

Rural Bus Connectivity and Quality of Services under Assam State Transport Corporation (ASTC)

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Abstract: Road Transport Sector (RTS) is crucial for the people living in rural areas because other modes of transportation are hardly available in these regions. People are basically dependent on road transport services to run their day to day works in rural areas. Assam is a state of India where majority of the population is living in rural areas. The state comprises different geographical locations such as remotest of the remote locations, flood affected areas etc. and on the other hand, other modes of transportation such as trains, flights etc. are not adequately available in all places of the state. Thus, road transport plays a crucial role in moving goods and services in the state. So far as the welfare states are concerned, Public Road Transport Corporations (PRTCs) play a major role in delivering bus services to the people so all sections of the people can travel comfort journey at reasonable prices. Assam State Transport Corporation (ASTC) is only the Public Sector Road Transport Corporation (PSRTC) in Assam which provides bus services to the people of the state and in its connected regions. Here, the present study has been made to understand the status of services provided to the people living in rural areas of Assam under ASTC. Total 100 respondents from the group of passengers travelled by ASTC's buses (Lakhimpur Division) have been purposively contacted for collecting primary data and the data collected from passengers would help to understand the availability/unavailability and the quality of services provided by ASTC to the passengers. Apart from the passengers, 8 ASTC's officials (four from each station) and 2 higher officials from ASTC's headquarters have been interviewed to understand the challenges faced by them in operating buses. Based on the collected data, the study finds that the corporation has failed to provide quality services to the passengers in many regards. The findings of the study highlight unavailability of push back system in seats in many buses, absence of a/c connections in buses allotted to rural areas, unhygienic bus stations etc. The study also reveals that service delivery is affected by the problems which are related to operation of buses such as rigid official procedures, financial deficiency, dissatisfaction of employees etc. Based on the findings, the study suggests concerned authority to take necessary steps to improve the quality of services regarding different aspects and to introducing such rules and regulations wherein employees feel comfort to discharge their duties. The study also suggests concerned authority to keeping proper surveillance over the properties of ASTC, focusing on proper maintenance of buses and bus stations etc.

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I. INTRODUCTION

Road Transport Sector (RTS) impacts a lot the development process of a country. It connects remotest of the remote locations and makes services available for the people living in those areas. So far as the services of Road Transport Sector is concerned, Public Road Transport Sector (PRTS) plays a major role to deliver goods and services to the people that are living in hilly, remote as well as flood affected areas. Even other sectors also depend on the quality of services related to road transport sector for proving effective services to the masses. Assam is a state of India located in the North-Eastern Region of the country and the state comprises different geographical locations such as hilly, plain as well as flood affected areas. So far as the bus service is concerned, Assam State Transport Corporation (ASTC) plays a vital role to move goods and passengers in the state and other parts of the North-Eastern Region. It is remarked that the state is affected by heavy flood every year and thus, bus service is more and more crucial than other modes of transportation for the state. ASTC is a Public Sector Transport Corporation (PSTC), Department of Transport, Government of Assam (GOA). The corporation is responsible for providing quality bus services in the state at reasonable prices so that all sections of the people can travel at fair prices to run their day to day works conveniently. India is a welfare country and thus, Governments are responsible for providing such assistance to the people which can help the people to grow themselves in different regards.

Kaushik Deb (2008) finds that SRTUs in India are always plagued by continued loses, which could in part be due to inefficiencies in operations and the size of the firms. It can be said that quality of services under SRTUs is affected by different factors such as poor maintenance of buses, stations etc. Planning Commission provides that the SRTUs deliver transport services to move passenger's requirement in the rural areas wherein people travel nearby towns for their works, health, education etc. and it is also stated that small and marginal farmers are also dependent on the bus service to carry their produce goods to urban areas¹. In rural areas, unhealthy competition is held between SRTUs and auto rickshaw, mini and maxi cabs etc. and SRTUs incur losses in rural areas². It can be assumed that SRTUs have failed to

¹ Report of the Sub-Group On State Road Transport Undertakings formed under the Working Group on Road Transport Constituted by Planning Commission, Twelve Five Year Pan (2012-2017)

² ibid

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provide quality services to the passengers as provided by private players to the same and thus, they have incurred loss which is one of the causes of poor performance of SRTUs. So far as the quality of services is concerned, Medhi (2004) has found that Public Sector Undertakings (PSUs) have faced problems regarding customer service quality, quality management and performance. It can be said that PSUs have faced challenges to provide quality services to the consumers. State Road Transport Undertakings (SRTUs) are also a kind of PSUs and ASTC is a Public Sector Undertaking (PSU), Government of Assam which has provided bus services to the connected regions. So far as the ASTC is concerned, COFR report (Cited in COFR, 2001) highlights that lack of proper maintenance is a factor that has affected the performance of ASTC. Similarly, Departmentally Related Standing Committee (DRSC), 2010-11 has recommended that there is need for purchasing new buses to replace old buses under ASTC. It can be said that there is deficiency with regard to the quality of buses under ASTC.

So far as the ASTC is concerned, Ministry of Road Transport and Highways (2017) finds that number of buses per 10 lakh population was 35 and average fleet utilization was 1090 in the financial year of 2015-16. It is also noticed that number of private buses under ASTC was 1055 in 2002-03, 1478 in 2007-08 and 1300 in $2013-14^3$. On the other hand, in case of ASTC's own buses, it was 471 in 2002-03, 304 in 2007-08 and 665 in 2013-14⁴. Since the introduction of public-Private-Partnership (PPP) model in ASTC, the number of private buses has been always higher than the ASTC's own buses. So far as the number of buses in the study area (Lakhimpur division) is concerned, it is found that there were 71 buses (ASTC-8 & Private-63) in the road in September, 2015⁵. So, it can be said that ASTC has very less number of its own buses. The number of private buses under ASTC is higher than its own buses in Lakhimpur division which has covered a large part of rural population of Assam.

NITI Aayog (NITI Aayog, 2018) states that India's rapid growth in population and wealth over last few decades has led to considerable strain in its transport infrastructure. It can be said that growing population increases the demand for transport system in the country. So far as the rural areas of Assam are concerned, the Census, 2011 provides that 85.90% of the total population of Assam is living in rural areas⁶. It indicates the importance of road transport services in the state specifically in rural areas where road transport is the prime mode of transportation of goods and services.

Thus, all these backdrops have made this area as interesting to investigate on the question how the services under ASTC are being provided to the consumers in rural area of Assam? It has drawn the attention to conduct a study on the bus connectivity in rural areas of Assam under ASTC which is only the Public Sector Transport Corporation (PSTC) existed in the state.

So far as the issue of quality assessment of services is concerned, Arvind Chaudhari (2015) uses certain indicators

³ Statistical Handbook, Assam published in different years

⁴ ibid

⁵ Gogoi, Lenin (2016), Governance of Public Road Transport Corporation: A case Study of Assam State Transport Corporation (M.Phil Thesis), Assam University, Silchar, India

⁶ <u>www.census2011.co.in</u> dated 03/07/2019

Retrieval Number F9325088619/2019©BEIESP DOI: 10.35940/ijeat.F9325.088619 Journal Website: www.ijeat.org such as cleaning at bus stops, drinking water facility, light and fan facility, seating arrangement at platform etc. to assess the quality of services provided by SRTUs. Madhur Jain et. al. (2016) provide different indicators to measure performance efficiency of bus systems such as seating capacity, scheduled services, number of shelters, reimbursement of fare concession etc. So far as this paper is concerned, the prime objective is to study the quality of services provided by ASTC in rural areas of Assam and certain indicators have been followed to conduct the study such as handling bus cancellation, refund of money if bus cancelled, buses keeping time schedule, prior information on re-scheduling of bus timing, quality of seat, availability of Push back system, availability of Television (TV) in buses, availability of WiFi in buses, availability of fan in buses, complaint box, alarm used by passengers, equipments to control fire, road safety guide book, emergency exit, midway ticket, emergency medical, technical problems addressed, E-ticketing system, Global Positioning System (GPS), CCTV, LED Monitors, A/C Connection, handling of a unforeseen situations, cleanness of bus stop, quality of shelter during halt, staff behaviour, availability of television at bus stop, availability of WiFi at bus stop and availability of Complaint box at bus stop. Following section deals with the methodology of the study.

II. METHODOLOGY

The Lakhimpur division has been purposively taken from the cluster of rural connectivity. Among the sub-stations, Dhakuakhana and Dhemaji have been randomly selected to collect primary data for the study. Total 100 samples have been purposively selected from the group of passengers and eight employees working under ASTC (Four from each station) have been purposively selected for data collection. Interview schedule has been taken for collecting data from passengers. In case of ASTC's officials, interview method has been adopted to collect data. Apart from that two higher officials of headquarters situated in Guwahati have been purposively selected to collect data. The data collected from officials helps in understanding the issues related to operation of buses and challenges to produce quality services under ASTC. On the other hand, data collected from passengers help in understanding the issues related to quality of services provided to passengers by ASTC. Following section deals with the analysis of primary data.

III. ANALYSIS OF THE PRIMARY DATA

 Table 1: Respondents View on the Quality of Certain Services Provided by ASTC (In%)

Sl. No.	Issues	Highly Unsatisfactory	Unsatisfactory	Satisfactory	Highly Satisfactory
1	Handling bus cancellation	22	32	40	06

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2	Refund of money if bus cancelled	25	45	25	05
3	Buses keeping time schedule	12	26	53	09
4	Prior information on re-scheduling of bus timing	23	27	47	03
5	Quality of seat	28	34	35	03
Source: Field Data					

Above table shows the responses of the passengers on certain issues related to quality of services delivered by ASTC. The table highlights that majority of the passengers are either dissatisfied or highly dissatisfied on the issues such as handling bus cancellation, refund of money if bus cancelled and quality of seats. On the issue of buses keeping time schedule, majority of the passengers are either satisfied or highly satisfied on the issue and with regard to the issue of prior information on re-scheduling of bus timing, half of the respondents are either satisfied or highly satisfied and vice versa.

Based on the responses of the passengers on the quality of services highlighted in the above table, it can be said that apart from time schedule for running buses, a huge number of passengers are not happy with the services provided by ASTC. Field observation provides that buses are running with fewer facilities and thus, people basically use to choose private buses for travelling in the study area.

Table 2: Passenger's View on the Availability of Certain **Facilities in ASTC's Buses (In%)**

Facilities in ASTC 8 Duses (in 70)						
S1.	Issues	Yes%	No%			
No.						
1	Availability of Push back system	23	77			
2	Availability of TV in buses	06	94			
3	Availability of Audio Players	23	77			
	in buses					
4	Availability of WiFi in buses	02	98			
5	Availability of Fan in buses	11	89			
6	Complaint box	06	94			
7	Alarm used by passengers	39	61			
8	equipments to control fire	70	30			
9	road safety guide book	25	75			
10	Emergency Exit	80	20			
11	Midway ticket	40	60			
	Source: Field Data	•	•			

Source: Field Data

Table no. 2 shows the responses of the passengers on availability of certain facilities in ASTC's buses. Majority of the passengers have opined that except the equipments to control fire and emergency exist, other facilities stated in the table are not available in ASTC's buses such as push back system, television, audio players, WiFi, fans, complaint box etc.

Field observation reveals that passengers are dissatisfied on unavailability of such facilities in ASTC's buses and thus, passengers generally use to travel by private buses where they feel comfort journey. It can be said that this situation affects in overall performance of ASTC at large.

Table 3: Responses of the Passengers on Quality of Services Related to Certain Emergency Situations Provided by ASTC (In %)

Sl. No.	Issues	Highly Unsatisfactory	Unsatisfactory	Satisfactory	Highly Satisfactory
1	Emergency medical	08	25	50	17
2	Technical problems addressed	17	42	39	02

Source: Field Data

Above table shows the responses of the passengers on quality of services related to certain emergency situations. With regard to the issue of emergency medical service, majority of the passengers are either satisfied or highly satisfied on the service. On the other hand, majority of passengers are either dissatisfied or highly dissatisfied on the issue of addressing technical problem by ASTC.

Interview conducted with the employees of ASTC reveals that absence of adequate vehicles to address emergency situations, rare use of new technologies such as online system etc. hamper in addressing technical problems effectively. The field observation finds that absence of skilled labour is another hindrance and despite of existence of certain instruments, these cannot be properly used to delivering quicker services to the customers.

Table 4: Distribution of the Respondents by Their **Opinions on Availability of Certain Facilities under** ASTC (In %)

ASIC (In %)					
S1.	Issues	Yes%	No%		
No.					
1	E-ticketing system	40	60		
2	Global	12	88		
	Positioning				
	System (GPS)				
3	CCTV	08	92		
4	LED Monitors	11	89		
5	A/C Connection	14	86		
Source: Field Data					

Above table shows the responses of the passengers on availability of certain facilities under ASTC. Majority of the passengers have mentioned that these facilities are not available under ASTC. However, field observation provides that certain facilities are available such as E-ticketing but remains inactive for long time. Field observation finds that CCTV, LED monitors and A/C connections are only available in some ASTC's buses running in city areas but hardly available in rural areas.



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Table 5: Responses of the Passengers on Handling Unforeseen Situation and Unsocial Consumers under ASTC (In%)

	ASIC (III%)							
Sl. No.	Issues	Highly Unsatisfactory	Unsatisfactory	Satisfactory	Highly Satisfactory			
1	Handling of a unforeseen	10	39	37	14			
	situations							
2	Handling of unsocial	19	30	40	11			
	consumers							
Source: Field Data								

Above table shows the opinion of the passengers on the issues of handing unforeseen situations and unsocial consumers under ASTC. Regarding the issues mentioned in the table, a huge number of passengers are either dissatisfied or highly dissatisfied though majority have satisfied or highly satisfied on the issues. Field observation provides that it differs from place to place. Thus, it can be said that sometimes, the concerned authorities have failed to discharge their duties properly in these regards. Eventually, many a time, the passengers have suffered in these situations.

 Table 6: Respondents View on Availability of Certain

 Facilities in ASTC's Bus Stops/Stations (In%)

Facilities in ASTC 8 Bus Stops/Stations (in 76)						
S1.	Facilities		Yes%	No%		
No.						
1	Availability	of	20	80		
	Television					
2	Availability	of	09	91		
	WiFi					
3	Availability	of	21	79		
	Complaint box					
Source: Field Data						

In the above table, majority of the respondents didn't find facilities such as television, WiFi and complaint box stated in the above table in ASTC's bus stations/stops. However, filed observation finds that certain facilities are available only in city services such as television. It is also found that facilities such as WiFi are also not found in city services.

Interview conducted with the employees of ASTC's headquarters shows that in past, many essential instruments had been provided to different stations but these were either stolen by unscrupulous persons or damaged. It is also mentioned that financial deficiency of the corporation is also responsible for the unavailability of certain facilities under the corporation.

Table 7: Opinion of the Passengers on Certain Issues related to bus stops/stations of ASTC (In%)

Sl. No.	Issues	Highly Unsatisfactory	Unsatisfactory	Satisfactory	Highly Satisfactory
1	Cleanness of bus stop	27	49	23	01
		21	FC	12	
2	Quality of shelter	31	56	13	
	during halt				
3	Staff	11	28	49	12
	behaviour				

Source: Field Data

Above table shows the opinion of the passengers on certain issues related to bus stops/stations of ASTC. With regard to the cleanness of bus stop and quality of shelter during halt, majority of the passengers are either dissatisfied or highly dissatisfied on the issues. On the other hand, majority of respondents are either satisfied or highly satisfied on the behaviour of ASTC's staff.

The field observation also finds that bus stations are unhygienic and inconvenient for passengers. Similarly, waiting rooms are not equipped with good instruments. The field observation finds that beds, seats, cloths etc. are not clean and these are not useful for passengers.

Interview conducted with the employees of concerned stations reveals that they have informed the higher authority about the conditions but no step has been taken for further action. On the other hand, interview conducted with the employees of headquarters shows that financial deficiency is the main reason behind these adverse situations.

IV. ISSUES RELATED TO THE OPERATION OF BUSES UNDER ASTC

Apart from the responses of the passengers on the quality of services received by them under ASTC, studying the challenges faced by the corporation in operating buses are also important to reveal the reality. To understand the issues related to operation of buses, certain employee's of ASTC have been interviewed to understand the challenges that they have been faced in producing quality services to the passengers under ASTC. Based on the responses of employees, it is understood that official rigidities such as delay in allocation of money to repair vehicles, inactive workshops etc. are responsible for dilapidated condition of ASTC's vehicles. Even many vehicles aren't in operation because some minor repairing is required such as replacement of tires and wheels, replacing damaged seats etc. It is also noticed that for keeping these vehicle for a long time in garage/stations/stops result in major damage of these vehicles and it creates huge loss of the corporation.



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It is also found that liability of the corporation is a factor which has made the corporation as a loss making institution. Similarly, absence of market led approach has resulted in poor performance and the corporation has failed to compete with private players. So far as the issue of employee's satisfaction is concerned, the interview conducted with official reveals that employees of the ASTC are not happy working with the corporation and they have dissatisfied on many issues such as salary, incentives etc. It can be said that dissatisfaction of employees has reduced the spirit of working for the betterment of services provided to the passengers under ASTC. It is realised that they don't put their best effort to produce quality services. Following section deals with the key findings of the study.

V. KEY FINDINGS OF THE STUDY

- 1. The study finds that apart from certain services such as time schedule for running buses, a large number of passengers are not happy with the services provided by ASTC. Buses are running with fewer facilities and thus, people basically use to choose private buses for travelling in the study area (see table 1).
- 2. On the issue of availability of certain facilities in ASTC's buses such as WiFi, TV, fan etc. majority of the passengers are unhappy with the facilities except the facilities regarding emergency exit and equipment to control fire (see table 2).
- 3. Regarding the issue of addressing technical problems, the study finds that many factors are responsible for poor services provided by ASTC such as inadequate vehicles. Thus, many a time, passengers suffer from this adverse situation (see table 3).
- 4. The study finds that certain facilities such as LED Monitors, A/C Connection, CCTV, GPS etc. are hardly available in rural bus service under ASTC (see table 4).
- 5. With regard to the issues of handling unforeseen situations and handling unsocial consumers, the study reveals that majority of the passengers are unhappy with the issues (see table 5).
- 6. So far as the issue of facilities available in ASTC's bus stations is concerned, it is found that the facilities such as WiFi, televisions etc. are not available in ASTC's stations situated in rural areas. However, available equipments were also destroyed by unscrupulous persons. Thus, it is realized that public are responsible for destroying public property in one hand and the corporation is responsible for poor surveillance on the properties on the other (see table 6).
- 7. The study finds that majority of the passengers are unhappy on the issues of cleanness of bus stops and shelter during halts. The stations are unhygienic and inconvenient for the passengers. However, interview conducted with officials provides that financial deficiency is a major reason for emergence of such situation. Similarly, official rigidity regarding allocation of money to deal with different emerging problems is another factor responsible for the same (see table 7).
- 8. Regarding the issue of staff behaviour, majority of the passengers are satisfied on the issue and they are happy with the behaviour of ASTC's employees (see table 7).
- 9. So far as the operation of buses is concerned, the study finds that the corporation has faced many problems such

as financial deficiency, rigid official procedures etc. and these factors have further affected the services provided to the passengers under ASTC. Similarly, dissatisfaction of employee's in different regards has also affected the services of ASTC.

VI. CONCLUSION

The paper has discussed the issue of rural bus connectivity and quality of services under ASTC in rural areas. Road transport is crucial for people living in rural areas where other modes of transportations are hardly available. It is noticed that majority of the total population of Assam are living in rural areas and thus, road transport plays a vital role in day to day life of people in one hand and it impacts on the development process on the other. So far as the Public Sector Road Transport Corporations (PSRTCs) are concerned, they have influenced a lot in achieving welfare goals of a welfare country like India. They play crucial role in providing quality transport service to the weaker and poor section of the society at reasonable price. So far as the ASTC is concerned, the study finds that the corporation is still lagging behind to produce quality services at reasonable prices to the passengers in many regards such as unavailability of push back system regarding seats in buses, absence of modern technologies such as GPS, etc. However, in city areas, certain facilities are available such as CCTV, LED monitors, A/C connections etc. but in case of rural areas, these are hardly available under ASTC's bus service. It deprives the people living in rural areas and it discriminates a section of the society to enjoy quality services. Thus, the study suggests that facilities should be introduced in all places irrespective of rural and urban areas to provide justice to the deprived people. It is noticed that concerned authority has failed to maintain buses, equipments and bus stations properly. Thus, it causes in damage of properties of the corporation. So, the study suggests the concerned authority to focusing on proper maintenance of buses, equipments and bus stations and also keeping proper surveillance over the properties of ASTC. Concerned authority should take steps to improve the quality of services so that passengers can enjoy comfort journey under ASTC. On the other hand, problems regarding the operation of buses such as rigid procedures, financial deficiencies etc. have hampered the corporation to produce quality services under ASTC. Therefore, the study suggests that concerned authority should introduce such rules and regulations wherein employees feel comfort to discharge their duties. Simultaneously, dissatisfaction of employees has also affected the performance of the corporation at large and it has resulted in poor service delivery to the passengers travelled by ASTC's buses. Therefore, the study recommends that the concerned authority should take necessary steps to reasonably fulfill the demands of the employees of ASTC and it would help to increase the morale of the employees to put their best effort to deliver quality services to the passengers travelled by ASTC's buses.

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