Chapter II

Performance of Indian Railways

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Section A:

Historical review of Indian Railways

2.1 Pre-Railway Period:

Throughout the history of India, difficulties of communication had been a predominance factor in determining the political, economic, and social development of the country. The distance to be traversed were tremendous and the natural obstacles to be overcome in passing from one region to another were formidable while even within a restricted area, internal communication broke down altogether in the rainy season. The forms of transport available during the pre-railway period were mainly human and animal transport on land boats and other country craft in water. Villages were isolated and were noted for their simplicity and self-sufficiency.

- Journeys slow, hazardous and dangerous:

  Travels from one origin to another were hazardous and fraught with great dangers from wild animals, bandits and highway robbers and also took considerable time, sometimes months for long journeys.

  Apart from being costly, slow and uncomfortable, journeys by road were far from being safe. There was always the danger of wild beats. Organized bands of robbers and thugs also freely operated in many parts of the country.
• **No proper roads:**

Except within urban limits, there were no roads prior to 1939, when it was decided to connect Calcutta and Delhi by good metalled roads suitable for wheeled vehicles, with bridges over small streams and ferries over the longer rivers. The level plains of India, scoured by streams which for eight months or more in each year were passable without difficulty by the conveyance generally used in the country offered so small and obstacle to intercourse between different localities that up to the end of the 18th century, there was practically no demand for prepared tracks even for military purposes, transport being chiefly effect by pack animals travelling along ride village pathways on which travelers could ride or be conveyed in palangains. However, difficulties of communication had been keenly felt since the beginning of the 19th century.

• **Transportation very costly:**

In the pre-railway age, the journey from Calcutta to Banaras a distance of 428 miles could be undertaken by land route by the dak, the Govt. postal van, in 5 days for Rs.375, by the palku with 8 bearers trudging the distance in a month for Rs.225, or by bullock cart of 35 days for Rs. 150. By water the cost of Rs.225 to Rs.375 and the time about 40 days varying according to the season. This Genetic plain was a fair sample of tertiary well served as regards communications in those days and the situation of other parts of the country not so favorably placed might well be imagined.
Agriculture, Industry and Commerce suffered badly

The central India, the system of transport was so inadequate and backward that the movement of traffic in cotton from Hinganghat to Mirzapore way carried at an average speed of 7 miles a day on the back of bullocks in penniers over an average distance of 100 miles – “In the absence of any defined road, a herd of hundreds of cattle, never so few as 100 and often exceeding 1000, was driven under constant watch, so as to prevent straying on the march. This entailed cutting the nights out and travelling only by day, in temperatures raying between 100°F and 130°F according to the seasons. There was also no protection from the inclemency of the weather, the cotton becoming saturated if the caravan was overtaken by rain. This meant such an increase in weight as to make further carriage on bullock back nearly impossible. If the way lay through cotton trap, the rain caused men to sink in the mud up to their ankles and cattle to their knees and in effect such a calamity meant rain to the animal, the carrier and the merchant.”

The great handicap of this mode of transport was in the excessive cost entailed. Taking the freight carried by an ox at 160 pounds at a cost of about Rs. 3-12 annas per 100 miles and the average distance at 500 miles, charge works out to Rs.260 per toner about 5 annas per ton mile. “Despite the fact that the control provinces produced the longest stapled and the most highly priced cotton in the country, the difficulty of transport east wards to the port waterfronts by and river, and three times break of bulk was such as to take two months. Under such conditions, Teylor describes the rich provinces of central India as being hermetically sealed.”
2.2 History of Indian Railways

A plan for a rail system in India was first put forward in 1832, but no further steps were taken for more than a decade. In 1844, the Governor General of India Lord Hardinge allowed private entrepreneurs to set up a rail system in India. Two new railway companies were created and the East India Company was asked to assist them. The first train in India became operational in 1851.

A year and a half later, on 1853 the First passenger train service was inaugurated between Bori Bunder Bombay, and Thane. Covering a distance of 34 Km (21 miles), it was dragged by three locomotives, Sahib, sindh and Sultan. This was the formal birth of railways in India. The formal inauguration ceremony was performed on 16th April 1853, when 14 railway carriages carrying about 400 guests left Bori Bunder “Amidst the loud applause of a vast multitude and to the salute of 21 guns.”

The First passenger train steemed out of Howrah Station destined for Hooghly, a distance of 24 miles, on 15th August 1854. Thus the first section of the East Indian Railway was opened to public traffic, inaugurating the beginning of railway transport on the Eastern side of the sub-continent. In South the Madras Railway company opened the first line on 1st July 1856. It ran between Veyasarpandy and Walajah Road, a distance of 63 miles. In the north a length of 119 miles of line was laid from Allahabad to Kanpur on 3rd March 1859. These were the humble beginnings which in outstanding path developed into a network of railway lines all over the country.
By 1880 the Indian Railways system had a route mileage of the about 9000 miles. The British government encouraged new railway companies supported by private investors under a scheme that would guarantee an annual return of five percent during the initial years of operation. Once established, the company would be transferred to the government, with the original company retaining operational control. The route mileage of this network was about 14,500 Km by 1880, mostly spreading inwards from the three major port cities of Bombay, Madras and Culcutta. By 1895, India has started building its own locomotives, and in 1896 sent engineers and locomotives to help build the railways.

Soon various independent kingdoms built their own rail systems and the network spread to the regions that became the modern day states of Assam, Rajasthan and Andhra Pradesh. A Railway Board was constituted in 1901, but decision making power was retained by Lord Curzon, the viceroy of India. The Railway Board operated under the guidance of the Department of Commerce and Industry and had three members, a Government Railway official serving as chairman, a railway manager from England and an agent of one of the company railways. For the first time in its history, The Railways began to make a tidy profit. In 1907, almost all the rail companies were taken over by the government.

The following year, the first electric locomotive appeared. With the arrival of the First World War the railways were used to meet the needs of the British outside India. By the end of the First World War, railways had suffered immensely and were in a dilapidated condition. The government took over the management
of the railways and removed the link between the financing of the railways and other government revenues in 1920, a practice that continues to date with a separate railway budget.

The Second World War severely weakened the railways as trains were diverted to the Middle East and the railway workshops were converted into war ammunition workshops. At the time of Independence in 1947, a large portion of the railways went to the newly formed Pakistan. A total of 42 separate railway systems, including 32 lines owned by the former Indian princely states, were merged as a single unit which was named as the Indian Railways.

The existing rail networks were abandoned in favour of Zones in 1951 and total of six zones came into being 1952, as the economy of India a improved, almost all railway production units were diagnosed. By 1985, steam locomotives were placed out in favour of diesel and electric locomotives. The entire railway reservation system was streamlined with computerization in 1995.²

2.3 First Railway in the World:

The first Indian Railways rolled on its tracks just 28 years after the world’s first train had made its initial successful run. This was in England. In 1823, George Stephenson became the Engineer of the project for the construction of the railways to link the Auckland area with Stockton via. Darlington and on September 27, 1825 the first world railway system was operated from Stockton to Darlington with George Stephenson latest engine ‘Locomotion No.1’ with a speed of 12 miles per hour.
In France, railways started in 1829, in Germany in 1835, in Holland and Italy in 1839 and in Spain in 1848. The construction of the first railway from St. Petersburg, now Leningrad, to the suburbs of Pavlovoyk was completed by a private company in 1837. The first railway in the United States was line in May 1830. Initially it was operated by horses & later locomotives were employed.3

2.4 Definition of Railway:

According to the Indian Railways Act, 1890, ‘Railway’ means a railway or any portion of a railway for the public carriage of passengers, animals or goods and includes:

a) All land within the fences or the other boundary marks indicating the limits of the appurtenant to a railways;

b) All lines of rails sidings or branches worked over for the purpose of, or in connection with, a railways;

c) All stations, offices, warehouses, workshops, manufactories, fixed plant and machinery and other works constructed for the purpose of, or in connection with, a railways; and

d) All ferries, ships, boats, and rafts which are used on inland waters for the purposes of the traffic of a railway and belong or are hired or worked by the authority administering the railway.

The definition of the word “R” is very wide. Any land within the boundary marks of a railway & any office or other works constructed for the purpose of or in connection with the railway shall be included within definition, accordingly offices of
the overseer and other persons engaged in construction work on the railway come within the ambit of the definition. But railway employed in clearing city’s refuse doesn’t come within the definition as contemplated include 2 of such 1 of workmen compensation Act. Railway includes a steamer. But a jetty uncoupled with a steamer is not a part of steamer.

A siding or a railway line would be an “r” only if it is meant for the purpose of public carriage of goods. If it is not so meant it is outside definition. But where in the list published the siding is not shown as included & there is as well no evidence regarding declaration of such a siding as a public siding, it does not fall within the meaning of sec. 4

2.5 Review of Various Committees on:

1. Select Committee 1871:

In 1871 a select committee of the British Parliament was appointed to review the schemes of railway construction. In order to implement its recommendations the secretary of state for India – Lord Salisbury made the following suggestion in 1874.

a) Only those lines should be laid which would become productive in the near future and the sum of money borrowed should be paid back during the period of their construction.

b) Money should be borrowed within India.

c) Money spent on famines should be paid out of the annual income from the railways.
d) The annual expenditure on railway construction should be limited to £25 lakhs per year. Although this expenditure was limited to £25 lakhs per year, yet the actual expenditure was higher and in 1879-80 it was in no way less than £35 lakhs. The average annual expenditure for this period came to more than £40 lakhs.  

2. **Select Committee 1884**

The Secretary of State for India having characterized the above scheme as very expensive, a Select Committee of the British parliament was again appointed in 1884 with the following terms of reference “to inquire into and report upon the necessity for a more rapid extension of the railway communication in India and the means by which the objects may be best accomplished, with special references to the report to the Famine Commissioners, and with due regard to the financial conditions of India.

**Recommendations:**

- The Committee made the following recommendations

  i. The work of rail construction should be shared both by the government and the companies.

  ii. The Government and the companies should undertake construction of self supporting lines.

  iii. Railway mileage should be increased for the development of internal and foreign trade of India and for saving the country from the ravages of famines.
iv. The Government can borrow £30 lakhs per year for rail construction but this money should be borrowed within India only.

v. Main routes should have broad gauge lines.

vi. Extension of railways should not increase involve additional taxation.

The Committee remarked “For political as well as financial reasons it was desirable that loan should be raised in India. On the other hand when the differences between the rates of interest in India and in England is so considerable as to afford full compensation for the comparative disadvantages of borrowing in England. The secretary of state should not hesitate to ‘borrow’ such moderate sums in this country (England) as well enable the Govt. of India to complete such public works as have been sanctioned.’  

3. Robertson Committee 1901:

In 1901, therefore, Mr. Thomas Robertson was appointed to investigate into the railway administration, organization and system. After a careful study of the entire situation he recommended as follows:

a. A Railway Fund should be created for the improvement of old lines and construction of the new ones.

b. All lines should be leased out to the railway companies.

c. A Railway Board should be established.

d. Steps should be taken to improve the operational efficiency of the railways.
e. For the construction of new lines the Guarantee system should continue.

The first three suggestions were very significant. Sufficient amount of money was not available from the General Reserve Fund for the development of railways. With the creation of separate railway fund the pace of railway construction and improvement could have been accelerated up to that time railways management was inefficient as part of the rest was company managed and the rest was under state management. The Indian public way completely against the view that entire railway system should be handed over to the railway companies. The Govt. did not consider it worthwhile to create a separate railway fund but they established a Railway Board in 1905 with 3 members – 1. President and 2 members; and it were put under the Department commerce and Industries. Even often the established of the Railway efficiency did not improve. No attention was paid to the provision of passengers amenities. 7

4. **Acworth Committee 1920-21.**

On November 1, 1920 the Secretary of state for India announced the appointment of the Indian Railway Inquiry Committee under the chairmanship of Sir William Acworth – a British authority on railways. The terms of reference of the committee were.

1) “To consider, as regards railways owned by the state. the relative advantage – financial and administrative, in the
special circumstances of India, of the following methods of managements.

a) Direct state management; b) management thoroughly company domiciled in London; c) Management through a company domiciled in India and with a Board sitting in India.

2) To examine the function, status and construction of the railway Board, and the system of control exercised by the Government of India over the railway administration, and to recommend for the adequate disposal of the railway business of the Government.

3) To consider arrangement for the financing of railways in India, and in particular the feasibility of the greater utilization of private enterprise of capital in the construction of new lines.”

**Main Recommendations:**

a. On the management of the railways the Committee was divided. Half of the members favored the direct state managements should be entrusted to the companies which were domiciled in India. The President himself favored state management; It was his casting vote which decided the issue in favor of state management.

b. Railway Finance should be separated from the General Finance.

In this regard the committee observed – “We recommend that the Finance Department should create to control the internal finance of the railways; that the railways should have a separate budget of their own, be responsible for earning and
expending. Their own income and for providing such net revenue as is required to meet the interests on the debt incurred or to be incurred by the govt. for railway purposes; and that the railway budget should be presented to the Legislative Assembly, not by finance Member of the council but the member in charge of railways.”

c. A railway Rates Tribunal should be appointed to consider the cases of rates and fares.
d. Representatives of the people should be including in the advisory committee.
e. A Gradual Indian station policy should be followed
f. Railway Reserve Fund a Depreciation and repairs of the rolling stock.
g. Main lines should construct branch lines under their jurisdict.
h. The Railway Board should be changed into a Railway commission.

In this connection the committee remarked- “We propose great changes in the constitution, status and functions of the Railway Board. We recommend that at the head of the Railway Department there shall be a Member of Council in constant touch with railway affairs; and we suggest that with object there shall be created a new Department of communications, responsible for railways, ports and inland navigation, road transport and telegraphs. We think that the member -in-charge of communications must be an experienced administrator and be able to represent his
department both in the legislative and with the public. We do not think he need so expected to be a technical experts.”

5. Dickinson Committee 1926:

The Dickinson Committee was appointed in September 1926 under the chairmanship of Sir Arthur Lower Dickinson. He was assisted by two experts in accountancy one from the U.S.A. and the other from England.

Terms of Reference:

The committee was appointed-

a) To examine and report fully in the system of accountancy and audit in respect all classes of both capital and revenue receipts and expenditure in force on the state-owned railways; and to make recommendations for revised and improved methods.”

b) To consider and report on the feasibility of the preparation of a proper annual balance sheet and profits and loss account for individual railways for separate organizations such as collieries; and for the whole of the receipts and expenditure of the Govt. of India relating to railways.”

c) To consider and report on the experimental system in force on the East Indian Railway of the separation of accounts from audit to make recommendation there on.

Recommendations:

The committee submitted its report to the Govt. of India on August 10, 1927 with the following recommendations:
1) Accounts of the Railways Board at present kept buy the accountant General, Railways should be handed over to the chief Accountant appointed by the Railway Board.

2) Railway accounts should be kept on the basis of work done services rendered by the railways and of work done for the railways.

3) Separate extracts’ should be prepared to include all expenses connected with stores and separate extracts of the electric department.

4) Suspense account should be treated as working capital and included in the capital expenditure instead of the income.

5) The controller of currency shouted act as banker and keep separate accounts for each railway system.

6) The Railway clearing house at Lahore should be controverted into a Central Station Accounting office and moved to Delhi.

7) Purchase of stores should be entirely separated from their custody and be entrusted to a supply officer.

8) Railway collieries should be placed under the charge of a Director of Collieries responsible to the Railway Board.

9) All coal supplied be state railways should be charged at cost including depreciation, sinking, and fund and administration expenses.

10) All goods carried by state railways for their own use be charged for transportation at 60% of full rates.

   The Government of India accepted most of this recommendations.
6. **Retrenchment Committee, 1931:**

In 1931, The Government of India on the suggestion of the Legislature, appointed a Retrenchment Committee, to suggest all round economies in expenditure. This committee appointed a Railway Retrenchment Sub-Committee to deal with the question of the economies in the railways. The Sub-Committee dealt only with economies in the expenditure on working lines was not discussed by it. 10

**The Committee Recommended:**

1) The reduction in the number of high executive officers of the Railway Board.

2) Abolition of Railway Rules Advisory Committee and The appointment of adhoc committee in its place, when they were necessary.

3) Abolition of Central publicity Bureau and the entrusting of the work to the Railway Board.

4) Reduction in the staff of London office of the Indian Railways.

5) Gradual reduction in the salaries of the staff from three and one half percent to 20 percent. There were other minor recommendations to affect economies in the expenditure incurred in connection with railway administration.

The Government of India accepted the recommendations of the Railway Retrenchment Sub-Committee and implemented then as far as they could. In this manner savings of nearly 3 cores of rupees was effected.
7. Pope Committee, 1932:

The expenditure on working lines was not reviewed by the Railway Retrenchment Sub-Committee and so the Government of India appointed the pope committee in 1932 to investigate railway working and to suggest economies in it.

The Committee Recommended

1) Job analysis should be carried out by Indian Railways.
2) A scientific study of experts and imports and charges on them should be made in order to attract goods traffic.
3) Tourist traffic should be attracted by providing amenities to travelers.
4) Economies should be affected by intensive utilization of locomotive power and by introducing new and improved methods of railway working, to reduce, manpower. The principle of the spending of money to save money was to be kept in mind. The importance of amalgamation was also emphasized to secure economy.  

8. Public Account Committee 1935:

In 1935-36, The Public Accounts Committee was alarmed with the existing condition and emphasized the need of overhauling the financial working of the Railways. This committee recommended, “The Govt. of India should immediately obtain the service of an acknowledged expert in railway management, to conduct an examination of the whole field and recommend steps which will secure definite (i.e. Other than more hopes of increased revenue due to improving trade) improvements in railway finance
to the extent ultimately like Rs. 3 crore a year immediately and ultimately of such magnitude as is required to maintain full solvency on a strict accounting basis.\textsuperscript{12}

9. **Wedgwood Committee (1936):**

The Government of India appointed a committee in October, 1936 under the chairmanship of Sir Ralph L. Wedgwood, to examine the position of state-owned railways. To suggest measures for securing an improvement in net earnings and for making the position of railway finances sound. Further the committee was asked to make suggestions on the problem of road coordination. This committee in its report which was submitted in June 1937, recommended that

i. Railway should stop paying towards General Revenue;

ii. General Reserve Fund and Depreciation Fund should be strengthened Rs.30 crore to be deposited per year;

iii. Road competition should be met in all possible ways;

iv. More service should be got out of the rolling stocks;

v. Close contact should be maintained with press & businessman;

vi. European staff should be increased;

vii. Produce adopted by the Railway Rates Advisory committee of 1926 should be simplified; and

viii. Press liaison and railway information officers should be appointed.\textsuperscript{13}
10. **The Indian Railway Enquiry Committee (1947):**

The Government of India appointed the India Railway Enquiry Committee in 1947 the chairmanship of Dr. H.N. Kunzru. The committee was changed, interalia, with suggesting practical methods of absorbing surplus staff on the railways, and economies in all branches of railway administration.

The need for a revision of the railway goods rating structure also engaged the attention of the Govt. who set up a standing committee of railway rating experts for evolving a simple uniform rating system on a rational basis, which would be equitable to the public as well as to the railway.

The report of the Kunzru Committee, published in November 1948, covered the entire field of railway administration, particularly from the viewpoint of economy and efficiency. The committee noted that the staff strength on the railways was on the increase while there was a general deterioration in the efficiency of the workers. In the place of the central organization under which the Railway Board was part of the secretariat of the Government of India, the committee recommended the vesting of control and management of the Indian Railways in a statutory authority composed of a chairman and six members. The setting up of this body was, however to be deferred for about five years.

As important finding of the committee was that financial result of the working of the Indian railways. Since 1924 were not satisfactory. Regarding financial matters. The main recommendations of the committee were;
i. The existing method of making adhoc contribution to the General Revenue had to continue until the future position of the railways could be assessed with greater definiteness:

ii. For the was next 5 years, an annual contribution of Rs.22 crore was to be made to the Depreciation Fund;

iii. It was desirable to have in the finance branch of the Railway Board a separate until primarily concerned with exploring means to improve earnings.

iv. No capital outlay should be incurred other than on strictly financial considerations; expect when a capital expenditures was justified on other important considerations; and

v. An Amortization Fund should be created in respect of intangible assets of the railways accounting to about Rs. 68 crore, the annual contributions to the fund being on percent of the gross earnings.\(^\text{14}\)

11. The Railway Freight Structure Enquiry Committee:

The Railway Freight Structure Enquiry Committee was constituted by the Government of India, under the distinguished leadership of Dr. A. Ramaswamy Mudaliar and the committee submitted its report to the Government of India in April, 1957.

The committee terms of reference were not merely confined to the consideration of the question of revision of the percent freight structures only but embraced other matters relating to that subject who was important from the point of view of the mercantile community and the public. At present the responsibility Indian Railways for the loss, destruction or deterioration of goods tendered for carriage by rails is that of a builee. Organized trade
and industry of modern India have, however, pressed for an examination of the questions whether the conditions in the country have not materially brought about a change in the responsibility of the railways as carriers of goods so as to approximate it to that of a common carrier. The committee was asked to examine whether the statutory provision dealing with the responsibility of railways as carriers needed any modifications and whether any adjustments in freight rates would be necessitated by these modifications.

The basic objectives of any railway freight structure should be to ensure that the sum total of railway revenues is reasonable and adequate and that within the limit thus set, the distribution of freight burden as between the different commodities and different lengths of haul is such as to take cognizance of the ability of the different commodities to bear the rates & to serve broad national economic interests.

Recommendations:

The recommendations of the committee may be divided into two broad parts, namely, those dealing with:

1) The basic structure, of rates which broadening determine the relative distribution of the cost burden as between different commodities.
2) The level of the rates which determines the total revenue.

In regard to the structure of rates, the main recommendations of the committee were:

i. That there should be an integrated scale of rates covering both class rates wagon-load scale with a regular and progressive
increase from the lowest to the highest class, through a percentage system with a standard rate base to be called the class 100 rates.

ii. That, instead of 3 legs, the rate scale should have 8 legs as stated above, so that a more even progressive rates may be achieved:

iii. That, as against only 99 out of about 3,000 commodities having separates Wagon-load rates, separates Wagon-load classification should be provided for almost all commodities. The rates for small being highest than the corresponding wagon-load rates by percentage varying from 7.5 to 30 of scale 100;

iv. That the minimum distance for charge be raised from 20 to 25 miles, but that it be applied only once irrespective of water the movement is over one or more railways;

v. That for most commodities, the rates be quoted only at railway risk, the quotation of alternative owners risk rates being confined to certain commodities moving in a loose condition and to perishables;

vi. That the existing classes and wagon-load scale be generally equated to the percentage classes in the new stricture.

vii. That in fixing the class in the new classification for any commodities, the corresponding class to the exiting classification, be fixed for wagon-loads or small according as the commodities now moves mainly in wagon-load or small:

and.

viii. That the classification of certain specified commodities to be fixed, some above and some below the corresponding classes to allow for various factors such greater social utility, altered ability to bear freight, etc.\textsuperscript{15}
12. The Railway Stores Enquiry Committee 1950-51:-

The Railway Stores Enquiry Committee was appointed in 1950 under the Chairmanship of shri. A.D. Shroff the report was submitted in 1951.

The Indian Railways purchase stores valued at cores of rupees every year through three agencies – Railway Board, Zonal Railways and the Ministry of Commerce and Industry. During the period of the Second World War, due to lack, of transport facilities and non availability of funds sufficient stores could note purchased. And as these purchases were entrusted to the Ministry of Industry and Supply, the railway complained against their inferior quality, high price and enormous delays.

Recommendations:

1) Railways should be made responsible for the store purchase of those commodities on which the operational efficiency of the railways and workshop production depended.

2) A central stores organization for supervising and controlling all stores transactions made by the railways should be set up under the Railway Board.

3) The procedure of stores purchase should be adequately simplified.

4) Information regarding stores purchase should coordinate.

5) Research facilities on the railways should be substantially increased.

6) Stores and equipment used by the railways should be standardized.\textsuperscript{16}
13. **Railway Convention Committee 1954:**

The Convention Committee 1954 did not disturb the principal features of the Convention Resolution of 1949. Since the total resources of the Government – including railway finances are now pledged to national development of which railway development forms a part, the committee fully appreciated that the relations between general Budget and Railway Budget ceased be a matter for rival claims. Now there should be co-ordination of resources. As the railway requirements presented by the Financial Commissioner showed a balanced presentation. No change was proposed in the nature of the railways contribution to general Revenues. It was recommended to continue at 4% for the next five years starting with 1955-56.

**Recommendations of the Railway Convention Committee, 1954**

i. It should be advantageous from all points of view to express the rate of dividend in terms of a percentage on the cortical at charge, and the amount paid annually though a fixed rate of dividend inclusive of the element of interest.

ii. The present rate of dividend should remain unaltered for another period of five years. However, the Committee, feel that in the matter of calculation of capital at charge and arriving at the total of the dividend payable, some minor adjustments are called for.

iii. The element of over-capitalization should be precisely assessed by the Railway Board and on that portion of the loan capital, the railways shall pay the dividend at the rate
equivalent to the average, borrowing rate charged by the Govt. of India to commercial departments from year to year.

iv. The dividend on the capital at charge of new lines should be computed at a lesser rate namely the average borrowing rate charged to commercial departments; and a moratorium should be granted in respect of the dividend payable on the capital invested on the new lines during the period of construction and up to the end of fifth year of their opening for traffic, the deferred amount being repaid from the 6th year onwards in addition to the current dividend out of the net income of the new lines.

v. The annual contribution to the Depreciation Reserve Fund which had been mentioned at a level of Rs. 30 corers during the 5 year period ending March 31, 1955 should be raised to Rs.35 corers during the next quinquennium.

vi. The Scope of the Development Fund should be extended so as to include amenities of all users of railway transport – such as improvement of goods sheds, platforms, waiting sheds etc. the present practice of earmarking Rs.3 corers per annum for this purpose should continue.

vii. Safety of travel-the primary amenity-must be provided. Expenditure on safety words should be given due priority in any allocation of funds from the Development Fund.

viii. The expenditure on unremunerative operation improvement works costing more than Rs. 3lakhs each should be charged entirely development fund.

ix. The cost of construction of all new lines might be debited to capital from the very beginning.17
Section B:

Present Status of Indian Railways:

2.6 Railway gauge In India:

2.6.1 Broad Gauge:

This is now found all over the country and all major passenger and freight routes are now broad gauge. This is the widest gauge in regular use anywhere in the world. (In the past, though, an 8’ gauge was used in Oregon, USA and a 7\(1\frac{1}{4}\)” gauge was used for the Great Western Railway in the UK) Outside India, the 5’6” gauge is found in Pakistan, a spur from Pakistan into Iran, Sri Lanka, Bangladesh, Argentina, Chile and the BART rapid transit system in the USA. The decision to use a gauge wider than the one in use in Great Britain was made with an eye towards economies in freight movement and also to ensure stability in the face of Indian weather and perceived threat of cyclonic winds.

About 42000 route km. of Indian Railways network are broad gauge.

2.6.2 Meter Gauge:

This is still found in a lot of places, despite the push to convert everything to broad gauge. It is said that this gauge was chosen by Lord Mayo (then Viceroy of India) based on calculations to allow 4 persons to sit comfortably abreast it would have been 3’3” except that there was then a push to move to the metric system and so the gauge became 1m. The first MG line was built in 1972 from Delhi to Faruk Nagar. About 14,500 route km of
Indian Railways network are meter gauge. (The figure was about 17,000 route km in 2000)

2.6.3 Narrow Gauge:

A few places in India have the even narrower 2 foot gauge: Jalpaiguri-Darjeeling, Neural Matheran and the Gwalior branch lines, which include Twalier-sheopur kalan, Gwalior-shivpure, and Gwalior-bhind. The Howrah-Amta and How-sheakhala narrow gauge lines were shut down a while back, and are now being rebuilt as broad gauge.

The two narrow gauge together make up about 3700 route km. of Indian Railways network.
Standard Gauge:

Has been used in a few places in India. The Calcutta tram lines are probably the most well-known and probably the only surviving example.

There are main three gauges of rails on Indian Railways namely:-

I. Broad gauge
II. Meter gauge
III. Narrow gauge

Their dimensions are given below:-

<table>
<thead>
<tr>
<th></th>
<th>Broad gauge</th>
<th>5feet 6inches</th>
<th>1676mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Meter gauge</td>
<td>3feet 3(\frac{3}{8}) inches</td>
<td>1000mm</td>
</tr>
<tr>
<td>3</td>
<td>Narrow gauge a)</td>
<td>2feet 6 inches</td>
<td>672mm</td>
</tr>
<tr>
<td></td>
<td>b) 2feet</td>
<td></td>
<td>610mm</td>
</tr>
<tr>
<td>2.1 Gauge wise total root km. of Indian Railways:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gauge</th>
<th>Route Km</th>
<th>Running Track Kms.</th>
<th>Total Tracks Kms.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Broad gauge</td>
<td>51082</td>
<td>72538</td>
<td>96851</td>
</tr>
<tr>
<td>2 Meter gauge</td>
<td>9442</td>
<td>9869</td>
<td>11676</td>
</tr>
<tr>
<td>3 Narrow gauge</td>
<td>2749</td>
<td>2751</td>
<td>3072</td>
</tr>
<tr>
<td>Total</td>
<td>63273</td>
<td>85158</td>
<td>111599</td>
</tr>
</tbody>
</table>
2.7 Components of Indian Railways:

- Railway Production Units:

  The Indian Railways (IRs) manufactures a lot of its rolling stock and heavy engineering components. As with most developing economies, the main reason is import substitution of expensive technology related products. This was relevant when the general state of the national engineering industry was immature.

  The six manufacturing plants of the Indian Railways, called production units, are managed directly by the ministry. These six production units (PUs) are each headed by a general manager, who also reports directly to the Railway Board.

  Research Design and standards organization (RDSo.), Lucknow is the R & D division of Indian Railways, and production units. Bharat Earth Movers Limited (BEML), Bangalore is an organization unrelated to the Indian Railways; however it manufactures coaches for both the Indian Railways and the Delhi metro system.

- Passenger Service:

  Indian Railways operators about 9000 passenger trains and transport 18 million passengers daily across 28 states and one union territory, Sikkim, Pondicherry, Arunachal Pradesh, and Meghalaya are the only states not connected by rail. The passenger division is the most preferred form of long distance transport in most of the country. A standard passenger train consists of 18 coaches. Coaches are designed to accommodate anywhere from 18 to 81 passengers, but during the holiday seasons or when on busy
routes, more passengers may travel in a coach. Most regular trains have coaches connected through vestibules. However, ‘Unreserved coaches’ are not connected with rest of the train via any vestibule.

Reservation against cancellation service is a provision for shared berth in case the travel ticket is not confirmed. It is a way of maximizing the number of waitlisted passengers to be accommodated in case of a cancellation.

- **Traction:**

  As of March 2008, 18,274 km of the total 63,273 km route length is electrified. Since 1960, almost all electrified sections on Indian Railway use 25000 v Ac traction through overhead centenary delivery. A major exception is the entire Mumbai section, which use 1500v Dc. And is currently undergoing change to the 25000 V Ac systems. Another exception is the Kolkata metro, which uses 750 V Dc delivered through a third rail.

  Traction voltage are charged at two places close to Mumbai central Railway trains passing through Igatpuri switch from Ac to Dc using a neutral section that may be switched to either voltage while the locomotives are decoupled and swapped. Western Railway trains switch power on the fly, in a section between vihar (DC) and vaitarna (AC), where the train continues with its own momentum for about 30m through an unelectrified section of centenary called a dead zone. All electric and EMUs operating in this section are the necessary AC/DC dual system type.
Freight:

Indian Railways carries a huge variety of goods from mineral ores, fertilizers and petrochemicals, agree cultural produce, iron and steel, multimodal traffic and others. Ports and major urban areas have their own dedicated freight lines and yards. Many important freight stops have dedicated platforms and independent lines.

Indian Railways makes 70% of its revenues and most of its profits from the freight sector, and uses these profits to cross subsidise the loss-making passenger sector. However, competition from trucks which offer cheaper rates has seen a decrease in freight traffic in recent years. Since the 1990s Indian Railways has switched from small consignments to larger container movement which has helped speed up its operations. Most of its freight earnings came from such rakes carrying bulk goods such as coal, cement, food grains and iron ore. Recent changes have sought to boost the earnings from freight. A privatization scheme was introduced recently to improve the performance of freight trains. Companies are being allowed to run their own container trains. The first length of an 11000km (6800mi) freight corridor linking India’s biggest cities has recently been approved. The railway has increased load limits for the systems 225000 freight wagons by 11%, legalizing something that was already happening. Due to increase in fuel cost, transportation by rail became advantageous financially. New measures such as speeding up the turnaround times have added some 24% to freight revenues.
• Accommodation Classes:

Several long trains are composed of two or three classes of travel, such as 1st and 2nd classes which have different pricing system for various amenities. The 1st class refers to coaches with separate cabins, coaches can be, air conditioned or non air conditioned. Further, other AC classes can have 2 or 3 tier berths, with higher prices for the farmer, 3 tier non AC coaches or 2nd class seating coaches which are popular among passenger going on shorter journeys.

In air conditioned sleeper classes passengers are provided with sheets: pillows and blankets meals and refreshments are provided, to all the passenger of reserved classes either through the on board pantry service or through special catering arrangements in trains without pantry car. Unreserved coach passengers have options of purchasing from licensed vendors either on board on the platform of intermediate stops

• Fares and Ticketing:

Fares on the Indian Railways across categories are among the cheapest in the world. In the past few years, despite a recessionary environment, the Indian Railways have not raised fares on any class of service. On the country, there has been a minor dip in fares in same categories.

Ticketing services are available at all major railway stators across India. In 2003, Indian Railways launched online ticketing services through the IRCTC website. Apart, except that they are booked online and delivered by post. According to comscore, the
Indian Railways website the top visited Indian travel site in April, 2010 with 7.7 million visitors.

- **Tourism:**

  IRCTC takes care of the tourism operations of the Indian Railways. The Indian Railways operates several luxury trains such as palace on wheels, golden chariot, Royal orient Express and Deccan Odyssey; that cater mostly to foreign tourists. For domestic tourists too, there are several package available that over various important tourist and pilgrimage destinations across India.\(^\text{19}\)
**Railway Zones:**

Indian Railway is divided into zones, which are further subdivided into divisions. The number of zones in Indian Railways, increased from 6 to 8 in 1951, nine in 1952, and finally 16 in 2003. Each zonal railway is made up of certain number of divisions, each having a divisional headquarters. There are a total of 67 divisions.

Each of the 16 zones, as well as the Kolkata Metro, is headed by a General Manager who reports directly to the Railway Board. The zones are further divided into divisions under the control of Divisional Railway Managers. The divisional officers of engineering, mechanical electrical, signal and telecommunication, account, personnel, operating, commercial and safety branches report to the respective Divisional Manager and are in charge of operation and maintenance of assets. Further down the hierarchy tree are the station masters who control through the track territory under their stations administrations.
### 2.8 Various Zones of Indian Railways:

Indian Railway traffic is divided into following zones on geographical base for easy efficient management.

**Railway Zones**

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name</th>
<th>Abbr.</th>
<th>Date of Establishment</th>
<th>Headquarters</th>
<th>Divisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Central</td>
<td>CR</td>
<td>November 5,1951</td>
<td>Mumbai</td>
<td>Mumbai, Bhusawal, Pune, Solapur, Nagpur.</td>
</tr>
<tr>
<td>2</td>
<td>East Central</td>
<td>ECR</td>
<td>October 1,2002</td>
<td>Hajipur</td>
<td>Danapur, Dhanbad, Mughalsrai, Samastipur, Sonpur</td>
</tr>
<tr>
<td>3</td>
<td>East Cost</td>
<td>ECoR</td>
<td>April 1, 2003</td>
<td>Bhubaneswar</td>
<td>Khurda Road, Sambalpur, Visakhapatnam</td>
</tr>
<tr>
<td>4</td>
<td>Eastern</td>
<td>ER</td>
<td>April, 1952</td>
<td>Kolkata</td>
<td>Howrah, Sealdah, Malda, Agansol</td>
</tr>
<tr>
<td>5</td>
<td>North Central</td>
<td>NCR</td>
<td>April 1, 2003</td>
<td>Allahabad</td>
<td>Allahabad, Agra, Jhansi</td>
</tr>
<tr>
<td>6</td>
<td>North Eastern</td>
<td>NER</td>
<td>1952</td>
<td>Gorakhpur</td>
<td>Izzatnagar, Lukhnow, Varanasi</td>
</tr>
<tr>
<td>7</td>
<td>North Western</td>
<td>NWR</td>
<td>October 1, 2002</td>
<td>Jaipur</td>
<td>Jaipur, Ajmer, Bikaner, Jodhpur</td>
</tr>
<tr>
<td>8</td>
<td>Northeast Frontier</td>
<td>NFR</td>
<td>1958</td>
<td>Guwahati</td>
<td>Alipurduar, Kutihar, Lumding, Rangia, Tinsukia</td>
</tr>
<tr>
<td>9</td>
<td>Northern</td>
<td>NR</td>
<td>April 14, 1952</td>
<td>Delhi</td>
<td>Delhi, Ambala, Firozpur, Lucknow,</td>
</tr>
<tr>
<td>No.</td>
<td>Division</td>
<td>Railway Zone</td>
<td>Foundation Date</td>
<td>Headquarters</td>
<td>Cities/Municipalities</td>
</tr>
<tr>
<td>-----</td>
<td>----------------</td>
<td>--------------</td>
<td>-----------------</td>
<td>-----------------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>10</td>
<td>South Central</td>
<td>SCR</td>
<td>October 2, 1966</td>
<td>Secunderabad</td>
<td>Secundarabad, Hyderabad, Guntakal, Guntur, Nanded, Vijayawada</td>
</tr>
<tr>
<td>11</td>
<td>South East Central</td>
<td>SECR</td>
<td>April 1, 2003</td>
<td>Bilaspur CG</td>
<td>Bilaspur, Raipur, Nagpur</td>
</tr>
<tr>
<td>12</td>
<td>South Eastern</td>
<td>SER</td>
<td>1955</td>
<td>Kolkata</td>
<td>Adra, Chakradharpur, Kharagpur, Ranchi</td>
</tr>
<tr>
<td>13</td>
<td>South Western</td>
<td>SWR</td>
<td>April 1,2003</td>
<td>Hubli</td>
<td>Hubli, Bengaluru, Mysuru</td>
</tr>
<tr>
<td>14</td>
<td>Southern</td>
<td>SR</td>
<td>April 14, 1951</td>
<td>Chennai</td>
<td>Chennai, Madurai, Salem, Tiruchechirapalli, Thiruvanthapuram</td>
</tr>
<tr>
<td>15</td>
<td>West Central</td>
<td>WCR</td>
<td>April 1, 2003</td>
<td>Jabalpur</td>
<td>Jabalpur, Bhopal, Kota</td>
</tr>
<tr>
<td>16</td>
<td>Western</td>
<td>WR</td>
<td>November 5, 1951</td>
<td>Mumbai</td>
<td>Mumbai central, Vadodra, Ratlam, Ahmedabad, Rajkot, Bhavnagar,</td>
</tr>
</tbody>
</table>
2.2 Size of the Network Zone wise route km.:

Indian Railways is one of the world’s largest rail networks with 63273 routes Km of route length. The zone wise size of the network is as below.

<table>
<thead>
<tr>
<th>No.</th>
<th>Zone</th>
<th>Route Kms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Central</td>
<td>3849</td>
</tr>
<tr>
<td>2</td>
<td>East Central</td>
<td>3465</td>
</tr>
<tr>
<td>3</td>
<td>East Coast</td>
<td>2568</td>
</tr>
<tr>
<td>4</td>
<td>Eastern</td>
<td>2414</td>
</tr>
<tr>
<td>5</td>
<td>North Central</td>
<td>3078</td>
</tr>
<tr>
<td>6</td>
<td>North Eastern</td>
<td>3447</td>
</tr>
<tr>
<td>7</td>
<td>North Western</td>
<td>5275</td>
</tr>
<tr>
<td>8</td>
<td>Northeast Frontier</td>
<td>3757</td>
</tr>
<tr>
<td>9</td>
<td>Northern</td>
<td>6859</td>
</tr>
<tr>
<td>10</td>
<td>South Central</td>
<td>5734</td>
</tr>
<tr>
<td>11</td>
<td>South East Central</td>
<td>2440</td>
</tr>
<tr>
<td>12</td>
<td>South Eastern</td>
<td>2639</td>
</tr>
<tr>
<td>13</td>
<td>South Western</td>
<td>3106</td>
</tr>
<tr>
<td>14</td>
<td>Southern</td>
<td>5169</td>
</tr>
<tr>
<td>15</td>
<td>West Central</td>
<td>2965</td>
</tr>
<tr>
<td>16</td>
<td>Western</td>
<td>6509</td>
</tr>
</tbody>
</table>
2.9 Organizational Structure of Indian Railways:
2.10 Zonal and Divisional Organization of Indian Railways

Zone

- General Manager
- Additional General Manager
- Principal Heads of Departments
- Senior Deputy General Manager
- Heads of Departments
- Deputy Heads of Departments

Departments in a Zone:

- Accounts (FA & CAO)
- Commercial (CCM)
- Mechanical Engg (CME)
- Personnel (CPO)
- Safety (CSO)
- Signal & Telecom (CSTE)
- Civil Engg (PCE)
- Electrical Engg (CMD)
- Medical (CMD)
- Operations (COM)
- Security (CSC)
- Stores (COS)

Division:

- Divisional Railway Manager
- Additional Divisional Railway Manager
- Branch Officers of the various Branches
- Senior Scale/Junior scale offices
- Supervisor and Staff
Branches in a Division:

- Accounts (Sr.DFM)
- Commercial (Sr.DCM)
- Electrical Engg shed Sr. DEE (TRS)
- Mechanical Engg C & W (Sr. DME)
- Medical (CMS)
- Personnel (Sr. DPO)
- Safety (Sr. DPO)
- Stores (DMM)
- Civil Engg (Sr. DEN coordination)
- Electrical Engg Traction Distribution Sr. DEE (TRD)
- Mechanical Engg (DME)
- Operations (Sr. DOM)
- RPF (Sr.DSC)
- Signal & Telecom (Sr. DSTE)

22
### 2.11 List of Railway Ministers

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Railway Ministers</th>
<th>State</th>
<th>Party</th>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ashraf Ali</td>
<td>Bihar</td>
<td>Congress</td>
<td>02/09/1946</td>
<td>14/08/1947</td>
</tr>
<tr>
<td>2</td>
<td>John Mathai</td>
<td>Kerala</td>
<td>Congress</td>
<td>15/08/1947</td>
<td>22/09/1948</td>
</tr>
<tr>
<td>3</td>
<td>NSG Ayyanger</td>
<td></td>
<td>Congress</td>
<td>22/09/1948</td>
<td>13/05/1952</td>
</tr>
<tr>
<td>4</td>
<td>Lal Bahudur Shastri</td>
<td>UP</td>
<td>Congress</td>
<td>13/05/1952</td>
<td>07/12/1956</td>
</tr>
<tr>
<td>5</td>
<td>Jagjivanram</td>
<td>Bihar</td>
<td>Congress</td>
<td>07/12/1956</td>
<td>10/04/1962</td>
</tr>
<tr>
<td>6</td>
<td>Swaran Singh</td>
<td>Panjab</td>
<td>Congress</td>
<td>10/04/1962</td>
<td>21/09/1963</td>
</tr>
<tr>
<td>7</td>
<td>HC Dasappa</td>
<td>Bangalore</td>
<td>Congress</td>
<td>21/09/1963</td>
<td>08/06/1964</td>
</tr>
<tr>
<td>8</td>
<td>SK Patil</td>
<td>Mumbai</td>
<td>Congress</td>
<td>09/06/1964</td>
<td>12/03/1969</td>
</tr>
<tr>
<td>9</td>
<td>C M Poonacha</td>
<td>Manglore</td>
<td>Congress</td>
<td>13/03/1967</td>
<td>14/02/1969</td>
</tr>
<tr>
<td>10</td>
<td>Ram Subhag Singh</td>
<td>Bihar</td>
<td>Congress</td>
<td>14/02/1969</td>
<td>04/11/1969</td>
</tr>
<tr>
<td>12</td>
<td>GL Nanda</td>
<td>Haryana</td>
<td>Congress</td>
<td>18/02/1970</td>
<td>17/03/1971</td>
</tr>
<tr>
<td>13</td>
<td>K. Hanumanthaiya</td>
<td>Banglor</td>
<td>Congress</td>
<td>18/03/1971</td>
<td>22/07/1972</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>State</td>
<td>Party</td>
<td>From Date</td>
<td>To Date</td>
</tr>
<tr>
<td>-----</td>
<td>------------------</td>
<td>---------</td>
<td>-------------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td>14</td>
<td>Ta Pai</td>
<td>Karnataka</td>
<td>Congress</td>
<td>23/07/1972</td>
<td>04/02/1973</td>
</tr>
<tr>
<td>15</td>
<td>LN Mishra</td>
<td>Bihar</td>
<td>Congress</td>
<td>05/02/1973</td>
<td>02/01/1975</td>
</tr>
<tr>
<td>16</td>
<td>Kamlapati Tripati</td>
<td>U.P.</td>
<td>Congress</td>
<td>11/02/1975</td>
<td>23/03/1977</td>
</tr>
<tr>
<td>17</td>
<td>Madhu Dandwate</td>
<td>Maharashtra</td>
<td>Janta Dal</td>
<td>26/03/1977</td>
<td>28/07/1979</td>
</tr>
<tr>
<td>18</td>
<td>TA Pai</td>
<td>Karnataka</td>
<td>Congress</td>
<td>30/07/1979</td>
<td>13/01/1980</td>
</tr>
<tr>
<td>20</td>
<td>Kedar Pande</td>
<td>Bihar</td>
<td>Congress</td>
<td>12/11/1980</td>
<td>14/01/1982</td>
</tr>
<tr>
<td>21</td>
<td>P.C. Shety</td>
<td>Indor M.P</td>
<td>Congress</td>
<td>15/01/1982</td>
<td>02/09/1982</td>
</tr>
<tr>
<td>22</td>
<td>ABA Ganikhan Chaudhari</td>
<td>West bangol</td>
<td>Congress</td>
<td>02/09/1982</td>
<td>31/12/1984</td>
</tr>
<tr>
<td>23</td>
<td>Bansilal</td>
<td>Haryana</td>
<td>Congress</td>
<td>31/12/1984</td>
<td>25/09/1985</td>
</tr>
<tr>
<td>24</td>
<td>Bansilal</td>
<td>Haryana</td>
<td>Congress</td>
<td>25/09/1985</td>
<td>04/06/1986</td>
</tr>
<tr>
<td>25</td>
<td>Mahasina Kidwai</td>
<td>Merut U.P</td>
<td>Congress</td>
<td>24/06/1986</td>
<td>21/01/1986</td>
</tr>
<tr>
<td>26</td>
<td>Madhawrao Scindai</td>
<td>Gaulior M.P</td>
<td>Congress</td>
<td>22/10/1986</td>
<td>01/12/1989</td>
</tr>
<tr>
<td>29</td>
<td>CK Jaffer Sharief</td>
<td>Banglor</td>
<td>Congress</td>
<td>21/06/1991</td>
<td>16/10/1995</td>
</tr>
</tbody>
</table>
2.12 An overview of Mumbai Railways

Two zonal Railways, the Western Railway (WR) and the Central Railway (CR), operate the Mumbai Suburban Railway system running in form of 9-car and 12-car rakes of Electric Multiple unit (EMU) trains. Two corridors (one local and other through) on Western Railway run northwards from Churchgate terminus parallel to the west coast up to Virar (60 Kms). Two corridors (one local and other through) on Central Railway run from Chhatrapati Shivaji Terminus (CST) to Kalyan (54 Kms), from where it bifurcates into Kalyan-Kasara (67 Kms) in the north-east and Kalyan-Karjat-Khapoli (61 Kms) in south-east.
The 5th corridor on Central Railway runs as the Harbour line starting from CST to Raoli Junction (11 Kms) from where the line splits. One line goes north-west to join WR at Bandra and goes up to Andheri (11 Kms) and the other goes eastward to terminate at Panvel (39 Kms) via New-Mumbai.

The pressure on the Mumbai Suburban Railway system has reached alarming proportions. Overcrowding has grown to such an extent that 5,000 passengers are travelling per 9-car train during peak hours, as against the rated carrying capacity of 1,710. Also, there is an acute problem of encroachment by slum dwellers on the property of Indian Railways which has created the problem of safety of commuters. The rail network is the principal mode of mass transport in Mumbai. To enable the Mumbai Suburban Railway System to meet the demands of the ever-growing passenger traffic, the Ministry of Railways and the State Government of Maharashtra joined hands to face the challenge and formed MRVC. However, the organization has not been able fulfill the aims and objectives for which it was set up. The researcher shall try to find out whether transfer of this organization into private hands can improve its performance and can lead to a better future for commuters travel in the city.

The Corporation is not only executing the projects identified so far, but also involved in the further planning and development of Mumbai Suburban Rail system for improved rail services in close coordination with Indian Railways and Government of Maharashtra. The geographical jurisdiction of MRVC is from Churchgate to Dahanu Road on Western Railway and from CSTM to Kasara, Karjat/ Khopoli and Panvel on Central Railway.
Apart from execution of Railway projects in Mumbai, the main functions of MRVC are:

- Develop coordinated plans and implement the rail infrastructure projects.
- Integrate urban development plan for Mumbai with rail capacity and propose investments.
- Undertake commercial development of Railway land and air space in Mumbai area.
- Coordinate and facilitate improvements of track drainage and removal of encroachments and trespassers.
- Coordinate with organizations operating the train services and responsible for protection of Railway’s right of way and urban development for purposeful resolution of allied issues and problems.

Mumbai city public transport comprises of Buses operated by Brihanmumbai Electric Supply and Transport (BEST) and trains operated Central Railway and Western Railway, the two zonal railways of Indian Railways. However, railway transport is the quickest and cheapest mode of transport among the two.
Mumbai Railway Map:
Reference

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