

HISTORY OF RAILWAYS IN SUB-CONTINENT AND RAIL TRANSPORT IN PAKISTAN

By

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EXECUTIVE SUMMARY

- (i) Rail Transport is categorized as primary mode of conveyance for a common man which provides to the public a safe, efficient, reliable, comfortable, affordable and environmentally friendly means of transportation for long distance bulk travel of passengers and goods.

Present rail network in Pakistan is the living legacy of the Britishers who established this for strategic purposes to strengthen their defence capabilities, to have their effective administrative control, and hold over the countries they were governing and to curb the native insurgencies successfully or to guard the strategies effectively, against the Czars of Soviet Unions. Under this strategy the first railway with a length of 169 Kms was established between Karachi City and Kotri during 1861.

At the time of partition total Track Route Kilometre of 8561 KM (All Gauges) came to our side out of North-Western Railways (NWR)

- (ii) In addition to providing means of transport to common man PR also provides the same quality of logistic services to the defence forces of Pakistan as and when required. In emergency PR takes the shape of an effective fighting arm for the country.

Pakistan Railways has been playing a very crucial role in social, economic and political development of Pakistan since its inception.

Being the cheapest mode of bulk and long haul transportation of goods and commuting passengers, it has been the pivot of Pakistan's industrial and commercial development

During any disaster or emergency Pakistan Railways has been the most preferred means of transporting relief goods, materials and equipment in the shortest possible time

Keeping in view the geographical contours of Pakistan, it has an excellent track network reaching to all nooks and corners of the country.

- (iii) In spite of its structure and assets rail transport mode has not been treated by the government the way it deserved. Once a most effective, extensive and efficient network of communication is not even a shade of its past.

This is one of the most discussed State Owned Enterprises (SOE) whose performance during the last few years has not been satisfactory at all and is incurring recurring annual losses running into billions of rupees and widespread dissatisfaction about its performance.

1. Former Chief Engineer Pakistan Railways.

Summary showing the performance of PR in respect of important parameters of a transport institution is given in the Table No.1, 2, 3, 4, 5 and 6 in the main context.

- (iv) Our railways is the victim of bad governance, low investments in all fields and deferred assets maintenance. Stagnant tariffs, declining market share in both passenger and goods transport, rapidly falling revenues have all contributed to bringing railways to lowest level.
- (v) Following are the prominent Causes of Deterioration of PR.
- Under-investment.
 - The Depleting assets.
 - Less priority of budget allocation for maintenance, replacement and development as compared with roads. Government spends three to four times more on road sector as compared to rail sector.
 - Wrong priority of investment.
 - Institutional dichotomy.
- (a) Since 1973 Pakistan Railways was converted into a government department under the newly created Ministry of Railways with the result that it, instead of a commercial organization, became a bureaucratic organization where rules and procedures count more than end results.
- (b) Top management in the hands of non-railway and non-professionals.
- Railways cannot rationalize fares on its own even if the price of oil triples.
 - Railways administration cannot stop working of loss making passenger trains and start operating profit making freight trains on its own.
 - **Governance issues:** Operational decisions, developmental budget allocation, posting / transfers are politically motivated than commercial considerations.
 - Lacking Leadership Qualities and mismanagement.
 - Play Safe Attitude.
- (vi) PR is endowed with an impressive potential in the shape of National Trade Corridor Infrastructure, from Ports of Karachi to almost major business centres of the country and has international connections as well as with the neighbouring countries of Iran, India and Afghanistan. There is lot of freight transportation potential from and to these countries which can be exploited.
- (vii) The real problem, therefore, in a sense, is not lack of resources, but their utterly inefficient utilization, mismanagement and lack of leadership. All this can be changed with leadership, vision, commitment and a plan, to be faithfully implemented.

(viii) **Principles of Road of Recovery for Pakistan Railways from Crisis:**

- (a) **The Federal Cabinet in its meeting held on 10th March, 2010, approved a summary submitted by the Cabinet Committee on Restructuring (CCOR) of Public Sector Enterprises (PSE's) which included PR as well.**
- In line with the policy decision of the Cabinet, the purpose of PR is to provide a competitive, safe, reliable and market oriented mode of transportation to the travelling public and transportation of goods.
 - PR would function as a business enterprise based on financial viability of train operations. Each train unit will have a purpose. The aim will be to maximize revenues while safeguarding public interest and national integration.
 - Train operations will be tailored in a manner where un-economical and non-commercial train services and sections should be identified and closed down. Even the non-commercial stoppages of trains should also be eliminated.
 - Running of freight trains should be preferred over the passenger trains being profitable.
- (b) PR must implement this decision in true spirit in addition to the following actions.
- Disinvestment of peripheral business.
 - Introducing Track Access Policy.
 - Out-sourcing of maximum core activities.
 - Induction of private sector in operation and maintenance activities.
- (c) **Financial Restructuring**
- Resolve the issue of social obligations of the state vs. commercial expectations from PR. If the state wants to run certain loss making train services for strategic / social considerations, let her compensate the PR for the loss thus incurred.
 - If Pakistan Railways have to be run as a government department then it should be treated as such in terms of revenues it earns and expenditures it incurs like other departments.
- (d) **Rationalization**
Pakistan railways needs to be run on purely commercial considerations with due regard for social welfare aspects, retaining most profitable railway trains and weeding out the un-economical ones.
- (e) **Governance Improvement**
To improve the quality of decision making at senior most level in the ministry, post of Secretary / Chairman of Ministry of railways should be manned by a professional, railways man.
- (f) **Investment**
Pakistan Railways needs massive investments just to arrest the fast depletion of its rolling stocks and fixed infrastructure as well as their up-gradation.

- (g) Capacity Building of the staff.
- (h) Out-sourcing of Operations.
- (i) Commercialization of Assets.

(ix) **Action Taken for Improvement of PR**

It is heartening to note that present administration is aware of the sad situation of the department and is taking steps for the improvement of the system to its best, discussed briefly as under:

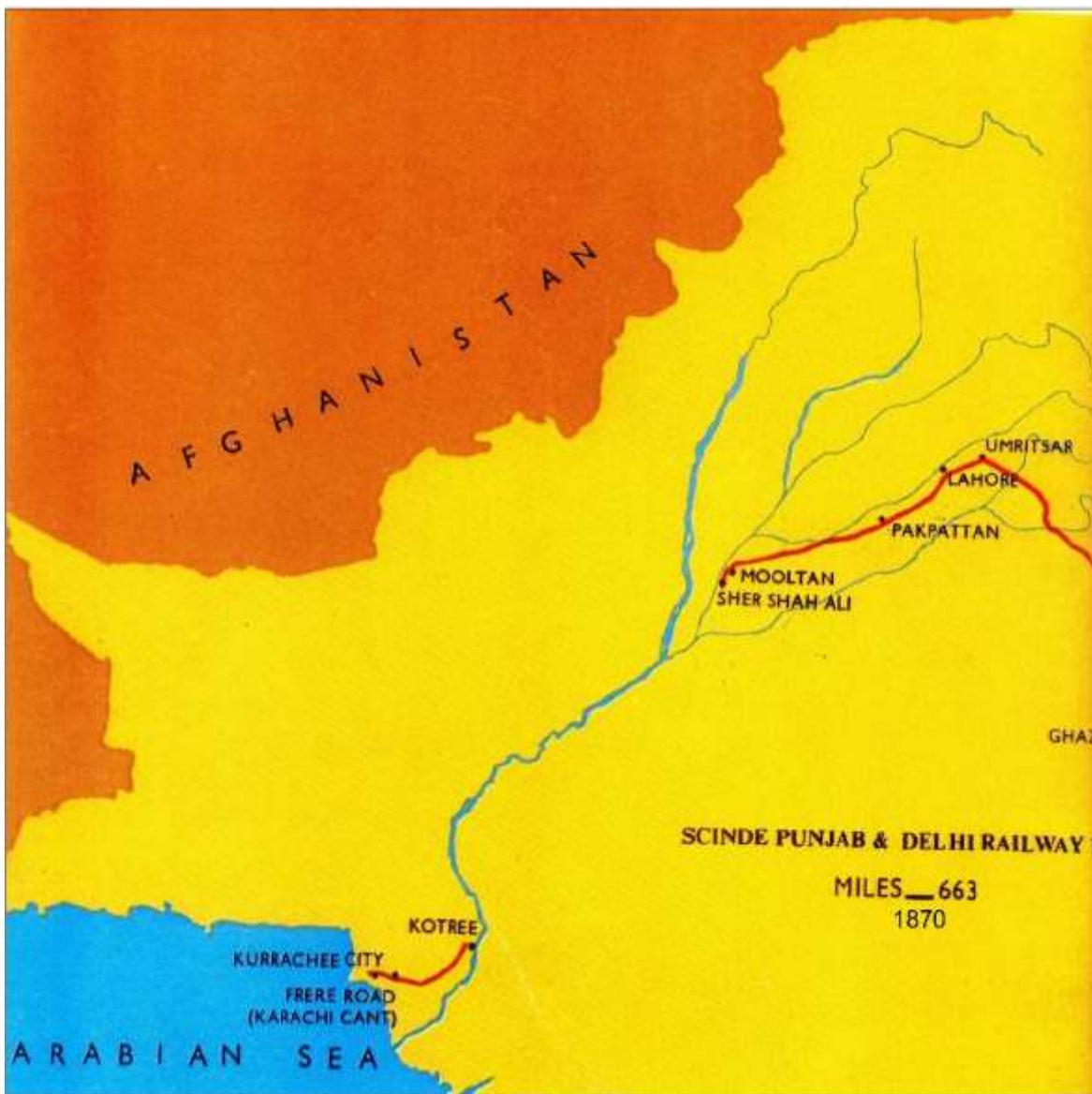
- (a) Loss making passenger / express trains have been identified and 136 trains have been progressively stopped concentrating on only 98 trains.
- (b) Locomotives thus retrieved are being allocated to freight sector. As a result freight tonnes carried during March, 2014 is 180,000 tonnes which were about 50000 during August-2012.
- (c) Freight Sector is getting special treatment in respect of allocation of locomotives. PR has already received 43 new ZCU Chinese locomotives which have been added to the locomotive fleet.
- (d) Purchase of 75 more new locomotives is under process. This lot of locomotives also contain 55 locomotives with 4000/4500 HP for working of freight trains.
- (e) In addition PR has acquired 10 locomotives from NLC under Public Private Policy and has added to the locomotive fleet of the department.
- (f) Action on rationalization of tariffs has been initiated and the results are encouraging.
- (g) Where PR is investing heavily in the rolling stock the infrastructure is also given a high importance to improve the speed, safety, reliability in addition to increasing its capacity for handling more freight traffic which is the profit making sector for railways. According to this vision PR is planning to invest in the project of China Pakistan Economic Corridor (CPEC).

1. History of Railways in Sub-continent:

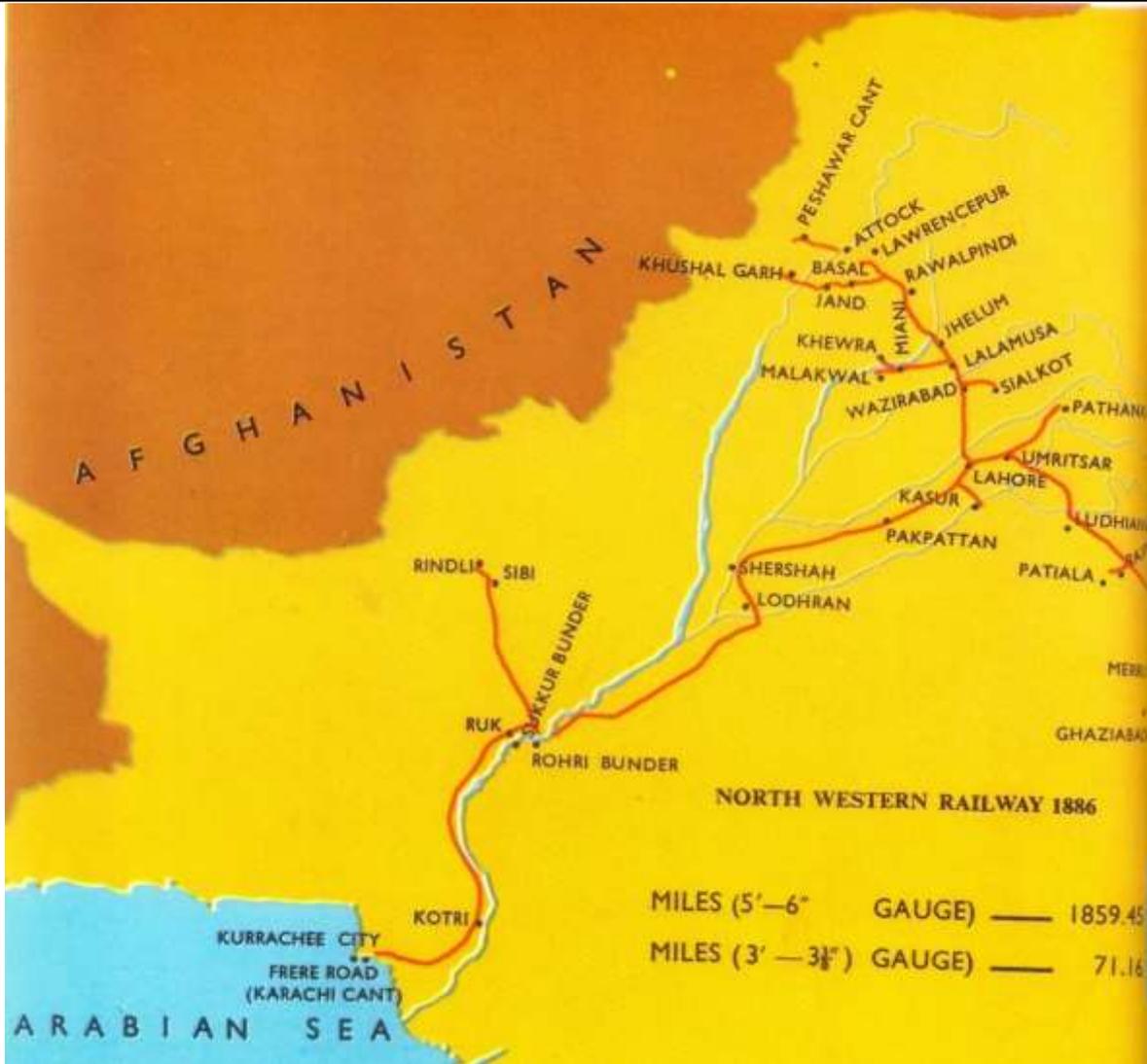
- 1.1. Rail Transport: is a system of transportation by way of wheeled vehicles running on rail tracks. This is categorized as primary mode of conveyance for a common man. This is a preferred environmentally friendly mode of transport for bulk carriage of passengers and goods over a long haul by providing to the public a safe, efficient, reliable, comfortable and affordable means of transportation.
- 1.2. Main objective before the Britishers for establishing the railway network in Indo-Pak was to strengthen their defence capabilities and to have their effective administrative control and hold over the countries they were governing. The railway network was aimed at transportation/movement of defence personnel and equipment on a bulk / mass basis quickly, economically and safely so as to deploy them effectively against the enemy with least delay.
- 1.3. Railway's history in this sub-continent goes as back as 1840 when first Anglo-Afghan war was fought. Its importance was felt more when CZARS' of Russia started expansion of their territory by conquering its adjoining territories. And as a result of complete annihilation of a British Army Brigade during 1884 at Kandahar British parliament passed a bill of 11-million pound sterling in one sitting for war efforts against the Russians/Afghans.
- 1.4. The strategic railways also known as the "Wardens of the Marches" were a vital part of the British Imperial system of defence in North-Western India. The first Anglo-Afghan war in the eighteen forties and the annexation of Punjab in 1849 brought the British Empire into direct contact with the frontier tribes and Afghanistan and opened a new chapter in British frontiers policy. West frontiers became the favourite theme of Britishers. The subject gained still greater importance when Czarist Russia began to expand towards Central Asia and British Rulers took alarm that its ultimate aim could be to penetrate into Afghanistan and India.
- 1.5. Railway tracks were laid for the service of British Crown mainly to provide speedy movement of troops and military stores wherever and whenever required. Rapid and swift army mobility was among the essential requirements as the colonial power was to curb the native insurgencies successfully or to guard the strategic effectively from rival European powers and specifically the Czars of Soviet Unions. The purpose was that the Russian forces must be contained away from the British territory. Under this concept and objective the railways in this continent was laid in the North-Western frontier and in the west (Baluchistan) of our country along with other support railways network at the back.
- 1.6. The frontiers of the sub-continent had loopholes, the vulnerable points in the shape of passes in the mountains which were used by the invaders from Afghanistan side to attack India. It was highly important that the control of these passes be with the British forces and it was decided that short of marching forward into Afghanistan there should be lines of occupation along:
 - (a) Khyber pass to Landi Kotal, Kabul
 - (b) Kurram Valley to Khurram
 - (c) Gomal valley to Wana
 - (d) Zhob Valley to Lora Lai
 - (e) Bolan Pass to Quetta and Kandahar

- 1.7. Necessity of railways in the sub-continent was more felt as a result of Industrial Revolution of early 19th century in England, lot of raw material was required which was not available as per requirements in Britain or in European countries but was abundantly available in the sub-continent at a cheaper rate. The British promoters pressurised and highly acclaimed for railways in the sub-continent, pleading the case for expanding the railways to British Colonies, to connect the world, Europe and Asia, from their extremities by one colossal railway. They argued that although the prime most consideration for rail road was the Military, for the better security, the second consideration they articulated was the lucrative commercial aspect of the railways that would provide the means of conveyance from the interior of sub-continent to the shipping ports, of the rich and industrially advanced countries, deficient in raw materials, and to transmit back the manufactured goods of Great Britain in exchange.

- 1.8. Under this scenario Karachi port was established during 1856 and first railways with a length of 169 Kms was established between Karachi City and Kotri during 1861. Other logistically highly important railways were completed progressively as per plans shown below.



Plans No.-1 showing the position of railways as during 1870



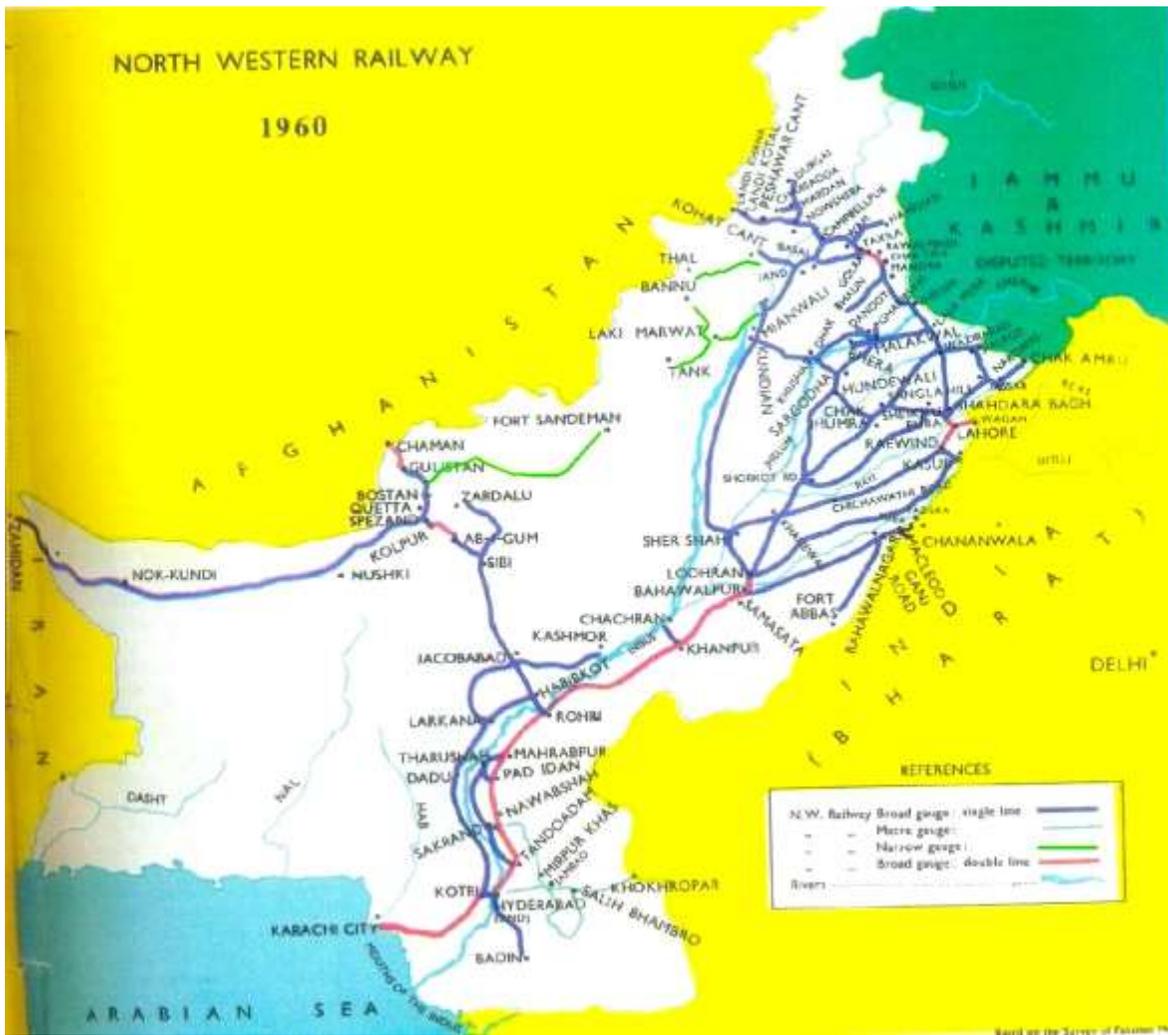
Plans No.-2 showing the position of railways as during-1886

- 1.9. Railways were earlier managed by companies and later on this responsibility was taken over by the state.
2. **Pakistan Railways (PR) at the Time of Partition:**
 - 2.1. Railways Network in Pakistan is one of the most visible and enduring legacies of the British Regime, also known as the "Iron link binding whole of the Sub-Continent".
 - 2.2. (a) At the time of Independence during 1947, the NWR with a total route kilometre (kms) of 11088 was bifurcated with 3043 route kilometres lying in India, and 8045 route kilometres in Pakistan.
 - (b) This figure rose to 8557 kms with the merger of part of Jodhpur railways of undivided India falling in Sind.
 - (c) In 1954 the Railway line was extended to Mardan and Charsadda and in 1956 Jacobabad – Kashmore narrow-gauge section (2'-6") was converted into broad-gauge.

- (d) Construction of Kot Adu - Kashmir line was completed in 1973, providing an alternate route from Karachi to up-country, along the right bank of river Indus.
- (e) Meter-gauge line from Hyderabad to Khokropar was converted to broad-gauge in two stages, From Hyderabad to Mirpur Khas 66.07 kilometre in 1967 & Mirpur Khas to Khokropar (Zero Point), 133 kilometre in 2006.
- (a) In addition 136 kms of track has been added as second track on Lodhran – Shershah – Multan Cantt – Khanewal section and further 246 kms of track on Khanewal – Raiwind section was nearing completion

2.3. At the time of partition the break-up of Track Route Kilometre was as under.

(a) Broad Gauge	7313.30
(b) Meter gauge	511.88
(c) Narrow gauge	<u>735.60</u>
Total	8560.78



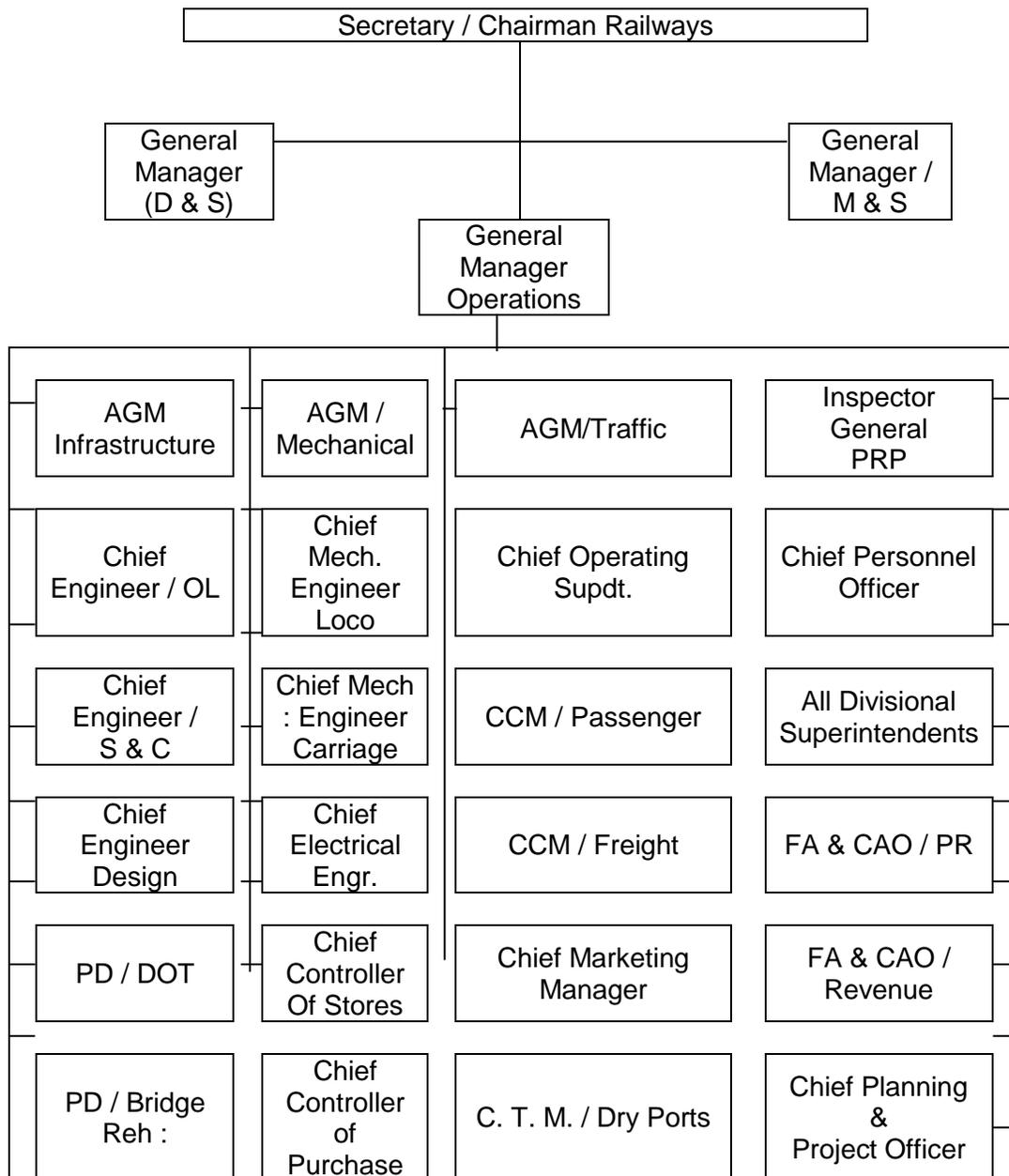
Plan No.-3 showing railways' network during-1960

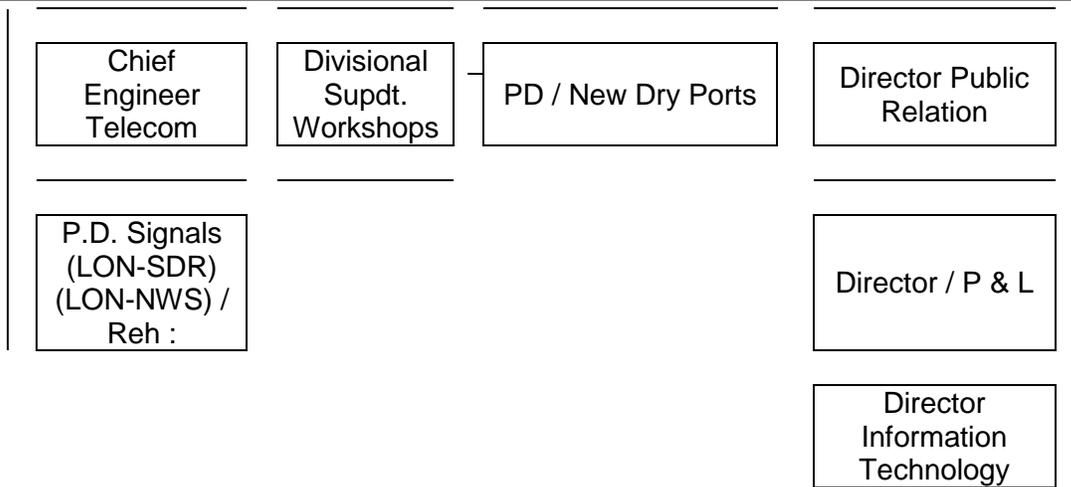
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2.4. Pakistan Railways (PR) forms the life line of the country catering to all its needs of large scale movements of freight and passengers traffic thereby contributing to economic growth and promoting the national integration through an iron chain link. Although basically thought, planned, designed and built as a strategic railways, at the start, yet its network has so far been spread and laid in the country that it can serve the transportation needs of the entire nation from every corner to other very effectively. The network of Pak Railways (P R) is so shaped that it has to feed different important business centres, widely placed in the country, which export their products through the only active ports located in the extreme south of the country and then move all the imports to the business and industrial centres located in the up-country.

3. Organisation of Pakistan Railway :

(a) Pakistan Railways is a Federal Government Department under Ministry of Railways and the Secretary for Ministry of Railways is the ex-officio Chairman of the Railways Board. The Chart given below gives its organization.





- (b) Pakistan Railways comprises of three functional units.
- **The Operation Unit.**
 - **The Manufacturing & Services Unit and**
 - **Welfare & Special Initiative Unit.**

Each unit is headed by a General Manager who reports to the Secretary / Chairman Railways for the performance of his unit.

3.1 Operations unit:

- (a) This is a key unit of Pakistan Railways and is located in the historic North Western Railways Headquarters building, at Lahore. It is responsible and oversees railways transport system and all related functions. This is headed by the General Manager (Operation) assisted by three Additional General Managers, each heading one of the following Business Units,
- (i) Assistant General Manager Infrastructure.
 - (ii) Assistant General Manager Traffic and
 - (iii) Assistant General Manager Mechanical.
 - (iv) In addition various heads / principal Officers of all support specialized departments like Human Resources Department, Railways Police, Project and Planning, Information Technology, Store and Purchase, Property and Land, Legal Affairs, Finance and Accounts departments also assist the General Manager (Operations) in their respective fields.
 - (v) The rail operation of Pakistan Railways is managed through seven territorial operating Divisions i.e., Peshawar, Rawalpindi, Lahore, Multan, Sukkur, Karachi & Quetta, besides, Workshops Division at Moghalpura, Lahore and an Administrative Division at Headquarter Office, Lahore. See Plan No 4 below:



Plan No.-4 showing the divisional head quarters of 8-divisions of PR

- (b) The Divisional Superintendents are assisted by the Divisional and Assistant Officers of their respective Departments i.e. Engineering Departments (Civil, Mechanical, Electrical, Signal & Telecommunications), Medical, Transportation, Commercial, Accounts, Railway Police and Personnel Department.

3.2 The Manufacturing and Services (M&S) Unit

This unit oversees the management of the :

- Concrete Sleeper Factories.
- Locomotive Factory Risalpur.
- Carriage Factory Islamabad.
- Railway Constructions Pakistan Limited (Railcop).
This unit was established in 1980 under Companies Act 1913 with a main objective to take part in construction activities of major projects both at national and international levels.
- Pakistan Railways Advisory and Consultancy Services Limited (PRACS).
The main job of this unit is to carry-out the consultancy projects in the field of railways.

3.3 The Welfare & Special Initiative Unit

This unit manages all railways owned Schools, Hospitals and the work of Director Stores & Purchases besides, monitoring of projects in execution and Pakistan Railways Sports Board. This is headed by General Manager (Welfare and Special Initiatives).

4. Key Operational Units**4.1. Infrastructure Unit**

Infrastructure unit is headed by the Additional General Manager Infrastructure, who is assisted by the following heads of Departments :

- a) Civil Engineering Department.
- b) Signal Department.
- c) Telecommunication Department.
- d) Design Department.

4.1.1. Salient Features of Track Infrastructure Year 2013

- | | | |
|-----|----------------------------------|---|
| (a) | Route Kilometers | = 7791 Kms |
| | • Broad Gauge (BG) (1676 mm) | = 7479 Kms |
| | • Meter Gauge (MG) (1000 mm) | = 312 Kms |
| (b) | Total Running Track (All gauges) | = 9069 Kms |
| (c) | Total track length | = 11755 Kms (11366 BG + 389 MG) |
| (d) | Nos. of Bridges | = 13841 (532 Major +13309 Minor) |
| (e) | Nos. of Tunnels | = 59 (Shela Bagh tunnel located in Baluchistan province being the longest one with a length of about 4 kms) |
| (f) | Nos. of Level Crossings | = 3815
(Unmanned = 2382 + Manned = 1433) |
| (g) | Nos. of stations | = 558 |
| (h) | Nos. of Halts | = 171 |
| (i) | Land | = 167,690 (acres) |

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4.1.2. Double Line Track existing on PR

(i)	Kiamari-Lodhran	843 kms
(ii)	Lodhran- Multan- Khanewal—	136 kms (Completed during 2005)
(iii)	Khanewal—Raiwind	246 Kms (Partly completed and opened for traffic)
(iv)	Raiwind-Lahore-Shahdara----	46 Kms
(v)	Lahore –Wagah-----	23 kms
(vi)	Chaklala----Golra Sharif -----	19 kms
(vii)	Abi Gum----Kolpur-----	37kms
(viii)	Ghulistan-----Chaman-----	60 kms
	Total-----	1410 kms

4.1.3. Classification of track with allowable speed on Pakistan Railways is as under :

Description	Max. speed (Km / h)	Length (Km)
Primary-A	105 / 110	3260
Primary-B	95	2807
Secondary	75	1184
Tertiary	65	1506
Meter Gauge	55	312
Total		9069

4.2. Mechanical Unit

- (a) Main function of the mechanical unit is the maintenance of all types of rolling stock including locomotives, coaches and freight wagons and keep them fit and ready for use by traffic department.
- (b) The Mechanical Unit is headed by the Additional General Manager / Mechanical who is assisted by the following Heads of the Departments (Principal Officers).
- Chief Mechanical Engineer / Carriage & Wagons.
 - Chief Mechanical Engineer / Loco.
 - Chief Controller of Purchases.
 - Chief Controller of Stores.
 - Chief Electrical Engineer.
- (c) As per statistics of 2013 following is the numbers of rolling stock available on the system
- (i) Passenger Carriages**
- | | |
|--------------------------|------|
| Passenger Coaches. | 1540 |
| Other Coaching Vehicles. | 245 |

Brake Vans.	235
Trailers.	01
Total all types coaches	2021
(ii) Nos. of Freight Wagons : (Broad Gauge)	
Covered wagons.	4830
Open wagons.	4670
For Container	1749
Tank Wagons	3810
Special Type wagons	524
Departmental wagons	625
Brake Vans	427
Four wheeled wagons.	11343
Eight wheeled wagons.	5292
Total Freight wagons in numbers	16635
Total Goods wagons in terms of 4 wheeled.	21927
Carrying capacity of in tonnes.	382605
(iii) Locomotives:	
• DE Locos 465 Nos.	(On average Daily 180 Nos. locomotives are available for various services. Remaining locomotives are stabled for want of imported spares).
• Electric Locos 16 Nos.	(Stabled due to doubling of track)
• Steam Locos 12 Nos.	(5 BG + 7 MG used for safari train only)

4.3. Traffic Department

Traffic department is responsible for the creation, maintenance, and delivery of passengers and freight services on the entire system.

The Unit is headed by the Additional General Manager Traffic, who is assisted by the following Heads of Departments (Principal Officers):-

- (a) Passengers Department.
- (b) Marketing Department.
- (c) Dry Port.
- (b) Operating Department.

5. Manufacturing Unit.

The Manufacturing Unit is headed by the General Manager (Manufacturing & Services). This unit looks after the working of:

- (a) Carriage Factory, Islamabad, (CFI).
- (b) Concrete Sleeper Factories, (CSF).
- (c) Locomotive Factory Risalpur.
- (d) Railway Constructions Pakistan Limited (RAILCOP).
- (e) Pakistan Railways Advisory & Consultancy Services (PRACS).

6. Welfare & Special Initiative Unit

The unit is headed by General Manager (Welfare & Special Initiatives) who is assisted by the following heads of the Departments (Principal Officers).

- (a) Medical Department.
- (b) Education Department.
- (c) Pakistan Railways Sports Board (PRSB).
- (d) Director Stores & Purchases.

7. Importance of Pakistan Railways :

- 7.1. The main objective of Pakistan Railways is to provide means of passengers travel and goods movement for majority of Pakistani population by providing them a safe, efficient, reliable, comfortable, affordable and environmentally friendly means of transportation in addition to providing the same quality of logistic services to the defense forces of Pakistan as and when required without wasting a single minute.
- 7.2. Pakistan Railways has been playing a very crucial role in social, economic and political development of Pakistan for the last 150 years.
- 7.3. Employing about 82,000 persons and providing employment indirectly to at least ten times more, it contributes substantially to the GDP of the country.
- 7.4. Being the cheapest mode of bulk and long haul transportation of goods and commuting passengers, it has been the pivot of Pakistan's industrial and commercial development.
- 7.5. By providing transport service to about 42 million passengers every year from one corner of the country to other, it is not only a symbol of unity of the country but also a vehicle of social and political integration.
- 7.6. It is also serving the nation in transportation of freight from port to extreme ends of the country and vice-versa thus contributing towards GDP of the country.
- 7.7. Rail transport consumes only one sixth of the energy per unit weight-km as compared to road transport. It is less polluting source of traffic-emissions per TKM. It is environmentally friendly.

- 7.8. Despite common perception, rail fatalities are much lower than road even on a per Kilometer (PKM) or Ton Kilometer (TKM) measure. Average fatalities per year on roads are more than 10,000 per year as compared to less than 100 on railway system.
- 7.9. During any disaster or emergency Pakistan Railways has been the most preferred means of transporting relief goods and defense materials and equipment in the shortest possible time
- 7.10. Keeping in view the geographical contours of Pakistan, it has an excellent track network reaching to all nooks and corners of the country and is a safe and most economical mode of transportation for long distance bulk goods and passenger haulage.
- 7.11. It has been experienced internationally that Double track railway system will be more efficient and economical in respect of transportation needs in the overall perspective as compared to four motorways consisting of four traffic lanes each constructed parallel to this set-up.

8. Performance of Pakistan Railways

- 8.1. One of the most unfortunate examples of wasting our inherited infrastructure at the time of partition can be found in the state in which our railways is found today. Once a most effective, extensive and efficient network of communication is not even a shade of its past. The speed with which the railways' significance in the transport sector has declined indicates that it is headed for near extinction. The world over, rail transport is regaining its lost glory as more investments are made and faster trains are built for both passenger and goods transport. What is more, this mode has been declared as environment friendly and hence it should be preferable to vehicular traffic that is degrading our road infrastructure and increases our dependence on fossil fuels imported by consuming country's foreign exchange.
- 8.2. Our railways is the victim of Bad Governance, Low Investments in maintenance, induction of new locomotives, up-gradation of rolling stocks, replacement and modernization of primitive signaling system, efficient communication network, track maintenance. Stagnant tariffs, declining market share in both passenger and goods transport, rapidly falling revenues have all contributed to bringing railways to a point where its pay and pension, of nearly Rs.34 billion, is paid through a subsidy from the government.
- 8.3. In spite of all its structure and assets it is one of the most discussed State Owned Enterprises (SOE) whose performance during the last some years has been not at all satisfactory and is incurring recurring annual losses running into billions of rupees and widespread dissatisfaction about its performance. Summary showing the performance of PR in respect of important parameters of a transport institution is given in the Table No.-1 below

Table No.-1: Comparative Statements of Important Performance Indicators of PR for the Last Five Years

S. No.	Particulars		2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	Decreased/ Increased to wrt 2008-09 (%)
1	Gross Earnings (Thousands)	Rs.	23,158,701	21,886,931	18,612,068	15,444,393	18,069,546	67
2	Operating Expenses (Thousands)	Rs.	28,111,303	29,661,445	31,464,910	31,443,343	35,123,742	125

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S. No.	Particulars		2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	Decreased/ Increased to wrt 2008-09 (%)
3	Operating Ratio		121.35	135.50	169.50	203.59	194.36	
4	Total Passengers carried (Thousands)	nos	82542	74933	64903	41097	41957	51
5	Total passengers Kilometer (Thousands)	nos	25701728	23522537	20618829	16093350	17388413	63
6	Coaching Earnings (Thousands)	Rs.	13,613,244	12,991,553	12,984,145	12,166,459	14,520,381	89
7	Total Goods carried (Thousands)	Ton	6,937	5,836	2,616	1,323	1,016	15
8	Tonne-kilometres (Thousands)	Ton	5,896,329	4,846,892	1,757,252	402,481	419,241	7
9	Average kilometres a Tonne of Goods was Carried	kms	850.00	830.50	671.69	304.24	412.74	36
10	Goods Earnings (Thousands)	Rs.	7,493,634	7,136,498	3,337,889	1,583,284	1,984,808	21
11	Miscellaneous Earnings (Thousands)	Rs.	2,051,823	1,758,879	2,290,034	1,694,650	1,564,356	76
12	Locomotives	Nos.	551	528	528	522	493	89
13	Coaching Vehicles	Nos.	1,763	1,776	1,774	1,823	1,785	101
14	Goods Wagons (in terms of 4 wheelers)	Nos.	21,984	21,261	23,774	23,774	21,927	100
15	Total Carrying Capacity of Goods Wagons	Ton	279,215	471,375	527,163	527,163	382,605	137
16	Persons Employed	Nos.	85,078	83,868	82,424	82,176	81,880	96

Table in the last column shows the relation of figures of 2012-13 in percentage with respect to those of 2008-09 regarding all performance indicators .It is clear from the table that the performance of Goods sector has been the worst hit during last five years as total goods carried, total tonnes kilometre and total goods earnings and average km a tonne of goods carried is reduced to 15%, 7%, 21% and 36% respectively.

Table No.-2: showing Operating Revenue, Expenditure and Operating Ratio
(Figures in Thousands)

Year	Revenue	Expenses	Operating Ratio (Expenditure / Revenue)
1950-55	315.112	209.712	66.55
1955-60	420.114	251.298	59.82
1960-65	514.701	348.688	67.75
1965-70	645.615	479.358	74.25
1970-75	959.970	724.589	75.48
1975-80	2,115.474	1701.72	80.44
1980-85	3,342.686	3223.649	96.44
1985-90	5,094.858	6785.465	133.18
1990-95	8,584.177	6937.438	80.82
1995-20	9,446.065	9528.494	100.87
2000-05	14,451.245	12257.511	84.82
2005-10	20,478.611	23519.341	114.85
2010-2011	18,612.067	31464.91	169.06
2011-2012	15,444.393	31443.343	203.59
2012-2013	18,069.545	35123.742	194.38

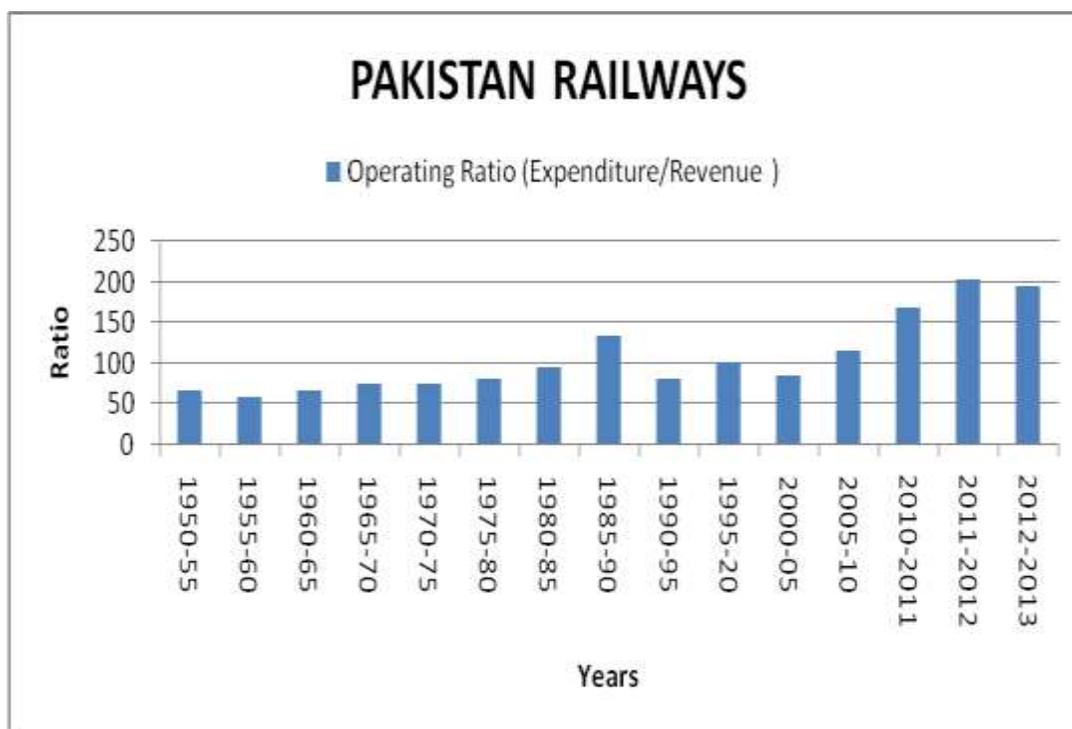
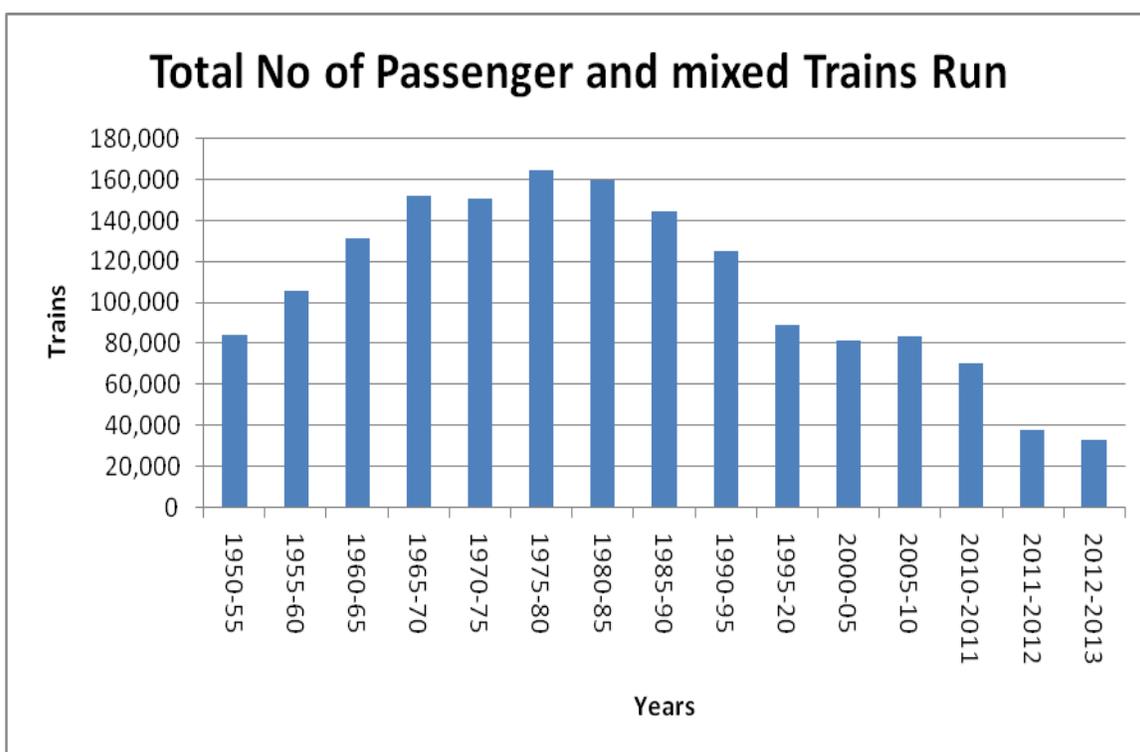


Table No.-2 with graph is very important which shows actual health of the department. This indicates that since 2005-2010, the working expenditure is more than the working revenue and is continuously increasing till during 2011-12, the expenditure was more than 200% of the revenue earned during that year.

Table No.-3 : Passenger Trains Run, Numbers of Passengers Carried, Total Kms covered by Passenger Trains and Total Passenger Kms achieved

Year		Total Numbers of Passengers and mixed Trains Run	Total Passengers Carried (Thousands)	Total kilometres covered by trains (Thousands)	Total Passengers Kilometres (Thousands)
1950-55	Average	84,697	78,942	19,787	6,778,538
1955-60	Average	106,210	102,657	24,469	8,064,025
1960-65	Average	131,273	126,284	27,927	9,533,593
1965-70	Average	152,499	130,475	31,039	10,025,201
1970-75	Average	150,651	134,076	31,642	10,792,170
1975-80	Average	164,917	145,710	35,042	15,111,969
1980-85	Average	160,024	113,474	35,301	17,402,638
1985-90	Average	144,538	82,319	35,982	18,483,168
1990-95	Average	125,348	69,084	33,999	17,828,907
1995-20	Average	89,409	67,964	31,461	18,853,609
2000-05	Average	81,495	72,828	30,692	21,992,225
2005-10	Average	83,813	80,557	32,546	20,970,516
2010-2011		70,915	64,903	27,971	20,618,829
2011-2012		38,418	41,097	21,459	16,093,350
2012-2013		33,368	41,957	19,962	17,388,413



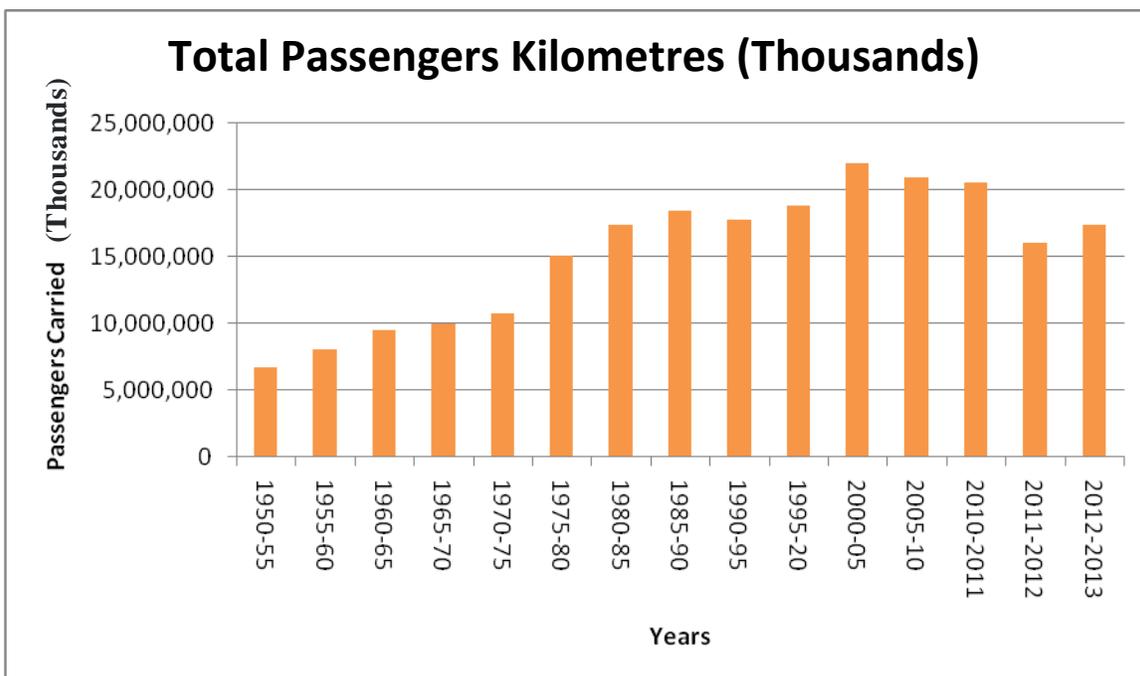
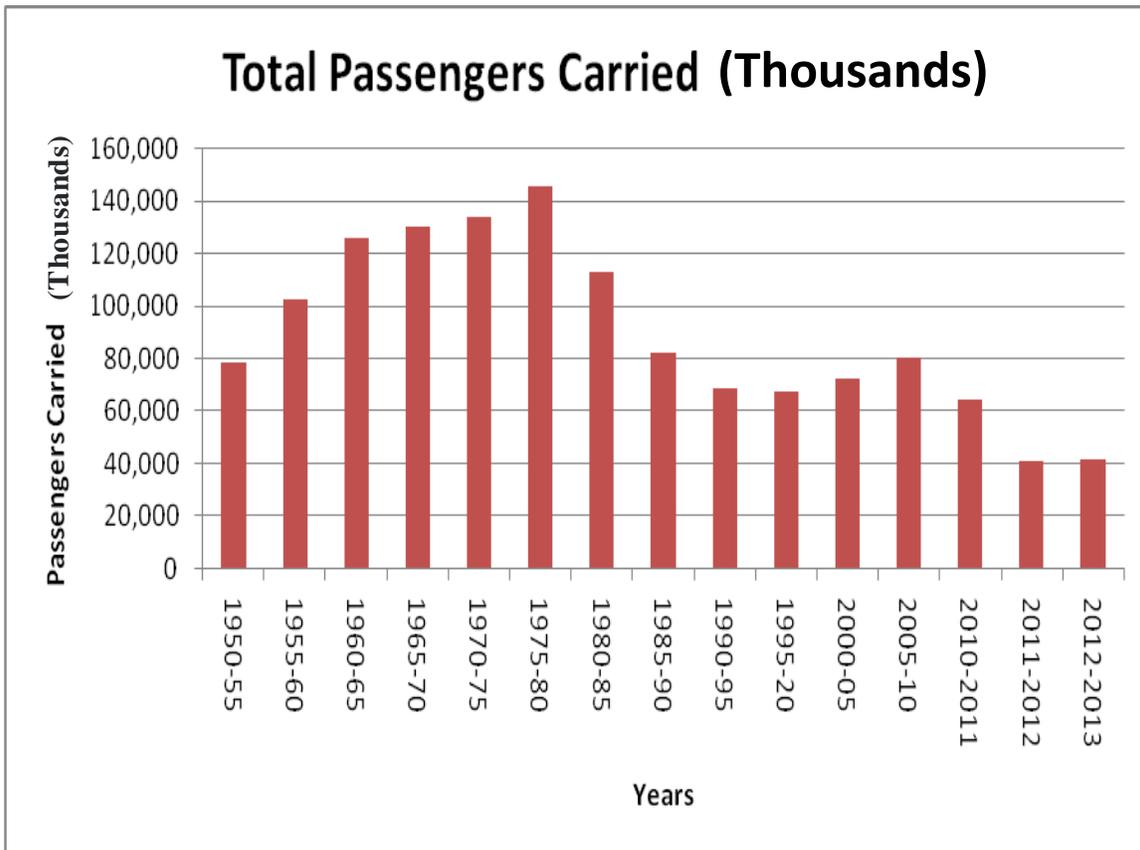
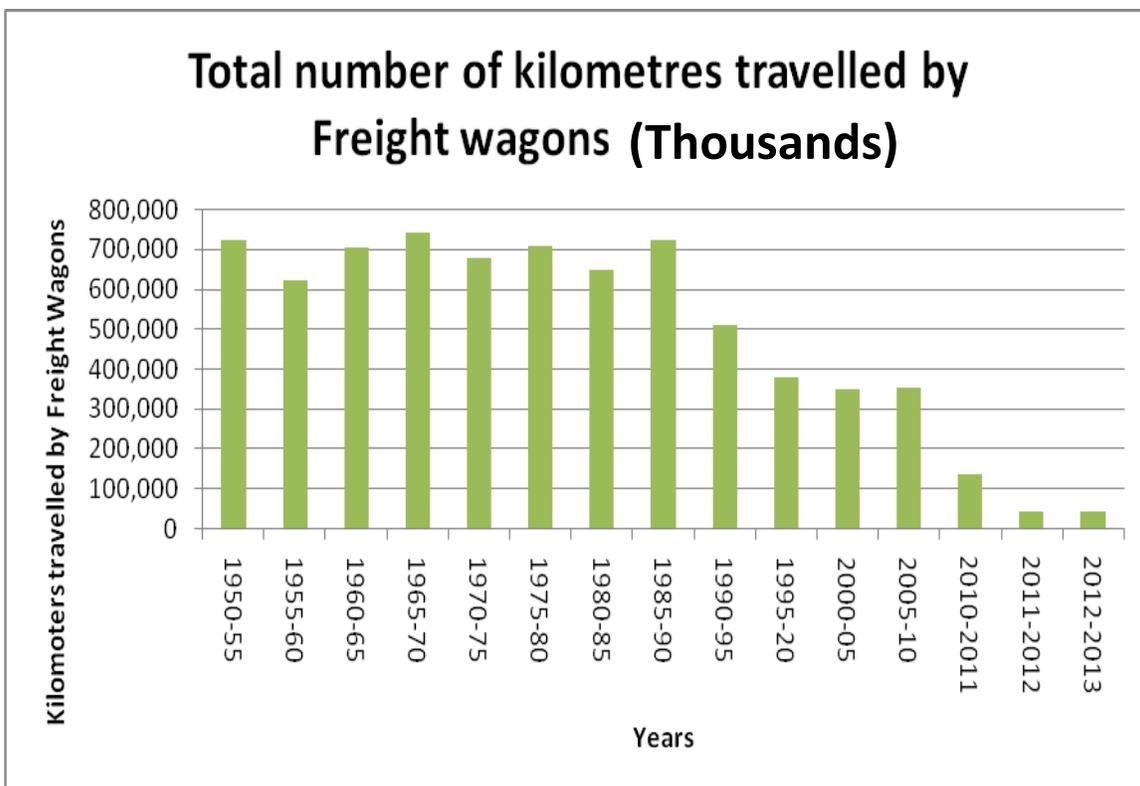
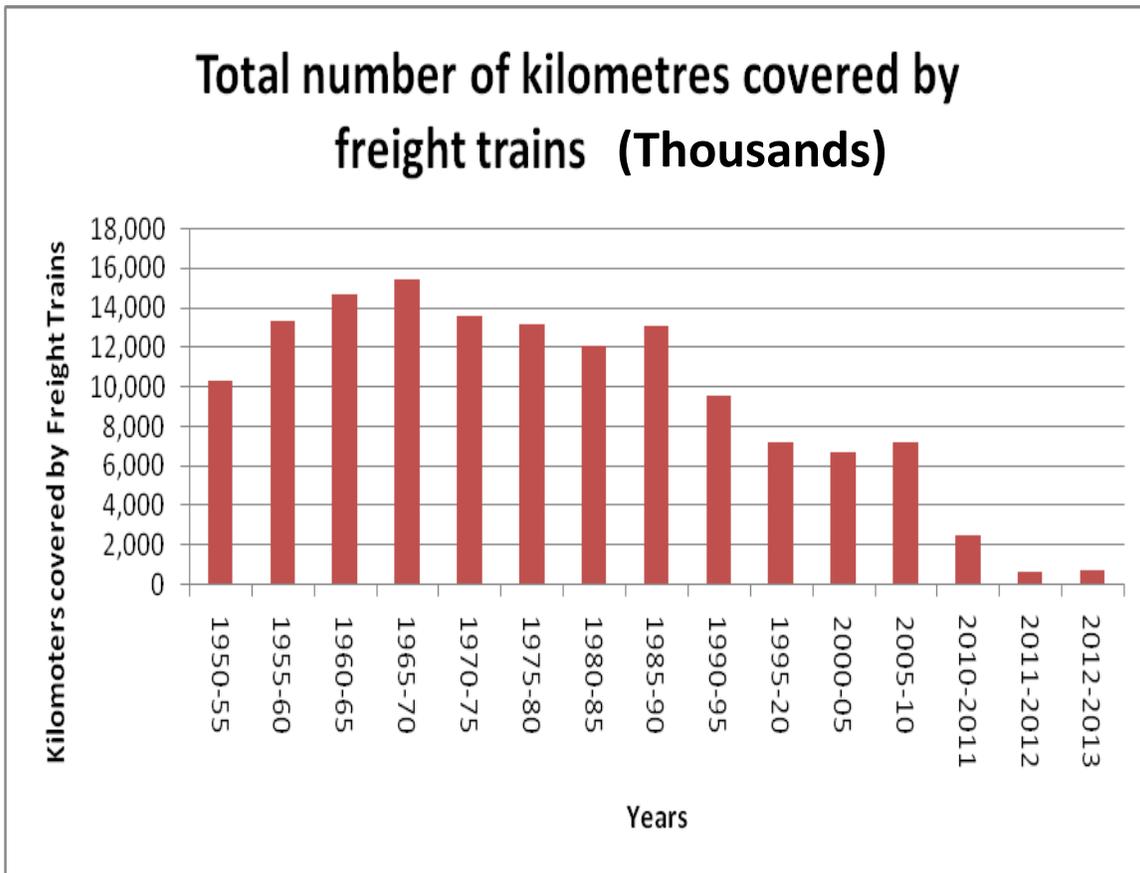


Table No.-3 and graphs indicate that all the parameters of passenger sector i.e. Numbers of passenger trains run, and numbers of passengers carried are continuously decreasing since 1980-85 with an exception of period 2005 / 2010, while Kilometers covered by passenger trains and passenger kilometers achieved are on the decrease since 1990-95 and 2005-10 respectively with small exception in between.

Table No.-4: Numbers of Freight Trains Run, Kilometres Covered by Trains and Average Wagon Turn Round in Days (Broad-Gauge)

Year		Number of freight trains run	Total number of kilometres covered by freight trains (Thousands)	Total number of kilometres travelled by Freight wagons (Thousands)	Average wagon Turn Round(Days)
1950-55	Average	70,843	10,311	722,514	8.3
1955-60	Average	88,477	13,306	622,567	7.8
1960-65	Average	90,735	14,635	701,681	9
1965-70	Average	92,071	15,407	741,559	11.1
1970-75	Average	78,230	13,544	676,470	13.3
1975-80	Average	65,423	13,184	708,117	15.9
1980-85	Average	61,694	12,064	647,030	16.9
1985-90	Average	53,666	13,088	720,851	17
1990-95	Average	35,863	9,540	509,257	16.4
1995-20	Average	20,337	7,191	380,412	19.1
2000-05	Average	17,782	6,728	350,794	21.2
2005-10	Average	16,893	7,172	354,762	21.4
2010-2011		4,435	2,499	137,630	48.9
2011-2012		1,782	699	44,120	105.1
2012-2013		1,414	729	43,125	129.5





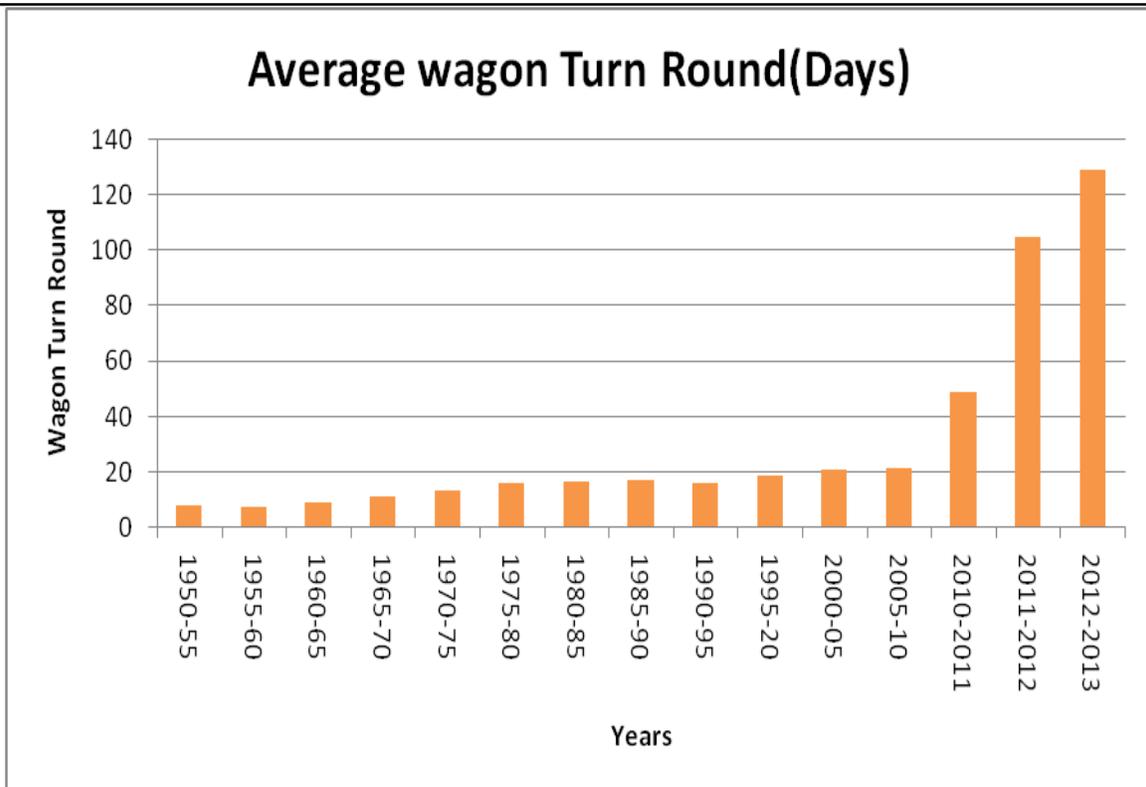
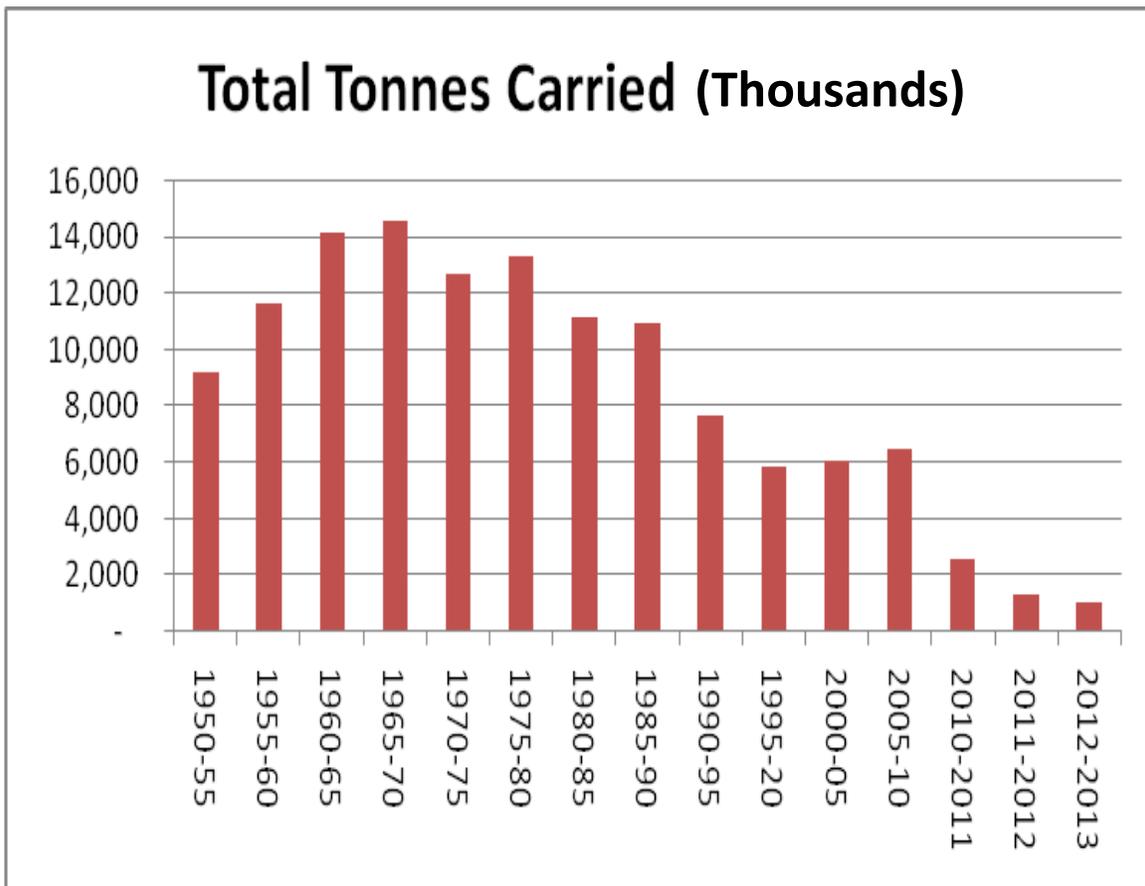
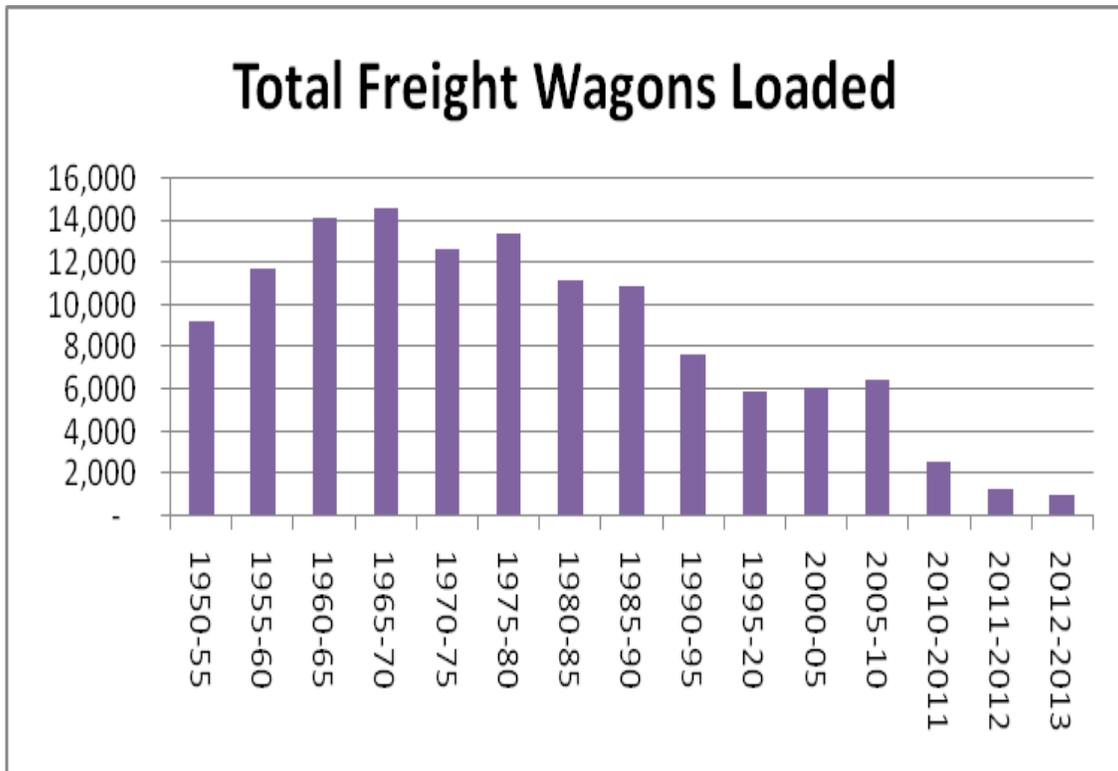


Table No.-4 and its graphs impart very important information about the working of Freight sector due to which PR has gone into heavy losses. This shows that running of numbers of freight trains started decreasing since 1985-90 from 33666 numbers of trains per year to only 1414 trains during 2012-2013. Similarly freight train kilometre decreased from average 13088 per year during period 1985-90 to only 729 during 2012-13. Average turn round of a freight wagon increased from 17 days during period 1985-90 to 129.5 days during 2012-13.

Table No.-5: Freight Operation showing numbers of Wagons loaded, tonnes carried and tonnes kilometre covered

Year		Total Freight Wagons Loaded	Total tonnes carried (Thousands)	Total Tonnes Kilometer (Thousands)
1950-55	Average	882,265	9,244	4,377,892
1955-60	Average	996,513	11,703	5,479,801
1960-65	Average	1,159,632	14,156	7,212,655
1965-70	Average	1,155,472	14,619	7,899,936
1970-75	Average	957,039	12,715	7,906,679
1975-80	Average	680,696	13,367	8,598,473
1980-85	Average	597,395	11,185	7,379,145
1985-90	Average	584,373	10,959	7,942,615
1990-95	Average	413,966	7,687	5,890,029
1995-20	Average	337,664	5,885	4,370,925
2000-05	Average	307,871	6,098	4,744,365
2005-10	Average	325,308	6,491	5,471,067
2010-2011		126,987	2,616	1,757,252
2011-2012		61,392	1,323	402,481
2012-2013		46,640	1,016	419,241



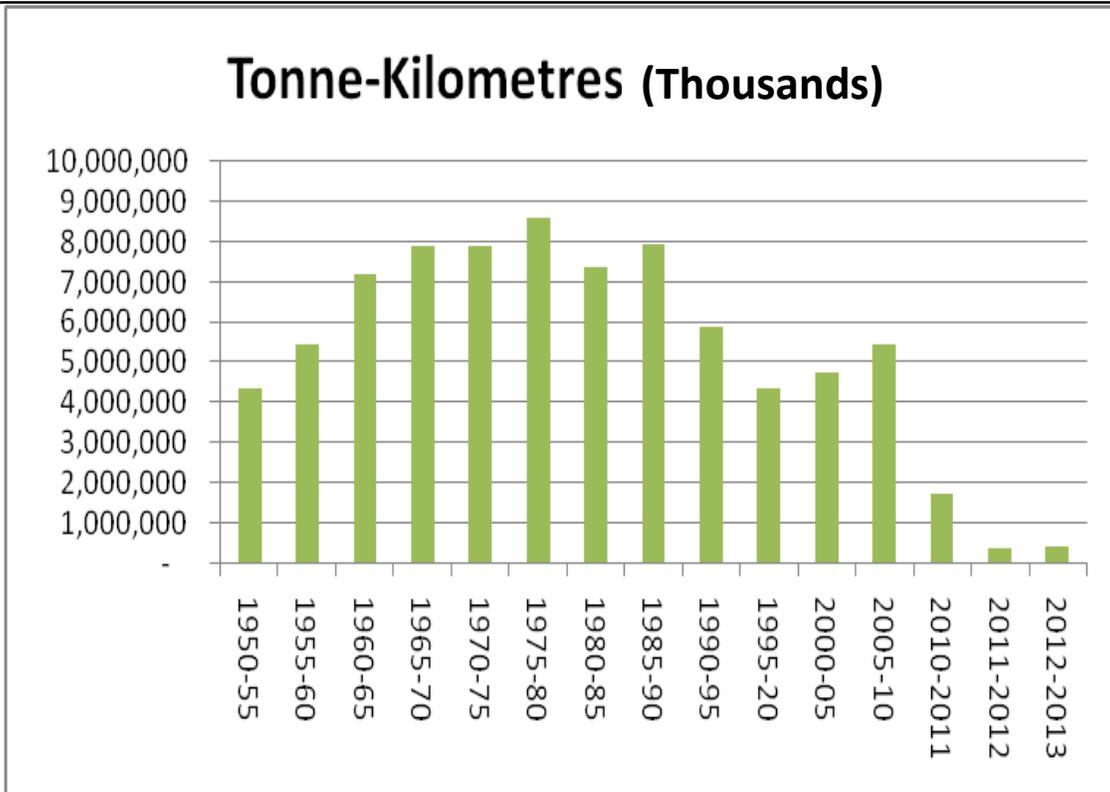


Table No.-5 alongwith graphs further provides very important information about the performance of PR freight sector. Table shows total number. of freight wagons loaded reduced from average 584373 numbers of total wagons / year during 1985-90 to only 46640 numbers during 2012-13, and tonnage carried reduced from 10959 tonnes during 1985-90 to only 1016 tonnes during 2012-13. Total Tonne Kilometre drastically reduced from 5741067 during 2005-2010 to 419241 during 2012-13.

Table No.-6: Locomotive Usage (Broad-Gauge)

Year		%age Average Numbers of loco under repair daily to Numbers of loco on line
1950-55	Average	14.2
1955-60	Average	14.6
1960-65	Average	13.6
1965-70	Average	11.3
1970-75	Average	13.3
1975-80	Average	16.5
1980-85	Average	18.3
1985-90	Average	17.0
1990-95	Average	20.1
1995-20	Average	23.2
2000-05	Average	25.0
2005-10	Average	25.4
2010-2011		32.0
2011-2012		33.8
2012-2013		37.3

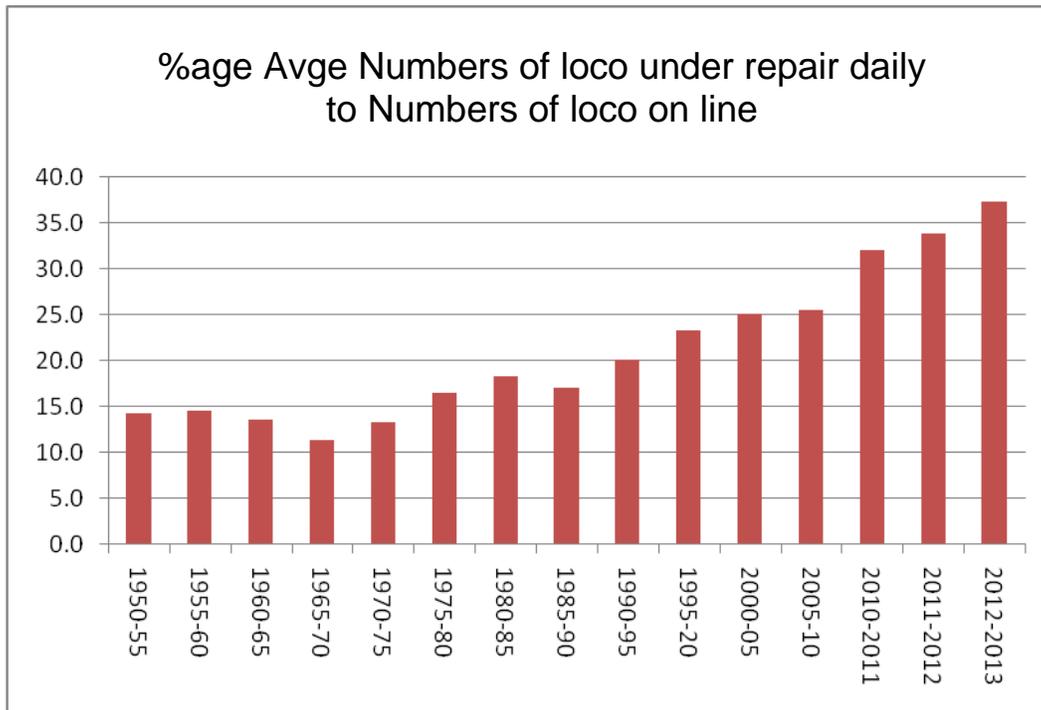


Table No.-6 alongwith graph indicates %age of Average number of locomotives under repair daily to Nos. of locomotives on line. This depicts the standard and quality of maintenance of locomotives. It shows that the working of maintenance workshops was continuously on the deterioration from 1990-95 to 2012-13. Rate of locomotives under repair was abnormal.

Table No. - 7: Punctuality Position of Passenger Mail and Express and Intercity Trains

Year	Mail/Express	Intercity	overall
2010	36	74	60
2011	14	69	52
2012	14	58	40
2013	27	59	47
2014	23	64	48

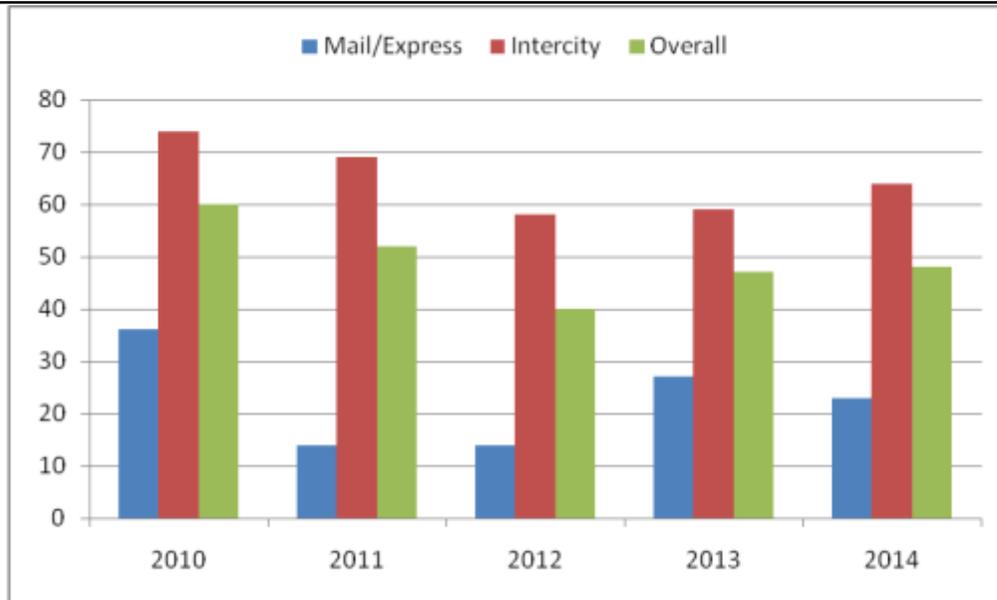


Table No.-7 alongwith graph shows punctuality of train running is one of the most important parameter of performance of a transport system for the passengers using the system. The table under reference indicates no good position regarding the punctuality of different categories of passenger trains.

9. Areas of Concern:

Study of the Performance Indicator tables given above indicates the following areas of concern.

9.1. Continuous losses:

Due to continuous falling earnings & increase in expenditure, PR is sustaining losses continuously and since 2005 position became worse when the expenditure became double to that of the revenue during 2011-12.

9.2. Fall / Decrease in revenue

Constant fall in earnings of the Pakistan Railways has been the prime reason for the continuous losses it is suffering. This in turn is due to following major reasons.

- (i) PR is compelled to run identified loss making passenger trains without any subsidy from the government.
- (ii) High mismanagement in the maintenance of locomotives, and procurement of spare parts which resulted in major portion of fleet to be under repair and not available for service to operate trains especially freight ones. Whatever locomotives were provided for service were not of full traction power and trains are being operated at a reduced speed of 30 to 40 kmh. Often the locomotives are not available to meet the full requirements of train operation as per schedule which results in cancelling of passenger trains and non-operation /running of freight trains.
- (iii) Consumers dissatisfied from the service provided in passenger and freight sector and dwindling consumers opting to travel by road because of improved road network and better services being provided by Bus modes.

9.3. As a result of this deteriorated condition of PR railways contribution towards transportation of national inland traffic has been reduced to :

- (a) Passengers 7 to 8%

- (b) Freight less than 2 %

Although lot of potential for transportation is available in the market.

- 9.4. Leakages and wastages in revenue collection due to structural or managerial inadequacies are also among the major reasons for the revenues falling short of the targets fixed annually
- 9.5. **Stagnant Tariff Structure**
Almost stagnant tariff structure of Pakistan Railways due to social welfare and political considerations
- 9.6. **Increase in Cost/Inflation**
Inflationary pressures are eroding the purchasing power of railways to buy goods and services for running, maintaining and developing the railways operational network. .
- 9.7. **Under-investment** has now started yielding bad results in the form of low efficiency threshold of almost every railway activity.
- 9.8. **Deferred maintenance** of rolling stock (locomotives and coaches) and infrastructure (track and signaling system) has lead to reduced train operation, decreased train speed, short train composition and loss of punctuality.
- 9.9. **Corruption:**
Lack of proper checks and balances create loopholes for corruption even in the presence of best legal framework and institutional mechanism
- 9.10. Because of increase in cost of fuels and other consumable stores and decrease in revenue the position, during near past ,became so critical that PR's fuel storage balance reduced to nil at one time and PR was not capable to buy the fuel for operating of trains and the train service were frequently cancelled.
- 9.11. **Mounting Complaints**
- (a) On account of unsatisfactory service to the users the Pakistan Railways is the target of mounting complaints from all corners for the last several years.
 - (b) Most of the complaints are about extremely low quality of services provided, lack of punctuality, and disrespectful attitudes of the employees towards the passengers, unnecessary secrecy and lack of commitment.
 - (c) This across the board consumer dissatisfaction has created a crisis of confidence among the very loyal passengers & freight base of Pakistan Railways.
- 9.12. **Demoralized manpower**
- (a) There is a widespread demoralization among the rank and file of all railway employees due to continuous losses, adverse publicity and sense of self-alienation.
 - (b) Demoralization is not only adversely affecting the efficiency and effectiveness of service delivery but is also forcing the most efficient and vital staff to leave the service.
- 9.13. Lack of proper facilities in trains and at railway stations for the passengers is a common feature.

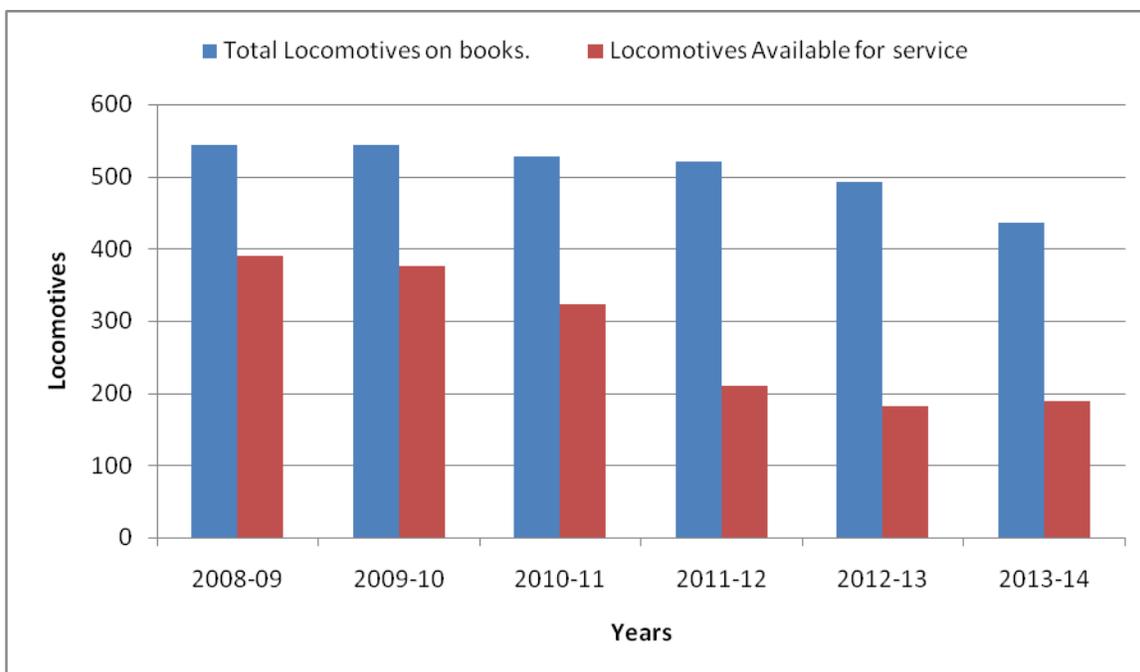
10. Causes Of Deterioration of PR

10.1. Critical Factor “The Depleting assets”

- (a) Almost every asset of Pakistan Railways, may it be infrastructure or its rolling stocks, is fast deteriorating as most of them have outlived their useful lives. It is adversely impacting upon its operational efficiency of the assets. Sufficient funds were not made available to PR which could catch-up the rate of deterioration as it could not be maintained to its desired level of use what to talk of their upgrading or improvement.
- (b) As a result locomotives failures are frequent and only 180 locomotives, on the average out of 481 were available in working order during 2013 for rail services. The position during earlier years was worse than this. Due to social reasons, mostly these locomotives were used for passenger express and intercity trains without caring that most of them were loss making ones. Availability position of locomotives during last 5-years is given in table below.

Table No.-8: Position of Locomotives during last 5 years-

Year	Total Locomotives on books.	Locomotives Available for service
2008-09	544	390
2009-10	544	376
2010-11	528	323
2011-12	521	210
2012-13	493	181
2013-14	436	189



- (c) Shortfall of locomotives in freight sector which is a profitable sector for railways transportation resulted in drastically reduced revenue generation in this sector (refer Table No.-1).

- (d) Due to deficient maintenance extensive speed restrictions over 10% to 25% lengths of track on main lines are being imposed which is the cause of late running of trains.

10.2. Damages to PR assets :

- (a) On the assassination of Muhtarma Benazir Bhutto during December 2007 damages worth Rs. 12.0 billion to railway assets were not compensated by the government.
- (b) Damages worth Rs. 8.0 billion due to floods of Aug. 2010.

10.3. Under-investment

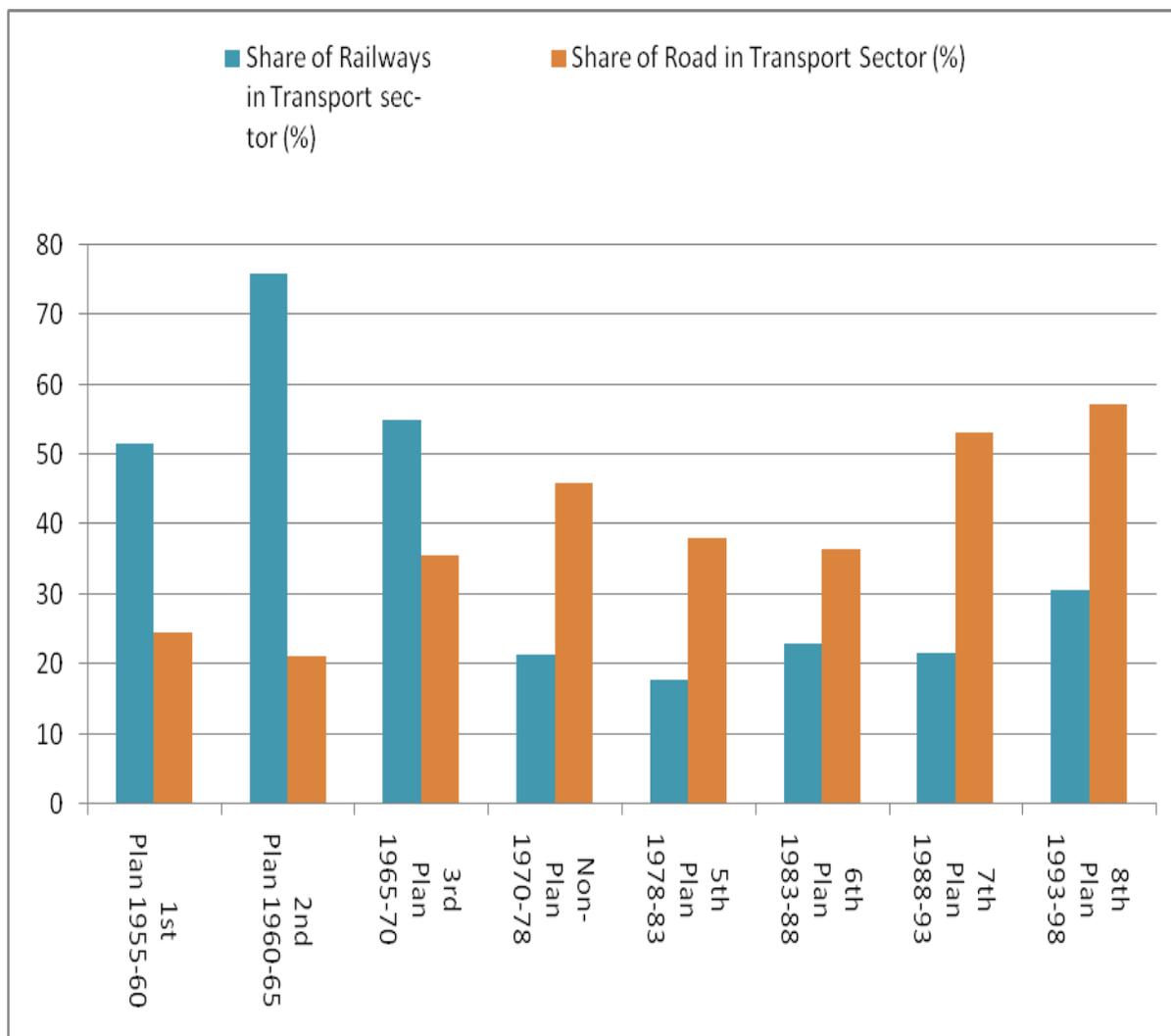
- (a) After 1973 Pakistan Railways' budget was amalgamated into the National Budget with the result that the profit they earned was diverted to other heads, leaving less and less allocation for its own maintenance, expansion and improvement. Table-9 placed below clearly indicates this behavior of the government towards railways sector.

Table No.-9: Share of Pakistan Railways in the National Five-Year Plans as compared with Road from First Five Year Plan to 8th Plan. (in Million Rupees)

Description		1st Plan 1955- 60	2nd Plan 1960- 65	3rd Plan 1965- 70	Non- Plan 1970- 78	5th Plan 1978- 83	6th Plan 1983- 88	7th Plan 1988- 93	8th Plan 1993- 98
A.	National Plan Size	4.860	10.600	13.200	75.540	153.210	279.000	350.000	752.000
B.	Outlay on Transport	0.928	1.500	2.060	13.630	31.156	32.366	39.150	130.576
C.	Outlay on Rail-ways	0.478	1.138	1.150	2.923	5.566	7.400	8.486	40.041
D.	Share of Transport in Overall Plan (%)	19.1	14.1	15.6	18	20.3	11.5	11.2	17.36
F.	Share of Railways in Transport sector (%)	51.5	75.9	55	21.4	17.9	23	21.7	30.66
G.	Share of Road in Transport Sector	24.5	21.1	35.6	46	38	36.6	53.1	57.2

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Description	1st Plan 1955-60	2nd Plan 1960-65	3rd Plan 1965-70	Non-Plan 1970-78	5th Plan 1978-83	6th Plan 1983-88	7th Plan 1988-93	8th Plan 1993-98
(%)								



(b) Even allocation in the 9th and 10th five year plan indicates the same behavior of the government .See table below

	9 th Plan (2005 to 2010)	10 th Plan (2010-2015)
Roads	Rs 156 Billions	Rs 316 Billions
Railways	Rs 45.5 Billions	Rs 109 Billions

On the other hand, the Government spends three to four times more on road sector. It was this combination of neglect to railways and preference to roads, which is the root cause of the present malady of Pakistan Railways.

- (c) We have not been able to formulate any National Transport Policy which could at least show where railways stand vis a vis other modes of transportation.

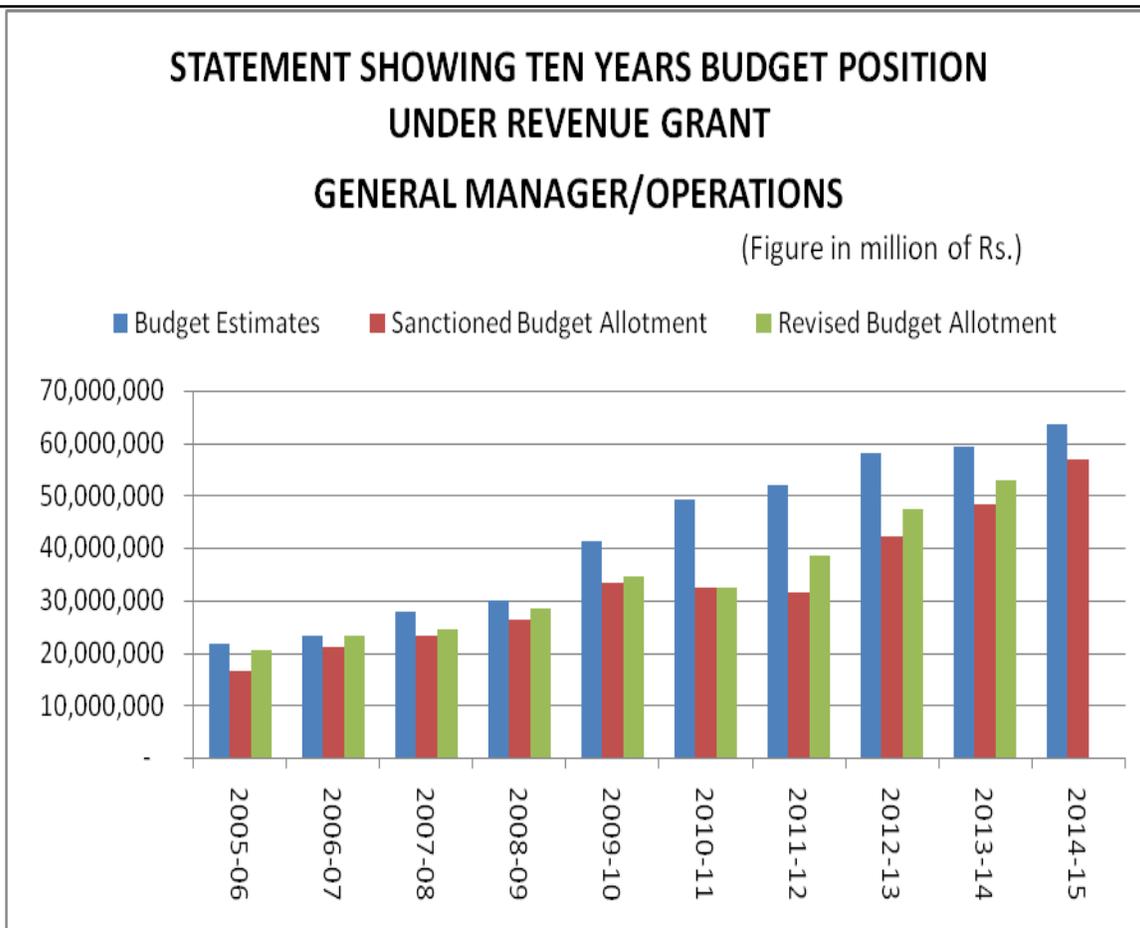
10.4. Ministry of Railways, which is responsible for providing funds for the maintenance and development of the railway network against Head Revenue, has no long-term framework for capital support to perform these roles. Sufficient funds are not allotted to railways sector which could be capable for catching-up the rate of depletion / deterioration of assets what to talk of any improvement, replacement or up-gradation.

Table No.-10 showing allocation of Revenue Budget vis-a-vis the demand by PR administration.

**STATEMENT SHOWING TEN YEARS BUDGET POSITION
UNDER REVENUE GRANT
GENERAL MANAGER / OPERATION**

(Figures in million of Rs.)

S.No.	Years	Budget Estimates	Sanctioned Budget Allotment	Revised Budget Allotment
1	2005-06	21,771.869	16,651.361	20,419.429
2	2006-07	23,081.915	21,172.886	23,225.659
3	2007-08	27,670.464	23,261.269	24,483.599
4	2008-09	29,822.934	26,239.253	28,336.266
5	2009-10	41,121.952	33,339.948	34,585.332
6	2010-11	49,134.811	32,322.408	32,322.408
7	2011-12	52,052.131	31,535.271	38,406.482
8	2012-13	58,227.631	42,319.610	47,368.496
9	2013-14	59,443.448	48,216.809	52,988.397
10	2014-15	63,659.412	56,902.595	



10.5. **Capability of utilizing yearly Allocation.**

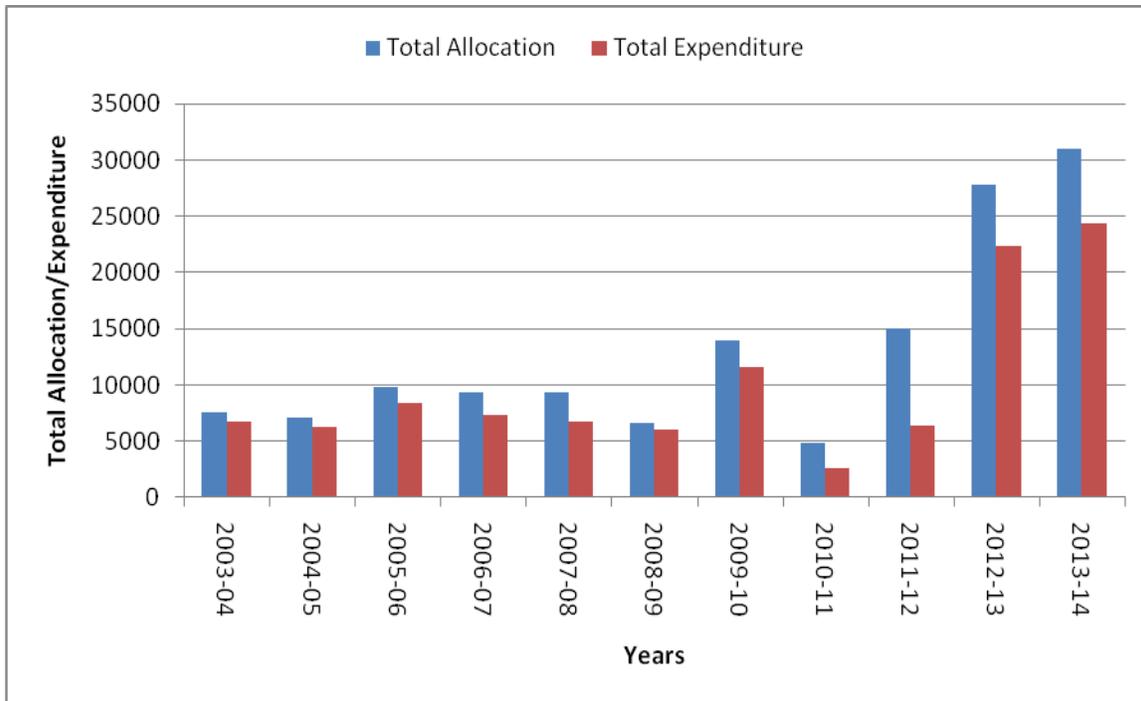
Table-11 below shows the Funds Demanded, funds Allocated and their utilization against PSDP for the last 10 years. It can be seen that performance of PR during 2010-11 2011-12 has been the worst when it could hardly consume 54% and 42% of the yearly allocation respectively mostly due to inefficiency and in-competency of the concerned Project Directors. Another very important factor is the delay and unwanted restrictions on the release of funds. However PR regained the position during last two years.

Table No.-11: Comparison of allocation of PSDP and its utilisation on Pakistan Railways

Figures in Million Rupees

Year	Allocation			Expenditure			Difference	Percentage utilisation
	Infra-structure	Loco-motive & Carriage	Total	Infra-structure	Loco-motive	Total		
2003-04	2035.489	5579.310	7614.799	1844.698	4882.688	6727.386	-887.413	88.346
2004-05	2209.946	4941.490	7151.436	1702.002	4548.929	6250.931	-900.505	87.408
2005-06	3800.950	6024.526	9825.476	3506.906	4891.774	8398.680	-1426.796	85.479
2006-07	4525.030	4758.270	9283.300	3807.050	3527.429	7334.479	-1948.821	79.007
2007-08	5683.655	3671.500	9355.155	3936.996	2790.848	6727.844	-2627.311	71.916
2008-09	3635.000	2995.000	6630.000	3043.339	2984.805	6028.144	-601.856	90.922
2009-10	5743.000	8266.000	14009.000	4294.639	7311.644	11606.283	-2402.717	82.849

2010-11	3798.502	1038.785	4837.287	1835.355	776.808	2612.163	-2225.124	54.001
2011-12	6015.018	8984.982	15000.000	3535.045	2799.524	6334.569	-8665.431	42.230
2012-13	8898.299	18911.219	27809.518	6833.180	15532.159	22365.339	-5444.179	80.423
2013-14	9957.540	21007.144	30964.684	3403.204	21003.000	24406.204	-6558.480	78.819



10.6. **Wrong priority of investment in the railways** is another big anomaly. There was no justification for the projects of dualization of railway track from Lodhran to Khanewal which has recently been completed.

Similarly up-gradation of Monabao track from narrow gauge to broad gauge was just a political expediency without financial or economic cost effectiveness.

10.7. **Institutional dichotomy:**

- (a) Besides amalgamating the two budgets during 1973, the government also made Pakistan Railways a government department under the newly created Ministry of Railways with the result that it, instead of a commercial organization, became a bureaucratic organization where rules and procedures count more than end results.
- (b) Bad luck for railways is that railway’s affairs at the top of management are in the hands of non-railway and non-professionals who are hardly in know, of even, a, b, c of the department.
- (c) Direct interference of bureaucrats in the purely technical issues always leads to ineffective service delivery. Now the anomaly is that we are expecting commercial results from an entity being run as governmental department.
- (d) Railways cannot increase fares on its own even if the price of oil triples. They have to move to the government for this purpose.

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- (e) Similarly, it cannot terminate those train services, which are no more needed as better road network, and good bus/truck services are available in the private sector because of political imperatives. In other countries, if the government needs to continue a loss making train service due to strategic reasons, it has to pay to the railways for the loss but you cannot do it in Pakistan. Even train stops are now decided on political basis.
- (f) In the rail transport passenger trains are not the profit making entity. These trains on PR are making hardly 50% of revenue but consume more than 80% of the department's resources. On the contrary freight trains with a use of less than 15 % resources can earn upto 50% revenue. But railway administration cannot stop working of loss making passenger trains and start operating profit making freight trains on its own.
- (g) Ministry is effectively rule-maker, manager, player and umpire of Pakistan's 'railway' team. Such a combination of conflict in roles with concentration of powers is inimical both to good public policy-making and to effective commercial management of state-owned enterprises.

10.8. Governance issues

- (a) Running a commercial organization with political considerations cannot yield profits.
- (b) Tariff rationalization, operational decisions and developmental budget allocation need commercial considerations and not political.
- (c) Posting / transfers made on political expediency adversely affects the operational efficiency and employees morale
- (d) Corruption is widespread because those caught have long hands reaching the corridors of power.

10.9. Lacking Leadership Qualities and mismanagement:

- (a) PR has been the victim of incapable and incompetent leadership for many years in the past. There was lack of proper direction, aim and commitment for bettering the institution and making this a viable commercial department.
- (b) Lack of management qualities/mismanagement is one of the main cause of deterioration of assets of rolling stock especially the locomotives. It was the cause of reduction in availability of locomotives which in turn resulted in elimination of freight trains operation and reduced earning of PR thus a great loss in revenue.

10.10. Play Safe Attitude:

Majority of railway officers, who are at the helm of affairs of taking decisions in respect of important matters, hesitate to take the responsibility and refer the things to higher authority. Decisions are not taken at right time. This attitude results in inefficiency of the department and things are delayed for no reason. This delay sometimes results in abnormal increase in cost of the projects and nobody is asked. The same attitude resulted in less utilisation of PSDP allocation during 2010-11 and 2011-12 when only 54% and 42% allocation could be utilised.

10.11. Ineffective management control of General Manager/Operations:

Organization chart at para No. 3 above indicates that there are 41 Nos. of High Level officers of BS-21 & 20 who have to report to General Manager / Operations directly:

- (a) Additional General Managers = 3 Nos.
- (b) Inspector General of Railway Police = 1 No.
- (c) Principal Officers = 29 Nos.
- (d) Divisional Superintendents = 8 Nos.

As per good standard of administration, the lateral span of control of any administrator should not exceed 7 – 10 officers. In the present circumstances, the General Manager has hardly any time to concentrate on the policy matters for the improvement of the department as he is always busy in day to day routine working of the department.

This aspect also reduces his efficiency. It is, therefore, high time that within the same framework of the officers, General Manager should be relieved of heavy unwanted load of administration.

11. Potential of PR

- 11.1. In spite of all above areas of concerns and adverse management PR is endowed with an impressive National Trade Corridor Infrastructure, a network of Total Track length 11755 Kms, from Ports of Karachi to the hinterland of the Punjab and borders towns of Torkham and Chaman. This network has been so designed that almost major business centres can be approached by the rail track. It has international connections as given below,
- Linkage of Gwadar to Western China.
 - India in the east.
 - Iran, Turkey and Middle East in the west.
 - Afghanistan and Central Asian countries in the North-West.
- There is lot of freight transportation potential from and to these countries which can be exploited.
- 11.2. Safe, efficient, cheap and environmentally friendly means of transport, 1/6 cheaper than road.
- 11.3. Capable for Long and Bulk haul traffic of both passengers and Freight. Such traffic is abundantly available at both national and international level. P R share in inland transportation is hardly 8% in passengers and less than 2% for freight traffic which can slowly and progressively be improved through proper management of potential of PR and commitment to the objective.
- 11.4. Potential freight traffic available for more than 26 freight trains a day.
- 11.5. Increasing demand in the market for long distance passenger traffic.
- 11.6. Potential for commercial exploitation of real estate through joint ventures/PPP
- 11.7. Investment in train operating companies through PR's "Open Access Policy"
- 11.8. Contracting out commercial services on trains and at railway stations to private companies

11.9. Utilization of idle capacity of the manufacturing units of PR, like Carriage Factory, Islamabad, and Locomotive Factory Risalpur.

12. Principles of Road of Recovery for Pakistan Railways from Crisis

- (a) Running P R as commercial organization based on financial viability of train operation.
- (b) Post the right man on right job and give complete freedom of working with no interference. This principle was tried with complete success during 1999 to 2003.
- (c) Bringing professional management.
- (d) Concentration on core activities. Shifting of focus towards freight.
- (e) Rationalization of fares.
- (f) Disinvestment of peripheral business.
- (g) Introducing Track Access Policy.
- (h) Out-sourcing of maximum core activities.
- (i) Induction of private sector in operation and maintenance activities.
- (j) Creation of independent regulatory authority.

13. Actions Required / Strategy / Way forward

An inherently commercial and profitable organization today stands in a state of huge losses, having countless stores of precious amounts of refused rails, rolling stocks, locomotives and having rebuilding factories suffering from low capacity utilization. It is, however, not a poor organization, as it owns priceless lands, the main artery of rail link and large number of branches connecting far flung areas of the country, numerous bridges, countless buildings, factories, historic railway stations and a very large cadre of technical and civil servants. They are highly skilled, but presently they are demoralized and de-motivated, as they see no hope for their betterment tomorrow. The real problem, therefore, in a sense, is not lack of resources, but their utterly inefficient utilization, mismanagement and lack of leadership. All this can be changed with leadership, vision, commitment and a plan, to be faithfully implemented, that would aim at complete leveraging of railway assets, infrastructure and improving incentives of employees to perform better.

13.1. Train operations.

This is the most important field which needs immediate attention for improvement.

The Federal Cabinet in its meeting held on 10th March, 2010, approved a summary submitted by the Cabinet Committee on Restructuring (CCOR) of Public Sector Enterprises (PSE's) which included PR as well.

- (a) In line with the policy decision of the Cabinet, the purpose of PR is to provide a competitive, safe, reliable and market oriented mode of transportation to the travelling public and transportation of goods.
- (b) PR would function as a business enterprise based on financial viability of train operations. Each train unit will have a purpose. The aim will be to maximize revenues while safeguarding public interest and national integration.

- (c) Train operation will be tailored in a manner where uneconomical and non-commercial train services and sections should be identified and closed down. Even the non-commercial stoppages of trains should also be eliminated.
- (d) For optimal use of the rolling stock and infrastructure, train units have to be redefined for the freight and passenger sectors as:
 - (i) A freight train should run at a speed of 80 kmh with a load of 2,200 tonnes hauling bogie stock on a flat section. In this era of advancement PR should prefer to run high speed freight trains with high capacity wagons having a train load of about 4500 tonnes.
 - (ii) A passenger train with a composition of eighteen (18) coaches carrying 1200-1500 passengers, running at a speed of 120 kmh which should be increased to 140 kmh progressively.
- (e) **Target demand for revenue generation**
 - (i) PR would target the demand for long distance and bulk carriage of passenger and freight traffic. Running of freight trains should be preferred over the passenger trains being profitable.
 - (ii) Trains whose revenue is less than 50% of the expenditure would be identified and considered for closing down.
 - (iii) Train operations will be tailored to generate maximum revenues at minimum costs
 - (iv) The passenger and freight train mix will be re-adjusted and resources diverted to revenue generating freight sector.
 - (v) PR would adjust fare and freight structures i.e. tariff, according to market dynamics.

13.2. National Transport Policy :

- (a) To give the true direction to the modes of transport national transport policy should be finalized and set-out aims and objectives for transport as a whole. Every mode of transport should know where they stand in the overall national transport perspective.
- (b) It will end the unnecessary competition among the four modes of transportation and force them to go for a national multi-model transport network.

13.3. Restructuring of governance mechanism:

- (a) Prepare legal frame work for active participation of private sector in the rail sector.
- (b) Segregate the multifunctional role of Ministry as Administrator, Operator, Regulator, through certain legal framework.
- (c) Ministry of Railways be given all powers for policy formulation, assisted by high-powered active railway advisory board consisting mainly of highly experienced railways, in service or retired officers.

13.4. Financial Restructuring

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- (a) Resolve the issue of social obligations of the state vs commercial expectations from PR. If the state wants to run certain loss making train services for strategic/social considerations, let her compensate the PR for the loss thus incurred.
- (b) If Pakistan Railways have to be run as a government department then it should be treated as such in terms of revenues it earns and expenditures it incurs.
- (c) Salaries, pension, operational, maintenance and developmental expenditure should be considered as public expenditure and not as loss which is what in normal discourse is being stated. Similarly its loan liabilities be paid by the state and not be treated as loss as is done by the government for other departments.

13.5. Rationalization

- (a) Pakistan railways needs to be run on purely commercial considerations with due regard for social welfare aspects, retaining most profitable railway trains and weeding out the uneconomical ones.
- (b) Across the board subsidy needs to be replaced with targeted relief to passengers with limited means

13.6. Fare Rationalization

Railways administration be empowered for

- (a) Maintaining the flexible system of tariffs, reducing the fare where there is competition, and increasing where there is no competition.
- (b) Segmenting- seasonal, family return etc
- (c) Subsidies for the widows, low income etc

13.7. Governance Improvement:

- (a) To improve the quality of decision making at senior most level in the ministry post of Secretary / Chairman of Ministry of Railways should be manned by a professional railways man.
- (b) Railways working is a very sensitive issue and the minutest interference can disturb the normal working, therefore, political interference in the operation departments from all corners for all purposes be stopped.
- (c) Authority with responsibility and proper incentives and rewards along with strict accountability regime is essential for effective and efficient service delivery.
- (d) Add transparency in procurement and sale.

13.8. Investment:

- (a) Pakistan Railways need massive investments just to arrest the fast depletion of its rolling stocks and fixed infrastructure as well as their up-gradation.
- (b) The Federal cabinet in its meeting held on 29th December, 2010 approved, a bailout package of Rs. 11.1 billion for rehabilitation of 145 locomotives, track maintenance and refurbishment of coaches etc
- (c) Later on GoP promised to arrange Rs. 6.1 billion for repairs of 100 locomotives through loan to be arranged by National Bank of Pakistan. However no relief was provided. The

situation has gone from bad to worse and train operations are frequently disrupted due to deferred maintenance of rolling stock especially the locomotives.

- (d) Some of the critical areas which need investment are Repair and Rehabilitation of available Locomotives, purchase of new locomotives (This sector to be given highest priority), replacement of overage tracks and repairs of bridges and modernization of its signaling. For this purpose The GoP has not given PR any special bailout package beyond their PSDP allocation.
- (e) All these funds are not necessarily to be provided by the state, private sector and foreign investors are willing to invest if provided with proper legal framework and adequate guarantees.

13.9. Capacity Building of the staff.

This aspect is also highly sensitive to achieve the goal for making PR a viable entity. Routine attitude of the officers to play safe and not to share responsibility by taking decisions in important issues need to be changed. In certain cases this attitude caused heavy losses to PR which were not counted. Lack of management skill, (deliberate or undeliberate) was the main cause of the fiasco of locomotives and freight sector which has to be improved

13.10. Out-sourcing of Operations

- (a) One of the quickest and easiest ways to put the Pakistan Railways back on track is to out-source maximum number of its operations.
- (b) For this purpose it should finalize and announce Public Private Partnership Policy for active participation of private sector in rail sector on Design, Finance, Built, Operate and Transfer (DFBOT) basis or Build, Operate, Transfer (BOT) basis
- (c) It should also introduce the Track Access Charges Mechanism to become a basis for private sector investment and partnership for freight & passenger operations of PR
- (d) Contracting-out commercial services on trains and at railway stations to private companies.

13.11. Corporatization of entities

Pakistan Railways have a dozen or so entities which have spare capacities in their manufacturing fields. Some of these are :

- (a) Sleepers manufacturing factories.
- (b) Workshops.
- (c) Locomotives manufacturing unit.
- (d) Carriage manufacturing Factory.

Utilization of idle capacity of the manufacturing units of the above assets may be investigated.

13.12. Commercialization of Assets

- (a) Pakistan Railways own very costly patches of real estate at prime locations in major cities of the country which have lot of potential for commercial exploitation. Everyone is after the land owned by the Pakistan Railways and suggests its outright sale to generate funds for its revamping. Joint ventures through private sector participation in real estate development on PR's land will be a preferable solution.

- (b) Pakistan Railways has assets other than land which could be successfully commercialized. One such asset is the railway stations in cities and big towns which can be converted into shopping malls.
- (c) Similarly sale of advertising rights along the tracks, on the stations inside the passenger coaches etc can be gainfully utilized for earning revenues if properly managed.

13.13. Indigenization

- (a) Pakistan's private sector in the manufacturing and services is robust enough to cater to most of the maintenance and operational needs of the Pakistan Railways. Induct the private sector starting with gradual manufacturing of spare parts, overhauling and finally complete manufacturing.
- (b) Infrastructure maintenance should be upgraded, with greater use of mechanized maintenance where possible, contracting-out of major periodic maintenance of track can be tried.
- (c) For signaling and telecoms, even routine maintenance may need to be contracted to external organizations able to pay market rates and guarantee an assured supply of spare parts
- (d) Without adequate maintenance the effectiveness of these systems will otherwise steadily decline, with significant effects on the efficiency of the remainder of operation.

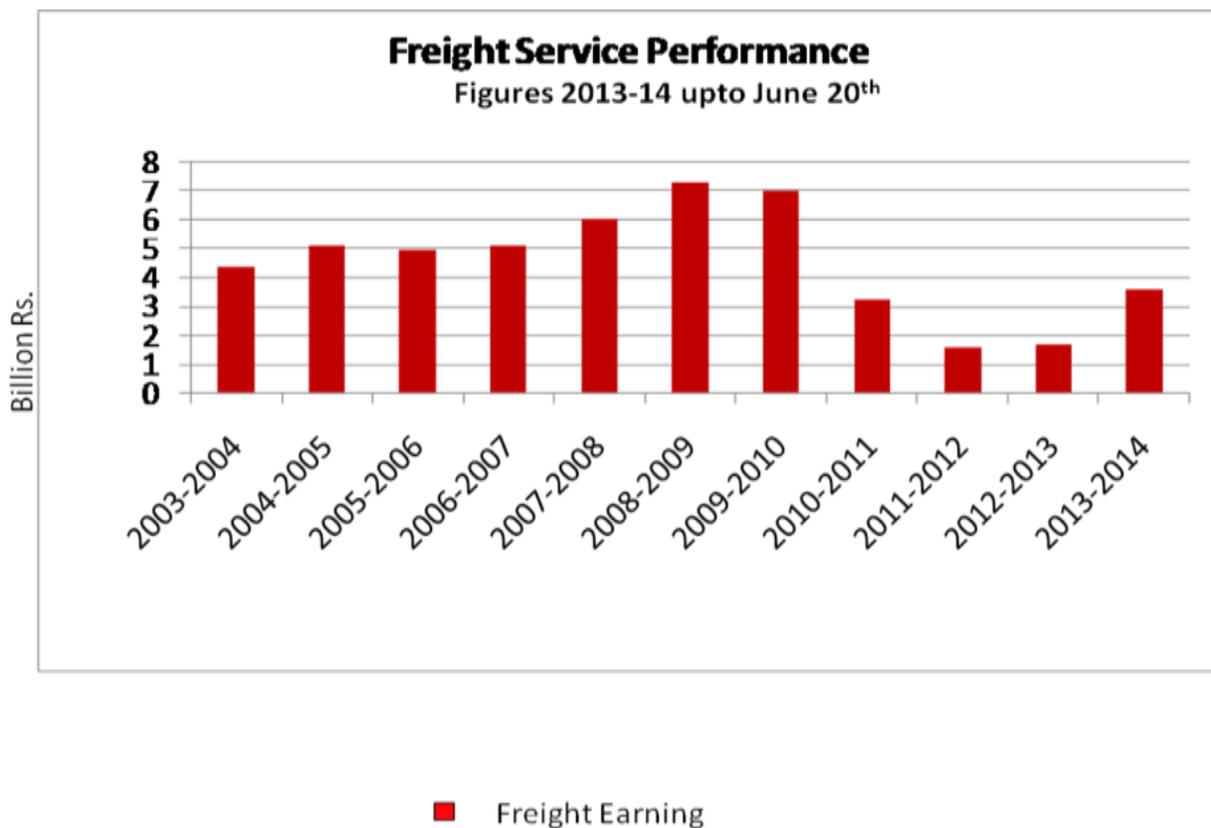
14. Action Taken for Improvement of PR

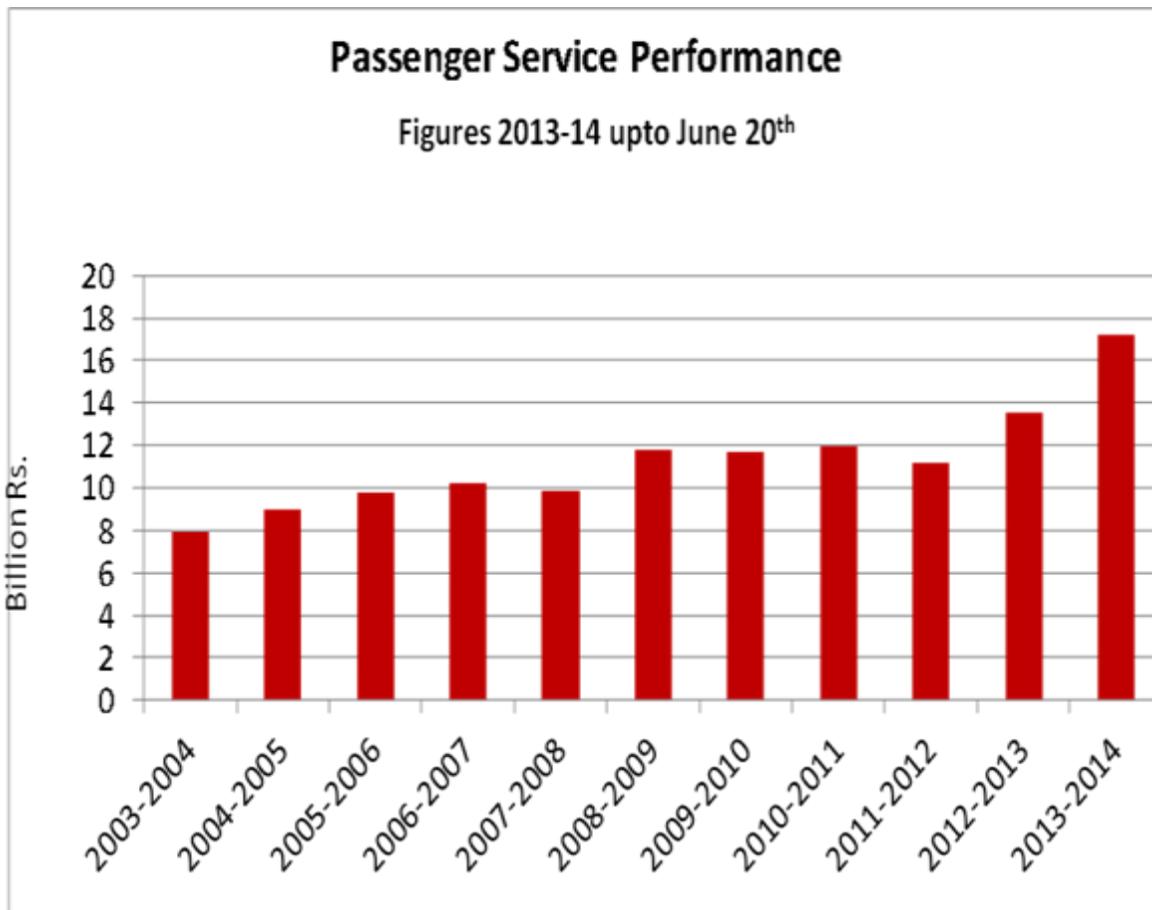
- (a) In response to Federal Cabinet's policy decision taken in its meeting held on 10th March, 2010 by approving a summary submitted by the Cabinet Committee on Restructuring (CCOR) of Public Sector Enterprises (PSE) Pakistan Railways (PR) started taking action on Federal Cabinet Policy decisions towards betterment of railways. Since then it has implemented as under,
- (b) Loss making passenger / express trains were identified and were closed progressively as under:

Year 2009-2010	Numbers of trains in operation	234
Year 2010-2011	Numbers of trains in operation	204
Year 2011-2012	Numbers of trains in operation	86
Year 2012-2013	Numbers of trains in operation	96
Year 2013-2014	Numbers of trains in operation	98

- (c) Locomotives thus retrieved were allocated to freight sector. As a result freight tonnes carried which were about 50000 during August 2012, the lowest figure, started rising-up and touched to about 180,000 tonnes during March, 2014. Now-a-days four to five oil freight trains daily are started from Karachi in different directions which was hardly half train at the start of the current financial year.
- (d) Freight Sector is getting special treatment in respect of allocation of locomotives. PR has already received 23 new ZCU Chinese locomotives which have been added to the locomotive fleet.”20 more such locomotives will be received shortly. After the successful trial of these 43 locomotives 15 more similar type of locomotives having 3000 Horse Power will be arranged till December 2014.
- (e) Purchase of 75 more new locomotives is under process. This lot of locomotives also contain 55 locomotives with 4000 / 4500 HP for working of freight trains.

As a result of improved availability of locomotives by the above actions of PR, performance indicators during 2012-13 and 2013-14 have improved as indicated in the graph below:

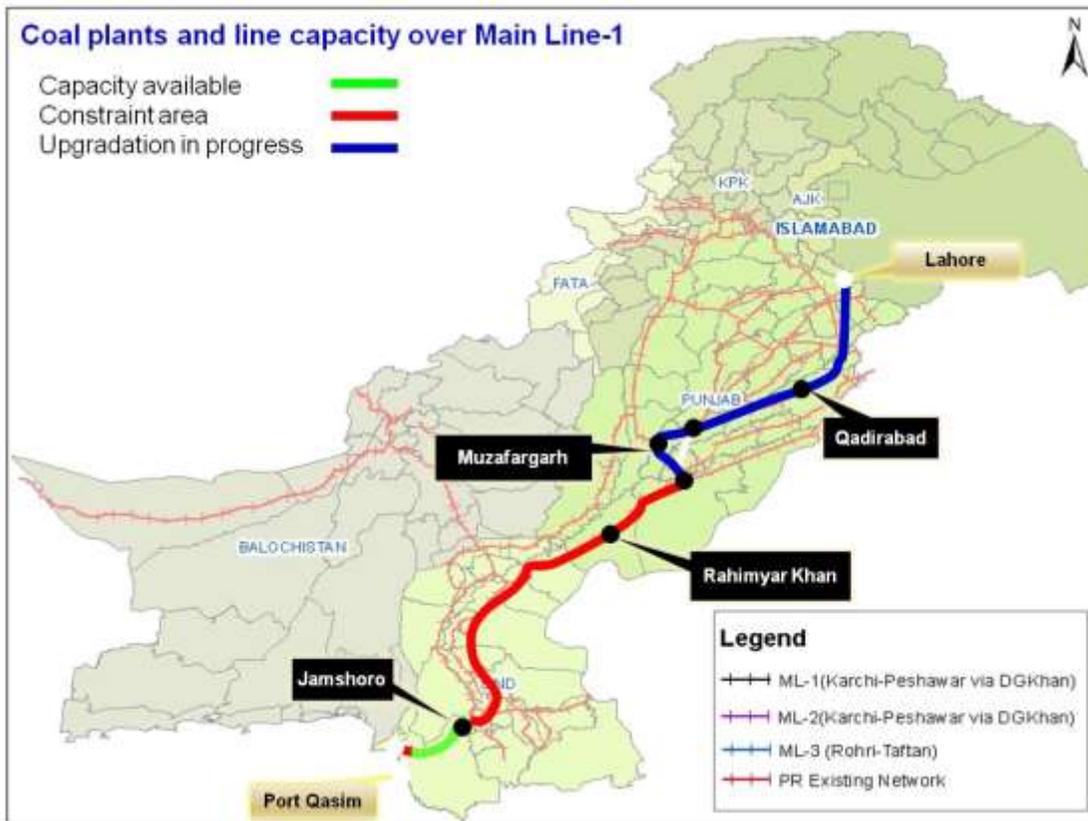




■ Passenger Earning

- (f) NLC had arranged 10 locomotives for PR on lease. These are under test. This is first project on PPP basis in the train operation. If properly managed this will open lot of opportunities for encouraging the Private companies to participate in the train operation activities.
- (g) In addition to-5 ZCU locomotives having 3000 HP under manufacturing in Locomotive Factory Risalpur will join the PR fleet shortly.
- (h) Pakistan Railways has been assigned the responsibility of transportation of 11111 tonnes of imported coal daily for generation of Power by Coal Power Plant at Sahiwal. PC-1 for purchase of 800 special types of Hopper Trucks is under approval by.

There are four such power plants to be operated on imported coal. Apart from Sahiwal other three are located at Jamshoro, Rahim Yar Khan and Muzaffar Garh. Four Plants will require about 45000 tonnes of coal daily, (16.2 Million Tonnes annually) to be supplied to them without fail.



This is a very big business package and will require lot of input in the shape of improvement of infrastructure, purchase of 3065 special hopper trucks, 63 Numbers of locomotives total costing Rs. 124.3 Billion before PR becomes capable for managing this project.

- (i) Action on rationalisation of tariffs has been initiated and the results are encouraging.
 - (i) As a result of above action improvement achieved is indicated in the comparison of revenue earned during 2013-14 compared with the previous year 2012-13.

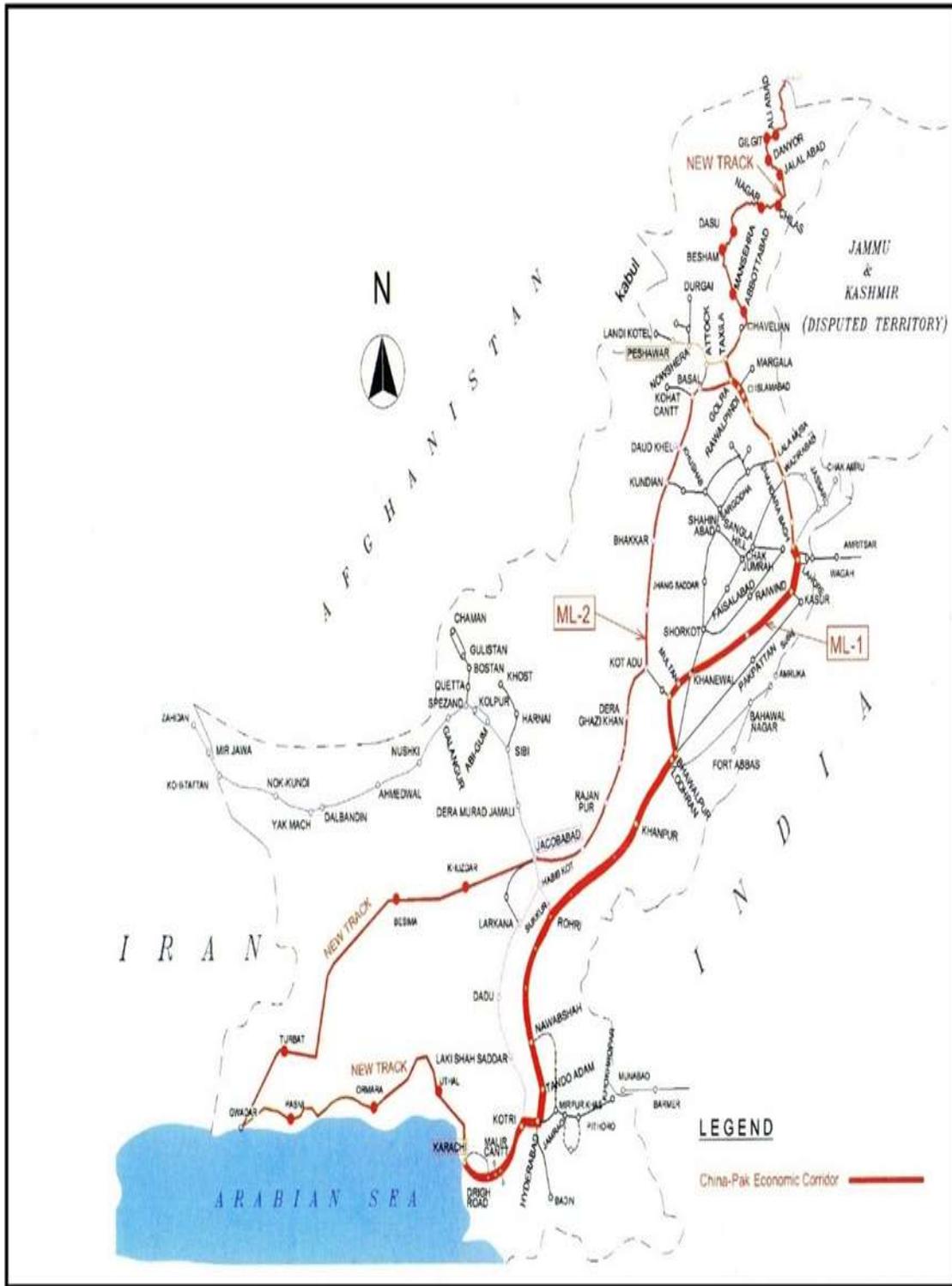
Revenue earned during 2013-2014	23.98 (Rs. Billions)
Revenue earned during 2012-2013	18.07 (Rs. Billions)
Increase	05.91 (Rs. Billions)

- (ii) During 2013-14 freight sector earned Rs. 3535 Millions as against Rs. 1985 Millions during 2012-13 which is about 79% more than the previous year.
 - (j) Where PR is investing heavily in the rolling stock the infrastructure is also given a high importance to improve the speed, safety, reliability and comfort in addition to increasing its capacity for handling more freight traffic which is the profit making sector for railways. According to this vision PR is planning to invest in the project of China Pakistan Economic Corridor (CPEC).

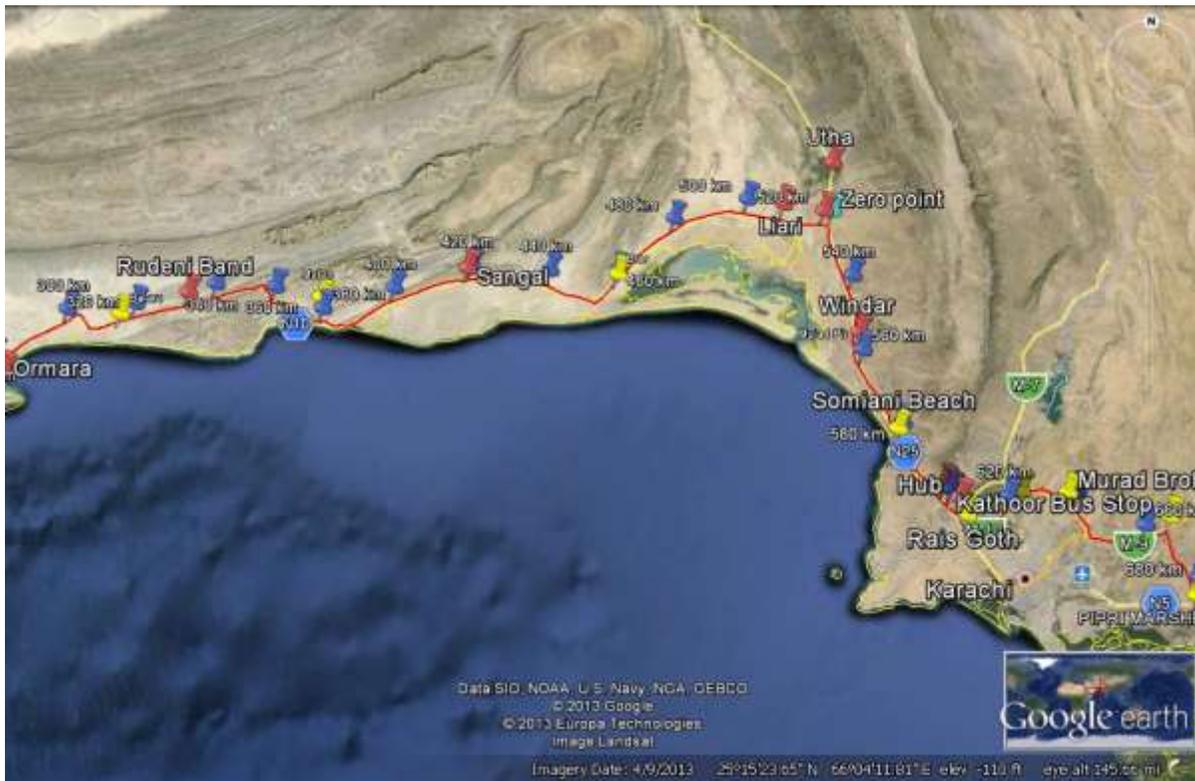
CPEC project envisages greater connectivity and trade linkage between the two countries, through a network of rail, optic cable, and establishment of special economic zones, energy sector development and economic co-operation.

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Under the overall framework of CPEC up-gradation of existing rail network, creating new rail linkages and establishing dry port and cargo handling facilities are important initiative of PR.



China Pakistan Economic Corridor and Pakistan Railways



New Rail link from Gwadar to Karachi in connection with Pak-China Economic Corridor (700 Kms)



New Rail Link from Havelian to Khunjerab

15. Conclusion:

- (a) Keeping in view the strategic and commercial importance of an efficiently run railways as well as social obligations of the state to provide affordable and cost effective mode of transportation to the public, Pakistan railways should be given due importance.
- (b) National transportation policy should be finalized as early as possible so that the funds allocated for transportation sector could be judiciously distributed among different modes of transportation.
- (c) Pakistan Railways should be run on purely commercial considerations and across the board subsidy needs to be replaced with targeted relief to passengers with limited means.
- (d) Out-sourcing of operations, corporatization of its entities with subsequent privatization and a strict accountability regime are some of the other essential measures for effective service delivery.
- (e) Pakistan Railways must be managed by professional railways man at the top.
- (f) Policy of right man on the right job for the railways is the best recourse for improvement. It has been experienced that if all the posts of Divisional Superintendents and one post of General Manager / Operations are manned by competent, bold and target achieving officers, there will be lot of improvement in Pakistan Railways provided they are given free hand without any interference.
- (g) Assert concentrating on core activities and out-sourcing peripheral activities, i.e. education, health, sports etc.

References

To make this paper as most appropriate, authentic, reliable and to the point, following documents were consulted:

- (a) Paper prepared by Mr. Ashfaq Khattak, Ex. General Manager / Operations, Pakistan Railways on Restructuring / Revitalization of Pakistan Railways on 4th January, 2011 and Presentation made to Ministry of Finance.
- (b) Documents on PSDP allocation to Pakistan Railways prepared by Chief Planning and Project Officer, Pakistan Railways, Lahore.
- (c) Pakistan Railways' Year Books for various years.
- (d) Pakistan Railways' web site i.e. www.pakrail.com.pk