



Status of Service Delivery System of Bangladesh Railway: An Empirical Study

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ABSTRACT

The Bangladeshi Railway was given the name after the country gained independence in 1971. Even so, it had a history dating more than a century before that. By the turn of the century, it had just about 37 diesel-hydraulic and 231 diesel-electric locomotives. These ran about 100 coaches and 10900 freight wagons. This number has presently increased and it serves in a network of broad-gauges, dual-gauge and meter-gauge in around 440 railway stations. The public sector runs various transport modes like the Biman Bangladesh Airline, taxis, ferries, buses and other means that move freight around and out of Bangladesh. With a capacity to transport more than 60% of freight around Bangladesh, the public sector transport quite overshadows the BR, which suffers a number of challenges that cripple it to date. These challenges range in nature from lack of sufficient funds to operate the railway, to a poor railway network, part of which may be attributed to the Indo-Pakistan War that ground the services to a halt back between the 1960s and 1970s. Moreover, ongoing, coronavirus pandemic is proving to be another challenge that has grounded the normal operations at BR. The research has been conducted by a field survey using a structural and semi-structural questionnaires and face-to-face interview. A set of (---) questionnaires were given to (---) stakeholder at various levels at almost all the junctions in Mymensingh to observe the practical service delivery experiences of the railway sector. Over the survey a plethora of experiences have been gained which is givens as findings in this article and we have given some recommendations which will make this sector stronger.

Keywords: Bangladesh Railway, railway services, public sector, rail gauges, passenger services

INTRODUCTION

The public sector is important in any given country. Rail connectivity is of great importance for economic growth and regional development of Bangladesh.

There are two main types of existing railway services offered by BR. Firstly is passenger service and secondly the cargo service. Many citizens use the railway for transportation every year. In the 2014-15 year a roughly 67 million people were transported by BR, which increased compared to 65 million passengers in the 2013-14 period (Ahsan, Rahman & Hayder, 2016). To improve the delivery of services to passengers, the agency introduced inter-city train services in the mid-1980s. Currently, there are over 90 inter-city trains in operation. About 41% of the Bangladesh Railway passengers are being transported by inter-city trains, contributing an estimated 84% of the total earning of passenger traffic (Bangladesh Railway Company DLCA, 2021). To be appealing to passengers as well as enhance the overall standard of services, the railway agency introduced a variety of online services in addition to other developments (Results Management Team, 2016).

As freight and cargo services the railway usually relied up when it comes to transporting traditional low-rated essential goods. These include salt, petroleum products, boulders and stones, sugar, as well as steel and iron. Others are coal, jute, fertilizer, food grains, and cement (Ahsan, Rahman & Hayder, 2016). It mainly carries cargo containers between Dhaka and Chattogram. The railway agency has developed new Inland Container Depots (ICDs) and increased the speed of operations.

While it is critical to recognize the importance of railway services during this challenging time with the coronavirus pandemic, it is imperative to note that the organization has come up with ways of offering services regardless of the state of affairs. The Dhaka Tribune (2021) reports that the Dhaka – Sylhet route, Chittagong – Sarishabari, Khulna – Chilahati and the Bir Muktijoddha Shirajui Islam – Dhaka routes will be organized so that they work on a schedule of delivering both agricultural produce and a controlled number of passengers so that the lives of the Bangladeshi people is not interrupted as badly as the pandemic can cause it to be. All these have been scheduled to run concurrently with the current lockdown that is aimed at reducing the cases of coronavirus infections that have been increasing steadily in the past few weeks (Dhaka Tribune, 2021).

Additionally, there are concerted efforts between the Bangladeshi government, working in synergy with the Indian government, to reintroduce train services between Dhaka and other routes within Bangladesh. These will augment service provision between routes like Petrapole and Benapole. Other routes between Bangladesh and India will include Gede – Darshana, Singhabad – Rohanpur and Radhikapur – Birol. All these have been fully discussed between the heads of states of the two countries. According to The Mint online edition (March, 2021), Modi and Hasina even commissioned a passenger train that would run between the two countries (PTI, 2021).

LITERATURE REVIEW

The importance of users' perception has been highlighted and prioritized by numerous researchers in the context of service quality assessment of Bangladesh Railway sector. A study conducted by the Steer Devise of London on the railway passenger service quality evaluation

carried out between the period June 2019-June 2020 was prepared for shadow strategic rail authority to study the importance of rail way passengers into improvement of the range and quality of facilities and service on stations and in trains. The study is mainly to focus on monetary valuation of the improvement of service for a number of passenger groups. The aim of the research is to provide some robust parameters which can be used in different circumstances of assessment of railway services. To conduct the railway passenger quality valuation process to identify the responsible attributes regarding the passenger quality about 21 attributes are used frequently.

A structural equation model was developed by Eboil and Mazzulla to explore the importance of the relation between global customer satisfaction and service quality attributes. To analyze the correlation between quality attributes and identify the most convenient attributes for improving the supplied service their model is useful for transport agencies and planners. They identified the service characteristics like punctuality; regularity and frequency of runs, and cleanliness have the highest positive effect, on service quality.

Ona, Ebila and Mazzulla analyzed the transit service quality on the basis of the perceptions directly expressed by the passengers of the service and identified windows and doors working courtesy and competence on Board, information at station, punctuality of runs courtesy and competence in station and regularity of runs as the most inertial factors for ensuring service quality. A three-column format SERVQUAL instrument was developed and empirically tested by Cavana and Corbett to evaluate the passenger railway service quality.

To establish relationships between rail passengers' satisfaction and service quality, Eboil and Mazzulla experimented with introduction of indicators, explaining the endogenous latent variable different from the traditionally used indicators.

In spite of a conducted a large number of studies to evaluate the factors which directly affect the service quality of RW station based on perception of passengers in developing countries, a handful of studies have been found in developing countries.

A study conducted by Vishnuvar and Selvaraj on salem division of southern railway of India identified provision of ticketing machines, water vending machines, platform shelters at stations, pay and use toilets, provision of improved cost effective lighting good retiring rooms with modern furniture, coach indication boards, signage, security and enquiry counters as the crucial factors for evaluating service quality of railway.

Customer's satisfaction of India's railway platform and customer behavior factors has been determined by Geetika for determining satisfaction with railway platform. A framework for assessing the impact of Service Quality Management practice on Indian Railway has been presented by Prasad Shekhar.

However, the study of this type on RW sector is absolute unfamiliar in Bangladesh. A handful of research have been conducted on assessing the service quality of RW service in Bangladesh. A study conducted by Rahman and Rahman focused on the RW transportation sector and developed a model during the relation between overall satisfaction and service quality attributes in a selective route from Khulna to Rajshahi to reinforce further improvement

process. The result of the research indicates that the overall service satisfaction depends on 8 distinct service quality attributes.

However, to the best knowledge of the authors, no comprehensive study has been done yet to assess the service quality of railway station in Bangladesh based on the passenger's perception. Hence, the present study aims to determine factors attributing to the service quality of railway station in developing countries with special reference to Airport Railway Station of Bangladesh Railways.

CHALLENGES OF RAILWAY SERVICE DELIVERY IN BANGLADESH

- There is no connectivity between the country's rail networks, including incompatibilities in rolling stock and differences of rail gauges. The nation has meter and broad gauges, with some dual gauge in the Western part of the country and meter gauge is used solely in the Eastern part (Ahsan, Rahman & Hayder, 2016).
- The railway network has remained neglected for many years with no sufficient budget for improvement and/or maintenance. Consequently, the infrastructure is largely in poor condition (Bangladesh Railway Company DLCA, 2021).
- Thirdly, persistent funding problems plagues the organization, important as it is. This challenge is worsened by the fact that BR is expected to operate long passenger services cheaply, thus leading to insufficient revenue for justifying investment, in spite of the high demand among passengers.
- That funding is the biggest challenge with the Bangladesh Railway is an understatement. This has been coupled with challenges that arise with the multiple challenges that are mentioned above. Inefficiency in the system is dogged with complex details that are difficult to sort out in a short while. These include limited capacity for development of particular projects that may boost finances. For instance, the efforts to work with other governments in the region, like the Indian government, is limited by a business environment that will not avail sufficient amounts of goods to improve the prevailing trade within the railway network (ADB, 2015).
- The current pandemic has done a great deal of damage for the organization. Despite having to carry half the capacity in its trains in terms of passenger loads, fares will remain the same. This means that there is already a decline in revenue. Not only is it expensive to run the trains on such an arrangement, but this implies that the organization has to dig deep into its own funds to run such an operation. This does not extend to the cargo services, meaning that it retains the profits on that front. Regardless of such efforts seeming to offer more challenge than reprieve, expansion projects with other organizations appear to be the only means through which the effects of the abovementioned challenges may be mitigated (Star Digital Report, 2021).

FINDINGS

Findings reveal that BR continuously seeks to improve the delivery of services to passengers and freight customers. For example, by the year 2018, it had made several changes. There had been changes in the train operating and networking system and changes in the railway platform since a healthy environment in the train stations was introduced. It had also introduced new trains, improved service delivery by offering passengers pure drinking water and other facilities in all stations, and changed and improved the rolling stock (Ahsan, Rahman & Hayder,

2016). Besides, it added new train services and expanded the railway network, offered tickets at competitive prices, constructed a double line between Bhairab Bazar and Tongi, as well as third and fourth lines from Tongi to Dhaka. In addition, there has been a change in the service delivery system such as buying tickets through SMS and these services are provided through Banglalink and Grameenphone.

There are also many other innovations in BR as demonstrated by the findings. These include the introduction of computerized train information display system (TIDS), buying or booking ticket through online, introduction of diesel multiple unit (DMU) in Bangladesh Railway, introduction of mobile ticketing (M-ticketing) and electronic ticketing (E-ticketing) services, creation of computer-based global positioning system (GPS) mapping, and using digital train control telephone to communicate with other stations. Other innovations include web mail system, computerized train tracking and monitoring system (TTMS), which was introduced on 16th January 2014 and it displays train position and train speed, and provision of telecommunication services to both railway and the general public. Also, passengers can obtain information regarding train position, real-time starting, and next stoppage by sending an SMS to the number 16318. The aforementioned changes have greatly boosted service delivery. As a case in point, Bangladeshis now receive comfortable and safe services, and passengers can easily get information regarding train services. Overall, the service delivery system has become more efficient. There are challenges associated. These include neglect and poor maintenance of wagons and rail tracks, funding problems, as well as lack of connectivity between the railway networks in nation.

Emerging reports indicate that BR is intending to increase the coverage of the dual-gauge railway line between its Shahid M. Mansur station to Bogura. To this effect, Rites Group has emerged as a favorite to win the contract for this 80km stretch of railway that is bound to improve services, including movement of cargo, between the two points. This recent development is yet to be finalized and is said to be financed under LOC by the Exim Bank, India. Such improvements may seem like piecemeal developments that do not particularly have an impact given the fact that it is financed by a foreign entity and may need to be paid back over a long period, but it goes a long way since it avails an infrastructure project that comes in a timely fashion at a point when the logistics for the railway organization is proving to be a very big challenge (Digital Editor, Business Standard, 2021).

The quality of services offered by BR is really wanting since contributing factors have sustained an onslaught of poor services consistent with ill-funded government organization. The biggest challenge stems from myriad factors, top among them being that paying passengers are not in the numbers that will attract some profits to enable the company offer competent auxiliary services. For instance, the toilets in the train are not clean enough, hence not conducive for use by most passengers. Only the brave manages to use them. Surveys indicate that more passengers prefer the toilet services at the stations than those in the trains. This greatly compromises the quality of services offered by BR since toilets are a very critical component for use by passengers, especially those on long journeys (Islam, 2018).

There is an agitation to improve service delivery, but even more interesting is the extension of railway services into India. Seen as a frontier in reopening trade volumes between the two countries, this will run on the old railway line for the time being. However, the earmarked

expansion foments good fortunes for BR since it means that a lot of these railways will be funded by both India and Bangladesh. This means that projects of such magnitude may not be as expensive as they can be for such a small economy because India will shoulder part of the expansion program to ensure that there are sufficient railway services between the two country. Currently placed at INR 70k crore, trade between India and Bangladesh will mostly be boosted. Consequently, the volume of trade will have an impact that is likely to bring back income to the BR, which can then be used to strengthen service delivery, in turn greatly improving service delivery that has been a far cry from what a competent railway organization should offer (Sarkar, 2020).

PROBLEMS IN SERVICE DELIVERY BY RAILWAY AUTHORITIES:

This study identified the major problems in railway authorities. Among the problems identified; the most alarming problem is poor quality of service delivered by the railway authorities.

The service quality of railway is not up-to-the mark. The authority have failed to provide quality service to the passengers, many types of service related problems are found in the railway.

The key problems found in the service delivery in railway are discussed below:-

(a) Inefficiency of the officials

- The officials of railway are very inefficient .
- They fail to service quickly .
- During any crisis or emergency situation; they can't act quickly.
- The officials are not responsive to the complains by the passengers.
- The officials take too much time to take decisions.
- Most of the officials are very slow in providing service.

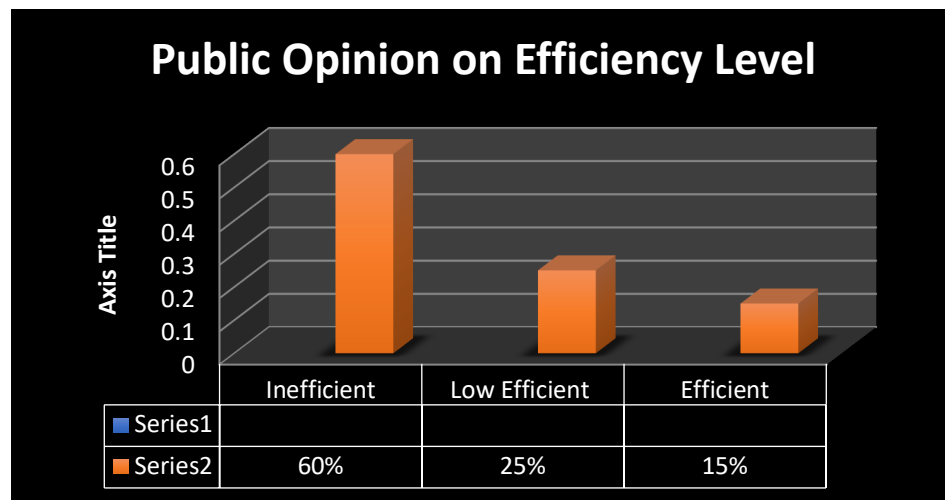


Figure 1: Efficiency Level of Officials

Figure 1 shows that efficiency level of official of RW sector of Bangladesh is very low (15%) whereas inefficiency level is extremely high (60%).

Inappropriate attitude to the passengers

- The officials do not behave properly to the passengers.

- They don't have service mindset.
- Very often the officials behave rude to the passengers.
- Sometimes the officials pay no heed to the request of the passenger.
- Although the officials are bound to respond to any request for help from the passenger.

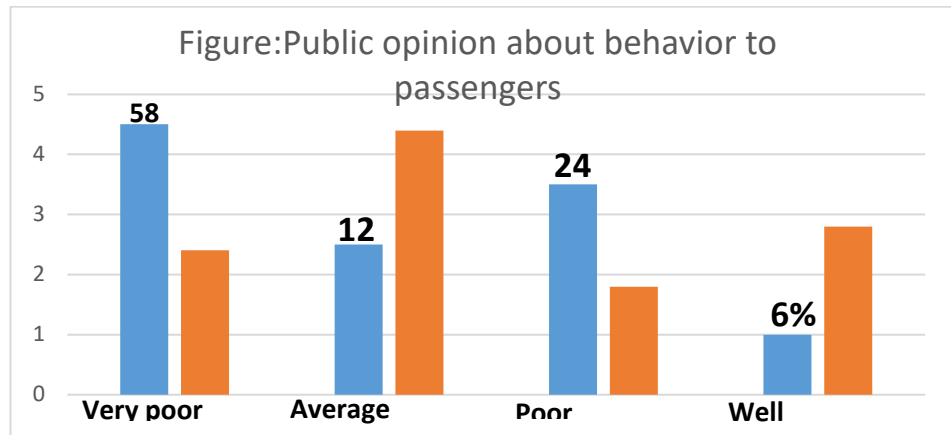


Figure 2: Public Behavior of RW personnel

The figure 2 shows that a vast majority of RW personnel's customer behavior are very poor (58%) whereas a merely 6% personnel behave properly. The RW personnel's customer behavior are average and poor are respectively 12% and 24%.

(b) Lack of professionalism of the railway officials

- The railway officials have lack of professionalism.
- Most of the officials do not possess professional ethics.
- Many of the officials don't behave formally "politely" to the passengers.
- The officials have lack of training, experience and counselling.
- The officials are less service-oriented.

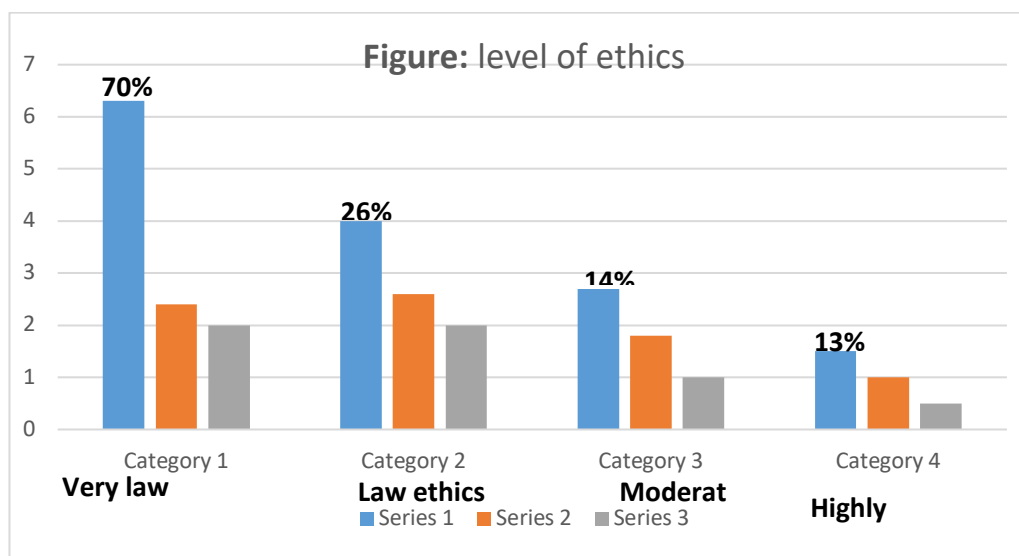


Figure 3: Professional ethics level of RW Officials

It can be seen from the figure 3 that professional ethnic level of RW personnel is very poor. Very low level of professional ethnics is observed in 70% of the cases whereas high level of professional ethnics is observed only merely 13% of the cases.

(c) Absence of sufficient facilities in the waiting room

- There is inadequate facilities in the waiting room of the stations.
- The waiting rooms are small compared to the number of the passenger.
- The number of seats in the waiting rooms are not satisfactory.
- The waiting rooms have no “separate corner” for “men” and “women”.

The seats are not comfortable enough, Many seats are broken, or damaged

(d) No special facilities for women, parties, handicaps, freedom-fighters

- In most of the cases, the study observed that there is no special facilities for women, parties, children, handicaps, freedom fighters.
- The handicaps or physically disable persons face much difficulty in travelling by trains.
- Women are often harassed by the male passengers.

Problems in trains schedule management

Schedule management is another major problem in railway. The railway authority most often fails to maintain the train schedule. Various causes lead to the mis-mangement of their schedules are descripted.

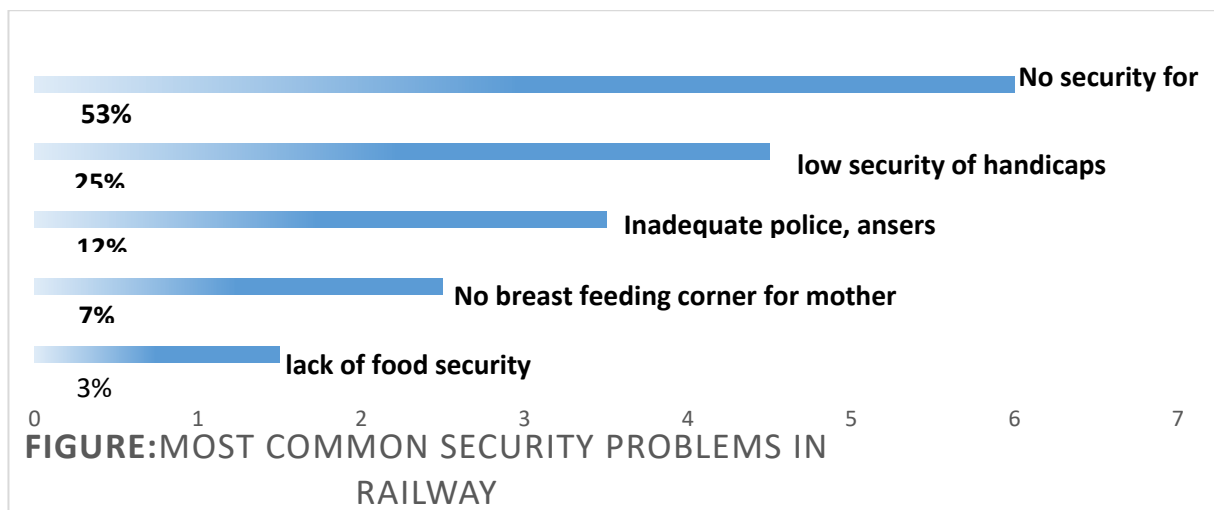


Figure 4: Maintaining train schedules

The figure 4 shows that the schedule maintaining level of RW department is very low. Only merely 3% of the train service follows the schedule whereas an overwhelming majority of (53%) does not maintain the schedules.

(e) Problems in visiting website of railway

- While visiting the website of the railway; sometimes the server is down.
- The visitors experience much difficulty in visiting the websites.

Problems in purchasing e ticket through online:

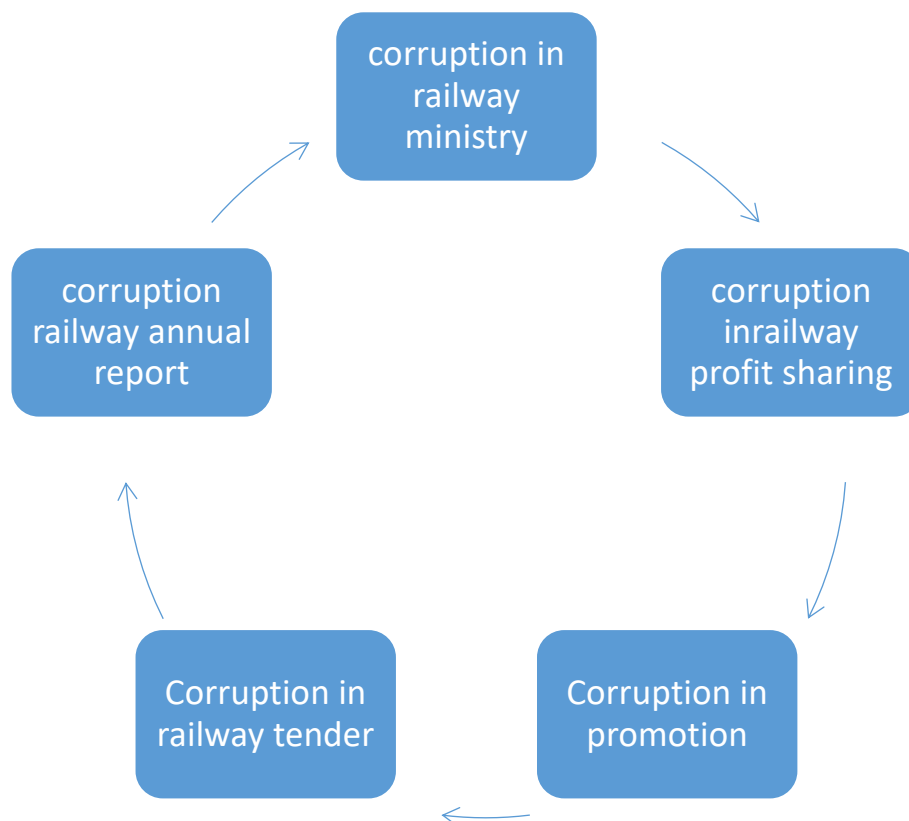
- Ticket –seekers face difficulty in purchasing e-ticket through online.
- The number of available e-ticket in online isn't sufficient.a

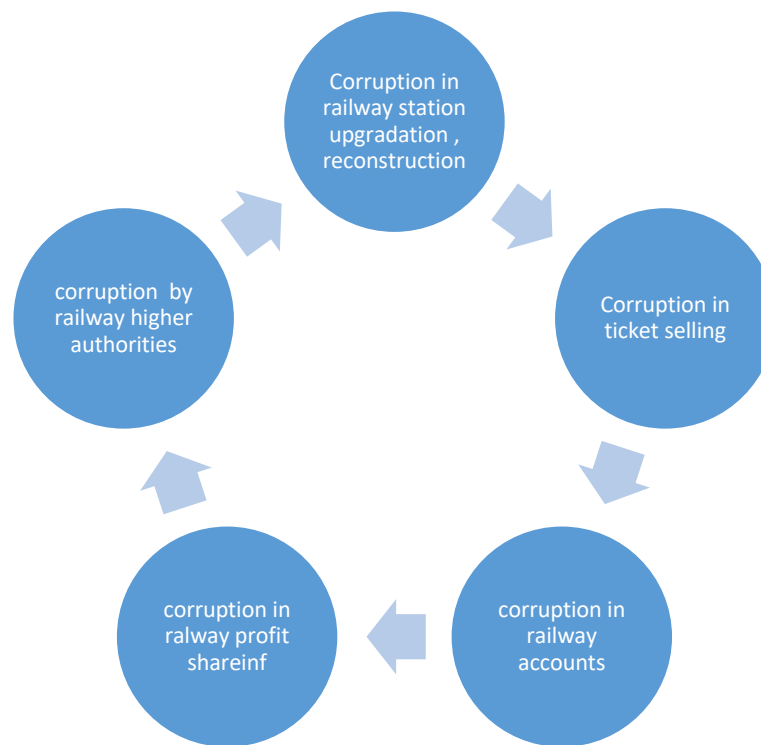
Factors behind these problems

- Poor planning by ministry of railway
- Insufficient manpower of railway department
- Lack of budgetary sanction for railway sector
- Politicization of railway authority
- Corruption in recruiting the railway officials
- Poor co-ordination
- Low level of monitoring in railway sector
- Lack of mass awareness
- Failure of govt. to prioritize the railway sector

The “main factor” responsible for the present situation in railway

- There are so many factors that are responsible for the present situation in Bangladesh railway .Among those factors, the most important factor is the enormous corruption by railway officials. Te corruption areas of Bangladesh Railway includes, Railway recruitment, promotion, Ticket selling, Construction and re-building of railway junctions, Annual report making of railway, Railway accounts, Profit sharing, Other types of corruptions etc.

**Figure: Types of corruption in railway**



This corruptions have caused great problems in railway department. Basically the whole system of railway has become weak, mis-managed. As a result, railway service quality is deteriorating day by day. The service quality of officials, efficiency, of staffs, hospitality inside train hasn't achieved expected standard rather, the railway service is causing public anger and dissatisfaction.

RECOMMENDATIONS FOR IMPROVING BANGLADESH RAILWAY SECTOR

For the quality of the railway sector in Bangladesh to improve, several recommendations are made. These are as follows:

- BR should seek to modernize its locomotive workshops and training institute with the aim of increasing its operation and human capacity.
- BR should extend its network within the capital city Dhaka by introducing a metro system to reduce traffic congestion.
- The railway infrastructure should be extended throughout the nation so as to meet policy objectives.
- BR should establish broad gauge rail system throughout the country to bring uniformity in the gauge system.
- The railway network should be integrated in a multi-modal approach.
- The sector should be allowed to play a bigger role in the overall transport sector in order to contribute more to the economic and social development of Bangladesh.
- The BR's rolling stock should be well maintained. Assistance from the World Bank and the Asian Development Bank can be used to maintain the wagons and improve the tracks.
- Challenges should be tackled using framework that is policy-oriented just like the BR collaborated with foreign companies to improve the signaling and interlocking railways. In effect, a periodical assessment of each improvement will be carried out by all stakeholders

to establish how these projects are fairing financially, and if they indeed are beneficial to all the parties that use the BR services (Mahfuz et al, 2017).

CONCLUSION

To sum up, Bangladesh Railway is a crucial public sector agency that plays a vital role in the transport system. The government of Bangladesh has been working relentlessly to modernize the railway communication system and has been trying to cope up with the demand from its customers. Most of the existing problems faced by BR currently are as a result of the lack of full and proper maintenance of the agency's permanent rail infrastructure, bridges, signals, together with other services that complement those of BR. To improve the railway sector, the following recommendations are made: BR should seek to modernize its locomotive workshops and training institute, extend its network within Dhaka, and the network should be integrated in a multi-modal approach.

Besides challenges that originate from a long tradition of not taking proper care of the available facilities, the BR is suffering from an obviously poor management of equipment and infrastructure. This means that the biggest challenge will be bringing in a better management team that will ensure a consistent maintenance of equipment and facilities so that small issues like lack of clean toilets and dirty cabins is not experienced by passengers. Furthermore, funds should be availed for maintenance of facilities and equipment to avert crises that arise from accidents that may be caused by poor maintenance. This is a pragmatic approach to management that ensures that crises are foreseeable due to frequent due diligence, and proper action to ensure that a well-maintained fleet of trains and facilities averts disasters that can be avoided in good time. This may only leave the organization standing in a better position to mitigate disasters, should they occur.

Lastly, international relations with countries like India bring in a very interesting angle since it enables BR to be the vessel through which Bangladesh can realize bigger profits for the organization, while still keeping a great relationship of bilateral trade blooming. In addition, such cooperation to expand operations beyond borders means that there are chances of improving profitability of the organization because this will increase chances of differentiating the services offered by BR. Effectively, it is critical to note that increased volumes of trade between the two countries is a great way through which sustenance of BR can be improved.

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