

# **Comparative Analysis of Pakistan Railway Sector Reforms Process.**



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## ACRONYMS

PR	Pakistan Railway
JNR	Japan National Railway
SOEs	State Own Enterprises
IMT	Integrated Multi-modal Transport Policy
PSDP	Pakistan sectoral development program
FDI	Foreign Direct Investment
MOR	Ministry of Railway
ERP	Enterprises Resource Planning
CRM	Customer Relationship Management
PPP	Public Private Partnership
NLTP	National Land Transport Policy
ECRL	East Coast Rail Link
GDP	Gross Domestic Product
NESCOM	National Engineering Scientific Commission
SPARCO	Space Pakistan Upper Atmosphere Research Commission
MOU	Memorandum of Understanding
IMF	International Monterey Fund
WB	World Bank



## ABSTRACT

Pakistan's railway sector is facing a crisis and difficulties to operate efficiently and effectively. Pakistan's railway sector had several challenges, major declining trend started from the last 50 years. But from 2001 to onward 2015 the situation deteriorated and reached the stage of crisis and collapse, almost having a severe implication on financial management and government. From the near recent 2000, to onward 2007 Pakistan's railway sector is reviving its image as a result as passenger traffic is getting improved and freight traffic service also positive as well. In reality, the modern Pakistani economy would not exist without the railway. Many of the problems that exist are the same. Different reforms are proposed for the restructuring of railway year by year but the gap in implementation remains the condition same as in the 1990s to date. There is a lack of government interest to develop and grow the Pakistan railway sector. This research relies on the qualitative approach to analyze the Pakistan railway sector reform process. To achieve the objectives published material including papers news articles reports etc. and primary sources semi-structured interview information is used. According to the requirement of the topic thematic analysis is used to reveal the main challenges and different dimensions of the railway sector reform process. Although, qualitative data analysis is undertaken by conducting interviews following purposive sampling from the different officials of the Ministry of the Railway. The finding of this research suggests that government should reduce its footprint in this sector to make it profitable and efficient. They should make the railway sector autonomous with less government interference. The federal government must promote public-private partnerships with proper implementation rules. Government should promote a positive image by increasing the budget for the railway and bringing improvement in strategic management and reform implementation.

**Keywords:** Pakistan's railway, Railway reforms, Public-Private Partnership Privatization of Railway, Restructuring of Railway

# CHAPTER 1

## INTRODUCTION

### 1.1 Study Background

Railways are climate-friendly and always played a vital role in the development and inclusive economic growth. In comparison to other modes of transport, rail is the most reliable, quickest, safest, and cheapest method for the transportation of goods and services all over the world. A large volume of goods and heavy machinery is transferred from one place to another through railway without negative implications on the environment. Primarily railway system is mostly emission-efficient and environmentally friendly mode of transport. In addition, electric-powered trains with the usage of renewable energy offer a carbon-free mode of transport its role is unbeatable in growing the agriculture sector productivity industrial sector mining industries, weaving mills, and food industry. This sector has a major contribution to the improvement of external-internal trade and the creation of job opportunities. All industrialized nations are more inclined toward the development of the rail structure (Asim, Nafees, & Research, 2014). When the British take on hold of the sub-continent of India. The considered first thing to accomplish was to establish and develop the rail network for connecting all the strategic locations and economic corridors to manage the sub-continent efficiently. This colonial power gives strength to Karachi a sprawling city of its time, a circular railway is an efficient and cheap mode of public transport. According to the present condition, the Pakistan railway is the second institution after the armed forces there is a need to understand its importance for economic growth (Anwar, 2020). However, In last 35 years, rail sector all over the world has gone through a significant reform process. The main purpose of the reform is to address the poor performance, inefficiency, and short-term losses within the railway sector. Railway reform's main agenda has been improving corporate governance and depoliticization of public funding for the railway sector. During the 1990s onwards rail sector

concerns related to development follow reform and inquiries in the railway sector. With these reforms, different countries have undergone (K. K. Khan, Abdul, 2020).

Major changes in the form of structural changes, ownership changes, and access arrangements over this period and offering different approaches to reform this sector. For example, in the case of Mexico, they adopted the method of privatization of the rail for the long-term lease of the private sector which results in positive implications on the productivity, safety, and quality of service provision. In the same way, Britain, Argentina, and New Zealand focused on increasing the involvement of the private sector rail reform started from 1974 to 1977. These reforms have had revolutionary impacts on the rail sector of Europe. The structural reforms that were followed by some countries involved a different combination of vertical and horizontal separation that focused on the separation of infrastructure from operation, transfer of ownership, and operating system from public to private companies. Privatization of the railway network has been a positive impact on the growth and successful working of the franchising system. No doubt during the reform process introduction of competition into passenger services achieved successful results. Japan's national rail was reformed in 1997. In the reform process rail network was divided into six-passenger companies. During the time of 1980s in Japan, railway reforms were important political agenda. These reforms were mostly focused on the privatization of the rail network and achieving positive and successful results to make the railway network reliable and successive for economic growth. Russia started the railway reform in 2001 after adopting the structural reform. The railway's reforms primarily focused on the inclusion of the private sector with little involvement of government funding. As a result, the Russian railway drastically change and private capital entered to meet up the challenges of the railway sector and provide incentives to increase and boost the morale of workers (Kurosaki, 2016).

Pakistan railway is one example of poor governance and massive political interference that can be enough to sabotage any sector of the economy. No doubt railway is the second-largest institution after the armed force but unfortunately, it's disorganized. The sector is dependent on the same infrastructure that was established and developed during the colonial era including tracks and other equipment of the railway. There is no development related to extending the railway track for efficient train running or replacing higher-speed trains that could be brought into service. Although most passenger trains without investing in infrastructure result in horrific accidents resulting in huge loss of human lives. Unfortunately, from 1947 onward we are not in a position to improve any aspect of service delivery in the railway sector. In fact with the passage of time situation is moving towards worsening. Pakistan railway is one of the sectors that are following the colonial structure to meet the needs and challenges of the 21 century. In the current situation, the Pakistan railway is the prey of political favors, public enterprises jobs, workers unions, collective bargainer agents, and most important is that their monopoly. So, the railway budget and improving at are approved by the government are in a position to implement. In reality, the modern Pakistani economy would not exist without the railway. Many of the problems that exist are the same. Different reforms are proposed for the restructuring of railway year by year but the gap in implementation remains the condition same as in the 1990s todate (Durrani 2011).

In 1990 it was placed on a list of the privatization commission and restructuring was proposed but not followed. The railway sector is one of the state-owned enterprises which proposed numerous reforms over different periods. Even though they recommend an open-access rail track policy for passenger and freight services. This thing provides a good opportunity for the engaged private sector in Pakistan's railway sector development and also increases the involvement of public-private partnerships. There is a chance that the private sector will invest in the railway sector, with its locomotives and freight. But in reality, nothing happened on the ground reform agenda remains

in form the of a document not implemented. Again during 1990s, they suggested restructuring of Pakistan railway into a corporate entity but due to poor governance, nothing happened to change the current structure of the railway. After a decade, the decision was made to divide the Pakistan railway into different subsidiary companies; one each for freight, passengers, and infrastructure. PR did not follow any reforms, and neither did it try to revamp its operations. As a result, the Pakistan railway is among the worst performers among the other state own enterprises and become a loss-making sector. In 2018 and onward this department had a huge deficit of PKR 26.994 billion (Bhutto, 2021).

When the British built railways in the Pakistani part of British India in the nineteenth century that time there is no economic activity or Population. Now the bulk of Pakistan's population and economic activities are close to the main railway line. In the 1970s Pakistan's railway sector had a major share contribution to the transport sector. The railway sector is one of the state own enterprises (SOEs) whose role is not deniable for sustainable economic growth and development. But unfortunately, this sector is passing through a crisis due to the major decline in investment by successive governments, because they are more focused and concerned about investment in road transportation and infrastructure development four times more than the cost of railways.

PR has been denied adequate funding for operations and maintenance. Subsidies have been given for working expenses but no major rehabilitation investment in tracks and rolling stock has taken place. According to an official document, "The federal budget exhibits a strong bias towards financing the construction and maintenance of roads," such that the expenditure on roads was more than three times the expenditure on the railway. However, competition from other modes of transport became severe and the Pakistan railway lost its competitive edge (Looney, 1998).

## **1.1 Statement of The Problem**

The railway sector is in dire need to perform better in comparison with other modes of transportation, mostly roads to cope with the challenges of environmental degradation and global warming. Vision 2020-25 has increased the budget allocation further for the transport sector by 25% till 2025. This was 45% of the previous PSDP funds allocation.

When we talk about reforming the railway sector several reforms are introduced in different periods. But every government changes these reforms and starts with zero. Why there is a problem our country is facing regarding rail reform? And what is the reason behind it, every government is unable to continue working on the proposed reforms of the previous government. What are the challenges the railway sector is facing to come out of the increasing budget deficits and decreasing revenue? In this prevailing situation, what is the future of the railway? How long government will provide subsidies and taxpayers' money Railway department?

## **1.2 Objectives**

- i. The historical analysis of the Pakistan railway reform process is taken from five years plan and implemented in passenger and freight services.
- ii. To understand which reforms are effective for Pakistan Railway to get out of the list of loss-making state-owned enterprises.
- iii. To compare the reform processes of the Pakistan Railway with the Indian and Bangladesh Railway

## **1.3 Structure of The Study**

The structure of the study focuses on the following way. Chapter 1 is related to the background. It also focuses on the research that highlights the historical background of the arising issues and discusses different views about the railway reform problem that is grown over time. The problems,

Hurdles, and importance of the railway sector are all discussed while consideration of exploration at the national level.

Chapter 2 is focused on the literature review. There is also a discussion of key factors that are the reason for the poor revenue generation sector. It also explains poor policies, lack of visionary leadership, lack of technological advancement, and flaws in implementation that the Pakistan railway sector to the developing sector of Pakistan state own (SOEs). Learning from other countries' experiences related to the railway sector like a public-private partnership, privatization, proper implementation, and stale policy towards the railway sector helped to revive the Pakistan railway sector. Chapter 3 discussed the overall progress of the Pakistan railway and its real loopholes and challenges that hinder this sector to grow and bring efficiency to this sector. It also discusses the government agenda that is focused to fulfill the demands of other stakeholders rather than public satisfaction. The major problem is the lack of successive government interest in the efficient management of railways. The current situation of the sector is measured through the qualitative semi-structured reviews of the concerned ministry participants. These interviews are helpful to highlight the main problem and barriers that are in the way of reform implementation and the deep root causes of the railway sector under development. Chapter 4 incorporated the major challenges in the way of the railway reform process and the concerns of the stakeholder to uplift the barrier of Pakistan railway and bring efficiency to the railway sector. However, the results of the interviews and analysis discussion while using data highlight the significant discussion on the burning problem including lack of technological intervention, lack of social education, footprints of government, etc. that should be addressed at the national level to make railway efficient. There is a dire need for state sponsorship to cope with the challenges of the railway and also a need for a financial assessment from the federal government in resource allocation. Chapter 5 also encircled that research aims to highlight gaps and serious flows with the

following recommendation and policy issues that need to address in a proper professional manner.



## **CHAPTER 2**

### **LITERATURE REVIEW**

This chapter is focused on the key elements and factors that are responsible for the backwardness of the railway sector of Pakistan. It also points out which policies and strategies must follow to bring the railway sector out of the crisis. It also provides easy access for the policymakers to draw the railway policies following the international experiences successive model of the railway. The digging drivers of the railway sector underdevelopment are based on the information and people's awareness about the running problem.

Pakistan's transport system and traffic densities reflect the concentration of population and economic activity around the Karachi area and in Punjab. In addition, virtually all international trade flows through the Karachi area ports, and about half involves flows of goods to and from Punjab. Pakistan Railways (PR) with more than 130,000 employees operates the fourth-largest railway system in Asia (88,775 lines). Rail traffic is concentrated on a few routes that serve long-distance freight and passenger movements with about half the system serving 95 percent of total rail traffic. Shorter distance traffic has been lost to road transport; the share of rail in domestic freight traffic has declined from 49 percent to 23 percent and in passenger traffic from 21 percent to 14 percent over the last 20 years.

#### **2.1 Why State Own Enterprises**

The privatization of state-run businesses has improved service quality, cut costs, and boosted productivity all over the world. Reforms related to the commercialization of SOE help to improve economic growth and increase productivity. This thing helps to bring transparency and accountability in the governance sector, and managers are incentivized to increase shareholder value (Chang, 2007) (Group, 2020). State own enterprises a vital role in the development of

developing countries' economic growth, and achievement of social and political benefits. Reforms provide the platforms to create more job opportunities fill the gap in the market and develop different sectors of society (Rabaland, Veullot, Habhab, & De Meneval, 2015). In South Asian countries, China was the most prominent country that adopted the state own enterprise's reforms and gain a major result to boost economic growth.

In earlier times government Centrally planned economies face significant challenges attempting to reform state own enterprises (SOEs). Even though the Chinese economy's price management, commodity and factor markets, taxation, investment financing, trade regime, foreign exchange system, etc. have seen significant improvement over the past 20 years due to the economic reforms. But the chronic performance problem of SOEs remains the government's biggest problem. Although the revenue system, corporate income tax system, contract responsibility system, and shareholding system were all tried and later adopted in SOE's incentives and performance, the latter has generally continued to decline in comparison to the non-state market share in manufacturing decreased from 78% to 27% between 1978 and 1997 (Lin, Cai, & Li, 1998). As much as 46% of SOEs were losing money in 1997, and their workforce represented 41% of the total SOEs workforce (Ma, 2000).

Some economists are beginning to see privatization viable option as a result of 18 years of unsuccessful managerial reforms that were supposed to tighten the SOE's budget constraints and boost their performance. Even if the SOEs are privatized, the state cannot escape the policy-induced, and soft budget constraints will remain a single policy burden remain. In the wake of privatization in Eastern Europe followed and approached through empirical evidence.

This means that for the SOE reform work, it will be necessary to free SOEs from policy constraints and give them a level playing field (Song & Development, 2018). Each of the aforementioned

policy challenges has a pare-to-optimal solution that can be implemented. Since the state is no longer responsible for the SOE's failures, strict financial constraints can be placed on them. Those in charge of state-own enterprises (SOEs) will be better able to fend off unwanted political interference if the government stops funding their operations. While one would hope that a level playing field would lead to improved SOEs performance, this is by no means guaranteed. Since SOEs should be able to make normal profits with management if policy burdens are removed, other enterprises, including privately owned ones, will have incentives to take over if it fails to perform well. It is unclear, however, whether privatization is a precondition for enhancing the effectiveness of SOEs. There are essentially no actual owners of any large, modern corporation (Zhang & Freestone, 2013).

### **2.1.1 Related to Methodology**

Peter (1998) stated that the key objectives of the British rail reforms are the opening of access to the railways, the infusion of commercial operation, and the directing of private sector talent and investment to the industry. Rail Regulator controls rights of access to infrastructure and the terms of access. There are promising indications that the reform is generating new interest and confidence in the rail freight sector. EW&S carries around 90 percent of domestic rail freight. In a very short period? Freed of public sector restraints? EW&S has managed to regain traffic long since lost to the railways, through a flexible approach to operations and rates. Apart from bringing in private sector expertise, a key objective of the reforms is that with the transfer of ownership to the private sector there will be an additional investment. Unlike passenger operators, EW&S is not subject to rules on level-of-service provision and short-term franchise contracts. Thus, investment in freight rolling stock is made in a different climate. Rail reforms process ownership was transferred to the private sector and the railway department is divided into 100 companies that regulate the whole

sector in a better way. These reforms are very helpful to come out with positive implications and bring effectiveness in this sector and the overall economy.

(Chauke & Maluleke, 2005) The study evaluated the division of the railway sector and shifting the ownership from the government to the private sector. Because private sector investment is very necessary to meet up the challenges of the rail department and improvement in infrastructure, increase efficiency, and effectiveness, reduction of operating costs, and increment in revenue. Learning from other countries' reform process that adopts public private-partnership or privatization provides a solution to meet the challenges of public demand and reduce the government's monopolistic behavior towards this sector. Separating the rail operation from the infrastructure is commonly followed in this industry all over the world. Public-private partnership provides proper investment for growth and development. For the revival of the railway sector private involvement ensure quality service providers.

### **2.1.2 Learning from Other Countries' Experience**

(Looney, 1998) Reported that PR is largely a passenger-oriented operation to 14 percent over the last 20 years. PR is largely a passenger-oriented operation with 70-75 percent of train-km devoted to the provision of passenger services. The much-awaited reversal in Pakistan Railroad's performance is unlikely other things, Pakistan Railroad's corporate structure should be redefined the right to collect subsidies from the Government for those unprofitable as a public corporation with managerial freedom and responsibility and services.

Around the world, many economies are trying to enhance their railway-related projects to enhance their growth from both the freight and passenger sides. Worldwide, countries started reforming and restructuring their railway sector in the 1990s but unfortunately, Pakistan is one of the country that started the restructuring and reform process very late. Learning from other countries'

experiences of railway reform is crucial for experts, analysts, think tanks, and legislative bodies to work on it to make railway sector modernization through the reform implementation process (Javed, 2012).

### **2.1.3 Lesson Learns from Malaysia**

For instance, the Malaysian government is enhancing its rail projects in the country. For instance, East Coast Rail Link (ECRL) completed in 2022 it passes from Port Klang and goes through Peninsula towards Kelantan in the northeast Peninsula, of Malaysia. This project is the game-changer in the region because it connects the poor east coast with the rich west coast. Likewise, the Light Rail Transit 3 and the Mass Rapid Transit (MRT) projects by Malaysia speaks volume about the country's will improve the transportation sector as the development of the sector ensures promising growth and development for the country.

### **2.1.4 Lesson Learns from Bangladesh Railway Reform Process**

(Javed, 2012) Examine that Bangladesh's railway reform process is more concerned about the sustainability of growth and increasing efficiency. To achieve this goal, they separate the infrastructure from the operation and provide a strong argument to attract private investment in this sector following the National Land Transport Policy (NLTP) and the draft Integrated Multi-modal Transport Policy (IMTP). This thing provides an opportunity for private investors and brings effectiveness to this sector. Moreover, there are many reasons for dividing the railway sector into different companies. The first and foremost reason for the reform process is to decrease the operating expenses and maintenance costs by enhancing railway traffic, bringing improvement in service delivery and customer satisfaction. The second reason is to make competition Intra - railway departments among different companies that are established to bring transparency, effectiveness, and efficiency. The third reason for reforming the railway department is to fulfill

public demand. The fourth reason is to find the gap in national transport public policy and find out the solution and formulate a vibrant and effective transport policy. The goal of the government is that the railway ministry is to get out of the list of loss-making enterprises to major contributor to gross domestic product (GDP) by driving the railway sector into different companies. Moreover, Rail infrastructure separation from the operation can also help to maintain the balance between the public and private sectors' investment in this sector. In Bangladesh, rail reform is more reliant on the modernization of rail and providing better support for economic growth and prosperity. Public-private partnership is a solution to the entire problem. However, the privatization of railway sector operation is very important and one of the solutions to improve services delivery, and customer satisfaction and to reduce the operating expenses that are the burden on the government brings efficiency and effectiveness for the sustainable growth of this department.

### **2.1.5 Lesson learns from Japan National Railway**

(Tomikawa & Goto, 2022) Reported that the Japan National Railway (JNR) reform to improve service delivery has been an excellent and major contribution to achieving the oriented goals for railway sector growth. In Japan after reforming the railway sector they are more concerned about the market benefits and the newly established JRs could focus their market and start to provide transport services through rail in the appropriate way for each region. Even though in the 1970s the Railway freight sector had been a loss-making enterprise and had a series of serious challenges. However, the railway is one of the sectors, which had been loss-making during the Japan National Railway era, the significant declining trend that started in the 1970s has been reversed and when rail reforms were implemented then the traffic volume improved. As, for the passenger sector, the suspension subsidy to the railway freight sector, this thing provides an option possibly to re-invest more of the profit to improve passenger services. However, there was a shift after the reform of

Japan's national railway the transport volume (passenger-km) fall 6% in the decade, then there is a clear difference the trend changed significantly, with the growth of the railway sector increasing by 27%, in the decade after the reforming of railway department. Furthermore, in the reform process, Japan Railway divided the departments into different departments following the business model of other Japanese private railways. In this process, Japanese railway passenger-led companies were more concerned about performing the active and progressive way to utilize and develop the space in and around the stations. Railway reform in Japan was mostly concerned with dividing rail departments into different companies and privatization was successful in decreasing operating expenses, increasing revenue, timely public service delivery, and customer satisfaction to achieve sustained growth. Japan rail passenger companies near large stations are developing a culture of various kinds of affiliated businesses promoting the external economy associated with railway sector operations; as a result, the revenue generated from these business activities has been growing.

### **2.1.6 Lesson Learned from China Railway Sector Reform**

China's railway transportation network has undergone rapid expansion in recent years to meet the transport demands brought about by the boom in the Chinese economy. Nevertheless, the state monopoly and centralized control are the cause of serious problems in the rail industry. Several rounds of railway reform have been implemented since 1986 and continue this effort and bring a high-speed rail (Pittman & Policy, 2004; Yu, 2015). From 1990 onwards, china railway sector has undergone a series of structural and institutional reforms to meet transport demand, separate government from business, break up the state monopoly, and promote competition. The MoR was abolished and its functions were transferred to the Ministry of Transport as early as 1970. However, in 1975 the Railway department was separated from the railway sector and difficulties

with inter-departmental coordination (Yu, 2015).

In 1986, the first substantial changes were made to the railroad system. Then minister the of railway suggested a reform plan called “complete economic responsibility” to grant greater autonomy over financial resources to regional railway bureaus. The national railway ministry handed over management responsibilities to the regional railway bureaus over the years including profit retention, labor salaries, personnel decisions, and supply management. Railway reform plan focused on several separate commercial railroads competing with one another by using the market principle (Chen & Haynes, 2015; Huang et al., 2019).

### **2.1.7 Lesson Learned from European Railway Sector Reform**

The European railway sector has been showing a slower and less productive approach than the transport sector in adopting the railway reform and liberalization process that has been started in the 1990s. The European Union, except for the United Kingdom, has chosen a progressive approach to reforming its railway industries. European union countries in the correspondence focus on vertical interaction between infrastructure and operations, and the second level addresses the horizontal relationship between the numerous services that make use of the infrastructure (Di Pietrantonio & Pelkmans, 2004).

The vertical separation of the railway sector in Europe has improved their productivity. However, if new operators are given access to the freight industry, the efficiency advantages become even greater until the process is finished with horizontal-level reforms. However, there does not appear to be any impact on productivity from the move to franchise passenger services. Again, the introduction of new freight operators appears to have led to better results than the tendering procedure in passenger services, therefore it stands to reason that these separation processes contribute to efficiency increase (Cantos, Pastor, Serrano, & Policy, 2010).



### **2.1.8 Lessons learned from Britain Railway Reforms**

In the context of reforming the railway sector, Britain reformed the sector through privatizing. The privatization of the railway sector is helpful to gain benefits and maximize railway efficiency and minimize the subsidy. This process remains successful and the best course of action (Di Pietrantonio & Pelkmans, 2004).

In the reform process ownership of all railway assets transformed to the private sector providing a profit-making sector to the railway. The radical nature of the British reform can be traced back to the fact that it represented a challenge to the status quo, which held the various aspects of rail transportation was inextricably linked and could not be separated except along broad activities (such as infrastructure versus operation, or even among types of operation, such as passengers) (Yawned-Billon, Ménard, & Organization, 2005).

In contrast to the freight transport sector vertical and horizontal integration, privatization, and the introduction of competition for various sets of transactions all were part of the organizational innovation it introduced (Lodge, 2003).

### **2.1.3 Pakistan Railway Sector Real Challenges**

Khaliq, (2019) studies that the population of Pakistan is around 210 million from which 76 million people live in the urban areas, and the growth in population by 2.4% annually. The Pakistan Railway (PR) was founded in 1861 and currently, its headquarters is in Lahore City of Pakistan. The first single-track route was introduced from Karachi to Kotri by Sir Henry Edward and the distance was 169 kilometers. After the independence of Pakistan, there were 8,122 routes and later in 1954, the routes were extended from Mardan to Charsada and from Jacobabad to Kashmir in 1956 were drawn. Another line was constructed Kot-Adu-Kashomre in 1969-73 which was the alternative route to northern Pakistan from Karachi. The PR is a state-owned enterprise in Pakistan

and it works under the Ministry of Railway. The Ministry of Railway has the responsibility to make policies, administer passenger locomotive services, and regulate stakeholders such as railway companies, industries, and other organizations to sustain the growth and development of the country.

Looney, (1998) analyzes that the railway sector of Britain started its reforming structure from 19 century and handed it over to the private sector. After this reform, the railway sector moved towards growth, and after years of decline and the sunk cost was reduced. But unfortunately, the Pakistan railway is not moved towards proper reformation process. This sector is unable to attract high- level technical skills and managerial skills to offer proper incentives for efficiency and improvement. The main reason behind the poor infrastructure of the railway is the absence of an institutional reform environment. There is a dire need for the railroad structure should be reorganized as a public corporation with freedom of managerial skills and not rely on the government's unprofitable services.

The infrastructure of the railway is followed since its very inception. Nothing happened on the ground to change and bring modernization in this sector. The lowest priority to develop provision infrastructure is the main reason for increasing operating expenses and the downfall of revenue. The decrease in public sector allocation to this sector is speaking that government has the least interest to develop the railway sector which not only an important sector for economic growth but also it's linked with the security of the country. This thing results in the deterioration of facilities that are provided to the public. Low Memory Loss (Dementia), death rates from all causes priority to modernize the railway sector, and a decrease in public sector allocation has caused serious depreciation in the assets.

Cremer, Cremer, and Dondre, (2009) further contend that railway sector integration offers

efficiency in this sector as a comparison to disintegration. The example taken from the United States railway shows that integration increases the 30% consumer surplus from 1981 to 2001. Whereas all services provide their infrastructure. In this study, they present two papers: one paper is related to an integrated system that shows growth efficiency and infrastructure development of the United States of America. On the other hand, non-integrated system which shows negative results of efficiency and increases the cost of operating expenses. So, in this regard, the railway must adopt an integration policy to improve inclusive growth.

(M. Z. Khan, Khan, & Management, 2020) studies that the population of Pakistan is around 210 million from which 76 million people live in the urban areas and growth in population by 2.4% annually. The Pakistan Railway (PR) was founded in 1861 and currently, its headquarters is in Lahore City of Pakistan. The first single-track route was introduced from Karachi to Kotri by Sir Henry Edward and the distance was 169 kilometers. After the independence of Pakistan, there were 8,122 routes and later in 1954, the routes were extended from Mardan to Charsada and from Jacobabad to Kashmir in 1956 were drawn. Another line was constructed Kot-Adu-Kashomre in 1969-73 which was the alternative route to northern Pakistan from Karachi. The PR is a state-owned enterprise in Pakistan and it works under the Ministry of Railway. The Ministry of Railway has the responsibility to make policies, administer passenger locomotive services, and regulate stakeholders such as railway companies, industries, and other organizations to sustain the growth and development of the country.

The infrastructure of the railway is followed since its very inception. Nothing happened on the ground to change and bring modernization in this sector. The lowest priority to develop and provision infrastructure is the main reason for increased operating expenses and the downfall of revenue. The decrease in public sector allocation to this sector is speaking that government has the

least interest to develop the railway sector which is not only an important sector for economic growth but also linked with the security of the country. This thing results in the deterioration of facilities that are provided to the public. Low priorities to modernize the railway sector and a decrease in public sector allocation have caused serious depreciation in the assets.

(KAYS & PROSPECTS, 2013) the report examined that around the world, many economies are trying to enhance their railway-related projects to enhance their growth from both freight and passenger sides. For instance, the Malaysian government is enhancing its rail projects in the country. For instance, East Coast Rail Link (ECRL) completed in 2022 it passes from Port Klang and goes through Peninsula towards Kelantan in the northeast Peninsula, of Malaysia. This project is a game-changer in the region because it connects the poor east coast with the rich west coast. Likewise, Malaysia's development sector projects about the railway sector transport and road transport sector speak volumes about the country's will to improve the transportation sector development of the sector.

(Campos, 2001) further contends that railway sector integration offers efficiency in this sector as a comparison to disintegration. An example taken from the United States railway shows that integration increases the 30% consumer surplus from 1981 to 2001. Where all services provide their infrastructure. In this study, they present two papers: one paper is related to an integrated system that shows growth efficiency and infrastructure development of the United States of America .and the other one is the non-integrated system which shows negative results of efficiency and increasing the cost of operating expenses. So, in this regard, the railway must adopt the integration policy to improve conclusive growth and development.

(Geradin, 2006) Argues that railway sector liberalization helps to increase competition last twenty years in Europe. This thing improves the efficiency and effectiveness of the railway sector.

Liberalization is one of the best ways for rail to bring investment and increase competition and efficiency. Reforms related to liberalization help to promote better competition and better effectiveness for societal and economic growth. He also notes that many countries have not adopted liberalization policies in the rail sector which means that they are delaying the competition in this sector.

### **Research Gap**

The earlier studies of Looney (1998) and Tahir and Tahir (2020) have estimated the efficiency and effectiveness of the Pakistan railway using time series data. As in the literature review of the Pakistan railway sector that is mentioned above. This study is further investigating the Pakistan railway sector reform process. As in the literature review of the railway sector reform process, qualitative studies are adopted. But those studies are just focusing on railway efficiency not captured the proper study that focused on the Pakistan railway sector reform process. In this study, I have adopted the method of qualitative study interviewing with officials of the ministry to provide you with all the detailed information about the proposed reforms and why the reform process is not successful to achieve the oriented result.

### **2.1.4 Concluding Remarks**

In the concluding remarks of the literature review. Several points are identified according to the theory of liberalization for railways will help to promote competition, improvement in welfare, and a major contribution to the economic growth of this sector. The second perspective is that the lack of budget allocation for the rail sector and low priority to this department contribute to the increasing sunk cost and decrease in revenue generation. The third perspective is focused on the public-private partnership help to improve economic growth modernization of the infrastructure and efficiency in public service delivery. The fourth one is focused on the liberalization in the

railway sector not achieving the oriented level of efficiency, benefits, and competition as per the vision. The fifth is the many reasons including lack of political will, lack of proper reform implementation, and incomplete planning for the rail sector may be responsible for the mixed results. The sixth is that any liberalization program must be designed and implemented following political benefits. In the next chapter, we are going to discuss the research methodology.

## CHAPTER 3

### RESEARCH METHODOLOGY

In this chapter, we discuss the methodology that is adopted to capture the agenda of political inconsistency, lack of capacity building, financial constraints, and lack of social cohesion of all stakeholders. To understand the worsening situation and underdevelopment of the Pakistan Railway (PR) all information is captured through the qualitative semi-structured interviews of the concerned participants. The semi-structured interviews highlight the main issues that are hindering reform of the railway sector and find the main reason behind the backwardness of this department.

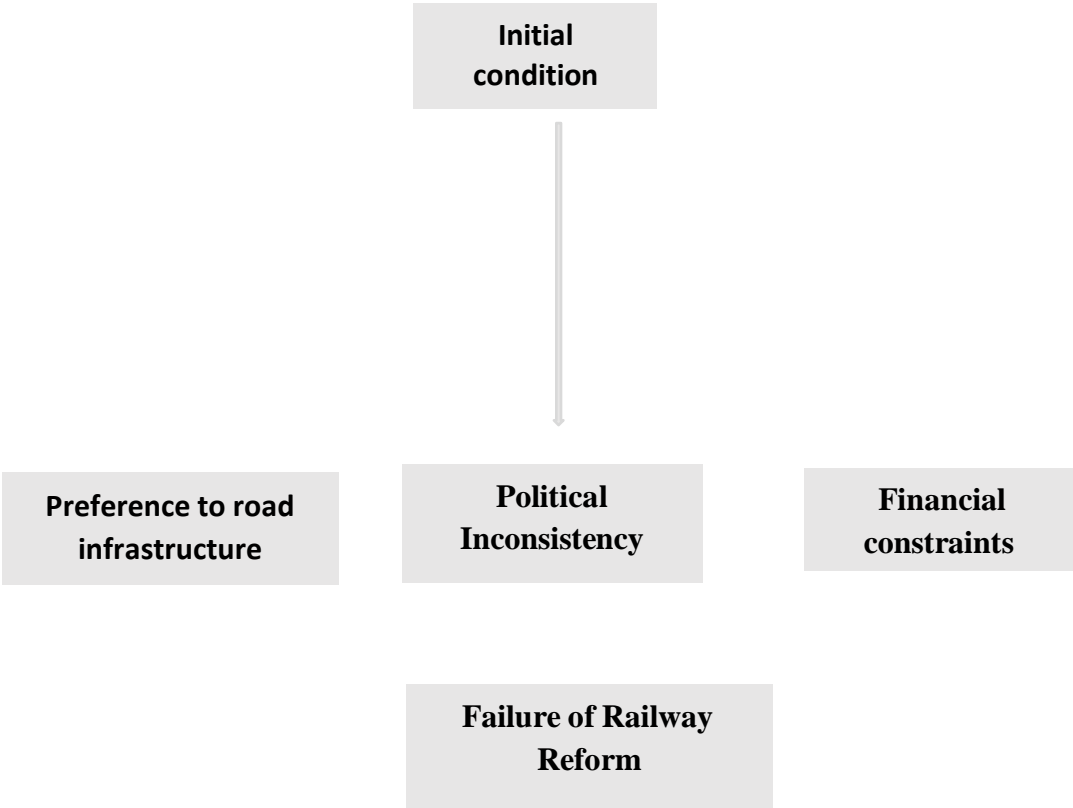
#### 3.1 Research Design

The qualitative research design's main purpose is to deal with complications and investigation the unraveling factor that is the reason for the underdevelopment and increasing operating expenses of the Pakistan railway (Hennink, Hutter, & Bailey, 2020). There is a clear relationship between research design and research method which is the formal and objective-based process of knowledge and information that is acquired to see the cause-and-effect relationship based on the selection of the specific research design. In this context, the main pillars of the research design are experimental causal / quasi-experimental, correlational, and descriptive research. Some of the research designs have key differences while most of the designs are the same for the true experiences.

This study concentrated on a qualitative type of research approach to find out the solution to the question. This research is explanatory. The data collection method for this study is including different techniques for data collection including a review of the literature, semi-structured interviews with open-ended questions, key stakeholders, and key informants also included. Several indicators are adopted after reading different countries' rail reforms process documents, policies,

and each five years plan of the transport department. A comprehensive literature review is very helpful in developing a list of relevant indicators. The data collection method is adopted following these indicators and in-depth interviews will be collected from different semi-structured interviews will be conducted with the top representative bodies and officials of the railway department.

### 3.2 Conceptual Framework



**Figure 3.1 AUTHOR’S DEVELOPMENT**

A conceptual framework is helpful to build up the objectives and give out rational thinking. It is providing information about the main problem's root causes and also provides a scenario in which the problem arises. It also highlights the main concepts and finds out the dimension of the rising problem. These figures also highlight the main reason behind what is prevailing in this sector and the failure of reform implementation. These would give an indepth information on the sector.

#### 3.2.1 Operationalization of the Given Variable



### **3.2.1.1 Preferences for Road Infrastructure**

The rail industry is the most important for the growth and development of Pakistan but unfortunately, our successive government is inclined toward road development instead of railway development. They spent three times more on-road in comparison to rail infrastructure. 70% budget allocation to roads and negligence of the Pakistan railway sector is the root cause of the downfall of the Pakistan railway. To some extent, the Ministry of the Railway (MoR) is responsible for the failure of the reform process in Pakistan (Li, Alam, & Wang, 2018). Because the funds that are provided for the railway sector are not efficiently utilized. The reason is that they did not have any policy framework for the capital support and further development of this sector (Lodge, 2003).

### **3.2.2 Political Inconsistency**

There is no doubt that the Pakistan railway plays a role as a catalyst for the economic growth of Pakistan. Several issues are behind the low investment and underdevelopment of the Pakistan railway. Apart from all that political inconsistency is the main reason behind the dwindling condition of the Pakistan railway sector. Regime change also has negative implications on the reform process. However, as the government change, it brings its new policies. Past proposed reforms and policies vanished and new agendas and strategies were adopted by the government according to their own stakeholders' interests. In this regard, political turmoil is the biggest turmoil in the way of implementation of the railway sector reform (Asim et al., 2014).

### **3.2.3 Financial Constraints**

Pakistan railway is in crisis and moving towards downfall where operating expenses are more than

the revenue generation. One of the root causes is the lack of investment in this e-sector to uplift the barriers in this department. Pakistan railway is one of the sectors that have received a significant setback of low investment from the successive government that preferred the development of the road at the cost of the railway (Tahir, 2021). There is a table below that shows the profit and losses of Pakistan railways from 1955 to 2018.

**Table 3.1 SUMMARY OF PAKISTAN RAILWAY PROFIT AND LOSS**

Year	Total		Profit/Loss	
	Earnings	Expenses	Value	Share in Earnings
<b>1950-55</b>	315.139	209.712	105.427	33.45
<b>1955-60</b>	420.114	251.296	168.818	40.18
<b>1960-65</b>	514.701	348.688	166.013	32.25
<b>1965-70</b>	645.615	479.318	166.297	25.76
<b>1970-75</b>	959.97	724.569	235.401	24.52
<b>1975-80</b>	2115.474	1701.72	413.754	19.56
<b>1980-85</b>	3342.686	3223.649	119.037	3.56
<b>1985-90</b>	5094.862	6785.465	-1690.603	-33.18
<b>1990-95</b>	8584.177	6937.438	1646.739	19.18
<b>1995-2000</b>	5446.07	9528.494	-4082.424	-74.96
<b>2000-05</b>	14451.25	14847.02	-395.776	-2.74
<b>2005-10</b>	20478.61	23519.34	-3040.73	-14.85
<b>2010-15</b>	21370.2	35965.61	-14595.415	-68.3
<b>2015-16</b>	36581.86	41857.95	-5276.086	-14.42
<b>2016-17</b>	40064.95	50072.32	-10007.375	-24.98
<b>2017-18</b>	49569.68	52070.74	-2501.064	-5.05

Source: Pakistan Railways Yearbook 2017-18, 2016-17 & 2015-16.

### 3.2.2 Pragmatic Research Paradigm

The study is based on the pragmatic research design that intends to focus on the individual people of the department within the same real-world- issue (Cassell, Cunliffe, & Grandy, 2017). Mostly pragmatic study in qualitative research is applied to the identification of the main problem and also looking at the broad perspective of the problem that arises and viewing the matters with a practical approach instead of an idealistic condition. Primarily pragmatic research paradigm is substantial in how questions are approached and resolved. In the case of the railway sector reform

process, pragmatic methods provide constructive knowledge and intervention and resulted in a better outcome to deal with the underlying cause of the failure of the railway sector reform process. However, pragmatic research also comes up with the qualitative analysis suggesting that integration, experience and interests, and unity of key stakeholders on the main principle can be used for the achievement of the effective result of the study. In this research deductive reasoning is used because this is a qualitative study that focused on flexible and reflexive research. In the case of inductive research, it reflects that moves from specific observations to broader generalizations (Kaushik & Walsh, 2019).

### **3.3 Research Methods**

The research methods that are chosen to highlight the problems and challenges of the Pakistan railway that reflect the usage of the substantial qualitative method to find the result of this study and the ultimate conclusion. It is vital to contemplate key factors that are influencing the interpretation of the case of higher and lower development position (Johnson, Vindrola-Padros, & Medicine, 2017) and (Baškarada & Koronios, 2018). Several scholars and researchers also discussed the qualitative data collection method and mentioned the practical use of the method to find the answer to the objectives that ensure the management of the collecting information, interpreting and concluding with results over each response of the respondents. Qualitative research is one of the methods that have less chance of risk in the collection and analysis of the data is a comprehensive response to the issue that is highlighted in the research and the variant that are spatial consideration of the Pakistan railway sector crisis and downfall. For the intentional resource allocation and connection with political inconsistency, Absence of visionary leadership, financial constraints preference of road on the cost of the railway there is the specific use of the method in the forms of themes, analysis, and codes against the collected information and data

(McCusker & Gunaydin, 2015).

The questionnaire of the qualitative research is developed through the variable that supports the need for the effective development and revival of the Pakistan railway (Hernández, Méndez, Mendoza, & Cuevas, 2017). The opinion and responses of the stakeholders are taken through semi-structured interviews. These opinions are considered important factors in the issuance of projects and finances that will be helpful to bring the railway sector out of crisis and pave the way for development and efficiency. Throughout the questionnaire development, there are different responses and focus on the variables that are important to address the main problem of the railway sector which unfortunately is not focused on by the policymakers, government, and concerned authorities with the matter of the Pakistan railway sector reform process. The semi-structured interviews are used as an instrument tool to gather information from the concerned ministry and progress analysis of the given opportunities for the size of the sample that is considered for the population.

**Table 3.2 RESEARCH METHOD**

<b>Research question</b>	<b>Data</b>	<b>Method</b>	<b>Instruments</b>
❖ <i>What are major reforms of Pakistan railway approved by the government and carried out by PR</i>	Qualitative	Qualitative analysis	❖ Semi-structured Interviews ❖ Reports /literature
❖ <i>Why most of the railway reforms were never implemented despite approval and repeated attempt.</i>	Qualitative	Qualitative Analysis	❖ Semi-structured Interviews ❖ Reports /literature
❖ <i>Which reforms are more effective to transform PR into an efficient railway?</i>	Qualitative	Qualitative Analysis	❖ Semi-structured Interviews ❖ Reports /literature

### 3.3.1 Research Scheme

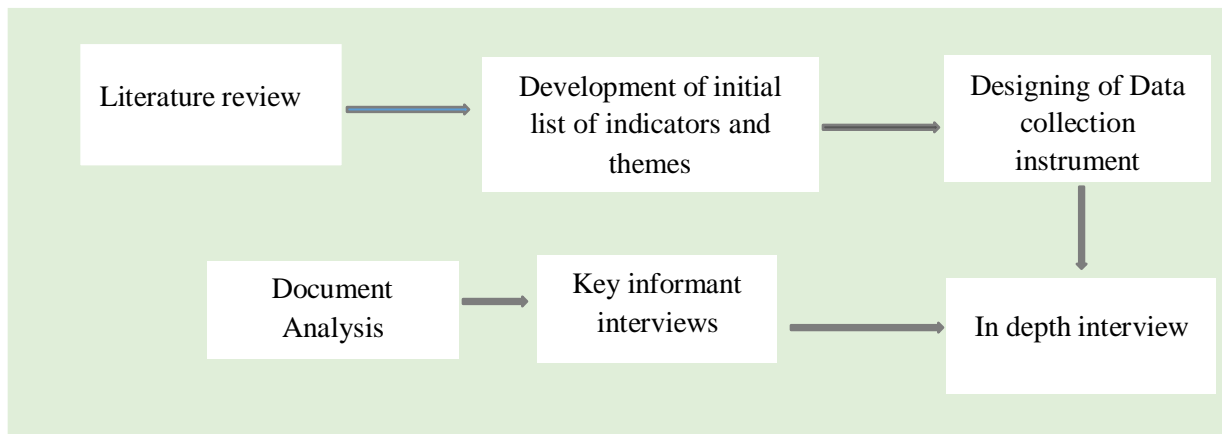


Figure 3.2 RESEARCH SCHEME

### 3.3.2 Source of Information

The qualitative method is used for this research to achieve the first objective of the study publish reports and data are used to measure railway reform implementation failure. The material gained through the sources of books, five-year government plans, policies, newspapers, PIDE blogs, and different articles. On the other hand, to analyze the remaining objectives of this research this study used qualitative analysis. Although according to the need of the topic thematic analysis is the best method that covers the factors and dimensions of the given study (Onwuegbuzie, Leech, & Collins, 2012) and (Choy & Science, 2014).

This research is used to understand the underlying cause of the Pakistan railway sector reform process failure. To address the following questions and achieve the objective primary data is collected through interviews and secondary data is collected from the given literature which consists of reports, policy papers, and other documents. Moreover, the sources of primary and secondary research are used as key determinants of the qualitative method (Esser & Vliegenthart, 2017). For the interviews those respondents are selected that are in a position to properly respond and understand the running problem of this sector Islamabad Ministry of Railway, railway

headquarter in Lahore, and Sadder railway station are selected for the information. During conducting the interviews session there is accurate information is found about the digging problem and its root cause of the problem. There is also a discussion on institutional reform.

### **3.4 Units of Data Collection**

The unit of data collection for this research is the Ministry of Railway, Planning Commission, Ministry of Transport, Ministry of Communication, their data and information. The information that will be used in this research is based on primary as well as secondary sources, which is mainly collected from Pakistan Railway's yearbook, Bangladesh Railway information book, national and international reports, news articles.

#### **Sample for Key Informants of the Interviews**

In this research purposive sampling is used. Here is purposive sampling used because the required information is not collected from the common person. Only an official person can answer the questionnaire. Following this sampling to generate informed information, discussion, saving time and money the respondents that are selected for the interviews (Campbell et al., 2020) are secretary of the railway, former secretary of the railway, general manager of Pakistan railway, director general of Pakistan, director (operations), deputy directors, deputy chief planning, etc. All the above-mentioned members of the Ministry of the Railway are interviewed with the question of railway reform failure, challenges of the railway, institutional reform, public-private partnership, and failure of the fund allocation for the railway sector. This study covers the overall analysis of Pakistan's railway sector reform under the area coverage of Islamabad and Lahore. Each hurdle and barrier are recognized and discussed under the developed themes and codes.

**Table 3.3 KEY INFORMANTS INTERVIEW (KII)**

<b>Sample for key informant interviews</b>
--

S.NO	Key informants	Number
1	Secretary of railway	1
2	Deputy chief planning	2
3	Deputy directors	8
4	General manager	1
5	Think tank /academia	2
6	Retired members of the railway	2
7	Operation manager	1
8	Assistant directors	3
	Total	20

There are major components of the analysis are outlined as given below.

Review of the literature:

There is a concept developed in the research that is based on the broad spectrum of knowledge about the study that is conducted. This knowledge and information come from different sources including books, reports legal documents and newspapers, etc.

Document Analysis:

This qualitative research analysis of documents is used to understand the problem and collect data on the highlighted issue and come up with evidence-based arguments (Bowen, 2009) and (Altheide, Coyle, DeVriese, & Schneider, 2008).

Interviews:

Semi-structured interviews were conducted with the concerned respondents such as academia,



think tanks, chief planning officers, and administration members to make the research valuable (Kallio, Pietilä, Johnson, & Kangasniemi, 2016) and (Whiting, 2008).

#### Key Informants' Interviews:

Key informants' interviews are conducted for the people of the Ministry of a Railway to know about the authenticated information. The KIIs include key stakeholders including government officials planning officer of the Pakistan railway, the director-general, operation managers, etc. who have full command of the rising issues of the Pakistan railway sector and the challenge Pakistan railway faces in the implementation of the reform process. This study followed a comprehensive strategy to draw a reliable solution (Kumar, 1989).

### **3.5 Development Instruments of the Study**

The study is more concerned with the development of the instruments that are helpful for the generation of effective policy for railway development and achieving the 25% growth rate according to Vision 2030 (Wu et al., 2017) The respondents are selected on their age experience and designation who have full command of the highlighted problem. For the analysis of the trends, arguments, and opinions the instruments of the questionnaire are shaped in parts to achieve a better outcome. The questionnaires are designed according to answers to all questions that are highlighted in this research. On the other hand, in the form of secondary data like the book, reports PIDE Blog, journals are followed as a tool for information collection. During conducting interviews different perspectives on the issue also highlight to tackle the gruesome situation of the Pakistan railway sector (Sofaer, 2002).

#### **3.5.1 Semi-Structured Interviews**

This study is based on the qualitative method of research. on this basis, semi-structured interviews

are conducted to understand the challenges of why reforms are never implemented despite approval from the government, and what challenges create a hurdle to implementing the reform for the development of the railway sector (Cypress, 2018) and (Kallio et al., 2016). The questions are developed to find out the answer to the highlighted objectives in this study. The technicalities of conducting interviews are the inclusion of key determinants and respondents to ask about the different perspectives on the failure and poor implementation of the Pakistan railway sector reform process.

The participants are mostly senior officials of the railway department, academic experts, and think tank members that talk about the Pakistan railway sector reform process as a major hurdle in the way of progressive railway reform and how public-private partnership is successive for the development and revival of Pakistan railway. To some extent, poor leadership lack of decisive policies, absence of training and financial constraints, and successive governments more focus on the development of the road pushing the Pakistan railway worse department of the state own enterprises (SOEs). The interview is divided in the following scheme (Smith, 1995) and (Dearnley, 2005):

- i. Senior officials of Pakistan Railway.
- ii. Senior Members of Pakistan railway.
- iii. Member of the National Transport Research Centre
- iv. Officials of the Ministry of Railway Deputy Directors
- v. Experts from Academia

### **3.5.2 Process of Data Collection**

The key informants' interviews in the qualitative research provide help to collect in-depth

information from the concerned stakeholders. The data and information collected through the interviews provide key facts about the railway sector reform process. As a result, this can fill the gap through the available literature and focus on the analysis for systematically finding the problem. Conducting interviews enables the provision of indepth and proper information about the stated objectives and questions of this study. Although secondary data analysis provides a way to conclude Pakistan's railway sector reform process (Lopez, Whitehead, Methods, & Practice, 2013) and (Gill, Stewart, Treasure, & Chadwick, 2008).

### **3.6 Techniques of Analysis**

Different scholars and researchers followed different techniques for the analysis of the data and information that is collected through the interviews. However, the tool is the way used by research to the description of the information and complicated connection of the various variable with each other used in this study. For the questionnaire, the responses received from different participants are effective among average-to-return queries (Alhojailan, 2012) and (Westbrook & Research, 1994). This is characteristic of qualitative research in which tools are used to have accurate and compulsive findings. The data that is collected through the interviews are analyzed with thematic analysis (Braun, Clarke, & Hayfield, 2022; Vaismoradi, Jones, Turunen, & Snelgrove, 2016). This approach is followed and looks after the different themes that are developed through respondent interviews. this analysis process is completed in the six following steps (Boyatzis, 1998):

1. The first step is familiarization in which the author actively engaged himself in interviews and transcribing.
2. The second step moving towards the generation of initial codes that appear interesting and effective for this study.
3. The third step is searching for the themes in which the author focuses on the codes

subthemes and themes' relationship development.

4. The fourth step is to follow the scheme of the final themes selection after the review
5. In the fifth order, the defined themes are followed as guidelines to understand the proper meaning related to the ~~is~~
6. In the last step, we write up all the developed themes and provide information and links that answer the stated objectives of the study.

### **3.7 Significance of Research**

It can be value-added because a very narrow study is available in the stated context. According to my best knowledge, there does not exist any single study which has evaluated the ongoing reforms process in Pakistan railways that are proposed and implemented. It will fill the study gap. It can open new vistas for the upcoming researcher in the given field of study. Interviews with different officials help to explore the main challenges of the Pakistan railway sector from the official ministry of the railway. These milestones help to cope with the challenges of the Pakistan railway and make it profitable SOEs and a major contribution to gross domestic economic growth.

### **3.8 Ethical Consideration**

Ethical consideration is followed at every stage of this research from conducting interviews to the data analysis process. Approval letters and prior permission were taken from the deputy registrar of the Pakistan Institute of development economics (PIDE). The privacy of the participants was kept as a priority. Respondents were guaranteed that this data is only used for academic purposes. In the next chapter, we are going to discuss results and discussions.

### **Wrap up**

In this chapter, we have discussed the whole methodology of this study. This chapter is covering

the method highlighted for the qualitative study to achieve the objectives of the study. In which we made discussion regarding semi-structured interviews, research design, instruments of the study techniques of data analysis, etc.

## **CHAPTER 4**

### **RESULTS AND DISCUSSIONS**

In this chapter primarily we can discuss the facts and information that is collected through the semi-structured interviews which are discussed in the previous chapter. The main purpose of the qualitative research design is to evaluate the reform and understand the reason for the failure of implementing reforms of the Pakistan railway (Hennink et al., 2020). However, there is a clear relationship between the research method and research design that provides information to see the cause-and-effect relationship followed by the specific research design.

#### **4.1 Analysis of Qualitative Information**

Analysis of qualitative information provides the various factors and drivers of the Pakistan railway sector reform process and is reflected in the form of discussion and organization of the responses of the respondents. The questionnaire that is prepared for the data collection from the concerned stakeholders is obtained through open-ended questions. The participants through the questionnaire provide information deep information about the hurdles and barriers to Pakistan's railway sector reform process failure.

##### **Part 1: Lack of planning for decisive policy-making and purposeful reform**

The respondents of the semi-structured interviews responded that yes there is a lacking plan for purposeful reform and direction for decisive policy making. There is no strategic planning for the coming ten to five years to achieve targeted growth and development. All plans are in working in the form of troubleshooting. When Pakistan was begin established in 1947 railway lines it was 20% more than the current situation over the year, we would increase its size but unfortunately, its size was reduced .no doubt railway is a very important matter. But due to the no continuity of policy, this sector is facing. Most people talk about all problems of the railway not because they

see it as critical for the economy but because they see railway inefficiencies because of governance that never worked to minimize these hurdles and smooth running of the Pakistan railway. The working culture of the Pakistan railway is very poor and stubborn, people are lazy, extreme resistance to changes, bureaucratic, low wages, lack of provision of incentives to the workers, strong unionization, and lack of accountability, and the government wants to focus on the organization of mind has allowed Pakistan railway at its peak of lethargic and inefficient. There are strong footprints and interference from government which provides fewer chances for the railway board to work independently. If powerful boards are not made with less government interference, the problems of inefficiency and sunk cost remain the same. Nothing will change because the railway board acted as the brain of the Pakistan railway including stakeholders / technical heads from our department. ***Government interference makes the railway sector poor policy formulation and policy making. For decisive policy-making and reform, there is a need for structural changes. Pakistan's railway sector is weak in decision-making. We have no proper goals to uplift the challenges through proper planning***

This shows that Pakistan's railway sector must grow properly with 100% autonomy and without government interference; it will work in a better way and revival its image by achieving a 20% growth rate.

The railway sector should strengthen with less government and political interference. It should be directly reported to the prime minister of Pakistan so in the light of the board's direction prime minister should hold meetings and make policies according to it. For example, in a year 25 billion are used for one purpose in the next year 25 billion were used in the other direction. So, in this context making the railway boards autonomous will help to achieve the oriented goals and aims.

## **Part 2: Political inconsistency is a hurdle in the way of reform implementation**

In response to the question of political inconsistency, the respondents provided the answer that: The Pakistan railway is a state-own enterprise (SOE) during the time of 1970s Pakistan railway had the largest passenger carrier share but over time its deteriorating quality of service providers also reduce the share of passengers and freight. To some extent creeping situation in Pakistan, the railway is due to political inconsistency. In a real sense, political inconsistency is nothing more than the serving of interests that contain the impact and power of each party as they are warlords that work to serve and influence the workers instead of severing the nation's interests. Most of the reforms that are approved by the government are never implemented or in way of implementation are vanished when the government is changed. As a new government come into power, they bring its policies, and old policies ended without implementation. Because they have different priorities instead of focusing on national interests. So, in this way, political turmoil and regime change are big hurdles in the way of reform implementation.

*“There is a need to make the environment at the political level. If the government change or not; the policies and reforms that are made for the Pakistan railway revival and make rail efficient must be implemented compromises must bear on the implementation of the proposed policies. Therefore, all successive governments must focus on national interests instead of influencing the workers through their power.”*

## **Part 3: Public-Private Partnership Reforms for Railway Sector**

In response to the question of the public-private partnership (PPP), reforms provide the answer to the way; *the public-private partnership model if applied in a true sense will bring modern business techniques (such as Tics, leopard services) to the organization and joint venture with local technical organizations such as NESCOM, SPARCO will save the foreign exchange.*



Public-private partnership-related reforms were proposed in the last 20 years but they remain only in the form of documents. Nothing happened on the ground. If the government focuses on the implementation of these reforms it will help to reduce the depreciation cost increases the profit and utilizes the funds properly for railway development. This sector needs experts because there is an absence of experts mostly people are elected through the competitive CSS exams. They don't have background knowledge about the railway and they policies, so in this regard they are not in a position to make a decision that is reliable about the efficient railway. Trains operation also handed over to the private companies this thing bring efficiency. *There is strongly supported for the public-private partnership model for making the Pakistan railway is the true catalyst for economic growth and development. But for this purpose, there is a dire need for professionals who have a full understanding of the public-private partnership model. Trains operation responsibility must be handed over to the private sector which will be profitable for Pakistan.*

These are all responses shows that are reflected the key challenges faced by the Pakistan railway sector.

#### **Part 4: Efficient Leadership and Institutional Reform Help to Achieve the Goal of Pakistan Railway**

Is information provided by the respondents is that; institutional reform related to *the automation and digitization* of the whole system including E. ticking, E-offices with *enterprises resource planning (ERP)* system which primarily rely on the integration of all processes from end to end. This thing will make the Pakistan railway paperless. All the information and data are generated through the electronic process which will wipe out the challenge of the absence of transparency and accountability, there should design of the human resource department that provides incentives and benefits based on their performance. Performance base Evaluation strategy. Performance-

based management should not be based on seniority but on achieving the given goals and objectives.

Institutional reform related to capacity building needs training of the working officers and new officers should help to work in a better environment. National and international training is broadening the vision for the serving bodies to apply the models from learning the successive model history of other countries like the United Kingdom, China, and Japan. For example, the Japanese and Chinese rail systems are successful models to generate revenue and customer service provision. Learning about the other countries' rail experiments helped to bring the application of the new model to Pakistan. Efficient leadership with background knowledge of the subject and professionalism help to achieve the goals and tasks of the Pakistan railway sector. Some of the reforms of capacity building are in progress including customer relationship management (CRM) is working for the tracking arrangement, SMS alerts, and call centers for providing information about the timing of trains' arrivals and departures done in the railway department. Most of the time government departments are reluctant to change reform in the case of human resources have been opposed by workers' unions. The rest of the reforms are never implemented because of poor policy.

#### **Part 5: Financial Constraints is Challenge in the Way of the Reform Process**

While discussing the financial resource allocation for the Pakistan railway sector the respondents provided the responses; ever-increasing deficit and a huge burden on the pension with the railway sector dealing is nothing more than the government's failure for arranging finances for Pakistan railway, when, why where finances are used are various factor the government needs to be fixed it other this sector suffers through the deficit years by years. There is also a lack of management and clear-cut policy which led the railway into a creeping deficit. Pakistan railway has a lower investment most of the allocated funds for the railway are used for buying the locomotive

repairment and maintenance needs more investment and budget for Pakistan railway infrastructure development. The department needs changes at the policy level to attract foreign direct investment and increase the Pakistan sectoral development budget (PSDP) for the Pakistan railways. This sector needs a master plan to attract the private sector for joint venture and development .lack of financial allocation brings crisis in the railway sector operation .private sector engagement also attract foreign direct investment(FDI) in this sector .in short the is a substantial decrease in the budget for the railway as provided by respondents *effective budget share and basic criteria will help to uplift the challenges of the Pakistan railway sector, otherwise, it leads to this sector in chaos and full privatization.*

#### **Part 6: Preference to roads on the coast of Pakistan railway**

It is provided to the respondents that; there is highlighted an issue that our government is focused on road infrastructure development. Approximately 70% of Pakistan's transport sector is used for road development only 30% is used for railway. As if we provide 70% budget allocation for the railway sector creates chances to improve efficiency and reduce the sunk cost. But unfortunately, our successive government policies are in favor of road infrastructure development instead of railway infrastructure .to some extent ministry of the Railway is responsible for maintaining the funds for the Pakistan railway sector development and smooth running the reason is that they don't have legal policy framework for capital support and further development. Some of respondents suggest that government should spend more money on the railway infrastructure and development instead of roads. The reason is that rail provides environmentally friendly transport instead of roads that are increasing environmental pollution.

## **Part 7: Why Most of the Reforms are never implemented Despite Approval from the Government**

The answer provided by the respondents is that; to some extent, there is political interference that brings failure in the railway sector reform implementation Pakistan railway board is in a position to work independently. It is always dictated by the higher authority of the government that it should make autonomous. So, in this, there is a chance railway sector-approved reform would implement. The railway sector needs structural changes. No provision of incentives creates demotivation and lazy working conditions for the workers. However, if people are provided good package salaries and performance-based incentives, perks, and privileges all things help to improve the working capacity of the workers and bring some positive changes in this sector .one of the other causes of failure of reform implementation is that lack of Monitoring and Evaluation mechanism the results of the projects are not measured should it achieve or not. Somehow most of the officers in the railway department are coming through CSS allocation. They have no knowledge about the background of these all things that created failure in policy implementation and reforms are only in the documents. Nothing happened on the real grounds.

## **Part 8: To Make the Railway Competitive Provinces Could Take It Over**

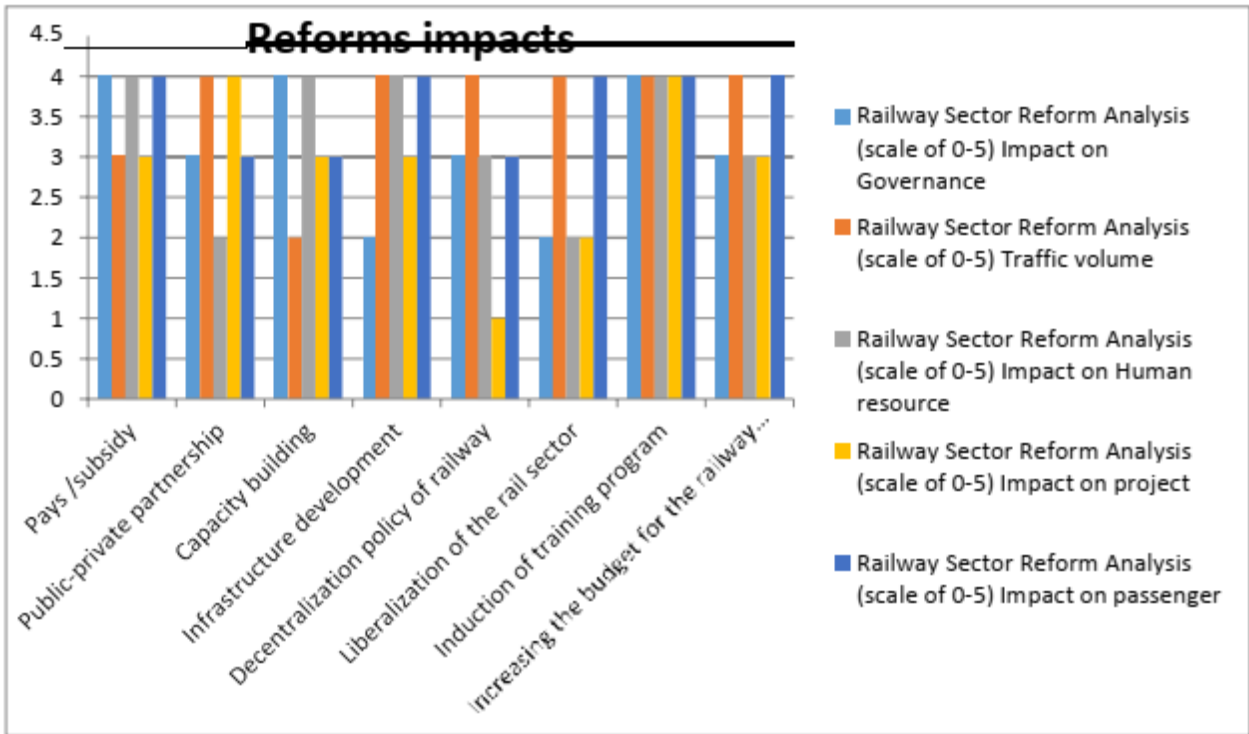
The participants reflected on the idea that: to make the railway sector competitive provinces could take it over is helpful and also make it profitable but also reduces its strategic importance of Pakistan railways. Some other responses provided that; the Pakistan Railway can't hand over the provinces because it's a federal subject. As we know that Pakistan railway is a state-owned enterprise if it will provide the provinces it will end up. So the basic solution to make the railway sector competitive state own enterprise (SOEs) there is a need to elect professionals with expertise, increase the budget, build human capital, and training of working persons to revive the Pakistan railway sector.

Pakistan railway policy was made by the communication department there is no clear-cut policy about the railway. There is a need to amend the Pakistan transport policy that provides a major portion of information about Pakistan railway. Pakistan railway is the largest share contributor sector of Pakistan. It should be recognized at the policy level.

**Table 4.1 RAILWAY SECTOR REFORM ANALYSIS**

Railway Sector Reform Analysis (scale of 0-5)					
Reform	Impact on Governance	Traffic volume	Impact on Human resource	Impact On project	Impact on passenger
<b>Pays /subsidy</b>	4	3	4	3	4
<b>Public-private partnership</b>	3	4	2	4	3
<b>Capacity building</b>	4	2	4	3	3
<b>Infrastructure development</b>	2	4	4	3	4
<b>Decentralization policy of railway</b>	3	4	3	1	3
<b>Liberalization of the rail sector</b>	2	4	2	2	4
<b>Induction of training Program</b>	4	4	4	4	4
<b>Increasing the budget for the railway sector</b>	3	4	3	3	4

SOURCE: (AUTHOR'S ESTIMATIONS)



**Figure 4.1** SUGGESTED REFORMS FOR PR

In the second stage, this study also develops a scale of 0-5 on the basic indicators that are selected after reading the different countries' literature on railway reform. It is mentioned in the table to analyze the reform process of the Pakistan railway sector through the gather information from the respondents (Kaushik & Walsh, 2019) and (Maruvada, Bellamkonda, & Technology, 2012). The respondent's response regarding the reform of increases *in pay and subsidy* has a positive impact on governance, increments in salaries bring efficiency and improve the working capacity of workers. As a result, it has a positive implication on human resource development and improves the projects working for increasing the volume of passengers and freight services. Increasing pay and subsidy is vital for those working officials who give his/her 100% to their job and

responsibilities. In a real sense official demand for upgradation of their job scale and getting more privileges is resistance to the reform implementation and its progress. Our government is already giving a subsidy to railway sector which is a huge burden on the economy. The respondents focus on the point of the training program that will provide help to improve the railway sector and bring new ideas through international training but the thing is that we are moving towards the fourth industrial revolution. This is the age of globalization era. In this age of modernization, IT is providing a platform to interact at a worldwide level without moving from one country to another country. If railway ministry officials wanted training programs and learn from other countries experiences they must utilize the online learning platform to bring innovative ideas for uplifting the railway sector crisis. Another reform regarding the increasing budget for the railway sector is to bring efficiency and get out of the list of loss-making state own enterprises. The respondents suggested that government should increase the budget allocation for the railway sector which will be helpful for the restructuring of the railway sector. But the thing is that every year there is a budget increment as compared to the previous years. The government is also providing a massive part of the budget for SOEs despite all efforts this sector not moving towards bringing efficiency and decreasing the budget deficit. In comparison to the budget increment, our railway sector is on the verge of collapse. At the time of inflation, our country is also at the edge of default.

## **4.2 Discussions**

Pakistan railway is one of the largest contributors to the share of gross domestic product (GDP). But unfortunately, lack of decisive planning and poor policy make it pass through the creeping deficient and in the position of dwindling. Pakistan Railway is facing the challenge of work unionization, resource constraints, government footprint, and failure of coordination of the government because all ministries are wanted to work independently this thing creates a

communication gap in the ministries that's why committee progress is not as satisfactory, lack of technological development, capacity building human resource development, lack of training for the new comers and already serving member of Pakistan railway sector. There is lacking Pakistan Railway's right men for the right job. Most technical decisions are taken by no technical ~~persons~~ who have no sense of technical revolution. There is also lack of innovative minds to explore the railway sector's new ventures for the growth and development of the Pakistan railway. One of the important aspect regarding decision-making, they are not good enough at decision-making. There is also a communication gap between the Ministry of Railways and the railway board in the context of policy and strategy making. In this worsening situation of Pakistan Railway, government does not indicate the initiatives to minimize the railway losses and improve the services of the Pakistan railway sector. Indeed, making railways competitive give a takeover to the provinces is not a solution to the arising problem. To somehow, Pakistan's railway sector can reduce sunk costs and bring revolutionary change by implementing these steps. If these steps are exactly followed, the Pakistan railway can create thousands of jobs and generate billions of revenues in Pakistan's economy which will improve Pakistan's gross domestic product (GDP). Transport policy must need to be amend it. The focus of the Pakistan railway sector should be prioritized. Most of the respondents said that increasing the pay scale of the workers improves the working performance of the railway sector. But the point is that the government is providing increments in salaries. Their increment is annual based not performance based. So in this case increasing salaries is not a solution to reduce the railway sector deficit. At that time within the institution, they should adopt the capacity-building mechanism that helps to bring efficiency in this sector.

#### **4.3 Comparative Analysis of Pakistan Railway with India and Bangladesh**

The primary objective of this study is to evaluate the overall state of railways across South Asia.



Because of gaps and not access to the railway data, this comparison is restricted to the countries of Pakistan, India, and Bangladesh. In the words, railway all over the world needs to be popular serviceable, and productive to contribute to economic growth.

Those living in these regions share the same climate, socioeconomic, cultural, and behavioral profile. Following this approach of study provides a standard setting for the countries of the region.

The worldwide community is attempting to encourage railway expansion instead of road infrastructure development. South Asian countries are more reliant on the development of railways as a result of climate change and environmental degradation. As we know that in terms of passenger of traffic activity, India ranks first among South Asian countries. This country accounts for 6.9% of all international passengers and longest passenger route network 64460 kilometers. In the case of Bangladesh has faced ups and down since its inception in 1971. Pakistan railway due to its strategic location has great potential for economic growth and social productivity.

### **Variable Selection for this Study**

The following variables are selected based on available data. These selected operations are those that are common in the selected countries.

- i. Vehicle kilometers'-per-vehicle day line (in terms of 4-wheelers, for passenger carriages)
- ii. Vehicle-kilometers per vehicle day online (in terms of 4-wheelers, for a n other coaching ~~vide~~)
- iii. Wagon kilometers per wagon day online
- iv. Engine kilometers per Day per Engine in Use
- v. Net Train load

For the comparative study of Pakistan railway with India and Bangladesh, the given

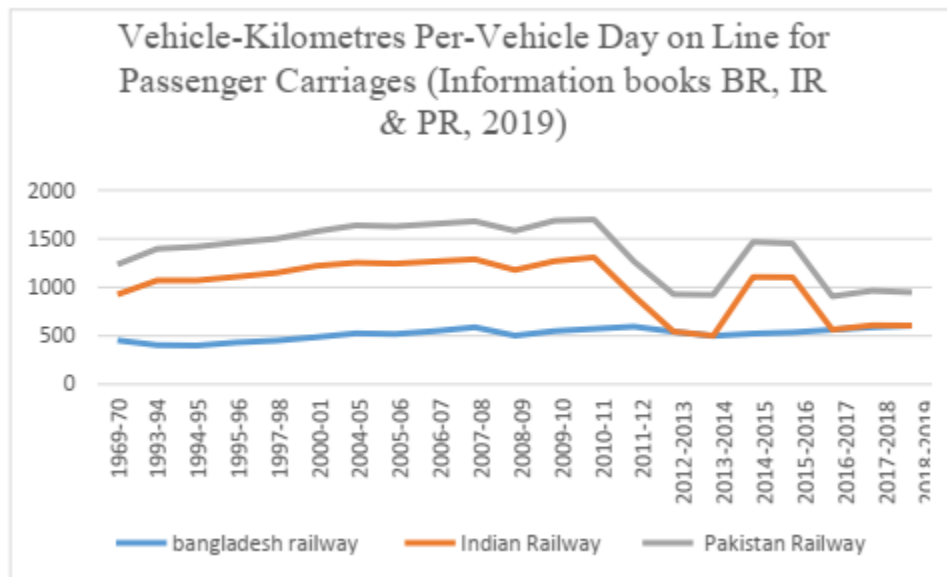
information is taken from the years 2019

- i. Route kilometers
- ii. Track kilometers

#### 4.3.1 Vehicle kilometers'-per-vehicle day line (in terms of 4-wheelers,

##### For passenger carriages)

This variable provides a tool to measure the productivity of the vehicle. Using this variable we are in a position to the usage of vehicle. Vehicle fulfills the passenger demand to cover the cost of their functionality and operation. A high kilometers usage of a vehicle indicates that massive usage of the vehicle without indication that is also wastage in the perspective of economic terms. Wasteful use of vehicles should keep the utilization at the very lowest level.



**Figure 4.2 VEHICLE KILOMETER PER VEHICLE DAY ONLINE**

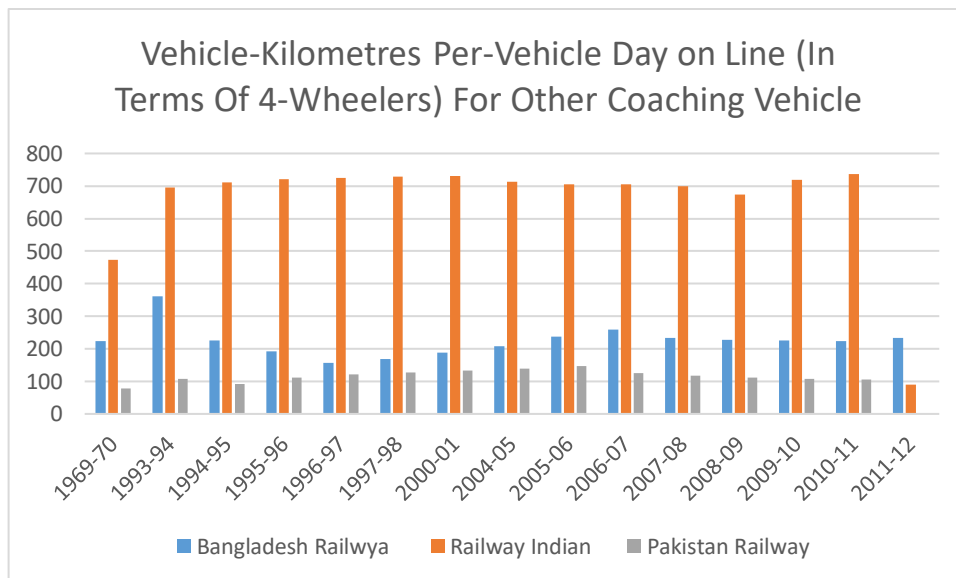
This figure provides information about the vehicle kilometers per vehicle day online for passenger carriages in Pakistan, India, and Bangladesh. Pakistan and India started their railway journey in the

same time frame but Bangladesh Railway started its railway journey in 1971 this time vehicle speed was 454, and Indian vehicle kilometers per was 437 almost the same as BR. But in the case of Pakistan vehicle meters per which 308 was comparatively less than Both India and Bangladesh. This graph shows the variation in these countries' vehicle usage.

This time series provides information about serviceable and unserviceable vehicle usage.

#### 4.3.2 VEHICLE KILOMETERS PER VEHICLE DAY ONLINE

This indicator also provides information to measure the productivity of another coaching vehicle per day in the selected countries.



**Figure 4.3 VEHICLE KILOMETERS PER VEHICLE DAY ONLINE**

This figure shows the KPVPD value of Pakistan, India, and Bangladesh's other coaching vehicles. In 1967-70, Pakistan KPVPD 79 KM. On the other hand, the KPVPD value of India and Bangladesh was 473 KM and 224 KM. as comparative India on the top position in respect of Pakistan and Bangladesh. In recent years both BR and IR moving towards improvement but Pakistan is constant.

### 4.3.3 Wagon Kilometers Per Wagon Day On-Line

This indicator measures the performance of wagon kilometers per wagon day online.

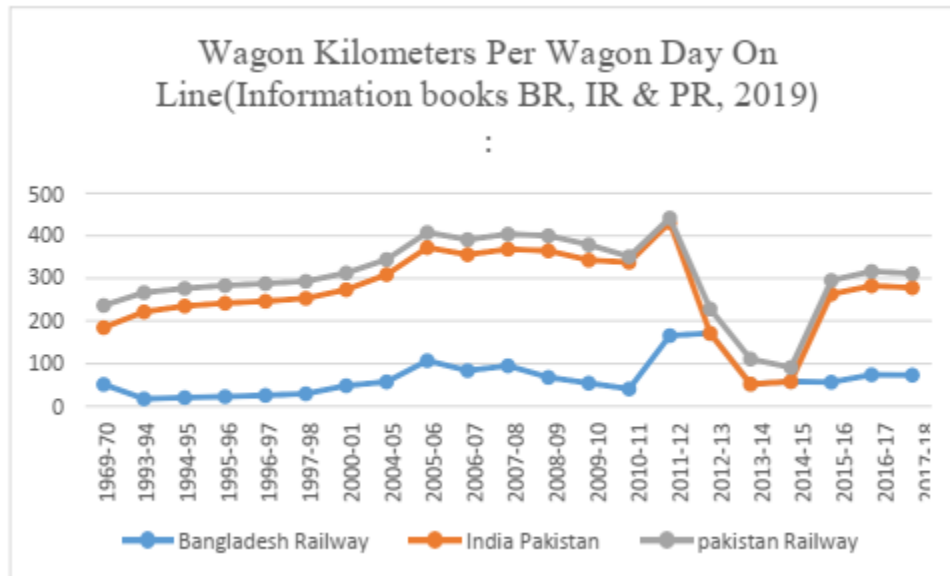
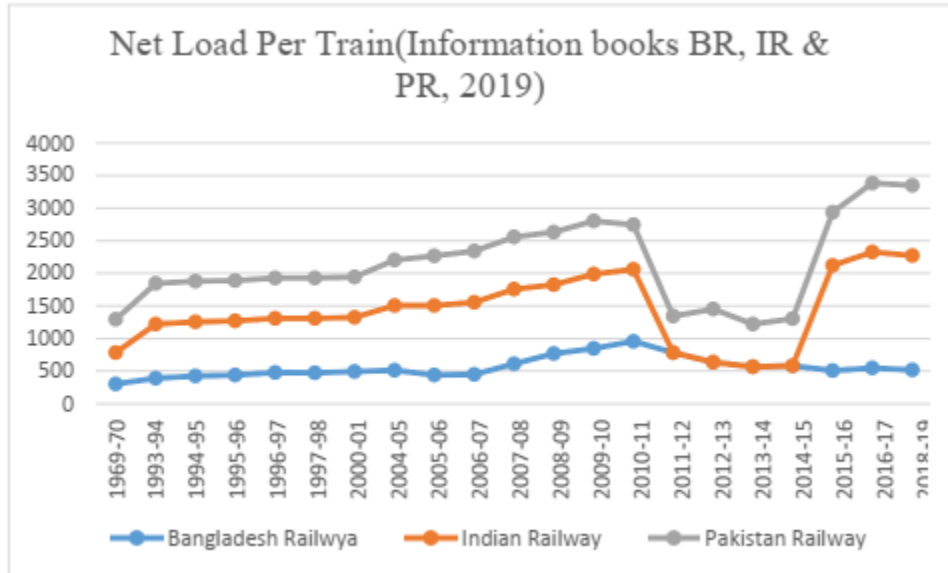


Figure 4.4 WAGON KILOMETERS PER WAGON DAY ON-LINE

This figure provides a dataset of the utilization of PR, IR, and BR wagon kilometers per day online. According to the dataset, Pakistan is reducing the wagon kilometers in comparison to India but is in a better position than Bangladesh. This reduction may be the result of the security of freight movement through rail.

### 4.3.4 Net load Per Train

Route capacity can be measured through the number of trains that can pass on the railroads within a given period. Large cars, engines, and longer trains have had impacts on the net load per train.

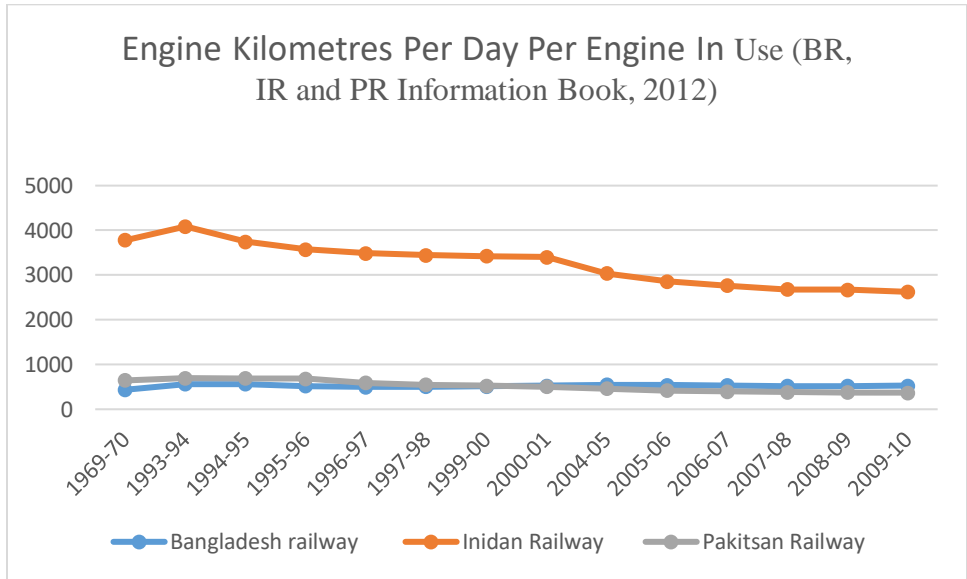


**Figure 4.5 NETLOAD PER TRAIN**

This graph provides information about the net train per load. Pakistan's average load per train was 507; India had 473 and Bangladesh had 329. At that time Pakistan was in the best position in the context of net train per load. But with time other countries moved towards improvement but unfortunately downward.

#### 4.3.5 Engine Kilometers Per Day Per Engine in Use

The indicator Engine kilometer per day per engine use measures the efficiency and operational performance of the railway. Through this graph, we saw that in 1969-70 the Indian railway is on the highest performance level which was 3785 KM. On the other hand, Pakistan was 647 and Bangladesh had 436 which is very low. In recent times Pakistan and India move downwards but Bangladesh show persistence in this regard.

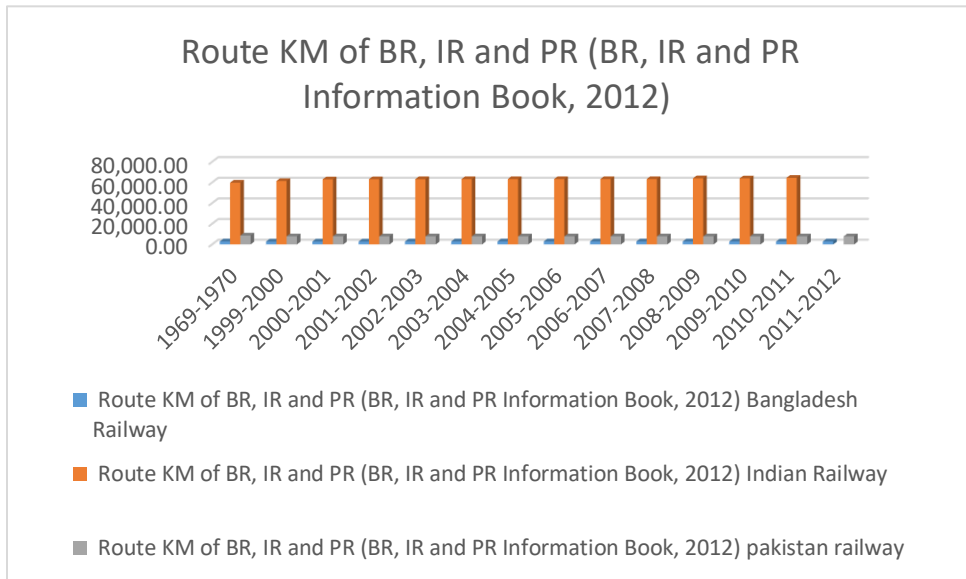


**Figure 4.6 ENGINE KILOMETERS PER DAY PER ENGINE IN USE**

#### 4.4 Passenger Freight Scenario of Pakistan, India, And Bangladesh Railway

The passenger freight scenario of the railway of Pakistan, India, and Bangladesh overview with limited data access within productivity railway.

##### 4.4.1 Route Kilometers



**Figure 4.7 ROUTE KILOMETERS**

This graph shows the tendency of variation of route kilometers of Pakistan, India, and Bangladesh.

This figure shows that there is a minor change the in route kilometers of PR and BR. But IR is moving towards progressive transport facilitation.

#### 4.4.2 Track Kilometers

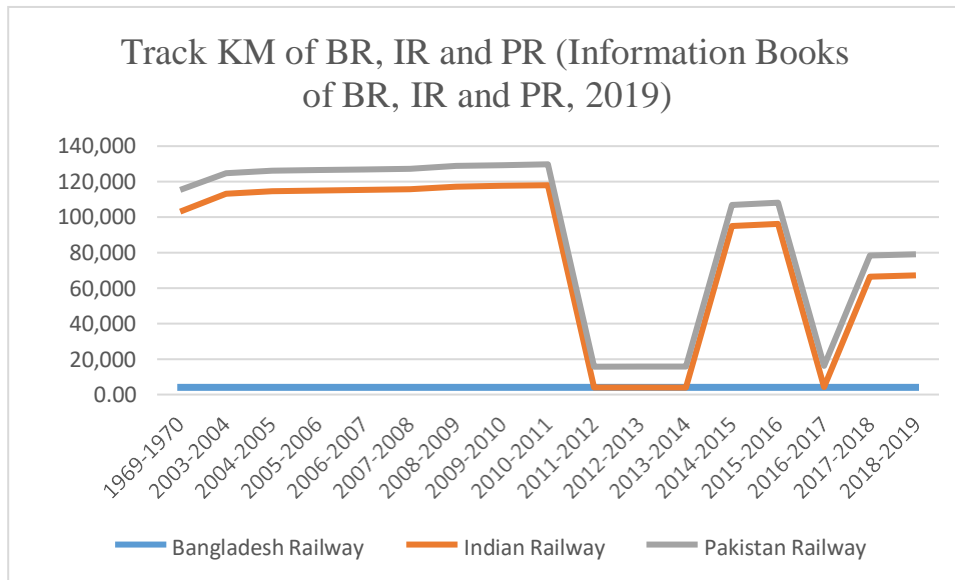


Figure 4.8 TRACK KILOMETERS

In this figure, we saw a comparison of the track routes of PR, IR, and BR. In track route, Pakistan was distinguished from 1969-70. According to the following trend, India also moving towards improvement but the track kilometer is reducing with time.

#### Conclusion

From the comparative performance study of Pakistan, India, and Bangladesh. It is worsening the position of the operating performance of Pakistan among the South Asian countries. The vehicle kilometers per day in Pakistan is 345 KM (2018-19) indicating that the usage of the Pakistan railway is comparatively average to that of India and Bangladesh. The other countries moving towards up-gradation and restructuring of the railway but Pakistan at that time is on the verge of

collapse. The vehicle kilometers per day of another coaching of Pakistan railway are 129 KM (2018-19) which is very low in comparison to the IR and BR. Overall Pakistan railway moving downwards. In comparison to other countries, the government supports this sector and provides subsidies. But the thing is that massive support of the government allocation for this sector development losses its efficiency.



## CHAPTER 5

### PREVIOUS REFORMS AND PROGRESS

This chapter discusses the previous reforms and achievements of Pakistan in the railway sector. As we know that growing economies of the world are trying to enhance their railway-related projects to rise their growth from both freight and passenger sides. For instance, the Malaysian government is enhancing its rail projects in the country. For instance, East Coast Rail Link (ECRL) will be completed by 2022 and it passes from Port Klang and goes through Peninsula towards Kelantan in the northeast Peninsula, of Malaysia. This project is the game-changer in the region because it connects the poor east coast with the rich west coast. Likewise, the Light Rail Transit 3 and the Mass Rapid Transit (MRT) projects by Malaysia speak volume about the country's will to improve the transportation sector as the development of the sector ensures promising growth and development for the country (Javed, 2012).

The population of Pakistan is around 210 million of which 76 million people live in urban areas and the growth in population by 2.4% annually. The Pakistan Railway (PR) was founded in 1861 and currently, the headquarter is in Lahore City of Pakistan. The first single-track route was introduced from Karachi to Kotri by Sir Henry Edward and the distance was 169 kilometers. After the independence of Pakistan, there were 8,122 routes and later in 1954 the route was extended from Mardan to Charsada and from Jacobabad to Kashmir in 1956 was drawn. Another line was constructed Kot-Adu-Kashmir in 1969-73 which was the alternative route to northern Pakistan from Karachi. The PR is a state-owned enterprise in Pakistan, and it works under the Ministry of Railways. The Ministry of Railway has the responsibility to make policies, administer passenger locomotive services, and regulates stakeholders such as railway companies, industries, and other organizations (Asim et al., 2014).

A comparative analysis of budget allocation for PR and road transport provides that the PR sector is not given due importance. In 2005-2010, 45.5 billion PKR budget was allocated for PR, and 155 billion PKR was allocated for road transport. Owing to the unequal and meager allocation of budget PR sector is getting worse as it takes 21 to 28 days to deliver the product far away by 1800 KM and it is 4 to 7 times higher than USA and China (Bogart & Chaudhary, 2015). In the fiscal year 2020, the number of passengers carried decreased by 39.4 million to 39.9 million. The total decrease in passenger traffic (Km Million) by 3.54%, freight (Tones Million) decreases by 0.56%, and freight (Tones Km Million) by 0.07%. The earnings of Pakistan Railway in FY2020 (July to Feb) by 36,916.85 million Pakistani Rupees and total working expenses (Total Administration, Repair & Maintenance, Operating Staff, Operating Fuel, Other Operating Expenses, and Miscellaneous) increased by Rs41050 Million or increased by 19% during (July to Feb) FY2020 as compared to last year with same July to Feb FY2019 (M.Z. Khan & Khan, 2021); "Pakistan Economic Survey 2018-19

### **5.1 Need for The Reform**

Pakistan is a country which is located in a very geostrategic location. From the western part, of China Pakistan, presents the shortest route to provide warm water access to seaports to central Asian countries and Afghanistan. Pakistan Railway was taken steps towards liberalization of trade policy to build trade relationships with regional states .in the case of India different talks resulted in three trade agreements. This agreement shows that in the coming years, trade between two arch-rival countries will increase and contribute to the gross domestic product (GDP). Furthermore, in the case of Afghanistan Pakistan updated the Afghan transit which allowed Afghanistan to transit their exports using Pakistan's territory. Pakistan also working on improving the trade relationship with Iran, Turkey, and Bangladesh as well. This thing shows that Pakistan can be a major transit

trading hub for international and regional trade (M. Z. Khan & Khan, 2021).

To explore and utilize this best potential Pakistan needs to focus on robust and competitive communication networks. This would include those roads, railroads, ports, and telecommunication. Following the network industry, the Pakistan railway has the potential to facilitate the Pakistan economy and generate revenue. Pakistan and the whole world saw the results of tremendous and proper growth in telecommunication, the Pakistan Post, and the aviation department due to the adaptation of liberalized policies (M. Z. Khan & Khan, 2021).

The last section analysis shows that Pakistan's railway sector at the verge of collapse and constantly moving towards decline. There are many reasons behind the constant decline of the Pakistan railway including political inconsistency, financial constraints, lack of strategic planning and operational issues, etc. all these things show that the railway has been serving social, political, and strategic purposes rather than the boost of economy and revenue generation. The increasing trend of the weak economy of Pakistan including poor governance, red-tapism, rampant corruption, lack of political and entrenched inefficiency, etc., will lead to this sector's further declining situation. Furthermore, this leaves no doubt economic control of the railway sector failed to create revenue and also stopped the industry from releasing its true growth potential. While the constant decline of Pakistan's railway sector is alarming and means that Pakistan will be unable to build strong trade relationships with regional countries (Tahir, 2021)

In the globalized world where all the regions are connected in this situation, Pakistan needs to focus on building an economically viable and competitive network industry. However, in the coming year, countries will force to compete in the regional and international network markets. To cope with eventuality Pakistan needs to focus on internal preparation to achieve the effectiveness and efficiency that is required to compete in the regional and international markets

(K. K. Khan, Abdul, 2020).

The failure of the social model of the railway is the biggest challenge for the government of Pakistan. For the last few decades' government of Pakistan was working to reform the Pakistan railway industry which can restructure this sector in a commercial direction. These reformation plans of the railway structuring are failed and unable to achieve the oriented targets. Again, this sector continues to operate under the control of the state (Tahir & Tahir, 2020).

As the literature review shows that liberalization or privatization is slow in many parts of the but a public-private partnership is performing better to achieve the defined results. However, reforms related to liberalization need to be tailored to suit one's requirements.

The next focus is on the Pakistan railway sector reforms that were focused on privatization, liberalization, and restructuring. This section also identifies the failure and challenges of such reform processes and recommends options to reform this sector in the future and achieve sustainable economic growth and development.

## **5.2 Recent Reforms**

Pakistan is one of the countries where the transportation sector is underdeveloped since its inception. So that is the reason the transport sector including the railway sector has continued receiving financial and technical assistance from international organizations such as the Asian development bank (ADB) and World Bank (WB). The main purpose of foreign assistance and funding is to development of the infrastructure, and increase trade volume and economic growth .in 1950 to onwards1999 World Bank provide financial assistance worth 347 million USD to provide support to 5 ports,5 roads, and 13 railway restructuring projects in Pakistan. All these projects are lined up with the request and requirements of the government of Pakistan (Anwar,

2020).

In the 1990s the most important project was initiated named as twelfth railway project. This project was considered a vital component of the Pakistan transport sector including railways, roads, and ports. This project was part of the seventh five-year plan (1988-93) and 1988 policy framework that was focused to achieve three main objectives that were:

- 1) Institutional reforms
- 2) Increase investment and adopt new technology
- 3) Bringing efficiency and proper utilization in the existing transport sector

The railway project's important component was the railway action plan 1998 provided a clear picture of the restructuring plan for the railway sector that was focused to facilitate liberalization and privatization. In this process role of railway, the board was clearly defined of following was that one, the role of the railway board in the executive matter was to be abolished (Tahir & Tahir, 2020).

Two manufacturing units of the railway were incorporated on the business lines to bring self-efficiency to the privatization. The budget for the railway was presented differently from the federal budget. The staff of the railway was reduced according to partition. All the decisions related to the posting of employees and promotion of people were shifted from the government of Pakistan to the general manager and railway board. Separation of the accounting department for different revenue streams (Tahir, 2021).

According to the World Bank report, the completion of the project resulted in the institutional reform that targets sustainability achieved at the end of the project. Moreover, Pakistan Railways not only establish a business department but also create an environment to improve commercial

operations. Another perspective of this project was influencing the government of Pakistan to organize a wide range of Pakistan railway reforms under the 1996 open access policy and privatization plan in 1997. As a result, manufacturing units were separated (Qamar & Saeed, 2016).

In the context of accounting reforms in Pakistan, the railway government of Pakistan took responsibility for public services obligations and repaying the complete cost that was demanded from the Pakistan Railway. One of the major accomplishments of this project was technical assistance which led to an open access policy in 1996 and a privatization plan in 1997. Implementation of open access policy allows private companies to provide railroad services to the Pakistan railway. For the private sector operators, flexibility and ease government of Pakistan liberalized the specification in the railway sector. The privatization plan of 1997 was more concerned with privatization reforms: 1) major focus on the incorporation of the Pakistan railway sector into three core businesses; infrastructure, freight, and passenger. 2) The second plan is call for the establishment of a new regulatory regime in the Pakistan railway for the provision of a liberalized and competitive environment for private operators. 3) the third plan of privatization is to call for separate prices for corporate entities. 4) fourth resettlement agency of Pakistan Railway manages the non-assets and surplus staff. the results of these projects were achieved in 1998 in the form of separate passenger, freight, and infrastructure units were established (Looney, 1998).

Furthermore, no reform related to the privatization and liberalization of the Pakistan railway was implemented and adopted. In reality, unbundling was automatically undone when the 2000s three units of Pakistan railway sector freight, passenger, and infrastructure again merged and formed as one unit and creating vertical integration .in fact regulatory framework and the legal instrument

were not implemented, and take place even though the regulatory authority ordinance. Furthermore, labor redundancy issues were not resolved and not studied (Javed, 2012).

In the reform process labor, dismal issues were properly addressed and privatization reform contemplates early into the process. As a result, privatization creates a sense of insecurity and an alarming situation for the employees who are not working efficiently and actively, confirmed about their perks and privileges. Employees of railway feel demotivated towards work resulting in a lack of ownership and lack of capacity, for the reform process.

Apparently from the learning experience, it appears that railway sector reforms related to privatization were not successful because of planning and execution failures and problems. In these phases, the process failed to appreciate the political and socio-economic reality in which the Pakistan railway sector operates. Meanwhile, the targets remained unsuccessful or unsustainable.

In reality, “it is important that decision-makers in the Ministry of Railways and the government of Pakistan failed” to bring all stakeholders on board. Especially within the Ministry of Railways Pakistan which results in a lack of required motivation to implement the reform. Meanwhile, the government of Pakistan failed to introduce proper legislation to sustain and protect the reform process and showed an absence of required political and bureaucratic support

The process of railway reform itself was ambitious given the socioeconomic nature of the Pakistan railway for many decades since its inception. Since its independence railway industry of Pakistan was struggling with the effort to end up all the politics and defense establishment despite relying on business strategy.

As we know that Pakistan's rail sector is state own enterprise and on the other hand reform of privatization concerns the transfer the ownership from a public entity to a private entity. Those

reform and development programs face failure to realize the real issue of red-tapism in employee culture create and prevailed year by year. Pakistan's railway sector is facing a crisis and difficulties to operate efficiently and effectively. Pakistan's railway sector had several challenges, Major declining trend started from the last 50 years ago. But in recent 2001 to onward 2015 the situation deteriorated and reached the stage of crisis and collapse, almost having some severe implications on financial management and government. From the near recent 2000, to onward 2007 Pakistan's railway sector is reviving its image as a result as passenger traffic is getting improved and freight traffic service also positive as well (Javed, 2012).

Instead of all that revival of the Pakistan railway still, a long way continuous struggle to become sustainable to manage and operate itself over a long period. Although Short funds allocation from Pakistan's sectoral development program led to a cut in maintenance because labor is fixed and fuel is fixed. The excessive budget part is used for operation and maintenance fewer finances remain to run the service. So, in this Pakistan railway is on the verge of destruction.

### **5.3 Progress Rate in The Pakistan Railway Sector**

As stated earlier also, that unless you have a vision of the overall system of your overall policy set for the whole transport sector, you will not have a vision for railways and railway will stay where it is. (Javed, 2012)

Last ten years' progress of Pakistan Railways, restructuring of Pakistan State-owned Entities has been initiated to improve overall corporate governance of PSEs and service delivery and move to a structural surplus and increase public sector savings such as Pakistan Railway (PR). Progress has been made including restructuring the Board of Directors of Pakistan Railway. In the 2012 to 2013 period, the Board of Directors of PR has been reconstituted with the involvement of high-caliber professionals. The credit line of PR from Pakistan State Oil has been enhanced to ensure



smooth supply, while an asset management company has been established for the optimum utilization of PR's assets.

In the year 2013-2014, an amount of 33.5 billion rupees has been allocated as a grant to PR and the Government allocated 30.97 billion rupees for Public Sector Development Program (PSDP) for FY2014. A comprehensive railway restructuring plan was under development and it was finalized in 2015 which was for an improvement in governance, internal business processes, service delivery, financial management, and investment planning regarding PR.

The Railway Revitalization Strategy is being implemented, which envisages improvements in business processes and the institutional framework, financial stability, and service delivery. As a result, Pakistan Railways (PR) has been making progress since FY2014 as reflected in its operational and financial data for FY-2014, 2015, and 2016. During FY 2016, PR added 39 new locomotives for freight service and at that time it was in the process of procuring 55 locomotives for coal transportation for Sahiwal and Jamshoro coal power plants, delivery of which started in December 2016.

Finally, in 2020, the Development expenditure grew by 38.4% during July-March as compared to last year's same period FY-2019. In absolute terms, development expenditures stood at Rs 382 billion during July-March, FY-2020 as compared with Rs 276.0 billion in the comparable period of FY-2019(2021).

#### **5.4 Reforms Achievement**

The Below table describes the achievements in different sub-sectors of PR.

For FY-2015 and 2016 to improve locomotives the fund was approved through PSDP for Rs 6284 million for which an agreement has been signed with M/S Electromotive Division USA. In 2013-

2014, the Ministry of Railways took initiatives regarding improving PR by introducing Performance benchmarking and the development of Key Performance Indicators (KPIs) for Pakistan Railway has been launched. It helps management to target the right areas for improving service delivery, business processes, and financials of PR. Under Public-Private Partnership (PPP), Pakistan Railway is required to maintain 100% punctuality of the trains, whereas commercial management of the trains is the responsibility of private partners.

**Table 5.1 LAST 10 YEARS' ACHIEVEMENT IN THE INFRASTRUCTURE SECTOR OF PR:**

**Years- Infrastructure Achievements**

- In 2017     □ 74 km of the track was rehabilitated besides laying a new track of 4 km track.
- 2016       □ 86 KM Auto Block Signaling System, 8 stations have been upgraded signaling.
- 2015       □ 90 km of track was rehabilitated and the doubling of 5 km of track was.
  - 6 stations have been upgraded signaling systems.
- 2014       □ 90 km of track has been rehabilitated besides doubling of 57 km track.
- 2013       □ Rehabilitation & Up-gradation of Karachi-Lahore-Peshawar (ML-1) Railway Track (1736 km).
  - Construction of Havelian Dry port including cargo handling facilities.
  - Orange Line Metro Train Project in Lahore (27.1 km)
- In 2012    □ 60 km of the track was rehabilitated besides doubling 68 km of the track.
- 2011       □ A new dry port was set up at Prem Nagar near Raiwind industrial area, Lahore through Public Private Partnership for Rs. 494.0 million.
  - Renovation of Khudian Khas, Usmanwala, Raiwind, and Kanganpur railway stations was carried out at Rs. 24.0 million to improve facilities for the passengers.
- 2010       □ Doubling of tracks from Khanewal to Raiwind (246 Km) and doubling of tracks from Khanewal to Chichawatni.

**Table 5.2 LAST 10 YEARS' ACHIEVEMENTS IN LOCOMOTIVE:**

Years	Locomotives Achievement
<b>2017</b>	<ul style="list-style-type: none"><li>• Rehabilitation of 27 (HGMU-30) of 3000 HP DE Locomotives.</li><li>• Special Repair of 100 DE locomotives.</li><li>• LC for Procurement of 20 DE locomotives (2000-2500 HP).</li></ul>
<b>2016</b>	<ul style="list-style-type: none"><li>• Rehabilitation of 27 held-up locomotives of 3000 Hours of Power.</li><li>• Special repairs of 150 locomotives</li></ul>
<b>2015</b>	<ul style="list-style-type: none"><li>• Special repairs of 150 locomotives.</li><li>• Out of 27 Nos. Locomotives, 15 locomotives have been turned out for service.</li></ul>
<b>2014</b>	<ul style="list-style-type: none"><li>• . Out of 27 Locomotives, 10 locomotives have been turned out for service.</li><li>• The procurement of 58 locomotives has been approved by ECNEC</li></ul>
<b>2013</b>	<ul style="list-style-type: none"><li>• The procurement of 58 locomotives has been approved by ECNEC and the contract awarded to M/s. Ziyang, China in November 2012.</li><li>• 14 locomotives arrived in Pakistan.</li></ul>
<b>2012</b>	<ul style="list-style-type: none"><li>• Funding to the tune of Rs 6.1 billion is being arranged through a banking consortium for the rehabilitation of 66 held-up locomotives through PRACS.</li><li>• ECNEC has approved the procurement of 275 locomotives,</li></ul>
<b>2011</b>	<ul style="list-style-type: none"><li>• Rehabilitation of 27 held-up locomotives (HGMU-30) of 3000 HP is being arranged through PSDP for Rs. 5108 million.</li></ul>
<b>2010</b>	<ul style="list-style-type: none"><li>• Rehabilitation of 400 old coaches is underway while 241 coaches are expected to be rehabilitated during the current financial year.</li></ul>

**Table 5.3 LAST 10 YEARS ROLLING STOCK SECTOR OF PR:**

<b>Years</b>	<b>Rolling Stock</b>
2017	<ul style="list-style-type: none"><li>• Procurement of 585 Hopper Wagons and 20 Bogie Brake Vans.</li><li>• Special Repair of 800 Coaches and 2000 Wagons.</li></ul>
2016	<ul style="list-style-type: none"><li>• Rehabilitation of 400 coaches' project.</li><li>• Procurement of 500 High-Capacity Bogie Wagons and 40 Power Vans.</li></ul>
2015	<ul style="list-style-type: none"><li>• 111 passenger coaches have been assembled.</li></ul>
2014	<ul style="list-style-type: none"><li>• Procurement and assembling of 202 passenger coaches.</li><li>• Assembling the material for 146 coaches has been received.</li></ul>
2013	<ul style="list-style-type: none"><li>• 56 new passenger coaches have been added.</li><li>• Material for 146 coaches has been received</li></ul>
2012	<ul style="list-style-type: none"><li>• A contract agreement for the procurement of 202 passenger coaches was signed for US\$ 134.5 million with a Chinese supplier firm.</li><li>• 9 passenger coaches have also been rehabilitated.</li></ul>
2011	<ul style="list-style-type: none"><li>• 52 new design passenger coaches were imported from China for Rs 4.1 billion.</li><li>• 22 passenger coaches have been rehabilitated.</li></ul>
2010	<ul style="list-style-type: none"><li>• A contract agreement for the procurement and manufacturing of 202 coaches was signed. Out of these 150, Coaches will be manufactured in Pakistan.</li><li>• 447 out of 500 completely knock down (CKD) wagons received from China.</li></ul>

*Source:* Economic survey of Pakistan

There have taken many initiatives and achieved many objectives regarding getting the Pakistan Railway on track but with the increase in achievements, the expenses are still much higher than revenue which shows that there are still gaps that can be filled with railway professionals. The

professionals should be higher and controlled by them not by MOR. There are historically introduced policies like track access policy and public-private partnerships. These policies should remain in the papers only. PR can control the losses by monitoring the things which are historically not fulfilling the gap between expenses and revenue. There should be the involvement of private parties which can help to fulfill the gap.

## CHAPTER 6

### CONCLUSIONS AND POLICY RECOMMENDATIONS

Since the late 2000s government is reforming the Pakistan rail till date they are making plans for rail reformation. The policy for reforming the railway is underdeveloped that is concerned with a public-private partnership, privatization liberalization, and track access policy these are all not known even when it will be completed and implemented with true sense. The reforms that are reiterated that change in the realm of Pakistan railway sector. Reforms are proposed again and again but nothing changes on the real ground.

Pakistan railway is working as a department for six-decade. Instead of massive funding from international donors and government spending to bring the railway out of crisis Pakistan railway ministry, railway board, and government of Pakistan have not been in a position to initiate the concept of public-private partnership and privatization that was followed by other countries to develop the rail system since, 1990s. However, the government of Pakistan never sets the goals and objectives for reforms It should be recognized which are measurable performance indicators within a short period. The major reasons behind the reform failure are the lack of background knowledge of the professionals who are elected through the competitive superior exams (CSS). They have no expertise or experience in problem-solving. Lack of management and resistance from the employees and workers' unionization are hurdles in way of implementation of Pakistan railway sector reforms. Because according to them increasing salaries and up gradation will help to improve the efficiency of railway department working. But the thing is that the already government provides increments annually that are not performance-based. So in this case this approach is not working to make the railway out of loss making state own enterprises. A national transport policy which is made by the communication department that does not provide clear-cut

information about the Pakistan railway sector should be amended and implemented to ensure a sufficient share of Pakistan railway freight and passenger transportation. Indeed, weak implementation of reforms has resulted currently Pakistan railway contributions of only 6% total over the country's transportation sector.

The railway sector is passing through the challenges of a lack of human resources development, a communication gap between the ministry of the Railway and the railway board at the policy and strategy-making level, lack of training of workers, absence of automation and digitization but Pakistan railway yet focus on the restructuring and buying more locomotives from China, Japan, and other countries. Private sector engagement is a very successive reform for the railway sector. Because this reform is proposed four time before that time but never implemented. Private sector engagement is provided the railway sector with competent minds and personnel to deal with the creeping deficit of Pakistan railway and bring efficiency to this sector. This is the major drawback of the Pakistan railway sector reform process.

For the passenger trains, there is a need to introduce quality services with season tickets to schools, colleges, and universities on booking tours through the Pakistan railway and make affiliation with hotels to give a standard service to its customer through joint ventures with good profit margins and gain a win-win situation. Improving the freight business by reducing minimum involvement and reducing corruption has a robust mechanism to track books /parcels.

However, the Pakistan railway has 30 billion PSDP fund portfolio and needs to spend 1% of this budget on monitoring and evaluation and 1% on the planning of these projects. Because there is poor planning and monitoring & evaluation lead to the duplication of projects, ghost employees, and ghost projects cost overrun, schedule overrun, and poor execution of the project resulting in late completion of the project which is completed in 2 years and takes time of 12 years. Pakistan

railway is losing billions of rupees to save thousands of rupees. But, hiring professional expertise that knows the implementation of reforms.

Pakistan Railway should hire people on a contractual basis to improve the services of this sector this will help indirectly improve its services and generate revenue for PR. PR has huge land (i.e. In thousands of acres all over Pakistan) on both sides of the track, which can be rented out to the PPP mode for farming, and cultivation of the trees e.g. in one canal land 169 trees can be cultivated after 3 to 4 years these trees can be sold in thousands of rupees. So in this way, this project produces billions of dollars in revenue for Pakistan. A percentage of this money can be paid to all employees and the rest of the money can be utilized for improving services and infrastructure.

All these steps will not only reduce PR sunk cost but will help to generate jobs for professionals and generate revenues if the same products are exported to the third world.

### **Policy Recommendation**

After analyzing the Pakistan railway sector reform process. The policy recommendation is to improve the performance and reform process in Pakistan would follow the market-based solution.

- i. Firstly, the government should refine its policy to increase freight trains and reduce passenger trains. Because passenger trains had to travel long distances without a good passenger ratio.
- ii. Implementation of railway reform needs to reduce the government footprint and divorce the direct control of the government in the management of the Pakistan railway. To achieve the results of Pakistan's railway reform and its implementation railway sector needs a decisive policy with a less – bureaucratic and vertical integration system should be established.



- iii. Pakistan Railway is the largest state-owned enterprise (SOE) government shall invest in this entity because it is an environment-friendly transportation system. As we know adopting a road policy brings congestion on roads and pollutes the environment. Improving railway performance will protect the environment from pollution.
- iv. Last few years the railway is under a huge deficit. To tackle this issue making the railway a provincial subject shall help to reduce operating expenses and increase revenue.
- v. To achieve the railway reform objectives, they must focus on the development of a market strategy because there is no marketing structure yet developed to promote this business.
- vi. Govt. should reduce the subsidies that are a burden on the economy and lead the railway to operationalize this sector commercially. Pakistan's railway integration with the private sector give more emphasis on the efficiency of the Railway sector.
- vii. To gain the optimum results and fulfill the demand of the public. Pakistan Railways needs to prioritize its reform process and its implementation.

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## **Appendix A**

**Topic: Analyzing Pakistan railway sector reform process**

### **Questionnaire (key in-depth interview)**

This study is carried out by the Pakistan Institute of development economics to know about the Pakistan railway sector reforms process and practices the purpose of the study is to know about the existing policies and practices of local governing bodies of the railway department, ministry of the railway and inter-departmental coordination and barriers that contribute to the worsening of Pakistan railway condition, this information that gathers would become part of the research project. The confidentiality of the information will be kept at every cost.

### **Section 1: introductory questions**

**Target Group: Government officials and representatives at the federal and provincial levels.**

**Name:** \_\_\_\_\_

**Department:** \_\_\_\_\_

**Designation:** \_\_\_\_\_

**Contact No:** \_\_\_\_\_

### **Section:2**

1. What do you think is there lacking in the plan for purposeful reform and direction for decisive policy making?
2. Do you think the present working system with no separation of government function and management responsibility was never questioned or not recognized as the problem?
3. What do you think about which reform implementation help to cut out the sunk cost and bring revolutionary change in the railway sector?
4. How to revive the Pakistan railway sector?

5. What do you think about public-private partnership-related reforms?
6. What major challenges are faced by the government to implement the reform in the railway department?
7. What, in your opinion are the most important steps that should be taken for the railway sector revival and improvement?
8. Do you think there is a communication gap between Pakistan Railways and the Ministry of the Railway regarding the proper reformation of the Pakistan Railway?
9. Do you think training can improve the working capacity of the railway workers?
10. Please suggest 5 major steps which can be helpful to improve the railway sector of Pakistan.
11. Does the government agenda for the railway sector development and making efficiently recognizable: knowledge and understanding about government agenda in regard railway sector improvement?
12. What do you think about transport policy? should it amend or not for railway sector efficiency?
13. What do you think about, why most of the reforms are never implemented despite approval from the government?
14. In your opinion what initiates indicates (practices and policies etc.) that government is (capable of or currently) playing its role to minimize the railway sector cost and improving the services
15. What do you think to make the railway competitive the provinces could take it over by their own companies rather than Pakistan railways?



16. How can exist mechanism of inter-departmental cooperation be improved?

17. Do you think all the stakeholders are on the board?