RAILWAYS

9.41 The Indian Railways is the world's second largest rail network under a single management and has been contributing to the industrial and economic development of the country for more than 150 years. Freight and passenger traffic are the two major segments of the railways, of which the freight segment accounts for about 70 per cent of the revenue. Within the freight segment, bulk traffic accounts for nearly 84 per cent of revenue earning freight traffic (in physical terms), of which about 43 per cent is coal. Improved resource management, through increased wagon load, faster turnaround time and a more rational pricing policy led to a

perceptible improvement in the performance of the railways during 2005-06 and 2006-07. During April-November 2007, the total revenue earning freight traffic grew at 8.2 per cent as compared to 9.19 per cent during the corresponding period of the last year (Table 9.11 & Figure 9.3).

Rail tariffs

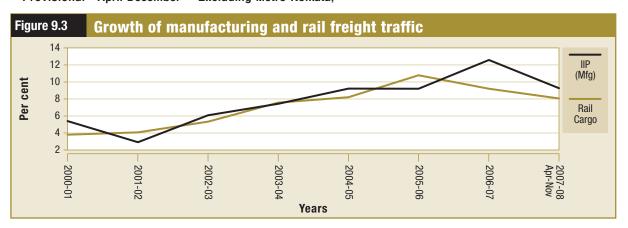
9.42 The Indian Railways have been taking certain proactive initiatives in the area of tariff and fare fixation and commercial practices. The rationalization of the fare and freight structure continued during 2007-08. There has been a conscious thrust on bringing in transparency,

 Table 9.11
 Performance of the Indian Railways

		April-December		cember	Change overprevious		
						year (per cent)	
Pa	articulars	2005-06 ^b	2006-07 ^{bc}	2006-07	2007-08	2006-07	2007-08 ^d
1.	Total revenue earning freight						
	traffic (mill.tonnes)	666.51	727.75	527.95	571.35	9.2	8.2
	i) Coal	294.25	313.33	226.17	245.26	6.5	8.4
	ii) Raw materials for steel plants						
	(excl. coal)	51.35	53.22	39.12	40.35	3.6	3.1
	iii) Pig iron & finished steel from						
	steel plants	17.74	21.04	15	16.24	18.6	8.3
	iv) Iron ore for export	41.24	38.84	28.57	38.28	-5.8	34.0
	v) Cement	61.19	73.13	53.94	56.66	19.5	5.0
	vi) Foodgrains	41.64	41.84	29.08	25.65	0.5	-11.8
	vii) Fertilizers	32.65	34.26	26.61	28.01	4.9	5.3
	viii) POL	33.45	31.69	25.89	26.27	-5.3	1.5
	ix) Balance (other goods)	93	120.4	83.57	94.3	29.5	12.8
2.	Net tonne kilometres (billion)	439.6	480.99	346.26	367.6	9.4	6.2
3.	Net tonne kms./ wagon/day(BG)	2,960ª	3,242	3,075	3,266	9.5	6.2
4.	Passenger traffic orig. (million) e	5,725	6,219	4,642	4,900	8.6	5.6
5.	Passenger kilometres (billion)	616	695	520	551	12.8	6.0

Source: Ministry of Railways

^c Provisional ^d April-December ^e Excluding Metro Kolkata,



^a Revised ^b Excludes 0.69 MT for 2005-06 & 1.06 MT for 2006-07 Konkan Railway loading.

simplification, and making rail tariff competitive to attract more traffic. Commodities are placed into different classes for the purpose of fixing tariffs. In the passenger segment, a variable fare scheme was introduced under which the Indian Railways introduced discounts in fares for the busy season (i.e., April 16 to July 14 and September 16 to January 14) and also for the lean season (balance period) (Table 9.12).

Freight corridors

9.43 At present, the high density network, the

 Table 9.12
 Discounts in rail fares

Class	Busy Season	Lean Season
AC First	3%	6%
AC 2- Tier	2%	4%
AC 3-Tier (81 berths)	4%	8%
AC CC (102 seats)	4%	8%
New Sleeper Coache	es .	
(84 berth)	4%	4%

Golden Quadrilateral, connecting the four metropolitan cities of Chennai, Delhi, Kolkata and

	Objective	Strategy	Expected measurable outcome	
1	Capacity enhancement in the short term	 Maximum utilization of existing capacity by addressing directional and seasonal variations in demand. Investment in automated signaling 	Increase in capacity utilization	
2	Significant enhancement of capacity	 Construction of Dedicated Freight Corridors (DFCs) and separating freight from passenger traffic Increase in capacity utilization 	Provide premium service to freight and passenger traffic	
		 Route-wise planning and capacity augmentation on the high density network Augmenting production capacity for locomotives, coaches and wagons 	Enhance line and terminal capacity	
3	Achieving higher maintenance standards	 Renewal,rehabilitation and replacement 	Increase throughput of existing assets	
4	Technology upgradation	 Extending the Freight Operation Information System to all loading points Interface with customer information system Switch over to 22.9-tonne axle load wagons and special wagons for movement of automobiles and bulk commodities, etc. 	Increased reliability in freight services	
5	Safety and passenger amenities	 Upgrading technology by use of Anti Collision Devices, adoption of fire proof coaches, crash worthy coaches, reducing level crossings, Enhanced training and efforts to empower Railway Protection force; 22 stations identified to be developed as world class; 	record and passenger satisfaction	
		 All mail and express trains to be provided with specially designed coaches suited for the physically challenged. 		

Mumbai, has got saturated at most locations, including, its diagonals. With the present growth rate in GDP of over 8 per cent, the Indian Railways expect to carry 95 million tonnes of incremental traffic per year and about 1,100 million tonnes revenue earning freight traffic by the end of the Eleventh Five Year Plan. It has become necessary to augment the freight carrying capacity of the railways to handle the increase in the volume of traffic in the coming years. This is sought to be achieved by constructing Dedicated Freight Corridors (DFC). The railways has proposed a 2,700-kilometre-long railway line project at an investment of more than Rs. 28,000 crore which consist of 1,232-km-long Eastern Corridor (from Ludhiana to Sonnagar) in Phase-I and 1,469-kmlong Western Corridor from Jawaharlal Nehru Port area (Mumbai to Dadri/Tughlakabad) in Phase-II. The Eastern Corridor would be extended to the proposed Deep Sea Water Port near Kolkata as and when the traffic builds up.

9.44 Both Eastern and Western Corridors will be made suitable for running of longer and heavier trains of 25-tonne axle load with maximum moving dimensions comparable to world standards. Bridges and fixed structures, which have long life, would have to be laid on this route for 30-tonne axle load. The loops provided on the DFC will need to accommodate double trains (1,500 metres). Logistics Parks are also proposed to be developed on DFC. An SPV called Dedicated Freight Corridor Corporation of India Limited (DFCCIL) has been formed to implement the project.

Rail safety

9.45 Rail safety is an important consideration for the Indian Railways from the point of its responsibility as carrier of passengers and goods, as also in terms of its operational reliability. In this regard, the index for accidents per million train kilometre has come down progressively from 0.55 in 2001-02 to 0.29 in 2004-05 to 0.28 in 2005-06 and further to 0.23 in 2006-07. The number of consequential train accidents also came down from 415 in 2001-02 to 195 in 2006-07.

9.46 To wipe out the arrears in renewal and replacement of overaged assets, viz., track, bridges, rolling stock, signaling gear and some

safety enhancement works within a fixed time frame of six years, a Special Railway Safety Fund (SRSF) of Rs. 17,000 crore was set up in 2001-02. The expenditure under SRSF till 2006-07 was Rs. 14,920.88 crore. The operation of the fund was extended by one year up to 2007-08. All works to be funded through SRSF are likely to be completed by the terminal year 2007-08. Adequate contribution is also being made to the Depreciation Reserve Fund (DRF) to take care of asset renewals in future.

Rail stations and passenger amenities

9.47 The Government has identified 22 stations located in the metropolitan cities and major tourist centres for development of world class stations through PPP route by leveraging a part of the realestate development potential. The preparatory work for New Delhi and Patna stations through appointment of consultants has already been taken on hand.

9.48 The Indian Railway Catering and Tourism Corporation (IRCTC) is presently managing majority of catering units for the Indian Railways. So far IRCTC has commissioned 52 Multi-Cuisine Multi Outlet Food Plaza/Fast Food Units and 454 Automatic Vending Machines (AVM) for dispensing hot and cold beverages. IRCTC is presently producing and supplying "Rail Neer" brand of packaged drinking water for the consumption of passengers of the Indian Railways. It has been decided to augment the capacity of the existing two Rail Neer plants at Nangloi (Delhi) and Danapur (Bihar). It has also been decided to set up two more Rail Neer plants at Chennai and Mumbai. Out of 100 proposed budget hotels, tenders for 20 locations have already been awarded to the successful bidders. IRCTC is in the process of setting up the state-of-the-art cell kitchens on 20 major depot stations with private participation to supply quality food and beverages.

Human resources

9.49 Human resource is critical for the efficient functioning of the railways. At present, the railways has a total staff strength of 1.4 million. They are being equipped to cope with the changing environment, with the induction of better technology, work practices, automation and computerization to ensure safe, reliable train operations and services. An amount of Rs. 10

crore has been sanctioned for implementation of an Enterprise Resource Planning covering all functions of the Human Resource Management System prevalent in the Indian Railways. This would not only provide adequate transparency to the employees through prompt, user-friendly selfservice, but is also expected to implement the best practices in the HR field and enable detailed analysis of the human resource deployment.

9.50 The Eleventh Five Year Plan Document

observes that the infrastructure deficit for the railways is reflected in a saturation of routes, slow speeds for freight and passenger traffic and low payload to tare ratio. To address these shortcomings the strategies envisaged for the Eleventh Five Year Plan for the Indian Railways are summarized in Box 9.3. The total projected outlay for the Eleventh Five Year Plan for the Ministry of Railways is Rs. 1,94,263 crore at 2006-07 prices which is to be financed through gross budgetary support to the extent of 23 per cent.