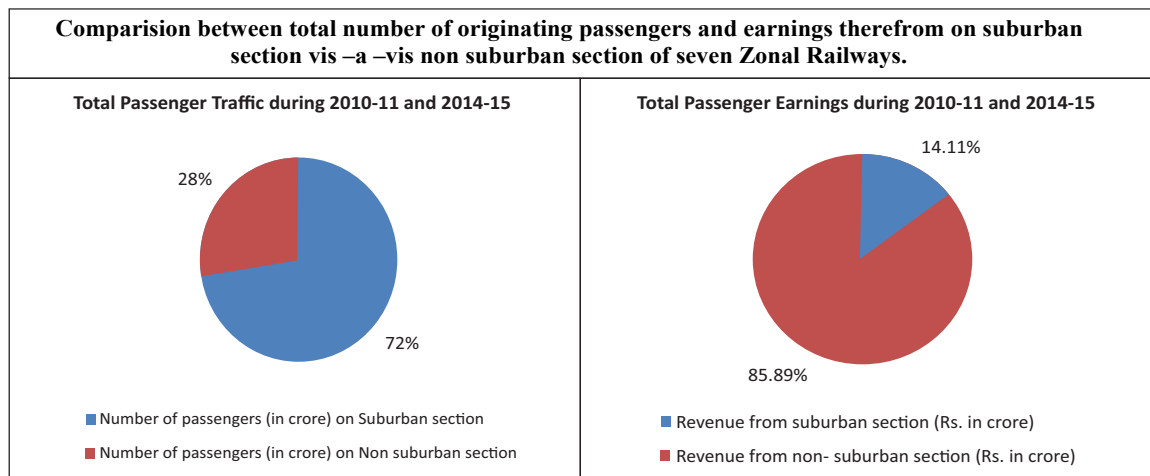


CHAPTER IV: FINANCIAL PERFORMANCE OF SUBURBAN TRAIN SERVICES

Audit objective 3: To assess the efficiency in improvement of overall financial performance of the suburban train services

During 2010-15, suburban trains carried 2225 crore passengers of seven Zonal Railways which constitute about 72 per cent of the total passengers (3054 crore passengers) carried during the same period. Scrutiny of records revealed that there was about 5.62 per cent growth of passengers during 2010-15 which led to increase in revenue from ₹ 1851 crore during 2010-11 to ₹ 2493 crore during 2014-15 i.e increase in earnings by 35 per cent.



The overall position of passengers travelling and earnings from the suburban section on seven Zonal Railways during the review period showed a positive trend. However, a declining trend was noticed in the growth of passengers travelling as compared to figures for the previous year of suburban system during the review period as shown in the Table 22 below.

Table No. 22: Trend of growth of passengers and revenue

| Year | Number of passengers originating (in crore) on CR, ER, SER, SCR, SR, WR and Metro Railway, Kolkata | | Passenger Revenue (₹in crore) | |
|---------|--|--|-------------------------------|--|
| | Suburban section | Growth compared to previous year (in per cent) | Suburban section | Growth compared to previous year (in per cent) |
| 1 | 2 | 3 | 4 | 5 |
| 2010-11 | 426 | 5.19 | 1851 | 5.47 |
| 2011-12 | 443 | 3.99 | 1940 | 4.80 |
| 2012-13 | 451 | 1.81 | 2022 | 4.23 |
| 2013-14 | 455 | 0.89 | 2261 | 11.82 |
| 2014-15 | 450 | -1.09 | 2493 | 10.26 |

Source: Indian Railways Annual Statistical Statement No. 12 of respective years.

Thus, the growth in suburban passenger traffic during the review period witnessed a declining trend which further turned negative by 1.01 per cent during 2014-15. However, the growth of earnings from suburban services during the period 2010-15 ranged between 4.23 and 11.82 per cent.

4.1 Operating cost *vis-a-vis* Earnings

In view of mounting loss of revenue on account of suburban train services, Standing Committee on Railways, in their 34th Report (October 2007) recommended effective implementation of measures in a time bound manner to improve the financial results of the suburban sections. The measures planned by the Ministry of Railways *inter-alia* included increase in length of rake, conversion from AC/DC traction in Mumbai areas, commercial exploitation of land, improvement in ticket checking to dissuade passengers from travelling without tickets.

Revenue loss in suburban sections

Scrutiny of records related to earnings from passengers carried on suburban sections revealed that there was no reduction in operational losses of any Zonal Railway during 2010-15 as indicated in the table 23 below:

Table No. 23: Revenue loss on suburban section (₹ in crore)

| Zonal Railways | Years | | | | | |
|---------------------------|----------------|----------------|----------------|----------------|----------------|--------------|
| | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | TOTAL |
| CR | 525 | 571 | 727 | 862 | NA | 2685 |
| ER | 1171 | 1308 | 1554 | 1802 | NA | 5835 |
| SCR | 36 | 52 | 61 | 66 | 80 | 295 |
| SER | 281 | 316 | 381 | 382 | 414 | 1774 |
| SR | 277 | 304 | 316 | 371 | NA | 1268 |
| WR | 100 | 89 | 129 | 250 | NA | 568 |
| MR | 129 | 225 | 259 | 294 | 299 | 1206 |
| Kolkata | | | | | | |
| TOTAL | 2519 | 2865 | 3427 | 4027 | 793 | 13631 |

Source: Annual Statistical statement of respective years

Further, it was observed that the growth in passenger earnings during the review period was not commensurate with the growing operational costs resulting in losses of ₹13,631 crore (This does not include the loss of CR, ER, SR and WR for 2014-15) from this segment as detailed in the table 23 above.

Operating Ratio of suburban section vis-à-vis Zonal Railway and loss of revenue from suburban segment is indicated in Table 24.

Table No. 24: Operating Ratio of suburban section vis-à-vis Zonal Railway and loss of revenue from suburban segment (₹ in Crore)

| Year | Particulars | CR | ER | SCR | SER | SR | WR | MR, Kolkata |
|---------------------------|--|-------------|-------------|------------|-------------|-------------|------------|-------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 2010-11 | Revenue loss – (A) | 525 | 1171 | 36 | 281 | 277 | 100 | 129 |
| | Operating Ratio of suburban network- (B) | 176.07 | 424.09 | 324.81 | 705.71 | 318.18 | 116.81 | 224.75 |
| | Operating Ratio of Zonal Railway (C) | 107.31 | 178.52 | 85.76 | 66.98 | 135.55 | 97.96 | 226.35 |
| 2011-12 | A | 571 | 1308 | 52 | 316 | 304 | 89 | 225 |
| | B | 180.23 | 449.48 | 345.95 | 744.74 | 308.94 | 114.01 | 309.54 |
| | C | 105.68 | 182.10 | 85.90 | 72.24 | 122.58 | 94.61 | 310.89 |
| 2012-13 | A | 727 | 1554 | 61 | 381 | 316 | 129 | 259 |
| | B | 201.27 | 516.02 | 312.76 | 750.48 | 309.16 | 119.07 | 328.27 |
| | C | 97.82 | 178.86 | 79.63 | 70.50 | 130.59 | 89.84 | 328.26 |
| 2013-14 | A | 862 | 1802 | 66 | 382 | 371 | 250 | 294 |
| | B | 214.62 | 537.60 | 300.70 | 511.27 | 304.82 | 133.29 | 302.62 |
| | C | 100.23 | 176.76 | 84.13 | 72.54 | 132.48 | 91.74 | 302.63 |
| 2014-15 | A | * | * | 80 | 414 | * | * | 299 |
| | B | * | * | 385.34 | 488.61 | * | * | 253.69 |
| | C | * | * | * | * | 128.98 | 86.51 | 253.69 |
| Total Revenue Loss | | 2685 | 5835 | 295 | 1774 | 1268 | 568 | 1206 |

*Note: - Figures for the period 2014-15 not furnished by CR, ER, SR and WR.

Source: Annual Statistical statement of respective years

Operating ratio of the suburban sections on all Zonal Railways was more than 100 per cent during the review period indicating that gross revenue from this segment was substantially lower than the gross operating expenses incurred. On CR and WR, Operating Ratios of the suburban section revealed an increasing trend over the previous years during review period indicating reducing revenues and escalating operating costs.

Comparison of operating ratios of the suburban section with reference to operating ratio of the respective Zonal Railways revealed that;

- On ER, operating ratio of the suburban section indicated an increasing trend over the previous years during review period due to reducing revenues and escalating operating costs. The Operating ratio of the suburban section steadily increased in each year from 2.4 times in 2010-11 to 3.04 times in 2014-15.
- Operating ratio of the suburban section of SER was 10 times the operating ratio of its Zonal Railway during 2010-11 and 2011-12, this increased to 11 times in 2012-13 and subsequently reduced to 7 times in 2013-14 pointing to improvement in its operating costs.
- On SCR, this ratio remained constantly high at 4 times the operating ratio of its Zonal Railway during the review period.

Thus, Indian Railways failed in adopting effective measures to reduce operational losses on account of suburban services which had adversely affected the operating ratio of the Zonal Railways as a whole.

Regarding improvement in ticket checking to minimize the loss on suburban train services, it was observed that 40 lakh passengers were detected travelling without ticket during 2012-15 and fines to the tune of ₹ 127 crore were imposed as indicated in the table 25.

Table No. 25: No. of ticketless passengers and penalty recovered

| Zonal Railways | Total Number of Suburban stations | Number of Passengers detected travelling without Tickets | Penalty recovered (₹ in crore) |
|-----------------------|--|---|---------------------------------------|
| <i>1</i> | <i>2</i> | <i>3</i> | <i>4</i> |
| CR | 76 | 1127675 | 37 |
| ER | 284 | 1492800 | 42 |
| SCR | 21 | 66254 | 2 |
| SER | 52 | 584648 | 25 |
| SR | 85 | 72074 | 2 |
| WR | 36 | 642053 | 19 |
| MR, Kolkata | 24 | 5289 | 0.14 |
| TOTAL | 578 | 3990793 | 127.14 |

Source: Records maintained in the concerned Zonal Railways.

4.2 Deployment of energy efficient EMU

In Railway Budget, 2013 it was announced that energy efficient electric locomotives and Electric Multiple Units (EMUs) would be deployed. Review revealed that energy efficient Siemens make EMU rakes deployed on CR and WR.

Railway Board in their reply (April 2016) stated that 372 energy efficient coaches have been inducted into passenger services in Mumbai area during 2014-15 and 2015-16. Balance 492 coaches will be inducted in 2016-17.

However, Railway Board has not provided data in respect of saving of energy with financial impact as a result of introducing these coaches.

4.3 Suburban Fare Structure

Standing Committee on Railways, in their 34th Report (October 2007) on “Suburban and Metro Railway” recommended that appropriate steps be taken to ensure break-even without additional financial burden on travelling public.

Scrutiny of records revealed that as per Coaching Tariff (No. 26 Part II) of Indian Railway Conference Association, prior to January 2013, the fare for suburban passenger services was higher than the fare for the non-suburban section. With effect from 22nd January 2013, due to rounding off of fares to the next higher multiple of ₹5, there was virtually no difference between fare for suburban and non-suburban section. However, the suburban fare as charged through Season Tickets being heavily subsidized caused mounting losses as passengers

travelling on season tickets accounted for about 65 percent of the total originating passengers on suburban sections while passengers travelling on season tickets on Non suburban section is not too significant.

4.4 Conclusion

The suburban train services are provided by seven Zonal Railways. On an average 445 crore passengers are being served every year by 578 suburban stations. Audit observed that adequate and effective measures in respect of the deficiencies were not taken by the Indian Railways. Suburban services were not commensurate with the volume of passengers handled by the suburban stations. It was observed that the number of passengers travelled during 2010-15 was much higher than the carrying capacity of the coaches. Besides, cancellation of services due to shortfalls in maintenance of track, signal failures, unit defects/unit shortage etc had also added to capacity constraints. Overcrowding of coaches resulting in passenger fatalities (4885 passengers) due to falling from running trains were very high in CR, ER and WR.

Though the punctuality of suburban train services was maintained as per Railway Board's target, it was showing a declining trend in CR and SR during the review period 2010-15. Speed restrictions resulted in longer running time of trains. It was observed that the permanent speed restrictions on suburban sections of Indian Railways increased from 384 (2010-11) to 402 (2014-15). The main reasons for imposing speed restriction were poor track conditions, existence of level crossings, weak bridges and encroachments along the track. Indian Railways failed to initiate effective remedial measures to withdraw speed restrictions.

Concerned Zonal Railways could not achieve the targets for track related works on suburban sections adversely impacting punctuality and safe operations of suburban train services. Availability of services was also affected due to delay in commissioning of new Electric Multiple Unit (EMU) rakes, delay in periodical overhauling, and abnormal detention of coaches at workshops coupled with frequent failure of rakes. The measures announced in the Budget speech for improvement of suburban services were not taken up.

Absence of certain basic amenities such as first aid kits, wheel chairs, adequate number of clean toilets, platform shelters, disable friendly ramp/escalators etc. indicated that effective monitoring mechanism was not in place to enforce implementation of guidelines of Railway Board. The Integrated Security System remained partially implemented even eight years after it was conceptualized in 2006. Metal Detectors installed at various stations were not monitored by the security personnel.

Operating ratio of the suburban sections on all Zonal Railways was more than 100 *per cent* during the period of review implying that their working expenses was more than their traffic earnings during 2010-15.

Though suburban train service is an important segment of passenger traffic, there is no separate organisational set up within the division with any separate budget allocation for improvement of this segment.

4.5 Recommendations

The following recommendations are suggested for implementation by the Indian Railways:

- i. *Enhancement of carrying capacity of Electric Multiple Unit (EMU) rakes, increasing the frequencies of suburban train services and effective actions to operate train services as per time schedule maintaining punctuality to ease overcrowding and accidental deaths.*
- ii. *Expediting works relating to capacity augmentation such as elimination of Level Crossings, withdrawal of speed restrictions, removal of encroachments especially in safety zone, introduction of new coaches, replacement of over-aged rolling stock etc.*
- iii. *According priority for requisite passenger amenities at stations in a time bound manner besides ensuring safety measures such as raising platform height, fencing between tracks to prevent deaths etc.*
- iv. *Expediting implementation of the Integrated Security System (ISS) at all identified sensitive stations and providing other essential security measures such as Close Circuit Television (CCTV), Door Frame Metal Detector (DFMD) and preventing unauthorised entry at important stations on priority basis.*
- v. *Identifying the areas for minimising operational costs of suburban train services and generating revenue through rationalisation of suburban fares.*
- vi. *Establishing a separate organisational set-up for the suburban train services to increase organisational efficiencies in the concerned zones.*



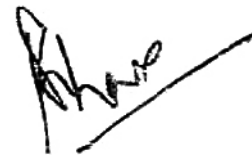
(Balvinder Singh)

Deputy Comptroller and Auditor General

New Delhi

Dated: 1 June 2016

Countersigned



(Shashi Kant Sharma)

Comptroller and Auditor General of India

New Delhi

Dated: 2 June 2016