



# ROLE OF ELECTRIC RICKSHAWS IN LANKA TOWN AND ITS HINDER LANES OF HOJAI DISTRICT, ASSAM

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## ABSTRACT

*Electric rickshaws are three wheeler battery operated para transit vehicles. From economic point of view they are far better than auto rickshaws which are run on petrol or diesel. India, Govt. had been funding with the help of Ministry of Non-conventional energy sources (MNES) to design and develop more safe and economic variety of E-rickshaws since 2000 till date. The present study on E-rickshaw is made to know role of E-rickshaws in passenger movement in Lanka town and its hinder lanes. Drivers of para transit was interviewed to know their socio-economic status and how it provide employment to poor literate in habitant of Lanka to serve their family livelihood. It is a cheap and environment friendly means of transport in town areas which produces negligible air pollution. Hence, conventional (petrol/diesel) auto-rickshaws are going to become past and E-rickshaws are going to become future day by day.*

**KEY WORDS:** E-rickshaw, livelihood, para transit, hinder lanes.

## INTRODUCTION

E-rickshaws have shown their identity as new era means of transportation in most of the cities of India. They have become a new source of income for many unskilled or semiskilled less educated People of Lanka town and its hinder lanes. E-rickshaws run on rechargeable battery and charging cost is very low than the cost of diesel or petrol hence economical. It provide mobility to the passengers from railway station Lanka to bus stands Nagaon, Kheroni, Lumding and Umrangshu and vice-versa. It also provide door to door service within the town and its hinder lanes. By operating E-rickshaw a driver can earn Rs 600 to Rs 1000 per day. Due to increasing number of rickshaws in the town it create congestion and hence slow down the traffic movement.

In the year 2000, under the auspices of the Government of India, an innovative individual conceptualized and fabricated the very first electric rickshaw in the country. This pioneering creation was christened as "ELECSHA" and successfully acquired a trademark. These electric rickshaws, powered by batteries with zero carbon emissions, earned recognition as an exceptionally eco-friendly mode of transportation. They are not only user-friendly but also boast minimal maintenance and operating costs. Moreover, they offer a favourable return on investment for their owners. Requiring a modest initial investment and demanding relatively little human effort, they serve as a means of livelihood, especially for those with limited education, literacy, or vocational skills.

E-rickshaws have now become a cornerstone of local transportation for shorter distances, particularly in the state of Assam and India as a whole. They have gained immense popularity as a cost-effective mode of urban and rural conveyance, especially in areas where other transportation services are scarce or prohibitively expensive. E-rickshaws have outshone traditional cycle rickshaws due to their efficiency, speed, and affordability. Notably, in rural areas like Lanka in the Hojai district of Assam, E-rickshaws play a crucial role in providing transportation services to remote regions devoid of regular bus services, thus facilitating connectivity among villages. Consequently, this study aims to examine the significant impact of E-rickshaws on the rural transport system in Lanka, Hojai district, Assam.

## OBJECTIVES

- E-rickshaws' role in creating jobs and serving as a new form of transportation.
- Examine the demographic characteristics of drivers within the study region.
- To research the socioeconomic position of their group.

## METHODOLOGY

For study and analysis both primary and secondary data were collected. Primary data are collected through direct personal interviews of the drivers during the month of March-April/2023. A total of 100 E-rickshaw drivers were interviewed from different parking places beside the roads of Lanka town and its hinder lanes. Secondary data were collected from different publish and unpublished



source like books, journals ,internet etc. Collected data are tabulated below and analyse by simple statistical tools, like percentage analysis.

## STUDY AREA

The town of Lanka is located in the Hojai District of Assam, about 11 kilometers from Sankardev Nagar, the district headquarters. Because of its unique location between the Mikir Hills to the east and the Western Jaintia Hills to the west, it has a peculiar rain-shadow characteristic at latitude 25.9329083 and longitude 92.9379687. Lanka railway station, railway station to Hawaipur , railway station to Nagaon centigate, station to Bamun gaon and vice –versa.

## RESULTS AND ANALYSIS

Data Tables (Source- Field Survey):

**Table-1.1. Location Distribution of E-rickshaw Drivers**

Location	Distance from Lanka railway station (in Km)	No. of Respondents
Lanka railway station	0	20
Nagaon centigate	1.5	20
Bamun gaon	7	20
Hawaipur	15	20
Islam patty	3	20
<b>Total</b>		<b>100</b>

**Table 1.2. Sex Distribution of the E-rickshaw Drivers**

Sex	No. of E-rickshaw Drivers	E-rickshaw Drivers (in %)
Male	100	100.00
Female	0	0.00
<b>Total</b>	<b>100</b>	<b>100.00</b>

**Table 1.3. Age Composition of the E-rickshaw Drivers**

Age (in Years)	No. of E-rickshaw Drivers	E-rickshaw Drivers (in %)
15 - 25	25	25
25 - 35	60	60
35 - 45	10	10
45 - 55	5	5
<b>Total</b>	<b>100</b>	<b>100.00</b>

Source: Field Survey

**Table 1.4. Marital Status of the E-rickshaw Drivers**

Marital Status	No. of E-rickshaw Drivers	E-rickshaw Drivers (in %)
Married	60	60
Unmarried	40	40
<b>Total</b>	<b>100</b>	<b>100.00</b>

**Table-1.5. Educational Status of the E-rickshaw Drivers**

Educational Status	No. of E-rickshaw Drivers	E-rickshaw Drivers (in %)
Illiterate	0	0
Upto Class-IV	5	5
Upto Class-VIII	10	10
Upto Class-X	40	40
Upto Class-XII	35	35
Graduate & Above	10	10
<b>Total</b>	<b>100</b>	<b>100.00</b>

**Table 1.7 Family Size of the E-rickshaw Drivers**

Family Size	No. of E-rickshaw Drivers	E-rickshaw Drivers (in %)
Less than 5	60	60
5 - 8	40	40
9 - 12	0	0
Above 12	0	0
<b>Total</b>	<b>100</b>	<b>100.00</b>

**Table 1.8. Daily Working Hours of the E-rickshaw Drivers**

Average Daily Working Hours	No. of E-rickshaw Drivers	E-rickshaw Drivers (in %)
0 - 6	30	30
6 - 12	70	70
12 & Above	0	0
<b>Total</b>	<b>100</b>	<b>100.00</b>

**Table 1.9 Daily Income of the E-rickshaw Drivers**

Average Daily Income (in Rs.)	No. of E-rickshaw Drivers	E-rickshaw Drivers (in %)
Less than 600	30	30
600 - 800	50	50
800-1000	20	20
Above 1000	0	0.00
<b>Total</b>	<b>100</b>	<b>100.00</b>

**Table-1.10 Daily Battery Charging Cost of the E-rickshaws**

Daily Battery Charging Cost (in Rs.)	No. of E-rickshaw Drivers	E-rickshaw Drivers (%)
100	60	60
140	40	40
200	0	0
<b>Total</b>	<b>140</b>	<b>100.00</b>

**Table-1.11 Ownership Status of the E-rickshaws**

Ownership Status	No. of E-rickshaw Drivers	E-rickshaw Drivers (in %)
Owned	75	75
Rented	25	25
<b>Total</b>	<b>100</b>	<b>100.00</b>



**Table-1.6. Religion Distribution of the E-rickshaw Drivers**

Religion	No. of E-rickshaw Drivers	E-rickshaw Drivers (in %)
Hindu	65	65
Islam	35	35
Others	0	0.00
<b>Total</b>	<b>100</b>	<b>100.00</b>

**Table-1.12. Duration of Experiences of the E-rickshaw Drivers**

Duration of Experience	No. of E-rickshaw	E-rickshaw Drivers
Less than 3	20	20
3 - 6	30	30
6 - 12	40	40
12 - 24	10	10
Above 24	0	0
<b>Total</b>	<b>100</b>	<b>100.00</b>

## DISCUSSION

The location distribution of E-rickshaw drivers in Lanka, Assam, is an interesting and significant aspect of the local transportation system. E-rickshaws, or electric rickshaws, have gained popularity in recent years as an eco-friendly and affordable means of transportation in many parts of India, including Assam. These vehicles are not only an efficient mode of commuting but also provide sustainable employment opportunities for many individuals, particularly in semi-urban and rural areas like Lanka, Assam. Lanka is a picturesque town in the Hojai district of Assam, located in the northeastern region of India. E-rickshaws have become a lifeline for the local population, offering a convenient way to navigate through the narrow lanes and busy streets.

E-rickshaw drivers are concentrated in and around the town center, market areas, educational institutions, residential areas, rural outskirts where most of the commercial and retail activity takes place. This is where passengers often require short-distance transportation, making E-rickshaws an ideal choice for commuting within the town. They serve as feeder services, helping passengers reach their final destinations from these major transit points. The location distribution of E-rickshaw drivers in Lanka, Assam, not only supports the local economy but also promotes sustainable and environmentally friendly transportation. This mode of commuting provides income opportunities for many individuals and addresses the transportation needs of the community. Moreover, it aligns with the broader trend of adopting eco-friendly and energy-efficient transportation solutions to reduce carbon emissions and promote a greener future.

Table 1.2 shows that most of the E-rickshaw drivers are male and no female are allowed act as driver in our Indian society. Table 1.3 shows that 60% drivers are of age group 25-35 years who will have to take more financial responsibility. Table 1.4 shows that 60% drivers are married and rest are unmarried. Table 1.5 gives educational status of drivers who are from illiterate to even graduate also. Table 1.6 shows that most of drivers are from Hindu community(65%) but Muslim community is also coming up in this profession. Table 1.7 shows family sizes of the drivers. Table 1.8 and 1.9 shows their working hours which is generally 6-12 hours and they can earn up to Rs1000 per day. Table 1.10 shows their battery charging cost which very less in comparison to petrol or diesel cost. Table 1.11 shows that most of the drivers are having their own vehicles(75%) and rest are having rented vehicles for which they will have to pay Rs200 per day to vehicle owners. Table 1.12 shows experiences of the drivers. Drivers also reported that cost of 4 seater Tuk-Tuki is around Rs2 lac and 3 seater new model E-rickshaw (Mahindra) is 4 lac which heavy and comfortable.

### Problems created by E-rickshaw services

- Traffic congestion possibility of accidents: Due to in adequate widths of streets and increasing number of E-rickshaws in the town creates congestion and some times accidents to pedestrians. Some times accidents occurred due to hitting by trucks, buses and cars.

## RECOMMENDATIONS/ SUGGESTIONS

- Banks should provide easy loans to unemployed youths for purchasing new advanced type of E-rickshaw.
- Main road within the Lanka town is under construction and has been widen but it is not marked for lane separations for different speed of vehicles and a separate lane must be provided specially for E-rickshaws.
- Fixed parking spots/ places must be provided for E-rickshaws.

## CONCLUSION

The study highlights the significant role of E-rickshaws in providing both transportation for local short distances and a source of income in rural areas of Lanka town, Hojai district, Assam. E-rickshaws benefit many people by offering daily income opportunities and improving connectivity in the rural region, despite occasional challenges faced by drivers. These vehicles have gained popularity as a mode of transport for short distances and as a new source of livelihood for numerous families in the study area. To support this, the government can consider providing subsidized loans for purchasing E-rickshaws under a self-employment scheme.



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