

Effect of Social Determinants and Occupational Susceptibility on the Employment and Livelihood Conditions of the Auto Rickshaw Service Providers of Agartala City, Tripura

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Abstract : *The issue of unemployment has become a serious and complicated problem that presents enormous obstacles for people as well as the country's economy. India's difficulty creating jobs and providing work opportunities has wide-ranging effects due to its large and diverse population. In such conditions, informal service in the field of transportation plays a crucial role in not only creating job opportunities but also providing commutation services to daily passengers. This Para-transit mode of transport is identified as the auto rickshaw transport service. Despite their role, they face different occupational susceptibilities. The present research work aims to analyse the social composition of the auto rickshaw service providers and find out the economic condition under which they earn sustainable wages and run their daily livelihood. For this purpose, field enquiries were conducted on the random sample survey. The study highlighted various other factors that influence the physical and emotional well-being of auto rickshaw drivers, showing that the work environment and stress directly affect their livelihood, occupation, and health.*

Key words: Occupational health, Livelihood, Service Provider; Occupational hazard

Introduction

Unemployment is a key issue and a grave crisis that in some countries, may explode and undermine the social fabric very badly. The International Labour Organisation estimates that more than 280 million people worldwide are either unemployed or working at a job that does not pay even a subsistence wage. Many eminent economists opine that the problem of unemployment cannot be solved only by creating job opportunities. At the present level of economic crisis, it cannot be ignored that there is no other alternative way than self-employment. Due to the declining trend of employment, the ray of hope of providing jobs to hundreds and thousands is, therefore, seen with only self-dependent jobs. Under these circumstances, to arrest the rate of increasing unemployment, Auto Rickshaw driving became one of the self-employment plans aiming at providing jobs to plenty of unemployed individuals.

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The study aims to analyse the social composition of the auto rickshaw service providers and find out the economic condition under which they earn sustainable wages and run their daily livelihood.

Review of literature

Bajaj (1961) studied the livelihood and operational conditions of 100 auto rickshaw drivers in Delhi. The study revealed various issues like ownership patterns of the auto rickshaw drivers, overcharging the commuters etc. The study explained that 74 per cent of the auto rickshaw drivers were not satisfied with their job due to low occupational prestige. Moreover, the auto rickshaw drivers had to face harassment from the police that affected their working as well as living conditions. Maheshchand (1979) examined the auto rickshaw transport system in Bangalore and identified the management system of the service facility. However, he did not address the socio-economic problems and issues of Auto rickshaw drivers. Parota et al. (1981), studied the Life of the Profile of the auto rickshaw Drivers in Bangalore. The study revealed that auto rickshaw drivers could not send their children to other renowned schools except government primary and secondary schools. It also reveals that 75 per cent of their income is spent on food, 10 to 15 per cent on rent and nil or a little savings. Rajkumar (1999) explained the effect of air pollutants on the respiratory system of auto rickshaw drivers in Delhi. Mohan and Roy (2003) divulged the drivers' characteristics, ownership and daily operations and also revealed the fact that auto rickshaw drivers are often facing rigorous charges by the administration and adverse attitudes from the media for their supposed venality. On the other hand, Anand and Ravi (2003) conducted a badge training programme for the auto rickshaw drivers of Delhi, which has been a step towards the development of the social responsibility of the drivers. The study also revealed that government efforts are needed to improve the public transport system. Gupta (2005) aims to examine the socio-economic problems related to financial aspects, self-employment, development and traffic mechanism of Bangalore City. Rahaman et. al. (2007) studied the practice and effect of smoking on the health of the auto rickshaw service providers in Dhaka City. Gowda et.al. (2009) also studied the employment opportunities in the auto rickshaw transport sector in Bangalore City. The study was conducted on 500 auto rickshaw drivers, collecting their perceptions on various issues of the sector, such as years of service, membership in different unions, vehicle ownership and working hours. The study also analysed the monthly income and expenditure and their satisfaction level through this service. Chaudhary et.al. (2011) discussed the prevalence of Cardio-Vascular diseases caused by the habit of tobacco chewing, alcohol consumption and smoking affecting the health of the auto rickshaw drivers in Nagpur City. Some international study was done, like Rahim et. al. (2012), who studied the socio-economic condition of battery-driven auto rickshaw drivers and their impact on the environment at Rajshahi City of Bangladesh. Adisa (2012), in a study taken in Lagos, Nigeria, revealed that the utility of auto rickshaw is to alleviate poverty. The study also revealed that male operators are mostly dominant and, fall into the working-class group and have a minimum level of education. Among the regional works, Das and Debnath (2013) studied the socio-economic segmentation of the households of auto rickshaw owners based on selected areas

of Tripura, India. Desai (2013) revealed auto rickshaws are the backbone of urban mobility in Delhi City; facing income insecurity, even auto drivers spend 10-12 hours per day earning. They earn on a daily basis and that has no fixed earning level. They also face various health issues as most of the auto drivers are constantly exposed to vehicular pollution. In a nutshell, they suffer due to poor socio-economic conditions. Debbarma and Mitra (2013) studied the problems and prospects of the auto rickshaw transport services in Agartala City. The study based on 150 auto rickshaw service providers revealed the socio-economic conditions of the auto rickshaw drivers of some selected areas of Agartala City. Rewar (2013) studied the tobacco consumption among the auto rickshaw drivers of Jaipur City, Rajasthan. The study revealed that the prevalence of consumption of tobacco products was very high among auto rickshaw drivers. Natarajan and Abdullah (2014) concentrated their study on the socio-economic condition of the 180 number of auto rickshaw drivers in Chennai. The study revealed problems and prospects encountered by the stakeholders and the role of organisations in transforming their lives. Anbalagan and Kanagaraj (2014) studied the problems and prospects of transport in Ethiopia with special reference to auto rickshaws in Hawassa City, East Africa. Farooquea and Jayachandra (2014) carried out an experimental test on the pulmonary functions of non-smoking auto rickshaw drivers. The study was conducted on 60 healthy auto drivers of Kozhikode City, Kerala. The study revealed that there is a significant decrement in the lung of those drivers who have been working for more than ten years. Subendiran (2014) studied the Socio-Economic and Lifestyle Problems of Auto-Drivers in Palani. The study reveals that many auto-drivers operate on an average for 15 hours. A deeper look into the respondents' family income and number of income/ wage earners revealed that additional income from the other family members was required to support the family. Bhattacharjee and Mitra (2015) studied the problems and prospects of the auto rickshaw transport services in Agartala City. The study, based on 531 sample size, revealed the socio-economic conditions of the auto rickshaw service providers of some selected auto rickshaw stands in Agartala City. Debbarma et.al. (2017) studied the problems of the auto rickshaw drivers of the Udaipur and Dharmanagar towns. The main aim of the study was to compare the socio-economic status of the auto rickshaw service providers of two towns located in different areas of Tripura. Niranjana (2017) attempted to study the demand and supply barriers to digital transactions among auto rickshaw drivers in Viman Nagar, Maharashtra, India. Debbarma and Mitra (2017) studied the health issues arising from driving of auto rickshaws by the service providers. It revealed that most auto rickshaw drivers face muscular-skeletal problems. The study was carried out among 84 auto rickshaw service providers in one of the important auto rickshaw stands known as Nagerjala motor stand in Agartala City.

Methodology and Database

The study of the Auto Rickshaw Service Providers is divided into different aspects as the social structure of the auto rickshaw service providers, their living and working conditions, occupational hazards and job satisfaction of the service providers. The study was conducted in the form of case studies carried out in Agartala City. Field enquiry was based on the random

sample survey. For this purpose, eight auto rickshaw nodes were selected randomly out of which 531 auto rickshaw service providers were interviewed. These nodes were Nagerjala, Battala, Radhanagar, Govindo Ballab, Old Motor Stand, R.M.S, Ashwini Market and Chandrapur, respectively. Personal Interviews were held based on the structured questionnaires in the form of a scheduled survey. The survey included various aspects and factors of the socio-economic conditions of the auto rickshaw service providers, which included the profile of the service providers, living status and working conditions. Further, the study concentrated on the issues related to their health, income and the service they provide to the commuters, their social organisation and their demands and their traffic-related issues. However, data regarding their social and working aspects have been analysed, interpreted and elucidated in the form of tabular structures wherever necessary. Statistical methods have been used to substantiate the results. Moreover, an attempt has been made to make the observation and the collected data comparable and coherent as far as possible. The study highlighted various other factors which influence the physical and emotional well-being of auto rickshaw drivers, showing that the work environment and stress directly affect their livelihood as well as their occupation as well as their health.

The Study Area

Agartala City is the largest city in Tripura in terms of its demography and area. The city is the hub centre of various administrative bodies that are run by the democratically elected government. The study area is located between 23°45'2" N to 23°55'2" N latitudes and 91°15' to 91°20' E longitudes, in the flood plain of the River Haora. Traditional feudal gift reflects the intangible heritage, monuments and symbols that emphasises the unique character of the city and represents it as an anchor for the city. Citizen from diverse caste and religion is also very exquisite and equally participate in shaping the cultural diversity of the city. The National Highway (NH-8) connects Agartala with mainland India through the State of Assam (Debnath et.al., 2021). Agartala is also connected by airways and railways with the mainland of the country (Debbarma et al., 2022, Roy et al., 2022). Public transport and walking connect residences to most jobs and amenities. Residential households are at optimal, with affordable housing available in most areas. With the expansion of the city, spatial growth is taking place along the northern and southern periphery while the Central part is compact (Roy & Mitra, 2022). Agartala Municipal Corporation Area (AMC) is surrounded by Bangladesh on the western border, Jirania R.D. Block in the East, Mohanpur R.D. Block in the North and Dukli R.D. Block in the South (Debbarma et al., 2018).

Result and Discussion

Auto rickshaws are the most popular Para-transit mode of connectivity that commutes passengers to their preferred destination. They provide a flexible mode of movement to the commuters of the city with last-mile connectivity. This study presents the picture of auto rickshaw transport sector in Agartala city, which has become an important part of the transport system of Agartala city. This sector is very important for the urban dwellers of this city for providing house to house service and also for the service providers because it is the source of their income. The

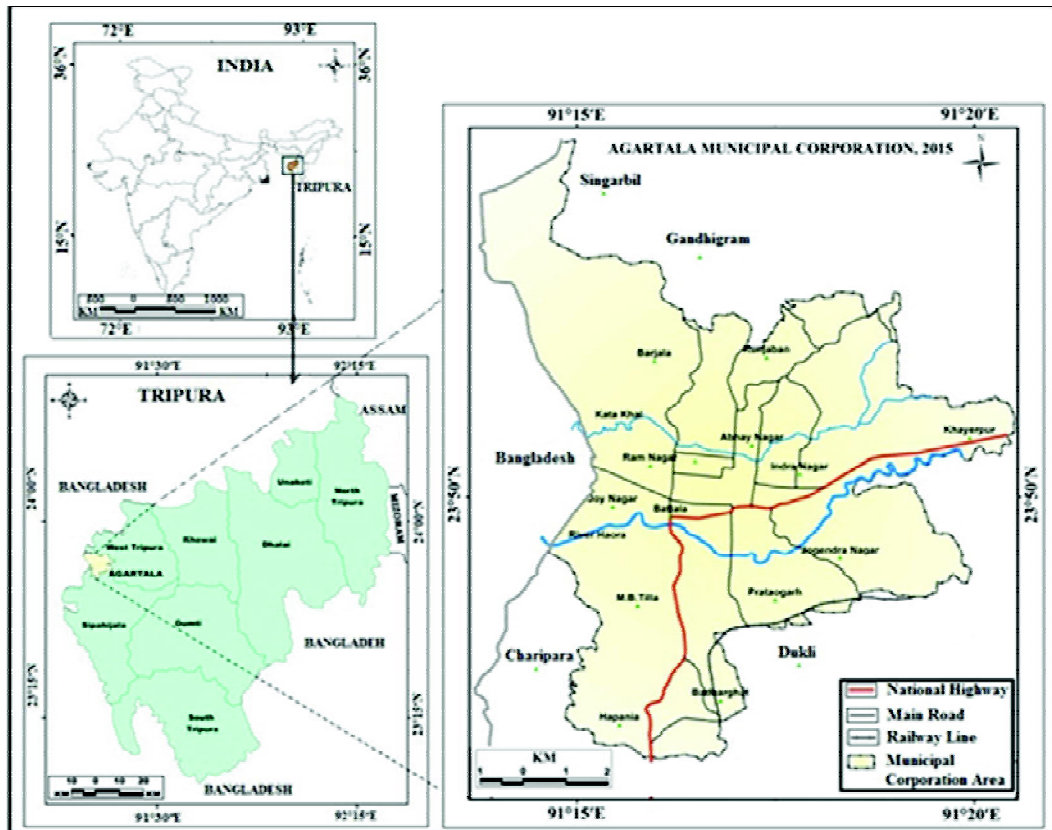


Fig. 1. Location of the Study Area

Source: Base map collected from AMC and developed by authors using ArcGIS 10.5

study was carried out on 531 Auto rickshaw drivers in different auto rickshaw nodes in the Agartala Municipal Corporation area to study their socio-economic and working profiles in the Agartala Municipal Corporation area.

Age Distribution

Auto Rickshaws, the most popular para-transit mode of transport in Agartala, has been a case of credit comments and criticisms. Auto rickshaws are classified as contract carriage under the Motor Vehicle Act 1988. According to Section 66 (1), the owner of the vehicle should hold a permit issued by the concerned Regional State Transport department and to obtain the permit, one must have the driving license and adequate prescribed age group. Age is an important factor because it determines the physical strength of an auto rickshaw driver for driving an auto rickshaw. From the field survey of Auto Rickshaw Service Providers, it has been found that auto rickshaw

service providers belonging to the age group of 18-28 age groups constitute 26.55 per cent. On the other hand, 38.04 per cent auto rickshaw service providers are between the age group of 29-39 years, followed by 28.43 per cent under 40-50 age group, respectively. Essentially, auto rickshaw service providers belonging to 18-28 and 24-39 age groups are more energetic and hard-working. At this age, willingness to work and earn pushes them to drive for a long period to support their families. As the age increases, the energy of doing work decreases. That is why very few auto rickshaw service providers belong to 51-61 age group, which constitutes 6.02 per cent and 62-72 age group is 0.94 per cent.

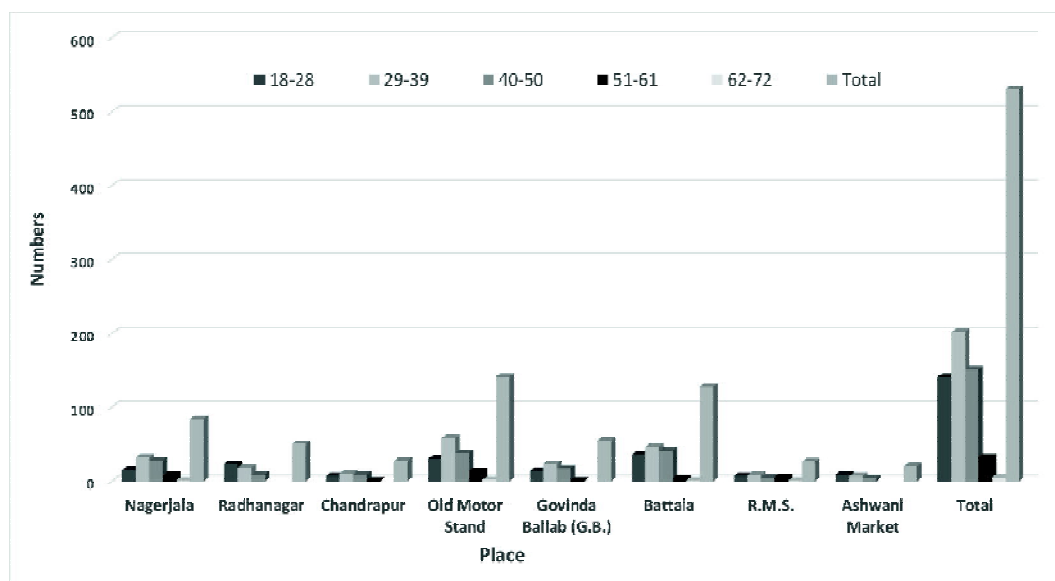


Fig. 2 Age Group of Auto Rickshaw Service Providers in AMC

Source: Data collected from field survey, 2017-18

Residence

A residence is an establishment which is being used as the main place of dwelling or home. From the present field survey, it is learnt that 90.96 per cent have their own residences in the Agartala Municipal Corporation area and that is why they are very familiar with different places of the Agartala Municipal.

Corporation area, which is helpful for them to make trips the whole day. On the other hand, 8.66 per cent auto rickshaw drivers live in rented houses. The auto rickshaw drivers who do not have their own houses live on rent in Slum/Bustee areas as they cannot afford to buy a plot of land in Agartala city due to their insufficient income.

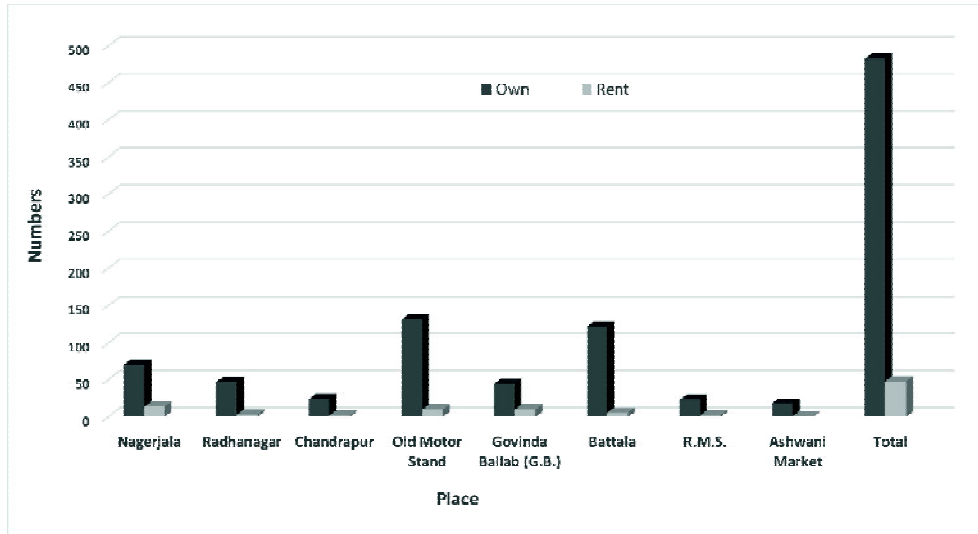


Fig. 3 Residence of Auto Rickshaw Service Providers in AMC

Source: Data collected from field survey, 2017-18

Literacy Level

Education is very important for livelihood because it gives people the knowledge to manage their life easily in different places or environments. To drive an auto rickshaw, a person should

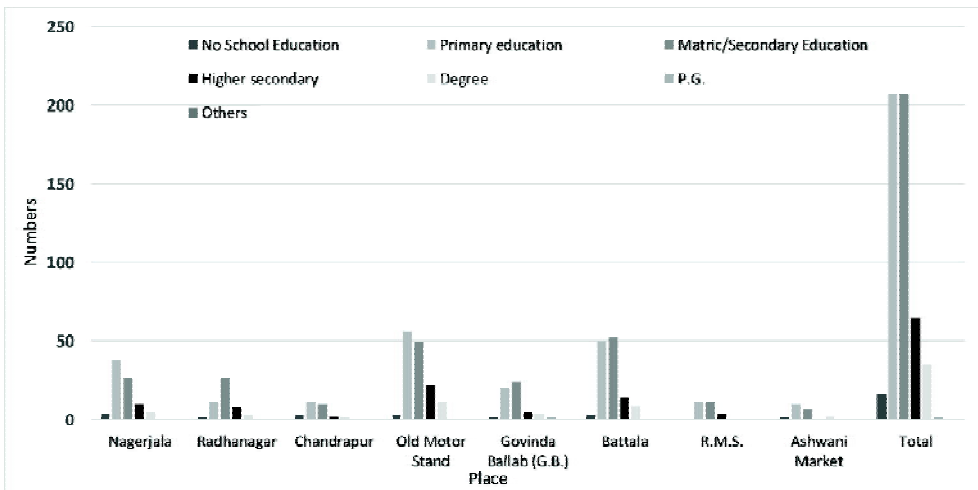


Fig. 4 Educational Level of Auto Rickshaw Service Providers in AMC

Source: Data collected from field survey, 2017-18

know some rules and regulations which are prescribed by the transport department. From the field survey, it has been observed that 96.99 per cent of auto rickshaw service providers are literate and only 3.01 per cent of drivers are illiterate. Basically, Tripura is one of the Indian states where the literacy rate is very high. 77.96 per cent of auto rickshaw service providers have education between primary and secondary or matriculate and 12.24 per cent have their education up to higher secondary and only 6.78 per cent have completed their graduation and post-graduation. Data reveals that the major auto rickshaw drivers belong to poor and middle-class families. So, they generally study up to the primary or secondary level as the cost of studying there is low, but in the case of higher studies, they cannot afford the cost of studying. Regarding employment, principally those who have completed their graduation or post-graduation they do not prefer the service of driving an auto rickshaw, but as they could not get any job, they take up this profession for their livelihood.

Family Size

People earn for maintaining their livelihood. From the study, it is revealed that 54.05 per cent auto rickshaw service providers have family members of 2-4 persons and 45.95 per cent auto rickshaw drivers have more than four persons in their household. No auto rickshaw service provider was found living alone.

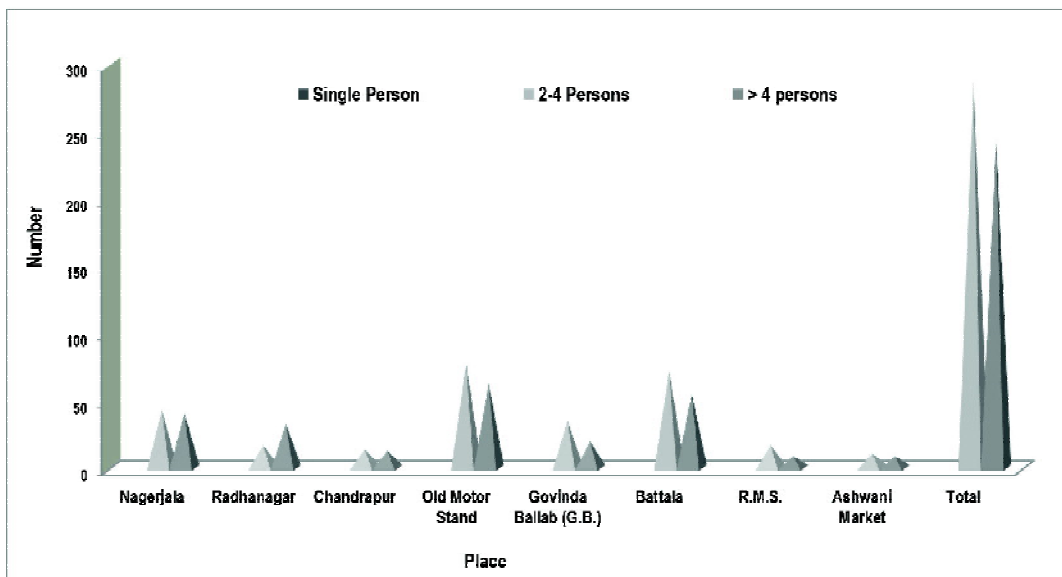


Fig. 5 Family Size of the Auto Rickshaw Service Providers in AMC

Source: Data collected from field survey, 2017-18

Type of Ownership and Rental Charge of Auto Rickshaw

Ownership of a vehicle determines the economic status of the driver. Around 59.70 per cent auto rickshaw service providers have their own auto rickshaws, either taking loans from banks or money lenders, whereas 40.30 per cent of auto rickshaw drivers are financially incapable of acquiring a new auto rickshaw. Among the auto rickshaw service providers who run auto rickshaw on rent, about 87.38 per cent have to give rent up to 200-400 rupees per day based on the condition of the auto rickshaw and the route which the auto rickshaw follows. On the other hand, 12.15 per cent auto rickshaw drivers have to give rent less than 200 rupees per day as the condition of the auto rickshaws is not good and the routes are not appropriate for their income. There are drivers who run auto rickshaws of their relatives and pay less than 200 rupees per day.

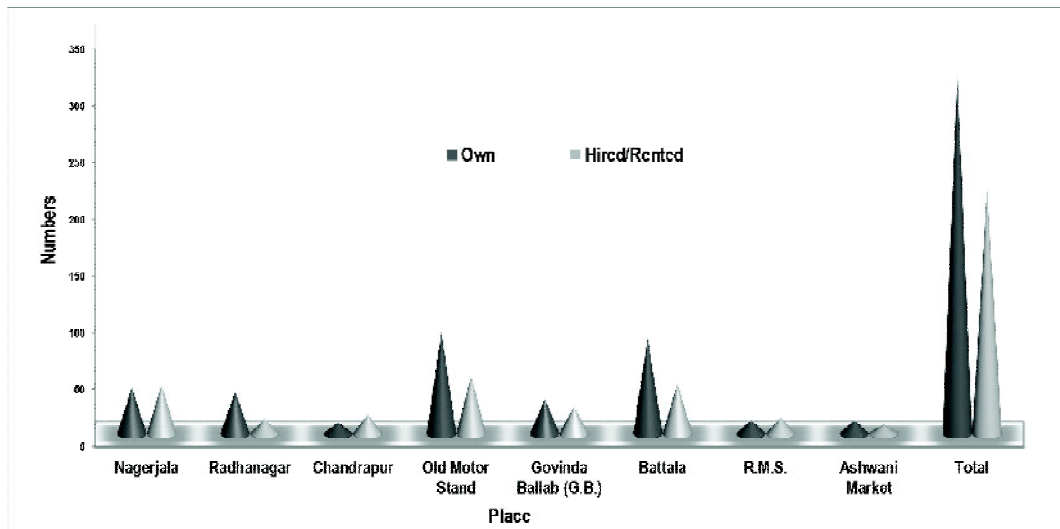


Fig. 6 Type of Ownership of Auto Rickshaw Service Providers in AMC

Source: Data collected from field survey, 2017-18

Source of Finance

An auto rickshaw service provider is a self-employed individual who intends to drive and earn with the help of an auto rickshaw. However, before the service providers become self-dependent, they are basically unemployed persons in society. With the gradual increase of age, the necessity of earning arises and as they lack the opportunity to get jobs, they adopt the profession of driving an auto rickshaw. But as buying an auto rickshaw costs more than his monthly income, he either approaches bank loans or lending money from any other source. In the present study, it is found that 57.68 per cent of the auto rickshaw drivers have bought auto rickshaws on loan from various nationalised banks. 38.24 per cent have obtained auto rickshaws

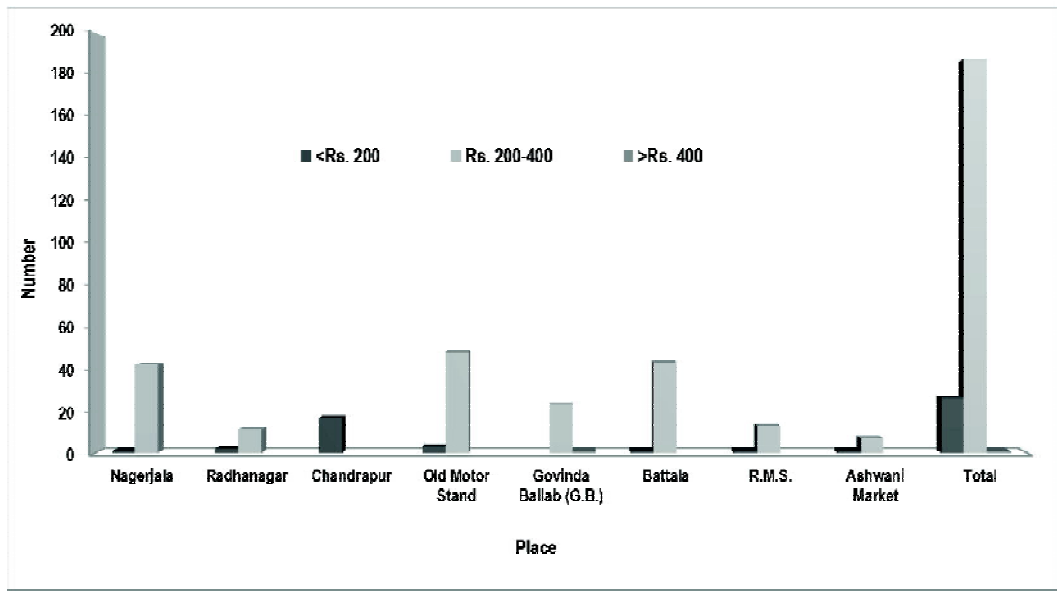


Fig.7 Rental Charge paid by Auto Rickshaw Service Providers in AMC

Source: Data collected from field survey, 2017-18

without any loan. In the beginning, they started driving auto rickshaw on rent and by saving money for a long time, they could acquire auto rickshaw. Only 4.10 per cent of the auto rickshaw

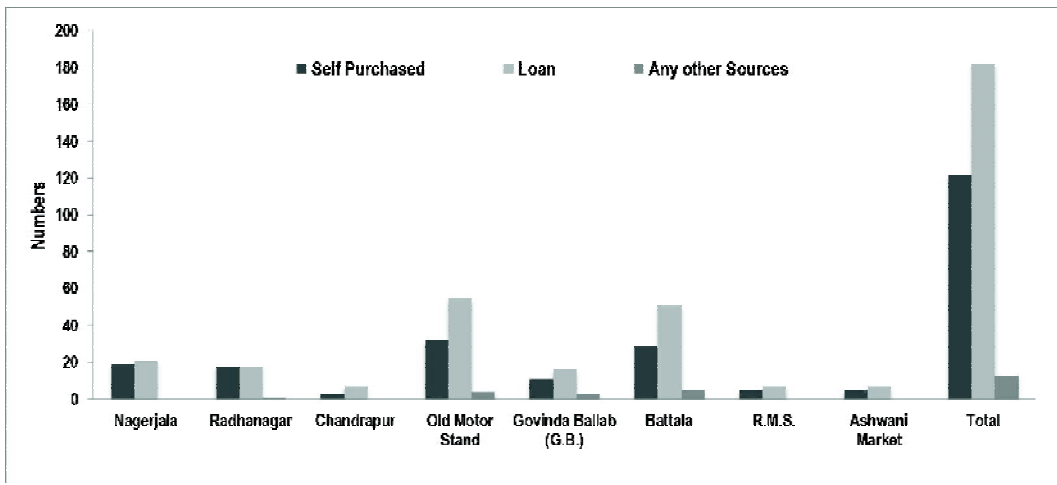


Fig. 8 Source of Financing Auto Rickshaw

Source: Data collected from field survey, 2017-18

service providers is found to purchase auto rickshaw by borrowing money from other sources such as relatives.

Year of Service

In any profession, the experience is a common attribute. From the survey, it is revealed that 29.57 per cent of auto rickshaw service providers have 1-5 years of experience of driving an auto rickshaw. As the city has been growing and developing at a steady rate therefore, the interest of people in this sector is also increasing. From field analysis, it is seen that from 2000 till 2012 approximately 77 per cent auto rickshaws have been registered and in 2012-2014, 23 per cent auto rickshaws were enlisted. As Agartala City gradually developed steadily, the interest of the unemployed persons in driving auto rickshaws has amplified.

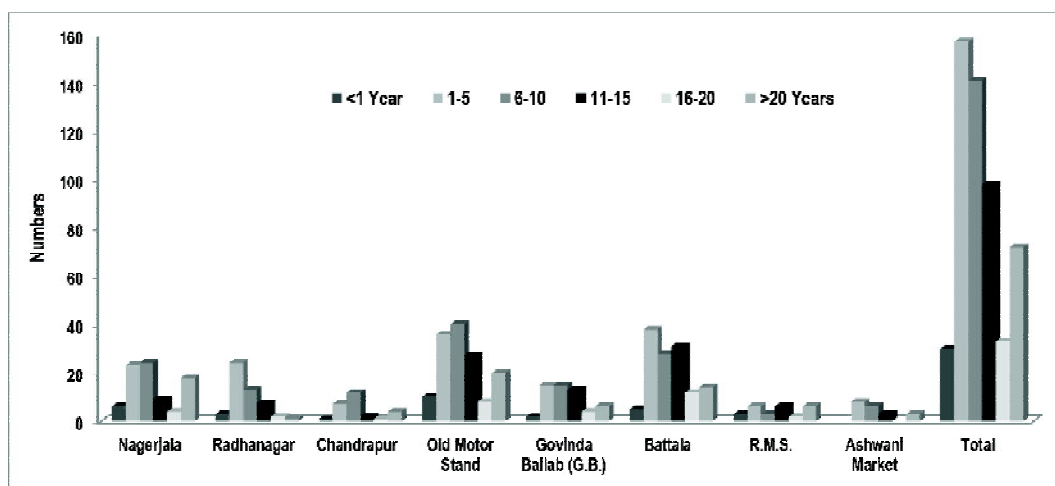


Fig. 9 Experience of the Auto Rickshaw Service Providers in AMC

Source: Data collected from field survey, 2017-18

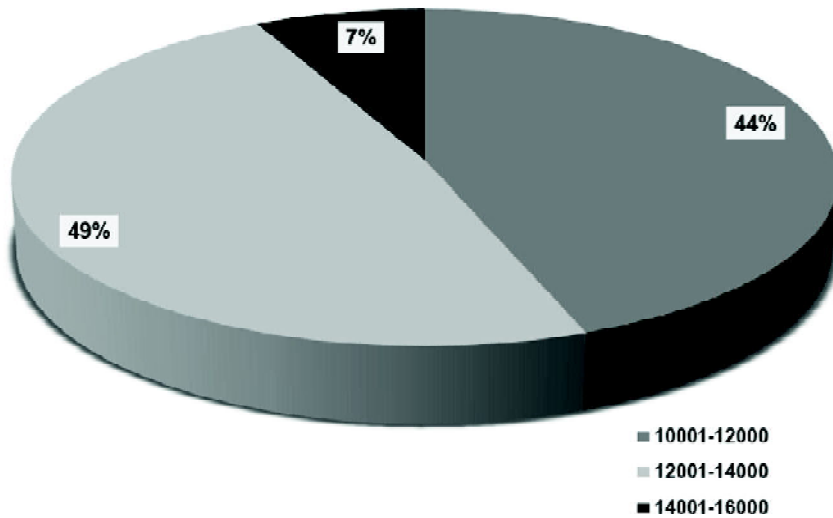
Monthly Expenditure

The monthly expenditure of a family is the cost of the basic necessities. Making a budget is very important. In the present study, the expenditure includes all sources of expenses of the service providers, including all the basic needs, food, non-food, health and maintenance of the vehicle, including fuel required to run in a month. The expenditure is from all the sources of income of the auto rickshaw service providers. It is learnt that 44 per cent auto rickshaw service providers have to spend rupees 10000-12000 per month, whereas 49 per cent have to expend 12000-14000 rupees per month. Only 7 per cent of the service providers have an expenditure of rupees 14000-16000 per month.

Table 1 Monthly Expenditure of the Service Providers from all Sources

Auto Rickshaw Stand	N	Range	Minimum	Maximum	Mean	Std. Deviation
Nagerjala	84	5000	10500	15500	12083.33	1231.693
Radhanagar	50	4000	10500	14500	12150.00	1225.786
Chandrapur	27	3500	10500	14000	11870.37	1123.119
Old Motor Stand	141	5500	10500	16000	12833.33	1267.262
Govindo Ballab	55	4500	10500	15000	12081.82	1318.542
Battala Motor Stand	128	5000	10500	15500	12675.78	1415.034
R.M.S	26	3500	10500	14000	12846.15	1172.768
Ashwini Market	20	5500	10500	16000	12825.00	1741.710

Source: Data collected from field survey, 2017-18

**Fig. 10** Monthly Expenditure of the Auto Rickshaw Service Providers

Source: Data collected from field survey, 2017-18

Auto rickshaw service providers of various nodes have different levels of income. However, it does matter under what circumstances the service providers work. The working condition includes number of trips provided per day, collection of trips per day, service hours spent in a day and the total monthly income of the service providers from that profession.

Trip Per Day

Trips are very imperative. The income of auto rickshaw service providers depends on number of trips they can do. From the field study, it is observed that around 65.16 per cent of the auto rickshaw service providers are giving trips 6-10 times per day. It is due to traffic congestion the number of trips sometimes becomes less. However, in areas like the Ashwini market, due to the lower availability of passengers, the autorickshaw drivers have to wait for a long time to get passengers, which causes fewer trips in a day. On the other hand, 15.82 per cent of auto rickshaw drivers make less than six trips in a day as they are also engaged in providing reserve trips to schools and offices during peak hours of the day. Moreover, 15.44 per cent are consigned for outing the commuters for 11-15 times in a month. Only 3.58 per cent of auto rickshaw drivers carries trip 16-20 times. The number of trips increases due to their engagement in serving commuters for different purposes such as recreational activities, office trips, and school trips, and reserve trips according to the commuters' choice.

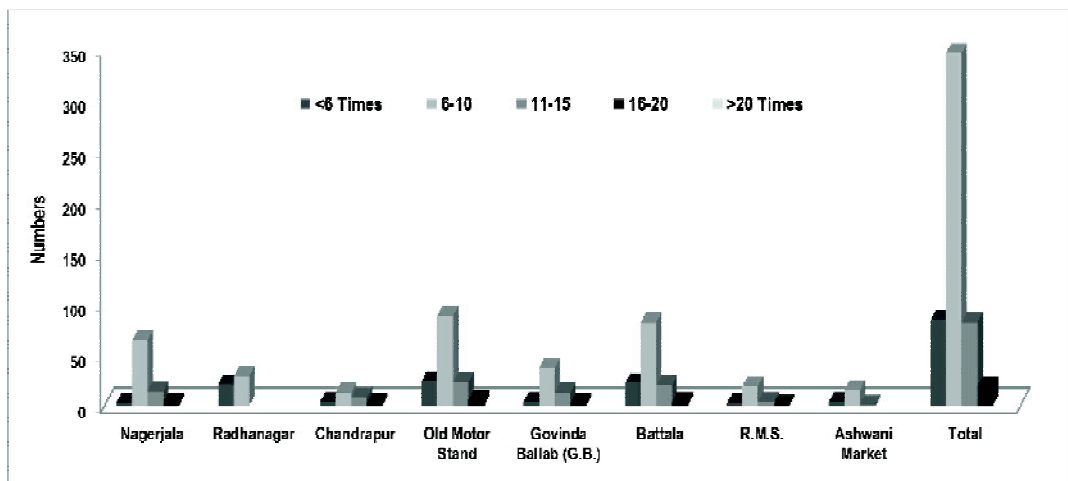


Fig. 11 Number of Trips Per Day

Source: Data collected from field survey, 2017-18

Trip Collection Per Day

From the survey, it is found that 46 per cent auto rickshaw service providers earn Rs. 200-400 per day, 38 per cent take home Rs. 400-600 daily, 12 per cent earn more than 600 rupees and only four per cent earn less than Rs. 200 daily.

In auto rickshaw transport service, a service provider can earn based on time spent by him in running auto rickshaw and the number of trips availed by him. During the last few decades, the shape, size and population of Agartala city have transformed enormously. The transport system

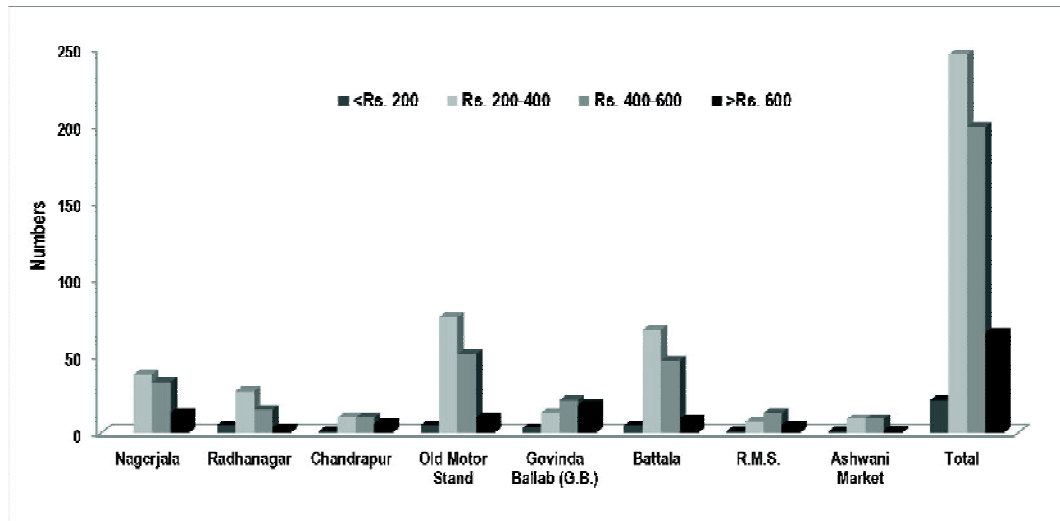


Fig.12 Number of Trips Collection Per Day

Source: Data collected from field survey, 2017-18

of Agartala Municipal Corporation has also been modified. As the number of vehicles boosted so as the number of passengers also increases. However, in most cases, they have to wait long for passengers as per their intake capacity (3+1). A few auto rickshaw routes are identified as the busiest routes where passengers are easily available. Perhaps due to this reason, few auto rickshaw service providers get a greater number of trips in comparison to others.

Table 2 shows the average wage collection on a daily basis from eight different Auto Rickshaw Stands. The wage collection per day differs from one stand to another. The wage collections are found maximum in Old Motor Stand, Govindo Ballab, Battala Motor Stand and R.M.S Auto Rickshaw Stand with a number of Rupees 760 per day. Minimum collection amounts to Rupees 150 per day in Old Motor Stand, Rupees 170 per day in Govindo Ballab, Rupees 180 per day in Battala Motor Stand and Rupees 190 per day in R.M.S Auto Rickshaw Stand. On the other hand, the wage collection is less in Ashwini Market compared to all the other Auto Rickshaw Stands. The collection range is Rupees 190 to 620 per day.

Service Hours per day

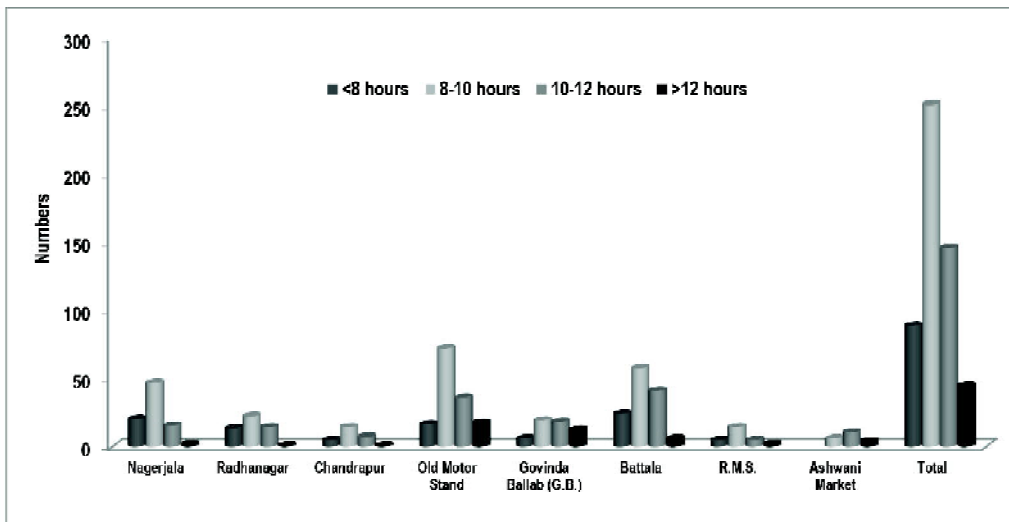
Auto rickshaw is an important element of the transport sector and people choose this service for commuting in different areas. The auto rickshaw drivers try to avail as many trips as possible to earn more by spending longer periods for this purpose. This study reveals that 47 per cent auto rickshaw service providers spend nearly 8-10 hours daily driving to earn money for their

Table 2. Wage Collection per day

Auto Rickshaw Stand	N	Range	Minimum	Maximum	Mean	Std. Deviation
Nagerjala	84	510.00	240.00	750.00	450.1190	147.54615
Radhanagar	50	600.00	150.00	750.00	371.8000	144.42977
Chandrapur	27	600.00	150.00	750.00	468.1481	169.68380
Old Motor Stand	141	610.00	150.00	760.00	408.2270	134.42621
Govindo Ballab	55	590.00	170.00	760.00	509.6364	161.01488
Battala Motor Stand	128	580.00	180.00	760.00	419.1406	124.45805
R.M.S	26	570.00	190.00	760.00	477.3077	141.55021
Ashwini Market	20	430.00	190.00	620.00	408.0000	123.78249
Total	531					

Source: Data collected from field survey, 2017-18

livelihood. They work from morning till night. Within this period, they take food, take some rest at home and do other activities. Nevertheless, 28 per cent auto rickshaw drivers drive 10-12 hours daily. Another 17 per cent and eight per cent auto rickshaw service providers spend driving less than eight hours and more than twelve hours, respectively. Those who run auto rickshaws for less than eight hours are busy with other activities like Business or part-time jobs.

**Fig. 13 Service Hour Per Day**

Source: Data collected from field survey, 2017-18

Table 3. Service Hour per day by the Auto Rickshaw Service Providers of Agartala City

Auto Rickshaw Stand	N	Minimum	Maximum	Mean	Std. Deviation
Nagerjala	84	7.00	14.00	9.4524	1.74525
Radhanagar	50	7.00	13.00	9.6000	1.52530
Chandrapur	27	7.00	13.00	9.6296	1.49739
Old Motor Stand	141	7.00	14.00	10.5106	1.51948
Govindo Ballab	55	7.00	14.00	10.9273	1.73049
Battala Motor Stand	128	7.00	14.00	10.2266	1.60322
R.M.S	26	7.00	13.00	10.1154	1.50537
Ashwini Market	20	9.00	14.00	11.1500	1.69442
Valid N (list wise)	20				

Source: Data collected from field survey, 2017-18

The above table shows the daily working hours of the auto rickshaw service providers of eight different Auto Rickshaw Stands. Working hours per day differs from one individual to another individual and also from one stand to another. The Auto Rickshaw Drivers of Ashwini Market work for a minimum 9 hours to a maximum 14 hours per day. The Auto Rickshaw Drivers of Nagerjala, Old Motor Stand, Govindo Ballab and Battala Motor Stand work for a minimum 7 hours to a maximum 14 hours per day. The Auto Rickshaw Drivers of Radhanagar, Chandrapur and R.M.S Motor Stand work for a minimum of seven hours to a maximum 13 hours per day.

Table 4 Monthly Income of the Service Providers from Driving Auto Rickshaws

Auto Rickshaw Stand	N	Range	Minimum	Maximum	Mean	Std. Deviation
Nagerjala	84	8000.00	4000.00	12000.00	8101.1905	2019.15490
Radhanagar	50	8000.00	4000.00	12000.00	7920.0000	2406.11466
Chandrapur	27	8000.00	4000.00	12000.00	7629.6296	1983.55059
Old Motor stand	141	6000.00	6000.00	12000.00	8063.8298	1720.51805
Govindo Ballab	55	8000.00	4000.00	12000.00	7909.0909	1955.73920
Battala Motor Stand	128	8000.00	4000.00	12000.00	7929.6875	1988.88088
R.M.S	26	5000.00	6000.00	11000.00	8423.0769	1879.85269
Ashwini Market	20	5500.00	4500.00	10000.00	6525.0000	1673.90970

Source: Data collected from field survey, 2017-18

Monthly Income of the Service Providers

All the service providers work to earn money to support their families. 37 per cent auto rickshaw service providers have informed that their monthly average income ranges from 6000 to 8000 rupees depending on per day trips and spending time. About 31 per cent are known to have a monthly income of rupees 4001 to 6000 whereas the monthly income of 20 per cent of auto rickshaw drivers is Rs. 8001 to 10000. 11 per cent have a monthly income of more than Rs. 10000 because they spend more time in providing the service. A small portion of around two per cent has income less than 4000 rupees.

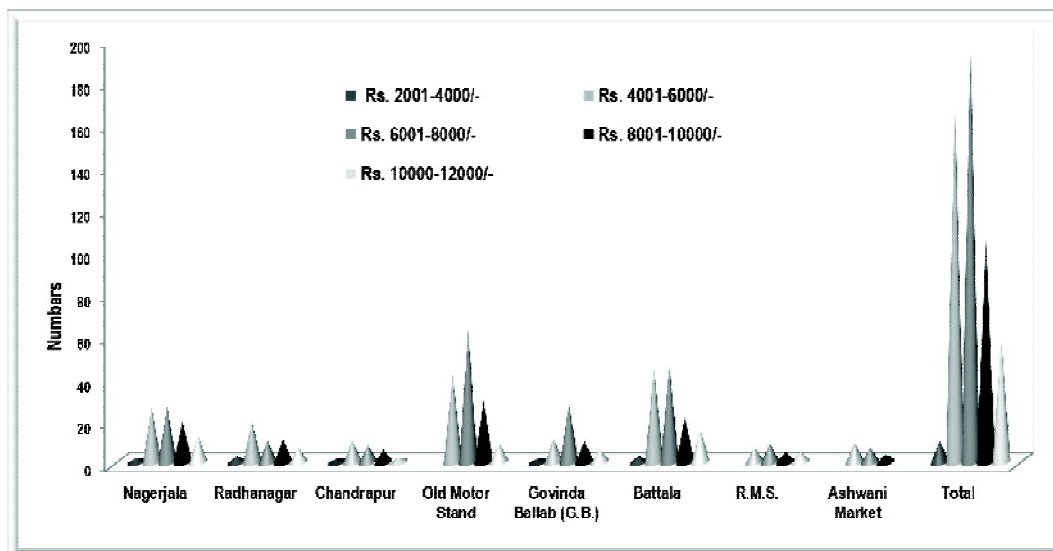


Fig. 14 Monthly Income of Auto Rickshaw Service Providers

Source: Data collected from field survey, 2017-18

Engaged in Other Economic Activities

The lives of the auto rickshaw service providers are full of financial stress as they struggle with low income. In Agartala, it is very difficult to maintain a family only with earning by running an auto rickshaw. They try to employ themselves in this occupation with the expectancy of earning decent wages for themselves and their families. However, most of the lives of auto rickshaw service providers remain under low economic status. In such a situation, the auto rickshaw service providers try to earn more wages in an uneven way by taking more passengers and providing extra trips through getting reserve trips for schools, offices, recreational activities of the commuters and even engaging themselves in transporting goods and commodities.

Furthermore, family members of the service providers also support them in many cases by engaging them in different works, such as part-time jobs. The study reveals that 54.99 per cent

of the service providers try to earn extra income, whereas 45 per cent of the respondents are not engaged in any type of work and are fully dependent on auto-rickshaw driving services.

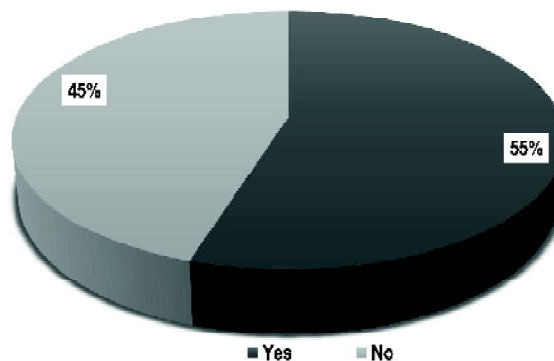


Fig.15 Engaged in Other Sources of Income

Source: Data collected from field survey, 2017-18

Table 5, shows the total monthly income (from all sources) of Auto Rickshaw Drivers in different Auto Rickshaw Stands. The Auto Rickshaw Drivers of Govindo Ballab and Battala Motor Stand have the highest monthly earnings, ranging from Rupees 5000 to 20000 every month. The Auto Rickshaw Drivers of Nagerjala Stand have monthly earnings from Rupees 7500 to 18000 per month. The Auto Rickshaw Drivers of Chandrapur Stand have monthly earnings ranging from Rupees 4000 to 18000 per month. The Auto Rickshaw Drivers of R.M.S. Stand have monthly income from Rupees 8000 to 17000 per month. The Auto Rickshaw Drivers of Old Motor Stand have monthly.

Table 5 Total Monthly Family Income of the Service Providers from all Sources

Auto Rickshaw Stand	N	Range	Minimum	Maximum	Mean	Std. Deviation
Nagerjala	84	10500.00	7500.00	18000.00	11029.7619	2487.74247
Radhanagar	50	6000.00	8000.00	14000.00	11020.0000	1388.58319
Chandrapur	27	14000.00	4000.00	18000.00	9962.9630	3907.40403
Old Motor Stand	141	10000.00	6000.00	16000.00	10539.0071	3067.14789
Govindo Ballab	55	15000.00	5000.00	20000.00	11036.3636	3355.28128
Battala Motor Stand	128	14000.00	6000.00	20000.00	10531.2500	3172.06681
R.M.S	26	9000.00	8000.00	17000.00	11346.1538	2288.09629
Ashwini Market	20	9000.00	4500.00	13500.00	7825.0000	2957.03888

Source: Data collected from field survey, 2017-18

earnings ranging from Rupees 6000 to 16000 per month. The monthly income of the Auto Rickshaw Drivers of Radhanagar Stand ranges from Rupees 8000 to 14000 per month. The Auto Rickshaw Drivers of Ashwini Market Stand have the lowest monthly earnings, ranging from Rupees 4500 to 13500 per month.

Infrastructural Facilities of the Auto Rickshaw Nodes

Infrastructural facilities of the auto rickshaw stand to include parking, food, drinking, sitting, and sanitation facilities. A recent study spotted that 86.06 per cent auto rickshaw drivers consume their food/Tiffin at home.

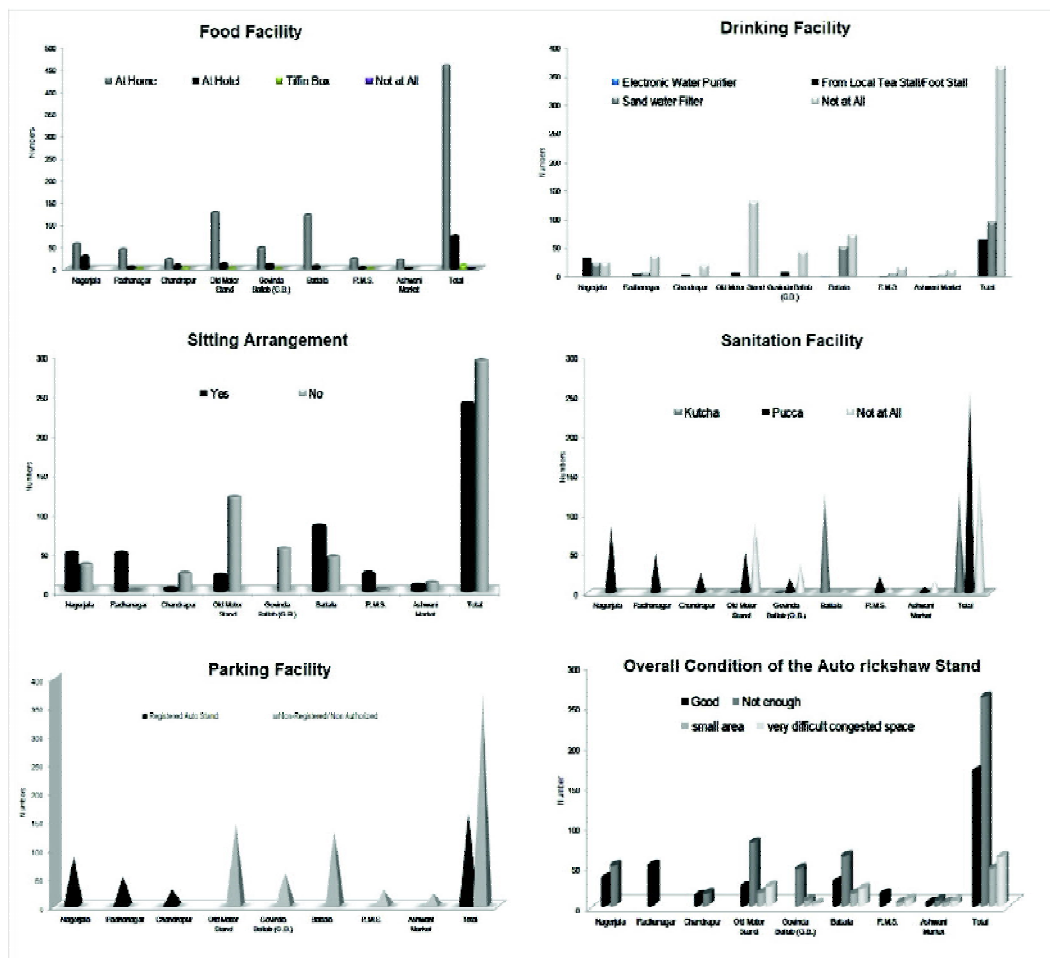


Fig. 16 Infrastructural Facilities of the Auto Rickshaw Nodes

Source: Data collected from field survey, 2017-18

which helps them save some amount of money, particularly when they do not get passengers. 13.94 per cent of drivers take their Food/Tiffin to hotels and about 1.51 per cent bring Tiffin from home. Various modes of vehicles need a station or junction from where they can take passengers to different places. It is called terminals. Different commuters move to various places by different modes of vehicles from particular nodes to their preferred destination. Nodes or terminals are built so that passengers, as well as the drivers, can take rest and wait comfortably before the journey. This is why it is important to have a few basic infrastructural facilities such as water, sanitation and sheds in those nodes. From the field study, it is revealed that 30.51 per cent auto rickshaw drivers take water in terminals from sand water filters and nearby local tea or food stalls. The majority of auto rickshaw drivers bring water from home. When they do not find any passengers, they take a rest in the terminals. Around 55.18 per cent auto rickshaw drivers 'opinion is that there is no proper sitting facility in the auto rickshaw terminals, especially in Nagerjala, Old Motor stand etc. whereas 44.82 per cent consider that they have a proper sitting facility in the terminals like Chandrapur, Radhanagar etc. On the other hand, 47.65 per cent of the Auto rickshaw service providers stated that the terminals are facilitated with sanitation facility (Pucca) Whereas 24.11 per cent stated that the auto rickshaw stands are not facilitated with pucca sanitation facility for which they have to consider to build temporary or Kutchha sanitation facility in their respective nodes. It is mainly observed in nodes like Battala Motor Stand, Ashwini Market etc. Moreover, from the field study, it is also found that only three auto rickshaw stands are recognised as registered auto rickshaw stands, which are Nagerjala, Radhanagar and Chandrapur whereas the rest are non-registered stands or nodes like Ashwini Market, Old Motor Stand, Govindo Ballab, Battala etc. It is clear from the field survey that registered auto rickshaw stands are facilitated with more basic infrastructures in comparison to unregistered auto rickshaw stands.

Occupational Susceptibility of Auto Rickshaw Service Providers

Health is a major cause of concern in driving occupations, especially among auto rickshaw drivers. Drivers spend a considerable amount of time in an environment full of pollutant gases, noisy, continuous cacophony and whole-body vibration. Further, irregularity of meals, no proper rest, awful condition of sanitary toilets, bad posture while driving and long working hours put stressful occupational. Such working parameters may be associated with various gastro-intestinal disturbances, musculo-skeletal, cardio-vascular, respiratory, hearing and other problems which can hardly compromise with driving safety issues (Whitelegg 1995, Saltzman and Belzer 2007, Singh et al. 2015). There have been lots of studies on the health profile of long-distance trucks (Ehrlich et al. 2005, Saltzman and Belzer 2007), tempo (Kartikeyan et al. 2004) and bus drivers (Poulsen 2004, Maculate 2000 and Winkleby 1988) and factors influencing them; but there have been very few studies about the short distance auto rickshaw drivers (Singh et al. 2015) and that too rarely done in India. As in many other cities, the auto rickshaw is one of the major modes of the public transport system in Agartala City too. Specific environmental degradation has increased the probability of disability or illness like hearing impairment, lowering the efficiency of the ocular system, breakdown of the nervous system etc., of auto rickshaw service providers. The present

work was planned to integrate and identify the health problems of the auto rickshaw drivers of various nodes of Agartala City (Debbarma and Mitra. 2017).

It is learnt that most auto rickshaw drivers are suffering from Muscular-skeletal problems that include knee, shoulder, wrist and back pain frequently. It is found that most of the auto rickshaw service providers face straight body aches after a whole day of service. Another major problem of health they face is the pain in the eye due to the stress of continuous driving. Furthermore, they also suffer low blood pressure and frequent gastric and respiratory problems. Due to taking their meals irregularly at odd hours, they mostly suffer acidity and gastro-intestinal problems, whereas inhaling of dust particles and smog while driving leads to respiratory problems. Unavailability of proper shedding in auto rickshaw nodes drivers are exposed to scorching sunlight that causes casual fever.

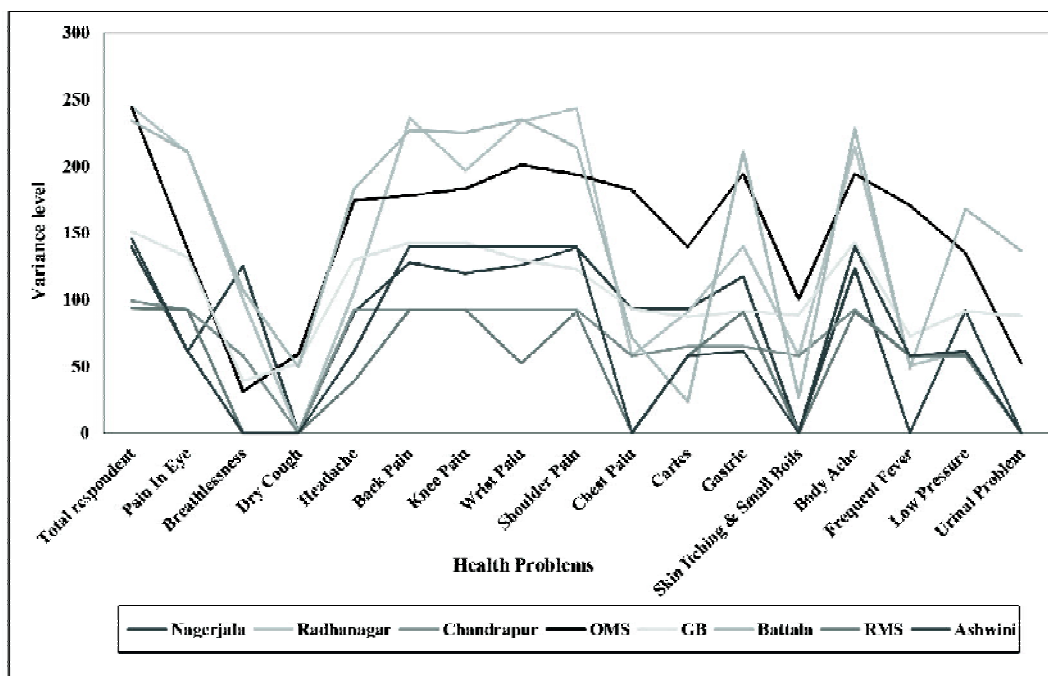


Fig 17 Identification of Different Health Problems based on the Perception Study on the Auto Rickshaw Service Providers of AMC Area

Source: Data collected from field survey, 2017-18

Problems Faced by the Auto Rickshaw Service Providers

The problem in different sectors of services in several areas is commonly found in everyday life. Agartala is a developing city. The city is not only increasing its size, shape, population but

also in the number of vehicles. Auto rickshaw service providers of the Agartala Municipal Corporation area are also facing the major inconvenience of Traffic jams on different roads during rush hour. The field study shows that 23 per cent of the auto rickshaw service providers face the difficulty of traffic jams due to the increase in vehicular activity and the width of the road not being sufficient. On the other hand, auto rickshaw service providers also face a lack of infrastructural facilities in their respective auto stands. 12.25 per cent of the auto rickshaw service providers viewed that the basic necessity of drinking and sanitation facilities are lacking in most of the auto rickshaw stands. Apart from these problems, the auto rickshaw service providers also highlighted that they frequently face problems related to the renewal of their documents (7.89 per cent), permit obtaining (8.75 per cent), petrol and CNG gas price rise (11.94 per cent), maintenance and high repairing cost of auto rickshaws (10.63 per cent) respectively.

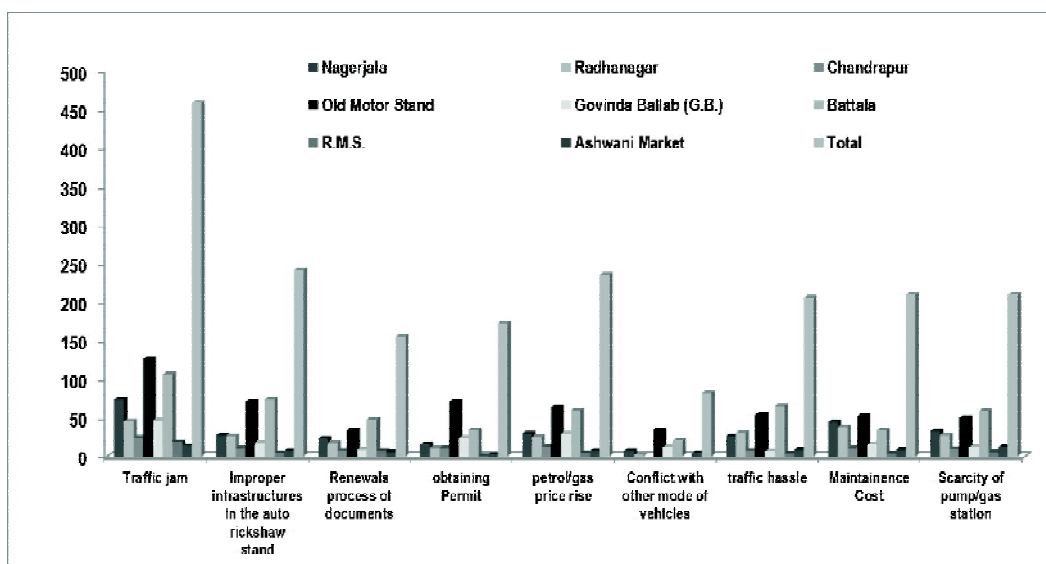


Fig 18 Perception of Various Problems faced by Auto Rickshaw Service Providers of AMC Area

Source: Data collected from field survey, 2017-18

Moreover, when a petrol pump station stops working, numerous numbers of different vehicles are enforced to assemble in another pump station. In such cases auto rickshaw drivers have to wait long hours in queue in the pump station. It is observed from the field survey that 10.63 per cent of the auto rickshaw service providers face a scarcity of gas stations. Furthermore, 4.2 per cent of the auto rickshaw service providers also face conflicts with the other modes of passenger vehicles for carrying the commuters and the perception of 10.43 per cent of auto rickshaw drivers is that they face frequent traffic hassles from the traffic policemen for charging them in an uneven and unlawful manner. Under all these unfavourable circumstances, the auto rickshaw service providers have to provide service to the dwellers to commute to their preferred destinations.

Effects

Working Hours and Wage Per Day

Station wise, Karl Pearson Co-efficient of Correlations is calculated between hours of work per day and wage earned per day and the values are presented in except Ashwini market ($r = 0.533$) that also have a positive relation but slightly less in comparison to other auto rickshaw nodes that have a strong positive relation between the hours of work they spend in running the auto rickshaws and wage earned from this profession on a daily basis. However, the respondents felt that though they work for a maximum 14 hours a day, they earn less income as the trips that they get are infrequent in nature. Moreover, due to the increase of stiff competition, their income has come closer in less income margin. Yet they somehow manage to sustain their livelihood as they provide extra trips, spend long hours in their station and try to earn respectable money for bread and butter at the end of the month.

Table 6. Co-efficient of Correlation between Hours of work and Wages Earned Per Day

Auto Rickshaw Station	Co-efficient of Correlation
Nagerjala	+0.871
Radhanagar	+0.752
Chandrapur	+0.893
Old Motor Stand	+0.803
Govindo Ballab	+0.805
Battala Motor Stand	+0.744
R.M.S.	+0.775
Ashwini Market	+0.533

Source: Data collected from field survey, 2017-18

Monthly Income and Expenditure

Pearson's Coefficient correlation depicts that there is a close value of the positive relationship between monthly income and expenditure. However, in some auto rickshaw nodes, wages are relatively lower in comparison to the monthly expenditure. Moreover, working conditions and earning wages, which directly affect the socio-economic conditions of the service providers, also have a close relationship. Thus, there is an inequality of income prevailing among different auto rickshaw drivers of different nodes. The following shows surveyed areas where the monthly income and expenditure varies according to various circumstances and conditions:

i. Nagerjala

Nagerjala is one of the registered auto rickshaw nodes as well as a terminal in Agartala City. Previously, Nagerjala was a marshy land till 2005. It was a wetland where water covered the ground for a long period of time. The marshy land of Nagerjala was usually treeless and dominated by grass and other herbaceous plants. The area was also surrounded by scattered settlements. With the passage of time, the present area has been transformed into a huge terminal zone. Mainly, the terminal provides commuters with the facility to travel towards the southern part of the state, covering the Sepahijala, Gomati and South Tripura Districts. The terminal is for deluxe buses as well as Mini buses, jeeps, Cruiser and 4-wheeler big passenger carriages (Tata Magic), and autos (three-wheeler). The Central, Northern and Eastern parts of the city areas also are well connected and accessible by auto rickshaws. Nagerjala auto rickshaw connects all nearby nodes like Chandrapur, Old Motor Stand, Gurkha Basti, R.M.S. Chowmuhuni etc. The node consists of a diverse group of private and public transport systems, which includes small and heavy vehicles that provide travellers to short or long-distance destinations in different directions (Debbarma and Mitra, 2017). Under these circumstances, the commuters also get attracted to visit the terminal to avail their preferred mode of vehicle. From the Coefficient of Correlation, it is clear that Nagerjala has a positive correlation ($r=+0.259$) between the monthly income and expenditure (Table 7). They have the scope of earning and running their livelihood in a positive manner because of the sufficient availability of commuters and the diverse connectivity of auto routes in and around Agartala City.

Table 7. Coefficient of Correlation of Monthly Income and Expenditure of the Auto Rickshaw Service Providers of Nagerjala Motor Stand

Nagerjala		Income	Expenditure
Income	Pearson Correlation	1	.259*
	Sig. (2-tailed)		.017
	N	84	84
Expenditure	Pearson Correlation	.259*	1
	Sig. (2-tailed)	.017	
	N	84	84
*. Correlation is significant at the 0.05 level (2-tailed).			

Source: Computed by authors using SPSS-23

ii. Radhanagar

Radhanagar motor stand is one of the most important terminals where vehicles are available to move to the north-eastern sides of the North, Unakoti, Khowai and most of the areas of West

Tripura Districts. In these terminals, Auto rickshaws, jeeps, cruisers, light motor vehicles, minibuses and also deluxe buses are available for passengers. It is a well-maintained and well-organised terminal. It is a registered terminal facilitated by a male and female sanitary facility, a passenger shed, and an information centre equipped with monitors for entertaining the commuters. From this terminal, Auto rickshaws are available for Gandhi Gram, Narshingarh and most of the parts of the northern zones of Agartala City. They provide long service hours but do not earn a respectable wage on a daily basis. However, the availability of commuters is very infrequent and the intensity does not remain the same daily. At the end of the month, most of the service providers find that their meagre earnings cannot meet the expenditure of the family needs. From the Coefficient of Correlation, it is clear that Radhanagar had a negative correlation ($r = -0.356$) between the monthly income and expenditure (Table 8). The main reason is due to the minimum availability of routes and less intensity of commuters.

Table 8. Coefficient of Correlation of Monthly Income and Expenditure of the Auto Rickshaw Service Providers of Radhanagar Motor Stand

Radhanagar		Income	Expenditure
Income	Pearson Correlation	1	-.356*
	Sig. (2-tailed)		.011
	N	50	50
Expenditure	Pearson Correlation	-.356*	1
	Sig. (2-tailed)	.011	
	N	50	50
*. Correlation is significant at the 0.05 level (2-tailed).			

Source: Computed by authors using SPSS, V23

iii. Chandrapur

Chandrapur Inter-state bus terminus (ISBT) is the key terminal which connects west Tripura with North, Dhalai, Unakoti districts and also some important tourist places like Unakoti temple and Jampui hill. It is also the essential terminal for connecting other states like Assam and Meghalaya. Here, basically, buses and jeeps are common modes of transport. Daily services are given to those destinations. The terminal is 'T' shaped in nature. It is well equipped with a passenger shed, information centre and various other facilities. However, Auto rickshaws are very less in number, but they provide multiple.

Table 9. Coefficient of Correlation of Monthly Income and Expenditure of the Auto Rickshaw Service Providers of Chandrapur Motor Stand

Chandrapur		Income	Expenditure
Income	Pearson Correlation	1	.336
	Sig. (2-tailed)		.086
	N	27	27
Expenditure	Pearson Correlation	.336	1
	Sig. (2-tailed)	.086	
	N	27	27
*. Correlation is significant at the 0.05 level (2-tailed).			

Source: Computed by authors using SPSS-23

route services that include Nagerjala towards the southern zone, Govindo Ballab towards the north and, Khayerpur and even Jirania, which is the outskirts of Agartala City, towards the Eastern zone of the city. The income of auto rickshaw drivers of Chandrapur is sufficient enough to meet their monthly expenditure. From the Coefficient of Correlation, it is clear that Chandrapur has a Positive correlation ($r=0.336$) between the monthly income and expenditure (Table 9).

iv. Old Motor Stand

The Old Motor stand is an unregistered auto rickshaw node in Agartala City. The node consists of different categories of the public transport system, which includes small and heavy vehicles that provide commuters to move short and long distances in different directions in the urban area. These include jeep and sumo, magic vans, minibus, deluxe buses and city buses, along with a high concentration of auto rickshaws. During the field survey, the total number of auto rickshaws counted in this area was 141. The node also consists of multiple routes that connect each and every corner of the city, providing the maximum level of services. By the increasing demand for transportation, the node gained its popularity for providing commutation even towards the outer periphery of Agartala Municipal Corporation. The outskirts include Anand Nagar and Gabordi towards the south-east direction and Jirania, Madhab-Bari towards the eastern direction. Thus, the service providers in this node have the maximum opportunity to generate income and meet their monthly expenses. From the Coefficient of Correlation, it is found that Old Motor Stand had a Positive correlation ($r=0.234$) between the monthly income and expenditure (Table 10).

Table 10. Coefficient of Correlation of Monthly Income and Expenditure of the Auto Rickshaw Service Providers of Old Motor Stand

Old Motor Stand		Income	Expenditure
Income	Pearson Correlation	1	.234**
	Sig. (2-tailed)		.005
	N	141	141
Expenditure	Pearson Correlation	.234**	1
	Sig. (2-tailed)	.005	
	N	141	141
*. Correlation is significant at the 0.05 level (2-tailed).			

Source: Computed by authors using SPSS, V23

v. Govindo Ballab

Govindo Ballab, popularly known as G.B. for its hospital, which is one of the top medical infrastructures of Agartala City, is also an unregistered auto rickshaw node in Agartala Municipal Corporation Area. There is a high concentration of auto rickshaws and city bus services in this node. There are four main routes that connect Agartala City with various places. The first route is the Old Motor Stand and Nagerjala, which bifurcates after reaching North gate. It includes multiple intersections of nodes before it reaches its last destination. The second route is the Old Motor Stand Route through Abhoynagar Road. The Third is the Indranagar route and its last-mile connectivity is Chandrapur ISBT. The fourth route is the Nandan Nagar-Chanmari Route,

Table 11. Coefficient of Correlation of Monthly Income and Expenditure of the Auto Rickshaw Service Providers of Govindo Ballab

Govindo Ballab		Income	Expenditure
Income	Pearson Correlation	1	-.116
	Sig. (2-tailed)		.400
	N	55	55
Expenditure	Pearson Correlation	-.116	1
	Sig. (2-tailed)	.400	
	N	55	55
*. Correlation is significant at the 0.05 level (2-tailed).			

Source: Computed by authors using SPSS, V23

with its last destination to Banikya Chowmuhuni. Interestingly, except for the first route, the other routes are single routes that move from the origin to the destination without touching any other intersection of nodes. That is why commuters are also very less in these routes. The service providers of these routes do not get a sufficient number of commuters and naturally, the income of auto drivers of this node is quite less. This shows that the relationship between expenditure and monthly income is negative in nature. From the Coefficient of Correlation, it is found that Govindo Ballab has a negative correlation ($r = -0.116$) between the monthly income and expenditure (Table 11) of auto rickshaw drivers.

vi. Battala Motor Stand

Battala is an unregistered auto rickshaw node in the Agartala urban area. There is no other transport system other than a high concentration of auto rickshaws in this node. During the field survey total number of auto rickshaws counted in this area was 128. It provides connectivity to various points of Agartala city. This includes connectivity with Milan Sangha, Drop Gate, M.B.Tilla, Beltali, Camper bazaar, Badharghat, Sidhi Ashram, ONGC Chowmuhuni, Hapania, Amtali, Suryamaninagar, Bhattapukur and Arabinda Sangha. All these areas are under the urban periphery of AMC. The node also connects rural-urban fringe areas, which include areas like Ranir Khamar, Kathaltali etc. This particular node connects each corner of the southernmost part of Agartala City and hence an auto rickshaw service provider of this node has the maximum opportunities, which help them to meet the necessary expenditure for their family members. This shows that the relationship between expenditure and monthly income of auto rickshaw drivers of this node is strongly positive in nature. From the Coefficient of Correlation, it is found that Battala Motor Stand has a strongly positive correlation ($r = 0.539$) between the monthly income and expenditure (Table 12).

Table 12. Coefficient of Correlation of Monthly Income and Expenditure of the Auto Rickshaw Service Providers of Battala Motor Stand

Battala Motor Stand		Income	Expenditure
Income	Pearson Correlation	1	.539**
	Sig. (2-tailed)		.000
	N	128	128
Expenditure	Pearson Correlation	.539**	1
	Sig. (2-tailed)	.000	
	N	128	128
**. Correlation is significant at the 0.01 level (2-tailed).			

Source: Computed by authors using SPSS, V23

vii. RMS

Rickshaw Motor Shmramik, popularly known as RMS or RMS Chowmuhuni is one of the most important nodes of Agartala city. It is situated in the central zone of the city and connected very near to the Hari Ganga Basak Road (H.G.B. road), which is one of the biggest commercial zones of the state as well as the capital. There is no other public transport system other than auto rickshaw in this node. A commercial zone surrounds the RMS to the south, Old Motors stands on the eastern side, the main residential zone on the western side and administrative offices of Agartala City on the north side. The availability of the commuters in this zone is very high and the service providers get the scope to commute them according to their preferred destination. This shows that the relationship between expenditure and monthly income of auto drivers of this node is relatively positive in nature. From the Coefficient of Correlation, it is found that RMS had a positive correlation ($r = 0.349$) between the monthly income and expenditure (Table 13).

Table 13. Coefficient of Correlation of Monthly Income and Expenditure of the Auto Rickshaw Service Providers of RMS

RMS		Income	Expenditure
Income	Pearson Correlation	1	.349
	Sig. (2-tailed)		.081
	N	26	26
Expenditure	Pearson Correlation	.349	1
	Sig. (2-tailed)	.081	
	N	26	26
**. Correlation is significant at the 0.01 level (2-tailed).			

Source: Computed by authors using SPSS, V23

viii. Ashwini Market

It is one of the important auto rickshaw nodes as it connects the rural area with the main urban centres of Agartala City. It is located at the far end of the Hapania Hospital Chowmuhuni with a few numbers of Auto Rickshaws. During the field survey, only 20 auto rickshaw service providers were found in this particular station. The availability of commuters in this zone is frequent as a number of people commute for various purposes. Moreover, except auto rickshaws, there is no other mode of public vehicle available at this point. This helps a few auto rickshaw drivers to earn more with less competition. This shows that the relationship between expenditure and monthly income of auto rickshaw drivers of this node is strongly positive in nature. From the Coefficient of Correlation, it is found that the Ashwini Market has a very strong positive correlation ($r = 0.750$) between the monthly income and expenditure (Table 14).

Table 14. Coefficient of Correlation of Monthly Income and Expenditure of the Auto Rickshaw Service Providers of Ashwini Market

Ashwini Market		Income	Expenditure
Income	Pearson Correlation	1	.750**
	Sig. (2-tailed)		.000
	N	20	20
Expenditure	Pearson Correlation	.750**	1
	Sig. (2-tailed)	.000	
	N	20	20
**. Correlation is significant at the 0.01 level (2-tailed).			

Source: Computed by authors using SPSS, V23

Thus, it is clear from the study that the influence of auto rickshaw is highly felt in Nagerjala, Chandrapur, Old Motor Stand, Battala, RMS and Ashwini Market. It is because it connects various destinations through various routes. However, Ashwini Market has the strongest positive relation of income and expenditure because there is no other mode of vehicle available at this point. This helps few auto rickshaw drivers to earn more with less competition. On the other hand, the least or negative relation between income and expenditure is found in the Radhanagar and Govindo Ballab nodes, as the routes there are very limited in numbers as well as competition with other modes of vehicles, making it difficult for the service providers to maintain their livelihood (Table 15). This shows that the availability of passengers is not proportionate to the number of auto

Table 15. Co-efficient of Correlation between Monthly Income and Expenditure of Agartala City

Auto Rickshaw Station	Co-efficient of Correlation
Nagerjala	+ 0.259
Radhanagar	-0.356
Chandrapur	+0.336
Old Motor Stand	+0.234
Govindo Ballab	-0.116
Battala Motor Stand	+0. 539
R.M.S.	+0.349
Ashwini Market	+0.750

Source: Data collected from field survey, 2017-18

rickshaws that inverse the relationship i.e., maximum passengers > maximum auto rickshaw, whereas in reality, maximum passengers < minimum auto rickshaws) to take maximum benefit by the selected routes in selected nodes. This shows that the number of vehicles is not proportionate to the number of routes and is unevenly distributed in Agartala City, which negatively affects this commercial driving profession, especially in the selected study areas.

Job Satisfaction

Any job which earns a minimum amount of wage that could meet the basic and daily requirements of the service providers is termed job satisfaction. Figure no. 19 shows that the auto rickshaw service providers of the Nagerjala, Chandrapur, Old Motor Stand, Battala, RMS and Ashwini Market are very satisfied with their service as they can meet the expenditure of their family in a rightful manner of earning. Auto Rickshaw service Providers of Ashwini Market stand have the highest percentage of satisfaction level (0.750). However, with positive, negative satisfaction also prevails. In the case of Radhanagar and Govindo Ballab, the earnings of auto rickshaw service providers are not sufficient to meet their expenditures. So, the satisfaction level is negative in nature.

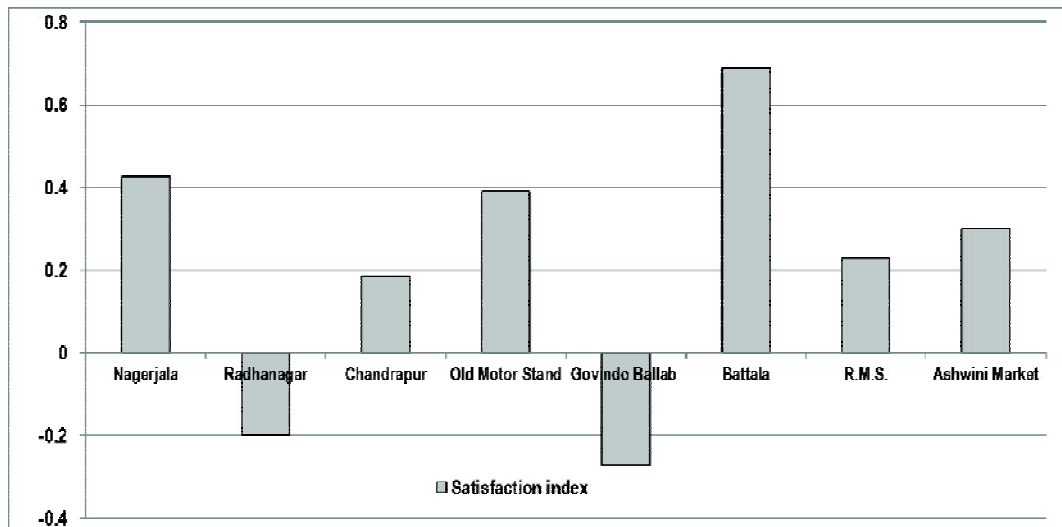


Fig 19. Level of Satisfaction of the Auto Rickshaw Service Providers in AMC Area

Conclusion

As the demand for urban transport increases in Agartala, so too does the popularity of the Auto Rickshaw. The demand for auto rickshaw services in urban transportation has grown by leaps and bounds with the growing population. It remains as the integrated feeder mode, providing

first and last-mile connectivity. It also ensures accessibility to commuters with special needs, such as the elderly and people with disabilities. Thus, the present field study that is done in eight different auto rickshaw nodes of the Agartala urban area shows the socio-economic condition of the service providers.

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