Asian Transportation Research Society

Examination of Problems Faced by the Drivers of Three-wheelers in Kurunegala District, Sri Lanka

Chamodya Sathsarani Ranathunga 1, Djoen San Santoso 2

1Department of Civil and Infrastructure Engineering, School of Engineering and Technology Asian Institute of Technology, Pathumthani

2Construction, Engineering and Infrastructure Management, School of Engineering and Technology Asian Institute of Technology, Pathumthani

Content

- Introduction
- Literature review
- Research Methodology
- Data analysis and discussion
- Conclusion and recommendation



Introduction

- Paratransits ?
- Role of paratransits?
- Examples of paratransits?







Tuk-tuk



Angkot



Auto-rickshaw



Jeepney

Introduction cont'd

Three wheelers are the major paratransits mode in Sri Lanka.

Characteristics of three wheelers

- Small size Easily wave in the traffic jam
- Fare Affordable
- Route Travel on narrow roads
- Availability Any time , any where



Introduction cont'd

Even though it provides better service to the public many problems have to face for both passengers & drivers

Objectives-

- To analyse the problems of drivers in three wheeler operation.
- Find out the reasons for the problems faced by the drivers.

Literature review

Drivers problems;

- Difficult to receiving money from the customer
- Calling for illegal activities
- Parking problems
- There is no guarantee that a rented vehicle could be given for the same driver for next day

(Somasundaraswaran et al(2007)- southern province ,Sri Lanka)



Research Methodology

Study area



Sample size



Research Methodology cont'd

Attributes used for the agreement rating with #1 to #5 linker scale

- No enough parking spaces
- Difficult to travel in rural narrow roads
- No organization to take care
- Low income
- Job status is not well respected
- Poor job satisfaction

Attributed used for the frequency rating with #1 to #5 linker scale

- Passengers fail to give money
- Being calling for illegal activities
- Being kidnapped by gangsters
- Feeling unsafe to travel with an unknown passenger
- Three wheelers are not well accepted
- Competition among three wheelers
- Riskiness to getting accident by a heavy vehicle
- No permission to enter some places

Groups for the analysis



Variables	Classification of variables	Frequency	%
Gender	Male	100	100
Age	18-30	39	39
Age	>30	61	61
Highest attained	Junior high school or less Senior high school or Higher than	65	65
education	Senior high school	35	35
Ownership	Owner	77	77
ownersnip	Hired driver	23	23
Daily earning	Low earning	49	49
	Middle earning	51	51
Experience	Less than10 years	22	22
Experience	Greater than 10 years	78	78
	Urban	50	50
Living place	Sub urban	50	50

- Descriptive analysis- for urban & suburban
 - The ranking is according to the drivers' agreement to the problems

Rank	Urban		Sub Urban	
	Problems	Mean	Problems	Mean
1	No enough parking spaces	4.76	Poor job satisfaction	4.2
2	Poor job satisfaction	4.7	Job status is not well respected	3.94
3	Low income	3.76	Low income	3.8
4	Job status is not well respected	3.7	Difficult to travel in rural roads	3.48
5	Difficult to travel in rural roads	3.28	No organization to take care	3.18
6	No organization to takecare	2.42	No enough parking spaces	3.14

Strongly disagree
Strongly agree

• Descriptive analysis for urban and sub urban

The ranking is according to the drivers' frequency of facing to the problems

Rank	Urban		Sub Urban	
капк	Problems	Mean	Problems	Mean
1	Riskiness to get an accident	4.56	Riskiness to get an accident	3.84
2	No permission to enter some places	3.62	Tw is not well accepted	3.52
3	Unsafe to travel with unknown person	3.56	No permission to enter some places	3.26
4	Tw is not well accepted	3.36	Unsafe to travel with unknown person	2.86
5	Calling for illegal activities	2.14	Fail to give money by the passengers	2.02
6	Fail to give money by the passengers	2.08	Kidnapping by gangsters	1.84
7	Kidnapping by gangsters	1.64	Calling for illegal activities	1.4

- 1 Never
- 5 Very often

Most of the drivers with less than 10 year experiences are young people and they do not like hard working

No of three wheelers are Higher in urban

Urban drivers have a union. But not in suburban

T-test results			Greater than 10 year experiences are middle &	
Experience	Less than 10 years		Id age and they have to naintain a family	
-Low income	3.68	3.81		
Job status is not well respected	3.95	3.78		
Living place	Urban	Suburban	Drivers and	
-No enough parking spaces	4.76	3.14	passengers	
-Competition among three wheelers	4.72	4.2	know each other	
-Poor job satisfaction	4.7	4.2		
-Calling for illegal activities	2.14	1.4		
-Unsafe to travel with unknown person	3.56	2.86	No. of moderized	
-Riskiness to get an accident	4.56	3.84	No of motorized vehicles are Higher	
-No organization to take care	2.42	3.18	in urban	

Young people do not like hard working

	Mean	
Age	18-30 years	30 yea
-No enough parking spaces	3.36	3.75
-No organization to take care	2.51	2.98
-Tw is not well accepted	3.26	3.56
-Poor job satisfaction	4.74	4.26
Ownership	Owner	Hired driver
-No enough parking spaces	3.51	3.91
-Kidnapping by gangsters	1.64	2.09
-Unsafe to travel with		
unknown person	3.13	3.48

Matured people can understand problems and their effects.

> Hired driver should be more responsible if something happen to the vehicle

Conclusion & recommendation

Urban drivers - No enough parking spaces
Riskiness to get an accident
Suburban drivers - Poor job satisfaction
Riskiness to get an accident

- Passenger behaviour problems faced by the urban hired drivers than suburban drivers.
- Middle and old aged ,Experienced drivers have problems of existing facilities and low income.
- Young drivers do not satisfy about their job, and seek for other employment.

Conclusion & recommendation

To improve the study

• Increase the sample size.

• Take data from many urban and suburban areas.

• Its better if possible to interview the respondents, rather than only distributing the questionnaire.

Conclusion & recommendation

To reduce the problems of the drivers



- Inform to the responsible people to provide more facilities to the operators like parking lot, garages, etc.
- Establish a union for the benefit of the drivers.
- Arrange safety workshops and training programmes for the drivers.
- Introduce loan system for the drivers to buy CNG or gasoline engine three wheelers.

THANK YOU