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Operators of the Minibus Services – An Opinion Survey

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ABSTRACT

As far as India is concerned, the rural population has less transport facilities when compared to the urban population. But after the introduction of minibus services, it gives the interior coverage to villages and it has a pivotal role to play. But the minibus services meet the needs of these poor people. In this paper an attempt has been made to analyze the socio-economic condition of the operators, reasons for owning new buses, reasons for holding old buses, problems while borrowing loan, opinion regarding the operation of minibus and so on.With this backdrop the present study has been made an attempt to study the opinion of the minibus operators.

Keywords : minibus service, operators, rural connectivity

INTRODUCTION

The present industrial and green revolutions have mainly caused the development of transport. In the sphere of economic development, transport has a crucial role to play. It is a service which helps the goods and passengers to be carried from one place to another. This system is a basic necessity for any economy. It is just like the nerve of an economy. The importance of transport is increasing everyday with new development in the field of road ways, motive power, engineering techniques and the like. This service has been assuming growing significance not only among rural folks but also among towndwellers. This enshrining role played by minibus services is due to two distinct features namely service in unserved rural areas and reasonable fares.

As far as India is concerned, the rural population has less transport facilities when compared to the urban population. But after the introduction of minibus services, it gives the interior coverage to villages and it has a pivotal role to play. But the minibus services meet the needs of these poor people.In this paper an attempt has been made to analyse the socio-economic condition of the operators, reasons for owning new buses, reasons for holding old buses, problems while borrowing loan, opinion regarding the operation of minibus and so on.

REVIEW OF LITERATURE

P. Chinnaiyan and R. Nandagopal,1 present that the minibus scheme had a positive response from rural people. Respondents were satisfied with the frequency, time schedule and the permission granted for carrying luggage. It was observed that the minibuses were overloaded with passengers in order to wipe out the cost. Though the owners were satisfied with the time schedules they were unhappy with the bus fare. Restricted number of operators per route and plying of minibuses only on the routes where the regular buses do not operate may make the scheme more attractive to the operators. It is also suggested to privatise the rural roads for motorable condition and educate the rural people on the maintenance of the roads. Increasing of bus fare for minibuses also could be considered to make the scheme attractive for the owners.

A. Hensher David,2 in his study, "Productive Efficiency and Ownership of Urban Bus Services", investigated the productivity differences between public and private bus service in Australia. He stated that private supply of public passenger transport in general had performed more efficiently than public supply.

The report,3 "The minibus and the Public Transport Systems of Kualalumpur", submitted by Janicson Mackey and partners stated that minibuses produced substantial benefits for both passengers and operators in terms of faster journey speed, slightly shorter waiting time, greater penetration into the central area, and cheaper travel for distance over 7 miles (11 kms). It helped to minimise the cost and maximise the profit.

M.J. Sahabandhu,4 in his book, "Activity-Based Methodology to Ascertain Transportation Needs and Allocate Financial Support for Rural Bus Service", discussed the various aspects like transportation needs, level of service, levels of subsidy requirements and the like. He also stated that the regular conventional bus services could not be operated at acceptable costs to the commuters even though it was essential as dispersed irregular transport demand would result in high operating cost.

Smith,5 provided rich insights into the problems faced by local governments in administering public transport and provided a modus operandi for a change in policy and administrative set up.

S. Sri Raman,6 in his study, "Systems Approach to Transportation Planning", has emphasised the need to integrate all modes of transport in an urban area under a unified authority on the plea that only such a framework can effectively plan and provide at reasonable cost the type and quality of service than the urban area requires for development. He has also stressed that to achieve better results in railways, more efficient operating and scheduling policies must be adopted.

Though many attempts have been made to study the various aspects of transportation, no attempt has so far been made to study the opinion of the operators of the minibus services. Hence, the present study.

OBJECTIVES OF THE STUDY

The following are the main objectives of the study:

1. To analyse the reasons for owning new bus
2. To assess the reasons for holding old bus
3. To find the details about the problems while borrowing loan
4. To analyse the opinion regarding the operation of minibus

METHODOLOGY AND SAMPLING DESIGN

The study is an empirical study based on survey method. An interview schedule was prepared for assessing the opinion of the operators.

The sample of the study comprises the southern districts of Tamil Nadu. There were 3925 buses that plied in Tamil Nadu and only 1036 buses plied in the sample area of the Southern Districts of Tamil Nadu during 2004-2005.

TABLE 1
Details of Sample Respondent

Sl. No.	Name of the Districts	Total. No. of Buses Plied During 2004-05	No. of Buses Selected as Sample	No. of Bus Operators as Sample
1.	Kanniyakumari	243	27	27
2.	Tirunelveli	211	24	24
3.	Tuticorin	171	20	20
4.	Virudhunagar	122	14	14
5.	Sivagangai	60	7	7
6.	Ramanathapuram	49	6	6
7.	Theni	93	11	11
8.	Dindigul	127	15	15
9.	Madurai	230	26	26
	Total	1306	150	150

Source: Primary Data

In order to assess the opinion of the operators, the researcher has firstly selected 150 buses by using proportionate random sampling. Secondly 150 persons were selected by using convenience sampling method that is one operator from each bus.

FRAMEWORK OF ANALYSIS

The data were analyzed by using appropriate statistical techniques such as Percentages, Garret Ranking, Weighted Average and ANOVA.

RESULT AND DISCUSSION

Socio-Economic Condition of the Operators

1. A vast majority of 83.3 per cent of the operators were males
2. Nearly 87 per cent of the same operators were married.
3. About three- fourth of the respondents' age was between 35 to 45 and 45 to 55 years.
4. Nearly 95 per cent of the respondents are educated.
5. About 88 per cent of the operators have less than four buses.
6. About 41 per cent formed this business on the basis of sole trade-ship, 31.3 per cent did so based on partnership firm, 18 per cent on Joint Stock Company and 9.4 per cent on trustee ship.
7. Majority of the operators have been in this business for 4 to 6 years.
8. Nearly 87 percent of the sample operators have new minibuses and the rest of them have old buses.

Reasons for Owning New Bus

There are a number of factors which may influence person to become operator of the minibus service such as effective services, low maintenance cost, less fuel consumption, chances for less repairs, commuter satisfaction, passenger satisfaction, long life duration and attractive looks. Table 2 reveals the reasons for owning new buses.

TABLE 2
Reasons for Owning New Buses

Sl. No.	Reasons	Rank							Total
		1	2	3	4	5	6	7	
1.	Low Maintenance Cost	12	17	21	27	18	10	26	131
2.	Less Fuel Consumption	9	21	33	17	17	25	9	131
3.	Chances for Less Repairs	32	32	19	10	18	11	9	131
4.	Commuter Satisfaction	29	18	13	27	16	10	18	131
5.	Passenger Satisfaction	30	11	18	19	26	13	14	131
6.	Long Life Duration	10	25	12	17	18	37	12	131
7.	Attractive Looks	9	7	15	14	18	25	43	131
	Total	131	131	131	131	131	131	131	

Table 2 highlights the reasons for owning the new buses. The researcher has identified seven reasons and asked the respondents to rank them. Based on the ranks awarded, the researcher has calculated rank of the respondents. Moreover to identify which reason is the most vital one, the researcher, has used Garret Ranking.

Reasons for Owning New Buses – Garrets Scores by Using Garrett Ranking

Table 2 shows the Garrett scores. First the Garrett ranks are calculated by using appropriate Garrett ranking formula. Then based on the Garrett ranks, the Garrett Table value is ascertained. The Garrett Tables and scores of each factor in Table 3 are multiplied to record scores in Table 3 Finally by adding each row, the total Garrett scores are obtained.

TABLE 3
Reasons for Owning New Buses – Garrets Score

Sl. No.	Reason	Rank							Garrett Score	Average Score	Rank
		1	2	3	4	5	6	7			
1.	Low Maintenance Cost	948	1122	1197	1350	774	340	546	6277	47.916	5
2.	Less Fuel Consumption	711	1386	1881	850	731	850	189	6598	50.366	4
3.	Chances for Less Repairs	2528	2112	1083	500	774	374	189	7560	57.71	1
4.	Commuter Satisfaction	2291	1188	741	1350	688	340	378	6976	53.252	2
5.	Passenger Satisfaction	2370	726	1026	950	1118	442	294	6926	52.87	3
6.	Long Life Duration	790	1650	684	850	774	1258	252	6258	47.771	6
7.	Attractive Look	711	462	855	700	774	850	903	5255	40.115	7

Table 3 show the Garrett scores and the average scores. The average scores are ranked according to their values. The first rank is given to "Chances for less repairs" and the last rank is given to "look attractive".

It is inferred that "chances for less repairs" is the major reason for minibus operators for owning new buses.

Reasons for Holding Old Bus

There are a number of reasons which may influence the persons to keep an old minibus. Such factors are effective services, easy to mobilise initial capital, less interest for borrowings, less formalities for R.C. and other formalities, familiarity for commuters and easy service facility.

TABLE 4
Reasons for Holding Old Bus

Sl. No	Reason	Rank					Total
		1	2	3	4	5	
1.	Easy to Mobilise Initial Capital	3	4	4	4	4	19
2.	Less Interest for Borrowings	2	4	4	4	5	19
3.	Less Formalities for R.C. and Other Formalities	9	3	6	0	1	19
4.	Familiarity for Commuters	1	6	3	7	2	19
5.	Easy Service Facility	4	2	2	4	7	19
		19	19	19	19	19	19

Source: Primary Data

Table 4 highlights the reasons for holding old minibuses. The researcher has identified five factors and asked the respondents to rank them. Based on the ranks awarded, the researcher has allotted the respondents to appropriate ranks. Moreover to identify which reason is the most average vital one, the researcher has used weighted average.

Reasons for Holding Old Bus - Weighted Average
The weighted average has been used to identify the prime reasons. The weights are given such as five, four, three, two and one for the first, second, third, fourths and fifth ranks respectively. Table 5 describes the reasons for holding old minibuses.

TABLE 5
Reasons for Holding Old Bus

Sl. No.	Reasons	Rank					Score	Average	Rank
		1	2	3	4	5			
1.	Eassy to Mobilise Initial Capital	15	16	12	8	4	55	2.895	3
2.	Less Interest for Borrowings	10	16	12	8	5	51	2.684	4
3.	Less Formalities for RC and Other Formalities	45	12	18	0	1	76	4	1
4.	Familiarity for Commuters	10	24	9	12	2	57	3	2
5.	Easy Service Facility	15	8	6	10	7	46	2.421	5

Source: Primary Data

The weighted average score ranking is according to their values. The first rank is given to “fewer formalities for RC and other formalities” and last rank is given to “easy service facility”. It is inferred that less formalities for RC and other formalities is the main reason for holding old mini buses.

Details about the Problems While Borrowing Loan
The lenders may not lend money easily to the borrowers. Because, the lenders have to follow a lot of rules and regulations. The operators of the buses borrow loan from different financial institutions. While borrowing loans, the operators face different problems. Such problems are given in Table 6.

TABLE 6
Details about the Problems While Borrowing Loan

Sl. No.	Reasons	Rank						Total
		1	2	3	4	5	6	
1.	For Finding Sureties	9	15	24	11	6	13	78
2.	For Completing Legal Formalities	19	25	11	8	13	2	78
3.	Forgetting Loan in Time	27	12	15	9	7	8	78
4.	Loan Delayed as Loan Quota Exceeded	13	8	14	25	8	10	78
5.	For want of Recommendation	1	17	6	16	26	12	78
6.	Political Interference	9	1	8	9	18	33	78
		78	78	78	78	78	78	

Table 6 Highlights the details about the problem while borrowing loan. The researcher has given six factors and asked the respondents to rank them. Based on the ranks awarded, the researcher has calculated the number of respondents placed in each rank. Moreover to identify which factor is the most vital one, the researcher has used Garrets Ranking.

Details about the Problems while Borrowing Loan - Garrets Score by Using Garrets Ranking Method

This technique is used to evaluate the problems faced by the operators. In this method the respondents were asked to rank the given problem according to the magnitude of the problem. The order of merit given by the respondents was converted into ranks.

TABLE 7
Details about the Problems While Borrowing Loans

Sl. No.	Problems	Rank						Garrett Score	Average Score	Rank
		1	2	3	4	5	6			
1.	For Finding Sureties	693	945	1296	506	222	299	3961	50.78	3
2.	For Completing Legal Formalities	1463	1575	594	368	481	46	4527	58.04	1
3.	For Getting loan in Time	2079	756	810	414	259	184	4502	57.72	2
4.	Loan Delayed as loan Quota, Exceeded	1001	504	756	1150	296	230	3937	50.47	4
5.	For Want of Recommendation	77	1071	324	736	962	276	3446	44.18	5
6	Political Interference	693	63	432	414	666	759	3027	38.81	6

Table 7 Shows the Garrets scores and the average scores. The average scores are ranked according to their value. The first rank is given for “completing legal formalities” and the last rank is given to “political interference.”

It is inferred that “completing legal formalities” is the major problem given by the minibus operators who borrowed loan.

Opinion Regarding the Operation of Minibus
The overall progress and development of the minibus service can be undoubtedly through the continuous utilization by the passengers of the respective routes. The dedicated service rendered by the minibus operators yield satisfaction to the users of minibus. Satisfied passengers can boost up the minibus services. Hence, in order to analyse the opinion of the operators towards the services of mini-bus, ANOVA test has been applied.

Analysis of variance (ANOVA) is a vital technique for research. This technique is used when multiple sample cases are scrutinised. The basic principle of ANOVA is to test the difference among the means of population by examining the amount of variation within each of the samples, related to the amount of variation between samples. The following formula has been used to test the variance7:

$$F^4 = \frac{\text{Variance between Samples}}{\text{Variance with the Samples}}$$

They are personal variables like sex, marital status, age, educational qualification and so on that normally influence opinion of the operators of the minibus. Experienced and older operators have richer knowledge about the minibus services than the young operators.

Table 8 portrays the age and the opinion of the operators toward their services. The null hypothesis is that the age does not influence opinion of the operators towards their services.

TABLE 8
Age and Opinion Regarding the Operation of Minibus

Sl. No.	Statement	Particulars	Sum of Squares	Df	Mean Square	F	Sig
1.	Cheaper Means of Transportation	Between Groups	5.079	1	5.079	6.229	0.014
		Within Groups	120.661	148	0.815		
		Total	125.740	149			
2.	Satisfaction of passengers	Between Groups	8.630	1	8.630	7.332	0.008
		Within Groups	174.203	148	1.177		
		Total	182.833	149			
3.	Covering nook and corner	Between Groups	6.156	1	6.156	3.884	0.051
		Within Groups	234.338	148	1.585		
		Total	240.693	149			
4.	Ride in Narrow Road	Between Groups	2.662	1	2.662	2.751	0.099
		Within Groups	143.211	148	0.968		
		Total	145.873	149			
5.	No Government Interference	Between Groups	2.292	1	2.292	2.224	0.138
		Within Groups	152.542	148	1.031		
		Total	154.833	149			
6.	No Specific Stop	Between Groups	0.375	1	0.375	0.226	0.635
		Within Groups	245.519	148	1.659		
		Total	245.893	149			
7.	Earn More Profit	Between Groups	0.401	1	0.401	0.230	0.632
		Within Groups	257.739	148	1.741		
		Total	258.140	149			
8.	Less Maintenance Problems	Between Groups	0.110	1	0.110	0.68	0.795
		Within Groups	241.763	148	1.634		
		Total	241.873	149			
9.	Eary Availability of Spare Parts	Between Groups	4.653	1	4.653	3.277	0.072
		Within Groups	210.121	148	1.420		
		Total	214.773	149			
10.	High Re-Sale Value	Between Groups	6.164	1	6.164	4.063	0.046
		Within Groups	224.509	148	1.517		
		Total	230.673	149			

* Significant
*# In Significant

The null hypothesis is rejected for six statements because the 'F' ratio is less than 0.05 at 5 per cent significant level. The 'F' ratio is more than 0.05 for four statements namely no government influence, no specific stop, earn more profit, and less maintenance problems. Hence, the null hypothesis is accepted.

CONCLUSION

Transport plays an important role for economic growth of the country. Service of minibuses is inevitable which aids for the development of rural and urban people. The minibus operators' role is also a vital one. In the view of passengers, the mini bus operators render a valuable and dedicated service though they are running buses with profit motive as the main consideration.

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