Chapter V

Summary, Conclusions and Recommendations

Summary:

In order to perform a systematic study, the analysis is divided into five different chapters. Each chapter deals with different aspects of the study.

Chapter 1 gives introductory information about the study. In this chapter present status of Indian Railways and its position in the world is discussed. Further information about various types of transport in India such as Road transport, Water transport, Air transport, Rail transport and also different types of passenger train services provided by Indian Railways such as Duronto Express, Rajdhani Express, Shatabdi and Jan Shatabdi, Jan Shatabdi, Garib rath, Superfast mail/Express, passenger and fast passenger, suburban trains is given in this chapter. The chapter also highlights the importance of the subject, objectives of the research, hypothesis, the research methodology used and its limitations. The available literature reviewed for the purpose of this study.

Chapter 2 is divided into two sections. Section A deals with historical review of Indian Railways which includes pre-railway period of Indian Railways, history of Indian Railways, definition of railway and by various committees established for the development of Indian Railways.

Section B discusses in detail present status of Indian Railways. It provides information about its various zones. It also deals with various components of Indian Railways such as Railway
production units, passenger services, traction, freight, and accommodation classes, fares and ticketing, Tourism and gauge of Railway in India such as Broad gauge, meter gauge and narrow gauge.

Chapter 3 deals with various schemes provided by Indian Railways. Indian Railways provide a number of schemes to fulfill its commercial purpose as well as social commitment. The schemes of social services are categorized as follow; these are titled as

1. Medical Schemes for Indian Citizens
2. Schemes for Senior Citizens
3. Schemes for Widows of Martyrs
4. Schemes for Students
5. Schemes for Girls Students
6. Schemes for Youths/Volunteers
7. Schemes for Professionals
8. Schemes for Delegates and Chambers of Certain National level organization
9. Schemes for Recipients of some prestigious awards
10. Schemes for Farmers

The important commercial activities of Indian Railways are also discussed in this chapter which includes:

- Facilities for foreign tourists by Indian Railways
- Citizens character on passenger services of Indian Railways
- Schemes for private firms under (PPP) private-public partnership model and Tatkal scheme.
Chapter 4 is the core part of the study. This chapter provides analysis of Revenue and Expenditure of Indian Railways. For this analysis detailed study of revenue and expenditure pattern of each zone of Indian Railways is worked out. This chapter covers complete information of different sources of earning of Indian Railways such as goods traffic, passenger traffic, other coaching earning, sundry earning, gross traffic receipts, net expenditure such as ordinary working expenses, operating expenses, repairs and maintenance, general superintendence and services, appropriation to pension fund, expenditure on staff welfare and amenities, total working expenses.

A comparative evaluation of expenditure pattern and pattern in gross traffic receipts of Indian Railways has been worked out in the last.
Conclusion:

1. It is observed that Indian Railways play an important role in the employment generation of the country. It is further observed that Indian Railways is the largest employer amongst all other central Govt. organizations who create employment opportunities for the people. According to the statistical data Indian Railways generate employment for 14 lakh employees in 2007 which is about 41% of the total employment generated by the central Govt. organizations.

2. As far as Railway network length in the world is concerned Indian Railways has fourth rank with 63327 km. followed by USA 2,26,706 km, Russia with 84158 km and china with 63637 km.

3. It is further observed that India ranks second in the carrying of passengers with 6219 million which is only followed by Japan with 8907 million and rank fourth in freight carrying in the world.

4. For the development of Indian Railways several committees were established by Govt. of India out of which the recommendations of 15 committees are analyzed in this study. It is found that recommendations given by Acworth committee were accepted and found to be more useful for Indian Railways. A separate railway budget has been created for its earning and expending.
5. There were only 7 zones of Indian Railways in 1996-97. The total number of zones was increased upto 16 zones in 2002-03. This shows good progress of Indian Railways.

6. It is seen that Indian Railways pay special attention to the economically weaker section of the society by giving them concessions in their passenger fares. The concessions are given to the patients suffering from major diseases such as T.B., Orthopedically Handicapped, Mentally retarded, Blind persons, Cancer patients, Heart Patients, Kidney patients, AIDS patients, Deaf & Dumb persons etc. The concession schemes are also available for Sr. Citizens, Widows of martyrs, Students, Farmers, Teachers, and Sportsman etc.

7. By giving above mentioned concessions to the needy people it is seen that Indian Railways incur losses. The total amount of losses incurred in 2009-10 is Rs. 14,976.61 crores which constitutes 17.19% of the total revenue earning.

8. Traffic earning includes goods traffic, passenger traffic, other coaching earning and sundry earnings. It is one of the most important revenue sources of Indian Railways. It is seen that the revenue is increasing consistently during the study period. The total revenue from traffic earning was Rs. 587889.8 crore for the study period. The earning from northern zone is amounted to Rs. 83645.68 crore which is (14.23%) of the total revenue collection from all the zones. The average collection of revenue of northern zone is the highest one among all the zones i.e. 5227.85. It has been increasing with 5.49% growth
rate. Northeast frontier zones revenue collection from the traffic earning is the lowest one as its average revenue collection is calculated as 884.16 of the total collection. The growth rate traffic earning of east central zone is the highest one i.e. 15.90%.
Considering consistency in increase in revenue collection of the northeast frontier zone its coefficient of variation (C.V.) is calculated as 63.78 which show inconsistency in its growth of revenue. The C.V. of south east central zone is calculated as 21.50 which shows highest consistency in its growth of revenue.

9. It is further observed that goods traffic is very important source of Indian Railways. It is one of the most important revenue sources. During the period of 1992-93 to 2007-08 the total revenue from the goods traffic was Rs. 386678.7 crore which was highest one. The earnings from south eastern zone is amounted Rs. 66898.54 crore (17.30%) of the total collection from all the zones. The average collection of revenue of south eastern zone is 4181.15, which is the highest among all the zones. It has been increasing with 3.68% growth rate. Northeast frontier zone collected revenue from goods traffic is the lowest one as its average revenue collection is calculated as 559.31. The growth rate of south western zone is the highest one i.e. 23.50% growth rate. For considering consistency in increase in revenue collection of the northeast frontier zone its C.V. is calculated as 58.51 which shows in consistency in its growth. The C.V. of western zone is
calculated as 19.96 which shows highest consistency in its growth of revenue.

10. Passenger traffic is also important revenue source of Indian Railways. The total revenue from passenger traffic was Rs. 167174.6 crore during the period of 1992-93 to 2007-08. The earning from northern zone is amounted Rs. 28124.39 crore (16.82%) of the total collection from all the zones. The average collection of revenue of northern zone is 1757.77 which is highest one among all the zones. It has been increasing with 7.33% growth rate. Northeast frontier zone collected revenue from the passenger traffic is the lowest one as its average collection is calculated as 220.17 of the total collection. The growth rate of east central zone is the highest one 22.71%. Considering consistency in increase in revenue collection the northeast frontier zone was earned Rs. 8949.04 crore (2.31%) which is lower, the C.V. is calculated as 58.51 which show in consistency in its growth. The C.V. of western zone is calculated as 19.96 which shows highest consistency in its growth of revenue.

11. Other coaching earning is also earning source of Indian Railways. The total revenue from other coaching earning was Rs. 13348.95 crore. The earning from northern zone is amounted Rs. 2659.76 crore (19.52%) of the total collection from all the zones. The average collection of revenue of northern zone is 171.87 which is highest one among all the zones. It has been increasing with 8.97% growth rate. South east central zone collected revenue from the other coaching
earning in the lowest one as its average collection is calculated as 21.22 of the total collection. The growth rate of northwestern zone is the highest one i.e. 32.58%. Considering consistency in increase in revenue collection the northeast frontier zone collected Rs. 605.13 crore (4.53%) which is lower, and its C.V. is calculated as 67.58 which shows inconsistency in its growth. The C.V. of west central zone is calculated as 19.57 which shows highest consistency in its growth of revenue.

12. The total revenue from the sundry earning was Rs. 15054.98 crore. The earning from northern zone is amounted to Rs. 5374.68 (35.70%) of the total collection from all the zones. The average collection of revenue of northern 335.91, the highest one among all the zones. It has been increasing with 15.51% growth rate. The south east central zone collected revenue from the sundry earning is the lowest one as its average revenue collection is calculated as 20.02 of the total collection. The growth rate of northeast frontier zone is the highest one i.e. 26.36%. Considering consistency in increase in revenue collection the northeast frontier zone was earned Rs. 1052.19 crore (6.99%). Its C.V. is calculated as 228.76, which shows very inconsistency in its growth. The C.V. of west central zone is calculated as 13.74 which shows highest consistency in its growth of revenue.

13. Gross traffic receipt includes in goods traffic, passenger traffic, sundry earning, other coaching earning, and suspense revenue etc. The total gross traffic receipt is Rs. 587131.9
crore. The earning from northern zone is amounted to Rs. 82871.93 crore (14.11%) of the total collection from all zones.

The average revenue of gross traffic receipt of this zone is 5179.49 which is highest one among all the zones it is increasing with 6.91% growth rate. The average revenue from gross traffic northeast frontier is found to be lowest i.e. 844.4.

The growth rate of east central zone is the highest one i.e. 18.05%. Considering consistency in increase in gross traffic receipts of the south east central zone its C.V. is calculated as 21.44 which shows highest consistency in its growth of gross traffic receipt it is seen that the growth of revenue of northeast frontier zone is much lesser consistence as its C.V. is calculated 63.52.

14. The total net railway revenue was Rs. 88868.28 crore. The net revenue from south eastern zone was amounted Rs. 24474.53 crore of the total revenue of east cost zone. The average collection of net revenue of east cost zone was 1903.86 the highest one among all the zones. The eastern zone from the net revenue is the lowest one as its average calculated was -512.12. The growth rate of south western zone is the highest one i.e. 43.11%. Considering consistency in increase in net revenue the north western zone its C.V. calculated as 117.49 which show very inconsistency in its growth. While the C.V. of eastern zone is calculated as -107.43 which show highest consistency in its growth of net railway revenue. The total revenue of this zone amounts to be Rs. -8193.93 crore.
15. Ordinary working expenses include in general superintendence and services, repairs and maintenance, operating expenses, expenditure on staff welfare and amenities, miscellaneous working expenses etc. the total expenditure on ordinary working expenses is found to be Rs. 398912.1 crore. The share of expenditure of northern zone among the total expenditure is Rs. 56787.04 crore which is (14.24%). The average expenditure of this zone is calculated as 3549.19 which is the highest one. It has been increasing with 6.50% growth rate. Northeast frontier zone has the average expenditure is 974.36 which is lowest among all the zones. The growth rate of east central zone is the highest one i.e. 23.66%. The total working expenses of south east central zone is Rs. 7674.25 crore, which is 3.46%. It is observe that there is more consistency in the increase in total expenditure of south east central zone as its C.V. is calculated as 7.94. The total expenses of south eastern zone are Rs. 42879.11 crore, which is 10.75%. It is seen that the increase in expenses of south eastern zone is less consistent as C.V. is found to be 39.84.

16. The total expenditure on operating expenses of all zones is found to be Rs. 214003.5 crore. The share of expenditure of northern zone among the total expenditure is Rs. 30266.37 crore which is (14.14%). The average expenditure of this zone is calculated as 1891.64 which is the highest one. It has been increasing with 6.37% growth rate. Northeast frontier zone has the average expenditure is 397.87 which is lowest among all the zone. The growth rate of east central zone is the highest
one i.e. 27.53%. The operating expenses of north central zone is Rs. 7407.25 crore (3.46%) it is observe that there is more consistency in the increase in total expenditure of north central zone as its C.V. is calculated as 5.81. The total expenses of south eastern zone amount to be Rs. 22443.51 crore which is (10.49%). It is seen that the increase in expenses of south eastern zone is less consistent as its C.V. is found to be 52.83.

17. The total expenditure on repairs and maintenance of all zones is found to be Rs. 129999.6 crore. The share of expenditure of northern zone among the total expenditure is Rs. 18279.26 crore which is (14.06%). The average expenditure of this zone is calculated as 1142.45 which is the highest one. It has been increasing with 5.92% growth rate. South western zone has average expenditure is 293.02 which is lowest among all the zones. The growth rate of east central zone is the highest one i.e. 19.21%. The repairs and maintenance of south east central zone is Rs. 1691.5 crore which is (1.30%). It is observe that there is more consistency in the increase in total expenditure of this zone as its C.V. is calculated as 12.27. The total expenses of southern zone amounts to be Rs. 11342.67 crore which is (8.73%). It is seen that the increase in expenses of this zone is less consistent as its C.V. is found to be 42.87.

18. The total expenditure on general superintendence and service of all zones is found to be Rs. 21403.24 crore. The share of expenditure of eastern zone among the total expenditure is Rs. 2846.26 crore (13.30%). The average expenditure of this zone is calculated as 177.89 which is the highest one. It has been
increasing with 9.67% growth rate. South western zone has the average expenditure is 50.81 which is lowest among all the zones. The growth rate of east central zone is the highest one i.e. 15.43%. The general superintendence and service of west central zone is Rs. 330.21 crore which is (1.54%). It is observed that there is highest consistency in the increase in total expenditure of west central zone as its C.V. is calculated as 14.00. The total expenses of eastern zone amount to be Rs. 2846.26 crore (13.30%). It is seen that the increase in expenses of this zone is less constant as its C.V. is found to be 39.84.

19. The total expenditure on appropriation to pension fund of all zones is found to be Rs. 71211.13 crore. The share of among the total expenditure of northern zone is Rs. 10051.6 crore (14.12%). The average expenditure of this zone is calculated as 628.22 which is the highest one. It has been increasing with 10.39% growth rate. South western zone has the average expenditure is 169.47 which is lowest among all the zones. The growth rate of northeast frontier zone is the highest one i.e. 14.02%. There is more consistent growth in the expenditures of east central zone as its coefficient of variance is calculated as 8.21 which itself shows the highest consistency in the appropriation to fund of this zone is Rs. 2226.88 crore (3.13%) It. is seen that the growth in expenses of north frontier zone is less consistent as its C.V. is found to be 49.85. The total expenses of this zone amount to be Rs. 3820.67 crore (5.37%).
20. The total expenditure on staff welfare and amenities of all zones is found to be Rs. 16985.54 crore. The share of among the total expenditure of northern zone was amounted Rs. 2371.93 crore (13.96%). The average expenditure of this zone is calculated as 148.24 which is the highest one. It has been increasing with 8.22% growth rate. South western zone has the average expenditure is 42.43 which is lowest among all the zones. The growth rate of north western zone is the highest one i.e. 15.07%. There is more consistent growth in the expenses of north central zone as its coefficient of variance is calculated as 13.90 which itself shows the highest consistency in the staff welfare and amenities of this zone is Rs. 306.69 crore (1.81%). It is seen that the growth in expenses of south central zone is less consistent as its C.V. is found to be 40.43. The total expenses of this zone amount to be Rs. 1588.24 crore (9.35%).

21. The analysis of expenditure shows rapid growth in the expenses during the period of time which support the first hypothesis of the study. Total working expenses includes in general superintendence and service, repair and maintenance, operating expenses, expenditure on staff welfare and amenities, miscellaneous working expenses, appropriation to pension fund, appropriation to DRF, provident fund – pension fund, and other retirement benefits, and suspense expenditure etc. The total expenditure on total working expenses of all zones is founded to be Rs. 512400.8 crore. The share of among the total working expenses of northern zone is Rs. 73511.59 crore (14.34%). The average expenditure of this
zone is calculated as 4594.47 which is the highest one. It has been increasing with 6.91% growth rate. South western zone has the average expenditure is 1362.69 which is lowest among all the zones. The growth rate of east central zone is the highest one i.e. 35.43%. There is more consistent growth in the expenses of south east central zone as its coefficient of variance is calculated as 9.72 which itself shows the highest consistency in the total working expenses. This zone is Rs. 9468.19 crore (1.84%). It is seen that the growth in expenses of northeast frontier zone is less consistent as its C.V. is found to be 40.18. The total expenses of this zone amounts to be Rs. 21803.12 crore (4.25%).

22. The total revenue (i.e. gross traffic receipts) earned by Indian Railways is Rs. 587135.9 crore for the above mention period. The average revenue is calculated as 36696. The growth rate of gross traffic receipt is calculated as 10.5% and the total working expenses is found to be Rs. 512400.8 crore. The average expenditure is calculated as 32025.05. The growth rate of total working expenses is calculated as 9.38%.

Which proof II\textsuperscript{nd} hypothesis of the study i.e. increases in revenue of Indian Railways is more than its expenditure.