



# A Study On The Private Bus Industry Before And After COVID19 With Special Reference To Ernakulam District.

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## ARTICLE INFO

## ABSTRACT

Every aspect of human existence has been impacted by the COVID-19 pandemic, resulting in widespread suffering irrespective of age, gender, profession, degree of education, or nationality. Numerous sectors have been severely affected, including banking, food manufacturing, public transportation, and education. With activities suspended during lockdowns, the public transportation industry has suffered the most out of all of them. Bus workers have become unemployed as a result of the significant losses experienced by private bus operators. Additionally, many workers had health and safety issues that neither the government nor the companies did enough to address. This study is an attempt to know the problems faced by the private bus industry of Ernakulam District before and after COVID-19 and to suggest measures to overcome the crisis.

**Keywords:** COVID-19, financial issues, private bus, bus employees, government support.

## INTRODUCTION

A very important part of Kerala's social and economic growth is being played by private buses. The State previously offered public transportation services using a distinctive and innovative strategy. But today the private bus industry has collapsed due to the Covid-19 pandemic. Governments and authorities all over the world have imposed previously unknown limitations on travel and mobility because of the COVID-19 outbreak. In addition to slowing down mobility, COVID-19 also reduced traffic levels and had a big impact on how people used various forms of transportation. In all forms of transportation, private and public buses continue to be extremely significant. However, the private bus industry suffered huge losses in 2020 and afterward. Private bus operators had difficulty in restoring services to their pre-Covid levels even though bus services were interrupted for a short period during the lockdown. It led to bus employees losing their jobs. The government took several actions to address the issues faced by the private bus sector. Most of them successfully reduced some of the bus industry's issues. But the government still needs to provide some more help. The change in people's travel habits during and after COVID-19 was another significant issue for bus operators. Many people reduced their reliance on public transportation. As a result, fewer people travelled. Most of them travelled in their private vehicles.

The purpose of this study is to know the problems faced by the private bus industry before and after the Covid-19 pandemic.

### Public Transport System

In Kerala, the government-owned Kerala State Road Transport Corporation (KSRTC) provides transportation services. With its main office located in Thiruvananthapuram, it has been in operation for a considerable amount of time and operates in three zones: South, Central, and North. But KSRTC is currently dealing with a serious operational difficulty. Before COVID-19, it was battling challenges like increasing maintenance and fuel expenses, competition from private bus companies, and challenges in overseeing its large fleet and drivers. The pandemic made matters worse by reducing passenger volume and income due to lockdowns and travel

restrictions. Costs were also raised by the requirement to clean buses and comply with safety regulations. Rules governing social isolation also made it more difficult to profit because fewer seats were available.

In Kerala, the way people travel around the state has a significant impact on the private bus sector. The government does not own or operate these buses; instead, private businesses do. They carry passengers from one location to another like large, moving autos. These bus businesses already had challenges before COVID-19, such as an excess of buses competing for passengers and operating expenses. Then came COVID-19, which made everything much more difficult. Lockdowns and people staying at home meant that fewer people were utilizing the buses, which decreased revenue for the companies. In order to keep everyone safe, they also had to spend more money on things like cleaning the buses. Even now, while things are beginning to improve, Kerala's private bus sector is still struggling to bounce back.

## REVIEW OF LITERATURE

1. Impact of COVID-19 on private sector bus workers with special reference to Irinjalakuda Municipality: The study claimed that bus drivers were losing their jobs as private bus operators attempted to revert to preCOVID conditions. This study demonstrated that bus drivers experience psychological stress, physical sickness, and financial hardship as a result of COVID-19. Economic difficulties are caused by a number of factors, such as heavy debt, low earnings, and unemployment. The majority of workers receive government subsidies and have backup jobs during the lockdown. Government initiatives including tax breaks and increased bus fares helped the public transportation industry. The study's objective is to ascertain how COVID-19 has affected the lives of private bus employees. (A.Dr.Umesh, 2021)
2. A study on the Use of Public Transportation during the COVID-19 Pandemic: The study discovers that the nationwide lockdown has had a significant impact on public transportation around the world. Finding out what influences travel and public transportation utilization during the COVID-19 epidemic is the goal of this study. The frequency with which people used public transportation prior to and throughout the outbreak is one of the study's main results. The survey's test contrasts the respondents' personal traits with how frequently they utilize public transit. (Valentino, 2021)
3. Impact of COVID-19 pandemic lockdown on the public transportation system and strategic plans to improve Public transportation ridership: The sustainability of public transportation has been aided by active pursuits like walking and cycling. The goal of this study is to investigate a number of issues related to using public transportation and emergency response systems set up in various nations. They concentrate on creating methods that can improve the effectiveness and safety of public transportation following a lockdown. (Kadali, 2021)
4. Impacts of the COVID-19 pandemic on transportation employment: It describes the societal, economic, and environmental changes brought about by the COVID-19 epidemic. This study investigates the impact of COVID-19 on the productivity of transportation industry workers. Important study findings indicate that the transportation sector was more affected by COVID-19 than other industries. It looks into the COVID-19 pandemic's impact on unemployment with a particular emphasis on the transportation sector. (Wang, 2021)
5. The Impact of COVID-19 on the Use of Ideas to Develop Policies and Intervention Centers for Urban Bus Services in India: This study emphasizes characteristics such as cleanliness and social isolation. (Suresh, 2021)
6. Occupational Stress among Private Bus Drivers Working in Thanjavur District: The competing demands of maintaining passengers' safety, keeping them sophisticated and non-aggressive, boosting bus operators' revenue, obeying and exceeding traffic laws, balancing work and personal obligations, handling unforeseen events like accidents, and much more often cause stress for both drivers and users of buses. For both drivers and passengers on private buses, job stability is the primary cause of stress. (Sethuraman, 2018)
7. Changing Transportation Behaviour During the Covid19 Crisis: People's lives have been profoundly impacted by the limitations put in place to stop the spread and effects of COVID-19. Among the major effects are worries about contracting and spreading the virus when using public transportation, as well as closed government which lowers demand for passenger transit. (Monschauer, 2021)

## STATEMENT OF THE PROBLEM

In Kerala, buses are the most popular mode of public transportation, used in both urban and rural areas, including suburbs. Buses promote social inclusion by making it easier for people, especially the elderly, those with disabilities, those with low incomes, and those living in distant locations, to access places for healthcare, work, education, and other services. The private bus industry has seen significant changes because of the impact of COVID-19. The Covid limitations and the lockdown caused a lot of unemployment, which resulted in a lot of issues for both private bus operators and workers. This study is intended to know the problems faced by the private bus industry in the Ernakulam district before and after COVID-19 and to suggest remedial measures to overcome the crisis.

### SCOPE OF THE STUDY

The focus of this research is to look into the private bus operators' activities in the Ernakulam district before and following the COVID-19 outbreak. It aims to understand the modifications, challenges and changes these operators have faced. The study will examine some topics, number of employees, seating capacity, financial effects, and any changes to regulations implemented by the government. The research intends to shed light on the methods and strategies used by private bus operators to maintain their services in the Ernakulam district throughout the disruptions caused by the pandemic by comparing the preCOVID era with the post-COVID scenario.

### OBJECTIVES OF THE STUDY

1. To know the number of buses, government support received, and the seating capacity of the buses before and after COVID-19.
2. To know the average profitability of bus operators before and after COVID-19.
3. To know the perceived impact of different expense factors among bus operators after COVID-19.

### HYPOTHESIS

**H1:** There is no significant difference in the average profitability of the bus operators before and after the COVID-19 pandemic.

**H2:** There is no significant difference in the perceived impact of different expense factors among bus operators after COVID-19.

### RESEARCH METHODOLOGY

SPSS and the percentage analysis approach are used for data analysis. The data is presented via tables and graphs. Both primary and secondary sources of data are used in the collection of the study's data. A standardized questionnaire is used to obtain primary data from the bus operators in the Ernakulam District. Secondary data is gathered from online resources, journals, and papers. The sampling size is one hundred.

#### Statistics: Private Bus Industry in Kerala

Statistics of:	Before COVID-19	After COVID-19
Number of buses	12900	7300
Number of workers	40000	15000
Average Passengers	1.04 Crore	40 Lakhs
Average Income	90%	50%
Average profitability	95% profitable	Less than 50%profit

(Source: Database from Private Bus Owner's Association)

#### Statistics: Private Bus Industry in Ernakulam

Statistics of:	Before COVID-19	After COVID-19
Number of buses	1308	850
Number of workers	4000	1800
Average Passengers	365000	182500
Average Income	90% income	Reduced to 50% income
Average Profitability	90% profitable	Reduced to 65% profitability

(Source: Database from Private Bus Owner's Association)

### DATA ANALYSIS AND INTERPRETATION

**Objective 1: To know the number of buses, government support received, and the seating capacity of the buses before and after COVID-19.**

Number of buses	Before covid 19 (%)	After covid 19(%)
0-2	42	55
2-4	34	27
Above 4	24	18

(Source: Compiled Data)

#### Interpretation:

From the table, 42% percent of the bus operators had buses between 0 to 2 before COVID-19 and the percentage has increased to 55% after the pandemic.

Government Support	Before covid 19(%)	After Covid 19(%)
Yes	93	11
No	7	89

(Source: Compiled Data)

**Interpretation:**

From the table, 93 percent of the bus operators say that they received government support before COVID-19 and after the pandemic, the respondents say that they haven't received government support and the percentage came down to 11 percent.

Number of passengers	Before covid-19(%)	After covid-19(%)
100% capacity	92	9
Above 75%	7	2
50%-75%	0	18
Below 50%	1	71

(Source: Compiled Data)

**Interpretation:**

From the above table, it is clear that before COVID-19 the 100% seating capacity was 92% and it has reduced to 9% after COVID-19.

**Objective 2: To know the average profitability of bus operators before and after COVID-19.**

**Ho:** There is no significant difference in the average profitability of bus operators before and after the COVID-19 pandemic.

**H1:** There is a significant difference in bus operators' average profitability before and after the COVID-19 pandemic.

**Paired Samples Test**

	Paired Differences				95% Confidence Interval of the Difference		t	df	One-Sided p	Significance TwoSided p
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper					
Pair 1 Profitability before covid19 - Average Profitability after covid-19	1.1200	.95642	.09564	1.30978	-.93022	11.710	9	<.001	<.001	

(Source: Compiled Data)

**Interpretation:**

The mean difference between average profitability before and after covid 19 is 1.12000 with a standard deviation of 0.95642. the p value is less than the significant value i.e., it is less than 0.05. this indicates that there is a significant difference in the average profitability before and after covid 19.

**Objective 3: To know the perceived impact of different expense factors among bus operators after COVID-19.**

**Ho:** There is no significant difference in the perceived impact of different expense factors among bus operators after COVID-19.

**H1:** There is a significant difference in the perceived impact of at least one expense factor among bus operators after COVID-19.

**Descriptive Statistics**

	N	Percentiles 50th (Median)		
		25th	50th	75th
Fuel and Energy cost	100	1.00	1.00	1.00
Maintenance and repair expenses	100	.00	.00	.00
Insurance premium cost	100	1.00	1.00	1.00

**(Source: Compiled Data)**

<b>Ranks</b>	
<u>Mean Rank</u>	
Fuel and Energy cost	2.26
Maintenance and repair expenses	1.33
Insurance premium cost	2.41

**(Source: Compiled Data)**

<b>Test Statistics<sup>a</sup></b>	
N	100
Chi-Square	109.976
df	2
Asymp. Sig.	<.001

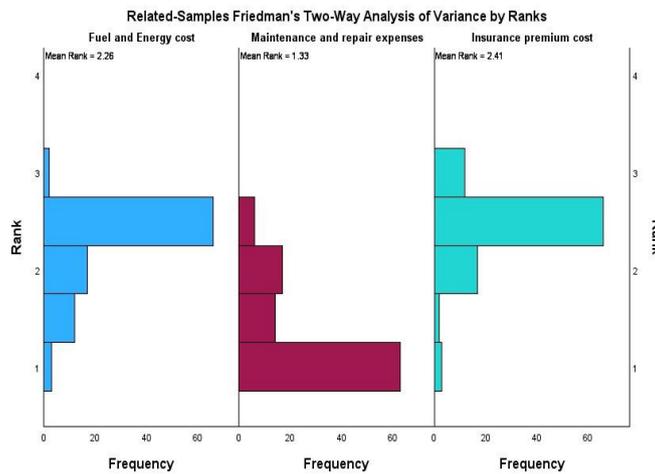
**(Source: Compiled Data)**

**Pairwise Comparisons**

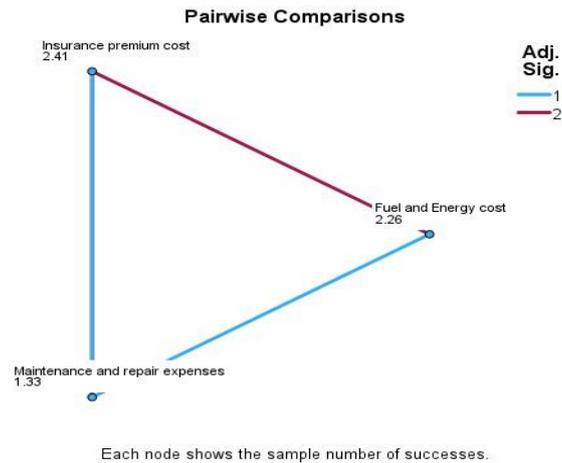
Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. <sup>a</sup>
Maintenance and repair expenses-Fuel and Energy cost	.930	.141	6.576	<.001	.000
Maintenance and repair expenses-Insurance premium cost	-1.080	.141	-7.637	<.001	.000
Fuel and Energy cost-Insurance premium cost	-.150	.141	-1.061	.289	.867

**(Source: Compiled Data)**

**Bar graph showing the mean rank of different operating expenses**



**(Source: Compiled Data)**



**(Source: Compiled Data)**

### Interpretation:

Each factor has been ranked based on its perceived impact on operating costs. Maintenance and repair costs have the lowest rank (1.33) indicating it is perceived as most impactful. Fuel and energy costs have a mean rank of 2.26 and insurance premium costs have the highest mean rank of 2.41 and it is perceived as least impactful. The chi-square value is 109.976 and the p-value is less than 0.001, indicating a significant difference between the mean ranks of the factors.

## FINDINGS

1. 79% of the bus operators are males and 21% are females.
2. 69% of the respondents say that spare parts cost was stable before COVID-19 and 58% of the respondents say that spare costs have increased significantly after COVID-19.
3. 56% of the respondents say that they had high income before COVID-19 and 35% of the respondents say that their income level has reduced significantly after COVID-19.
4. 51% of the respondents say that the road tax amount has gradually increased over time and 73% of the respondents say that the amount has moderately increased over time.
5. 68% of the respondents say that their operating costs were moderate before COVID-19 and 73% say that their operating costs had increased moderately after COVID-19.
6. 90% of respondents say that customers preferred private buses more before COVID-19 and it has decreased after COVID-19.

## SUGGESTIONS

- To reduce the financial strain on private bus operators, the government and local governments can offer financial support packages, subsidies, and tax breaks. To reduce the financial burden caused by lower revenues and higher operating expenses during and after the pandemic, the government can offer loan restructuring plans, interest rate reductions, and debt relief initiatives.
- To lower administrative burdens and compliance costs for private bus operators, reduce and simplify regulatory procedures, such as route permits, licensing requirements, and fare policies.
- Promote the adoption of digital technology by private bus operators, such as online booking platforms, mobile ticketing apps, and GPS tracking systems, to boost customer satisfaction, increase operational efficiency, and plan routes more effectively.

## CONCLUSION

The study was conducted to know the problems faced by private bus operators before and after COVID-19. The bus sector was badly affected by the pandemic. Financial issues and lack of government support were some of the main problems faced by the operators. Many respondents say that they didn't get any government support. Financial problems were another main problem faced by the operators as they had huge income losses and high operating expenses after COVID-19. After the pandemic, the traveling behaviour of the people had also changed as they preferred to use their own vehicles due to safety concerns which had resulted in their income and average profitability of their bus operating business. More assistance from the government will be greatly

helpful for these private bus operators which will help them to revive the transportation system and avoid their problems.

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