DISSERTATION ON

"THREE-WHEELER E-RICLSHAW AS A MEANS OF REDUCING UNEMPLOYMENT IN NALBARI TOWN"

SUBMITTED TO GUWAHATI UNIVERSITY FOR PARTIAL FULLFILMENT FOR THE DEGREE IN MASTER OF COMMERCE UNDER GAUHATI UNIVERSITY 2021-2022

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CERTIFICATE

This is to certify that the project report entitled "Three-Wheeler E-rickshaw as means of reducing unemployment in Nalbari Town" is a *bonafide* record of project done by **PIYANUJ NILIYAN MALAKAR**, Reg. No. **17048465**, under my guidance and supervision in partial fulfillment of the requirement for the award of the degree of **M.COM** and it has not previously formed the basis for any Degree, Diploma and Associateship or Fellowship.

Prof. PRIYANKA SWARGIARY

Project Guide

DECLARATION

I, Piyanuj Niliyan Malakar, hereby declare that the project work entitled **"Three-Wheeler E-rickshaw as mean of reducing unemployment in Nalbari Town"** is a record of independent and *bonafide* project work carried out by me under the supervision and guidance of Prof. PRIYANKA SWARGIARY, Assistant Professor, Department of Accountancy, Nalbari commerce college.

The information and data given in the report is authentic to the best of my knowledge. The report has not been previously submitted for the award of any Degree, Diploma, Associate ship or other similar title of any other university or institute.

Place: Nalbari **PIYANUJ NILIYAN MALAKAR**

Date: **17042465**

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CHAPTER 1: INTRODUCTIOM

1.1 Background

Nalbari town, regarded as the vibrant nucleus of the district, unfolds as a unique tapestry of administrative vigor and bustling commercial activities. Nested within Assam's rural charm, the town embodies both the cultural richness of the region and the evolving dynamics of urban life. As the district's central hub, Nalbari town grapples with the intricacies of a rapidly changing employment landscape. Despite the administrative and commercial vibrancy, stable employment remains an elusive aspiration for many residents. The town's identity as a microcosm of the district amplifies the urgency to address the nuanced challenges faced within its confines.

The backdrop of Nalbari town becomes the canvas upon which the narrative of unemployment unfolds. Beyond statistics, the town's residents experience the palpable impact of the employment dilemma. Against this backdrop, the study endeavours to unravel the town's unique employment dynamics, seeking to understand how the introduction of three-wheeler vehicles could potentially redefine livelihoods in this urban core.

In delving into this exploration, the distinctiveness of Nalbari town as a nexus of tradition and modernity shapes the understanding of the challenges faced by its residents. This background sets the stage for a focused inquiry, honing in on the town's pulse, aspirations, and the potential role of three-wheeler vehicles in shaping its employment narrative.

Addressing unemployment in Nalbari town is not merely an economic imperative; it is a crucial step towards fostering holistic development. Unemployment, when unaddressed, can have far-reaching consequences,

impacting the social fabric and overall well-being of the community. By delving into this challenge, the study seeks to uncover not only the economic dimensions but also the broader social and cultural implications, underscoring the vital importance of developing sustainable solutions.

Navigating the confluence of rural traditions, urban aspirations, and the persistent challenge of unemployment, this research embarks on a journey to explore innovative avenues. As the exploration deepens into the economic landscape of Nalbari Town, the study gains momentum, driven by the commitment to contribute meaningful insights to the discourse on rural development and employment dynamics.

1.2 Literature Review

1. Shiv et al. (2021) It discusses the introduction of electric rickshaws (ERs) in India's Para transit system as an eco-friendly and affordable mode of transportation. ERs have advantages over conventional auto-rickshaws (ARs) and manually-pulled cycle rickshaws (CRs). They are seen as a solution for improving transportation accessibility, reducing pollution, and generating employment, especially in small to medium-sized cities. Several state governments in India are recognizing the significance of ER services and planning to operate them. However, there are operational challenges and safety concerns associated with ERs, including a lack of charging stations, low speed, and structural issues.

2. Roy et al. (2012) it discusses the role of electric rickshaws (ERs) in India's transportation landscape and the associated implications for sustainability, employment, and infrastructure.it also acknowledges several challenges, particularly related to infrastructure and safety, which need to be addressed to fully realize the benefits of ER services in India

3. Harding and Milind . (2017) India's urban population is growing rapidly, with urban areas projected to add 404 million residents by 2050. This urbanization has led to significant private motor vehicle (PMV) growth, resulting in traffic congestion and poor air quality. Indian cities have implemented mass transit projects, but Para transit services are vital for areas not served by formal public transport. Para transit operators are often described as "informal," and their regulation status varies.

This paper aims to explain the rise of battery-rickshaws and the passing of the E-Rickshaw Bill in 2015. It argues that battery-rickshaws meet the demand for last-mile connectivity in cities, replacing cycle-rickshaws due to political factors and the voting power of battery-rickshaw drivers.
It provides insights into the challenges and solutions related to urban transportation in India, particularly the role of battery-rickshaws in addressing last-mile connectivity needs. It also highlights the political dynamics that influenced their formalization.

4. Goswami et al. (2018)The study aimed to assess the knowledge and practices related to traffic rules and road safety among E-Rickshaw (Toto) drivers. A cross-sectional study was conducted in Burdwan Municipality, and the sample size was 422. Results showed that a significant number of drivers were unaware of speed limits and road signals. A low percentage had good road safety knowledge and favourable practices. Associations were found between knowledge/practice and age, education, and income. The study recommends targeted interventions to improve road safety awareness and practices among E-Rickshaw drivers.

5. Shiv & Manoj. (2019)This study focuses on electric rickshaws in Indian cities, which is an affordable and eco-friendly mode of transport but have raised concerns about passenger safety. The lightweight and open structure of electric rickshaws, coupled with issues such as fragility and lack of safety features, have contributed to safety concerns. Fatal crashes involving electric rickshaws have

increased, leading to concerns about their use, especially for transporting children to schools. The study aims to explore passengers' safety perceptions of electric rickshaws, their attitudes toward various safety attributes, and how these perceptions vary across different socio-demographic segments. The research method, results, and implications for planning and policy are discussed in subsequent sections.

6. Sadhukhan et al. (2022) Indian cities are experiencing rapid urbanization, economic growth, and rural-to-urban migration, leading to increased private vehicle usage. This has resulted in traffic congestion, pollution, and safety concerns. National-level policies have highlighted the importance of providing quality Public Transport (PT) to address urbanization challenges. Initiatives like Smart Cities Mission aim to strengthen PT, including Mass Rapid Transit Systems (MRTS). However, MRTS alone cannot meet all travel needs, making Intermediate Public Transport (IPT) crucial for providing first and last-mile connectivity. IPT offers flexible, affordable, and accessible transport options, complementing formal transit systems. It serves various purposes, from door-to-door services in developed countries to feeder modes in large cities and primary modes in smaller cities with limited mass transit systems.
. The study aims to identify priority attributes for improving IPT service quality as access modes to Metro stations based on commuters' perceptions.

7. Hossain and Hasan et al. (2022) The study investigates the prospects and challenges of integrating Electric Three-Wheeler (E3W) vehicles into public transport in Bangladesh amid rapid urbanization and population growth. Highlighting the negative environmental impact of fossil-fuel-based vehicles, the research underscores the increasing demand for E3Ws due to their pollution-free and passenger-friendly services. However, challenges such as vehicle stability, regulatory issues, energy supply, and battery disposal are

acknowledged. The study delves into specific problems like structural issues and the consequences of uncontrolled battery charging. Proposing potential solutions, the research emphasizes the need for strategic E3W policies, offering an overview of existing policies in Bangladesh and recommendations for policymakers to foster the sustainable development of the transportation system.

8. Dr. Dey . (2023) The study examines the growing relevance of the paratransit informal public transport system in the context of rapid urbanization in Indian cities, with a specific focus on battery-powered electric three-wheelers, known locally as e-rickshaws or Toto. These electric rickshaws have gained popularity as a convenient and affordable mode of transportation, contributing to traffic congestion issues in Haldia town. The research aims to understand why individuals choose this paratransit occupation, exploring the challenges they face in their daily lives. Utilizing purposive and snowball sampling for data collection, the study employs qualitative methods, including participant observation, in-depth interviews, and group discussions. Findings suggest that low education and economic hardships drive individuals to adopt this livelihood. The study advocates for government intervention to enhance income opportunities for these paratransit workers, emphasizing the need for sustainable development in the sector.

9. Ghosh & Dey et al. (2021) This study examines the E-Rickshaw, a three-wheeled electric vehicle powered by a rechargeable battery, renowned for its popularity in India due to cost-effectiveness, eco-friendliness, and user-friendly features. Serving as a pivotal last-mile connector, the E-Rickshaw has transformed India's public transport system and emerged as a significant source of livelihood for many, offering a sustainable income. To address pertinent issues, the study thoroughly investigates the attributes of the E-Rickshaw and

employs the Analytical Hierarchy Process (AHP) to determine criteria weights for these attributes. Subsequently, the Technique for Order Preference by Similarity to Ideal Solution (TOPSIS), a Multi-Criteria Decision-Making (MCDM) technique, is utilized to identify the optimal E-Rickshaw. This research includes sensitivity and comparative analyses, providing valuable insights into decision-making processes within the context of E-Rickshaws.

10. Chouhan. (2023) This study investigates the role of E-rickshaws, three-wheeler battery-operated para-transit vehicles, in passenger movement within Lanka town and its surrounding lanes. Economically superior to petrol or diesel auto-rickshaws, E-rickshaws have been a focus of government funding through the Ministry of Non-conventional Energy Sources since 2000. The research aims to understand the socio-economic impact of E-rickshaws on drivers, particularly those from economically disadvantaged backgrounds, providing employment opportunities for literate individuals in Lanka. As a cost-effective and environmentally friendly mode of transport in urban areas, E-rickshaws contribute to reduced air pollution. The study suggests a gradual shift from conventional auto-rickshaws to E-rickshaws, positioning the latter as the future of public transportation.

1.3 Problem Statement

In the lively expanse of Nalbari town, unemployment emerges as a pressing concern, weaving through the urban fabric and impacting the daily lives of its residents. The town, a bustling hub of commerce and administration, grapples with a persistent challenge — the need for stable employment opportunities.

Current observations reveal that, despite the town's dynamic atmosphere, securing employment remains a notable struggle for many individuals. The streets of Nalbari echo with the urgency for innovative solutions that align with

the town's unique blend of tradition and progress.

The significance of this study lies in its targeted focus on Nalbari town, unraveling the complexities of urban unemployment. By exploring the transformative potential of three-wheeler vehicles, the study seeks to address the immediate challenges faced by residents while envisioning a future where these vehicles play a pivotal role in fostering economic vibrancy.

This exploration into Nalbari town's unemployment dynamics aims not only to shed light on the current situation but also to emphasize the profound impact of three-wheeler vehicles as agents of change. In doing so, the study aspires to contribute to a future where Nalbari town stands as a model of resilience, innovation, and sustainable urban employment.

1.4 Objective of the study

1. To investigate the role of three-wheeler vehicles in employment generation in Nalbari Town.
2. to evaluate the economic impact of three-wheeler vehicle based employment in Nalbari Town.

1.5 Research Questions

1. What is the impact of three-wheeler vehicles on employment in Nalbari Town?
2. What economic contributions do three-wheeler vehicles make to the local economy of Nalbari Town, and how does this impact job creation?

1.6 Significance of the Study

This study holds profound importance for Nalbari town, offering targeted insights that can drive local development. By delving into the dynamics of three-wheeler vehicle-based employment, it provides policymakers and stakeholders with a nuanced understanding of what works best for the town's economic growth. This tailored insight empowers Nalbari to implement strategies that resonate with the community, fostering not only economic progress but also a sense of ownership and pride among residents.

Moreover, the study's exploration of cultural norms and community perceptions within the context of employment initiatives addresses specific challenges faced by Nalbari town. By acknowledging these local nuances, the research aims to contribute to community-driven solutions, ensuring that the benefits of economic development are in harmony with the unique socio-cultural fabric of Nalbari.

1.7 Research Methodology

The methodology chapter unfolds as a systematic exploration into the dynamic relationship between three-wheeler vehicles and unemployment in Nalbari town. This section elucidates the methodological framework employed to scrutinize the multifaceted aspects of this economic nexus, adopting a judicious blend of quantitative and qualitative approaches.

As the investigation turns its focus towards the residents of Nalbari town, meticulous attention is given to the population and sampling strategy. A deliberate selection method ensures a representative cross-section, mirroring the

diverse demographics of Nalbari's inhabitants, each contributing a vital piece to the overarching narrative.

The data collection methodology, ranging from a meticulously crafted survey questionnaire to in-depth interviews and the utilization of existing secondary data, reflects a holistic approach. This triangulation of methods aims to capture a comprehensive understanding of the economic impact of three-wheeler employment on the individuals navigating the employment landscape in Nalbari.

Subsequent sections delve into the nuances of data analysis, and a candid acknowledgment of the study's limitations. As the research progresses, the methodology chapter underscores its commitment to maintaining the highest ethical standards, ensuring the validity and reliability of the findings, and navigating the boundaries that define the study's scope within Nalbari Town.

1.7.1 Research Design

There are two types of research design

- Descriptive research design: IT is a method used in research to systematically observe, document, and present the characteristics of a subject or phenomenon. Unlike experimental designs that aim to establish cause-and-effect relationships, descriptive research focuses on answering the fundamental questions of who, what, where, when, and how. This design is particularly valuable when researchers seek to provide a comprehensive and detailed account of a specific topic without

manipulating variables. Common methods employed in descriptive research include surveys, observations, and content analysis. The primary purpose is to organize and present data in a structured manner, allowing for a clearer understanding of the subject under investigation. Descriptive research acts as a foundational step in the research process, providing a basis for more in-depth studies and hypothesis generation in subsequent research designs.

- Experimental research design: It is a scientific approach in which researchers manipulate an independent variable to observe its effect on a dependent variable while controlling for other variables. The aim is to establish cause-and-effect relationships between variables. In experimental designs, participants are often randomly assigned to different experimental conditions, and rigorous control measures are applied to ensure that any observed changes in the dependent variable can be attributed to the manipulated independent variable. The experimental design allows researchers to draw conclusions about the causal impact of the independent variable on the dependent variable, contributing to a deeper understanding of the relationships between variables in a controlled and systematic manner.

The study is descriptive in nature. The descriptive design aligns with the study's goal of mapping economic patterns and understanding the impact of three-wheeler vehicles. its qualitative methods allow for a deeper exploration of individuals' experiences, providing a comprehensive view of the economic landscape in nalbari town.

Choosing a descriptive research design makes sense because it helps thoroughly study the unemployment trends and the impact of three-wheeler vehicles in Nalbari Town. This design allows for a detailed look at economic patterns and

lets us understand people's experiences in three-wheeler employment, fitting well with our research questions and goals.
In essence, the intentional use of simple random sampling within the descriptive study design aims to accentuate the strengths of quantitative approaches. This comprehensive strategy aims to offer readers a nuanced understanding of how three-wheeler vehicles impact unemployment in Nalbari Town, presenting a tapestry of insights that invites thoughtful analysis and interpretation.

1.7.2Source of Data

For the research study on three-wheeler vehicles and unemployment in Nalbari town , Assam, India, sources of data includes a mix of primary and secondary sources. Here's a breakdown:

1. **Primary Sources:**
    - **Surveys/Questionnaires:** Develop and administer surveys to individuals involved in three-wheeler vehicle-based employment, as well as other relevant stakeholders.
    - **Interviews:** Conduct structured or semi-structured interviews with key informants, such as three-wheeler operators, local authorities, and community members.
    - **Observations:** Observe the daily operations and interactions in areas where three-wheeler employment is prevalent.
2. **Secondary Sources:**

- **Government Reports:** Access reports from local government bodies or transportation authorities that may contain relevant data on the three-wheeler industry and employment in the region.
- **Academic Journals:** Review academic articles that discuss similar topics, providing insights into the broader context of three-wheeler employment.

1.7.3 Sample Design

Population Size

The population of the study covers all individuals who are employed as three-wheeler vehicle drivers in Nalbari town

The dynamic nature of the three-wheeler industry in Nalbari makes determining the exact population size challenging. Therefore the population size is unknown.

Sample Size

A sample size of 50 individuals has been determined, from the population, aiming for a comprehensive exploration of economic patterns, challenges, and opportunities within the constraints of convenient sampling.

Sampling Strategy

Convenient sampling is employed, selecting participants based on their accessibility and willingness to participate. This approach is chosen for its practicality and ease of implementation.

Study Area

The area selected for the study is Nalbari town.

1.7.4 Data Analysis

For data analysis percentages, tables and graphs are used. In conducting the data analysis for this study, a systematic approach was employed to derive meaningful insights from the collected questionnaire responses. Demographic information, such as age, gender, and educational background, was visually represented using pie charts and bar graphs, offering a clear snapshot of the participant profile and insights were synthesized into tables, offering a condensed summary of the responses.

The graphical representations employed in this data analysis not only enhance the clarity of the findings but also provide a visually engaging narrative, ensuring a robust exploration of the study's objectives.

1.8. Scope of the Study

This study, centred on Nalbari town, provides targeted insights into the dynamics of three-wheeler vehicle-based employment. Focused on local nuances, it aims to comprehensively understand challenges and opportunities, offering specific recommendations for economic development. Engaging with diverse demographics, the study encompasses various wards and neighbourhood’s within Nalbari town. Key aspects include the economic impact, cultural factors, policy awareness, and environmental perceptions. The findings seek not only to benefit Nalbari but also to hold relevance for similar towns facing analogous socio-economic challenges.

1.8.1 Limitations of the study

In focusing on the dynamics of three-wheeler vehicle-based employment in Nalbari town, it's crucial to recognize certain limitations. The sampled population may introduce bias, potentially limiting the representativeness of the findings to the entire town. Additionally, the study operates within a specific

timeframe, and economic and community dynamics may undergo changes that the research might not capture comprehensively.

Despite efforts to navigate cultural nuances, the study may encounter limitations in fully capturing the intricate influences of culture on employment perceptions. Furthermore, external factors such as economic shifts or unforeseen events might impact the dynamics of three-wheeler vehicle-based employment in Nalbari during the research period. These limitations underscore the need for cautious interpretation and consideration of the study's contextual boundaries.

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Chapter 2 Three-Wheeler E-rickshaw and Employment

2.1 Three Wheeler E-Rickshaw

The Battery-operated rickshaws, popularly known as e-rickshaws, a common sight on the bustling streets of Nalbari, represent a dynamic facet of urban transportation. With their distinctive tri-wheel design and compact structure, these vehicles play a crucial role in addressing the town's mobility needs. The convenience and adaptability of three-wheelers make them well-suited for navigating the narrow lanes and crowded markets, contributing to the local transport ecosystem. In this section, we explore the technical features and functional aspects that define these vehicles, setting the stage for a closer examination of their impact on employment in Nalbari town.

The unique design of three-wheelers, characterized by a single front wheel and two rear wheels, allows for increased manoeuvrability, making them an ideal choice for last-mile connectivity. Fueled by both conventional internal combustion engines and, in some instances, eco-friendly electric motors, these vehicles strike a balance between efficiency and environmental sustainability. Beyond their role in passenger transportation, three-wheelers in Nalbari town also serve as versatile carriers for goods, addressing local logistics challenges. As we navigate the intricate landscape of three-wheeler employment, understanding the nuances of these vehicles becomes essential to grasp their potential contribution to the economic fabric of Nalbari.

It have gained significant popularity globally since 2008. In India, their rise in prominence started around 2011. Recognizing their potential, the Ministry of Road Transport and Highways amended the Motor Vehicles Rules of 1989 in October 2014 to regulate e-rickshaws. Subsequently, in March 2015, the Parliament passed these amendments, officially legalizing the use of electric rickshaws.

E-rickshaws are considered a promising alternative to traditional petrol or diesel

vehicles, operating solely on battery power. They offer an affordable means of transportation, particularly benefiting individuals with limited financial resources who need to travel regularly. These vehicles provide an opportunity for those with minimal skills to earn a livelihood by operating e-rickshaws. The advantages include reduced environmental pollution, lower maintenance costs, ease of operation, and eco-friendly attributes.

Given these positive aspects and recognizing the potential for self-employment, the Government of Assam has taken a proactive step. It has decided to distribute e-rickshaws through the Directorate of Char Areas Development Assam, aiming to empower unemployed youths in Char Areas and create opportunities for self-employment. This initiative aligns with the broader goals of promoting eco-friendly transportation, supporting livelihoods, and contributing to environmental sustainability.

2.2 Employment Through Three-Wheeler E-rickshaw Vehicle

In the global and national context, the emergence and widespread adoption of Three-Wheeler E-rickshaws have marked a significant paradigm shift in the transportation and employment landscape. Globally, E-rickshaws have gained traction as environmentally friendly alternatives to conventional transportation, addressing concerns related to air pollution and fuel consumption.

On a national level, several countries, including India, have witnessed a surge in the use of Three-Wheeler E-rickshaws as a means of last-mile connectivity and a source of livelihood for many. In the Indian context, these electric vehicles have been promoted as a sustainable mode of transportation, aligning with the

government's push for cleaner and greener mobility solutions.

The relevance of Three-Wheeler E-rickshaws in the local economies of towns and cities cannot be overstated. They serve as cost-effective and energy-efficient modes of transportation, contributing to reduced carbon emissions and enhanced urban mobility. Additionally, the adoption of E-rickshaws has created employment opportunities for individuals seeking livelihoods in the transportation sector.

In Nalbari, the integration of Three-Wheeler E-rickshaws into the local context holds promise for addressing both environmental concerns and unemployment challenges. Understanding the global and national context provides a valuable backdrop for assessing the potential impact and sustainability of E-rickshaws as a viable solution in Nalbari's unique socio-economic setting.

In the broader context of Nalbari's local economy, the introduction of Three-Wheeler E-rickshaws carries significant relevance. These electric vehicles contribute to the economic landscape in several ways. One of the primary facets is the generation of employment opportunities. The operation and maintenance of E-rickshaws create direct jobs for drivers and support staff, addressing unemployment challenges within the community.

Moreover, E-rickshaws act as agents of micro-entrepreneurship, allowing individuals to own and operate their vehicles. This decentralized approach empowers local residents to become entrepreneurs, fostering economic independence and self-reliance. The integration of E-rickshaws also enhances last-mile connectivity within the town, facilitating the movement of people and goods and contributing to increased economic activities.

The eco-friendly nature of E-rickshaws aligns with global and national initiatives to reduce carbon emissions. In the local context, this translates to a positive environmental impact, promoting the overall well-being of the community. Additionally, the introduction of E-rickshaws adds a new dimension to the transportation sector, contributing to economic diversification. This diversification can stimulate growth and resilience, reducing dependence on a single industry.

Recognizing the relevance of Three-Wheeler E-rickshaws in Nalbari's local economy is essential for evaluating their potential benefits and formulating strategies for their strategic integration. The understanding of these economic dynamics serves as a foundation for sustainable development and the effective addressing of specific socio-economic challenges within the community.

2.3 Case Studies

- A Study on the Socio-Economic Condition of E-Rickshaw Pullers in Guwahati City,Assam, India by

  Mreeshi Agarwala & Ms. Bandana Gogoi (Assistant ProfessorAssam Institute of Management Vigyan Path)

The case study explores the socio-economic status, financial facilities, and satisfaction levels of e-rickshaw drivers in Guwahati, Assam, India. The research investigates variables such as educational qualification, family structure, migration, time in the e-rickshaw business, previous occupation, banking status, daily income, savings, and job security. It also examines the financial aspects, including the initial investment, battery charging and replacement costs, and ownership patterns. The findings indicate that e-rickshaw drivers experience positive changes in socio-economic conditions, yet face challenges such as high initial investment and maintenance costs. The study recommends government support through subsidies or loans to

enhance the viability of this alternative livelihood.

Lessons learned from the e-rickshaw case study offer valuable insights for Nalbari town's people. The necessity of regulatory clearances becomes evident, emphasizing the importance of safety and compliance for smooth integration. The positive impact on employment, especially for the youth, suggests an avenue to address local unemployment challenges. However, challenges such as sustainability, initial investments, and maintenance costs underscore the need for careful consideration. The study advocates for potential government support, possibly in the form of subsidies or loans, to enhance viability. Nalbari can glean lessons on regulatory roles, economic implications, and the importance of supportive measures when contemplating the introduction of e-rickshaws.. Lessons on the need for governmental support, potentially in the form of subsidies or loans, could guide local policymakers in crafting supportive measures. Additionally, understanding the regulatory role of local bodies and the economic implications for operators can inform the town's approach to integrating e-rickshaws into its transportation landscape.

Acknowledgment of limitations

It is crucial to recognize the inherent challenges and potential constraints that may influence the research outcomes. First and foremost, the study operates within a specific timeframe, and the dynamic nature of economic and community dynamics may evolve over time, potentially impacting the relevance and applicability of the findings.

the choice of convenience sampling as the primary sampling strategy. The reliance on convenience sampling, while expedient, may introduce a level of bias into the study, as participants are selected based on their easy accessibility rather than through a random or systematic method. This approach may compromise the generalizability of the findings to the broader population of Nalbari.

Additionally, the nature of convenience sampling may limit the diversity of

perspectives represented in the study. Individuals who are more easily reachable or willing to participate may not fully capture the entire spectrum of experiences and challenges faced by the diverse population of Nalbari. This limitation should be acknowledged transparently to provide context to the study's findings. it is crucial to recognize that the findings should be interpreted with the understanding that they may not fully encapsulate the richness and complexity of the entire population's experiences with three-wheeler vehicle-based employment in Nalbari.

CHAPTER 3

DATA ANALYSIS AND INTERPRETATION

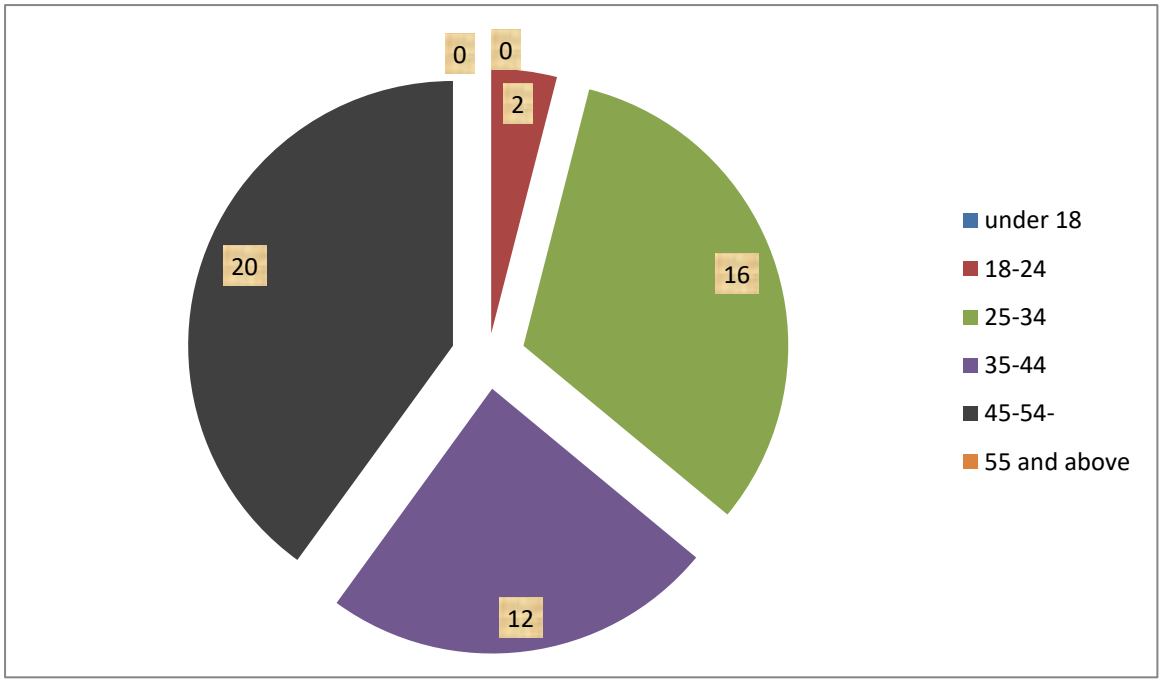
Section 1

Table 3.1 showing Age wise classification of respondents

Age	No of respondents	Percentage
Under 18	0	0%
18-24	2	4%
25-34	16	32%
35-44	12	24%
45-54	20	40%
55 and above	0	0%
total	50	100%

(Source: Primary data)

Figure 3.2 showing age distribution of the respondent



Interpretation:

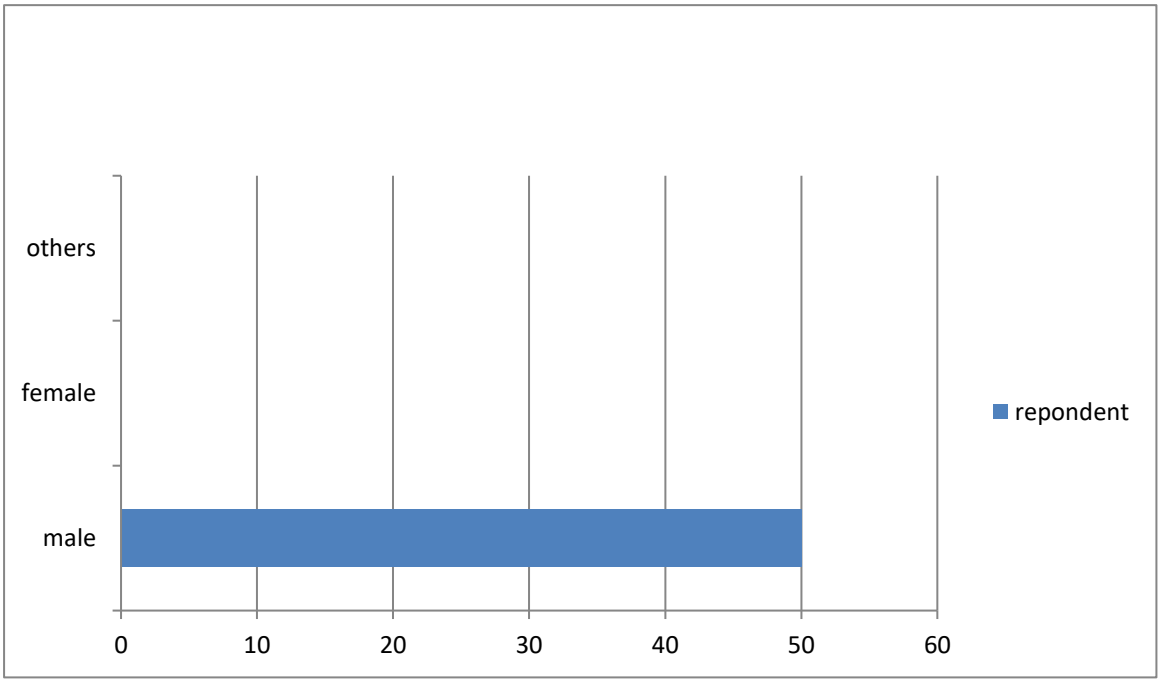
Table 3.1 shows age wise classification of respondents. The age distribution among 50 respondents is as follows: 4% are in the 18-24 age range, 32% in 25-34, 24% in 35-44, and 40% in 45-54. No respondents are under 18 or 55 and above.

Table 3.2 Showing gender wise classification of respondents

Gender	No of respondents	Percentage
Male	50	100%
Female	0	0%
Others	0	0%
Total	50	100%

(Source: Primary data)

Figure 3.2 Showing gender wise classification of respondents



Interpretation

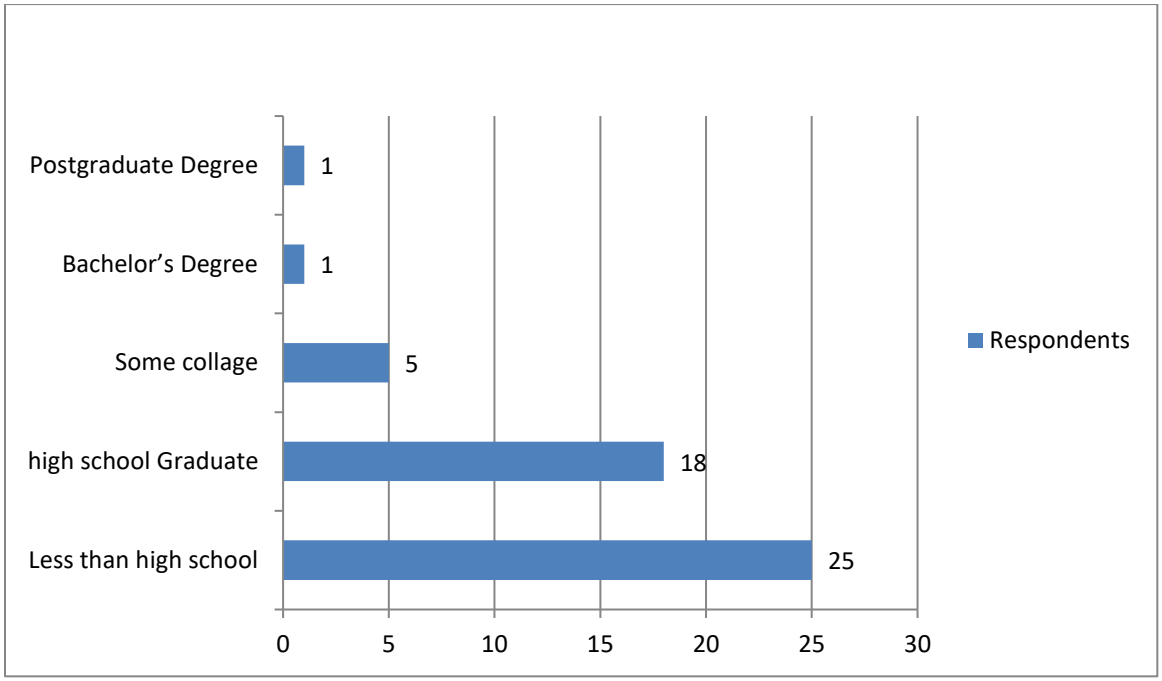
Table 3.2 shows gender wise classification of respondents. It reveals that 100% of the respondents are male and 0% of respondents are female or of other genders.

Table 3.3 showing educational qualification of respondents

Particulars	Frequency	Percentage
Less than high school	25	50%
high school Graduate	18	36%
Some collage	5	10%
Bachelor's Degree	1	2%
Postgraduate Degree.	1	2%
Total	50	100%

(Source: Primary data)

Figure 3.3 showing educational qualification of respondents



Interpretation

Table 3.3 shows the qualification of respondents. The data indicates that 50% of respondents have less than a high school education, 36% are high school graduates, and smaller percentages have some college (10%), a bachelor's degree (2%), or a postgraduate degree (2%). The majority falls below high school education, suggesting limited higher education representation in the surveyed group..

Section 2: Employment and Three-Wheeler Vehicle Usage

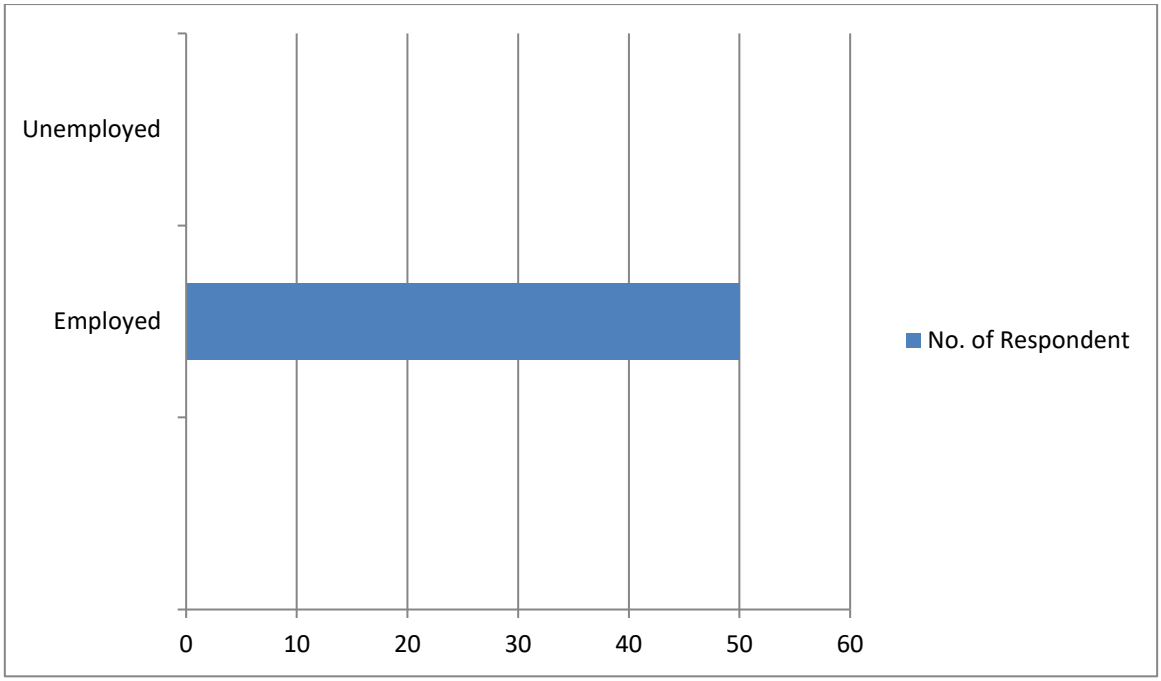
Table 3.4 the percentage of respondents currently employed or not

employed.

Employment status	No. of Respondent	Percentage
Employed	50	100%
Unemployed	0	0%
Total	50	100%

(Source: Primary data)

Figure **3.4** showing the percentage of respondents currently employed or not employed.



Interpretation

Table 3.4 shows that the respondents are currently employed . The data indicates that all of the Respondant are employed.

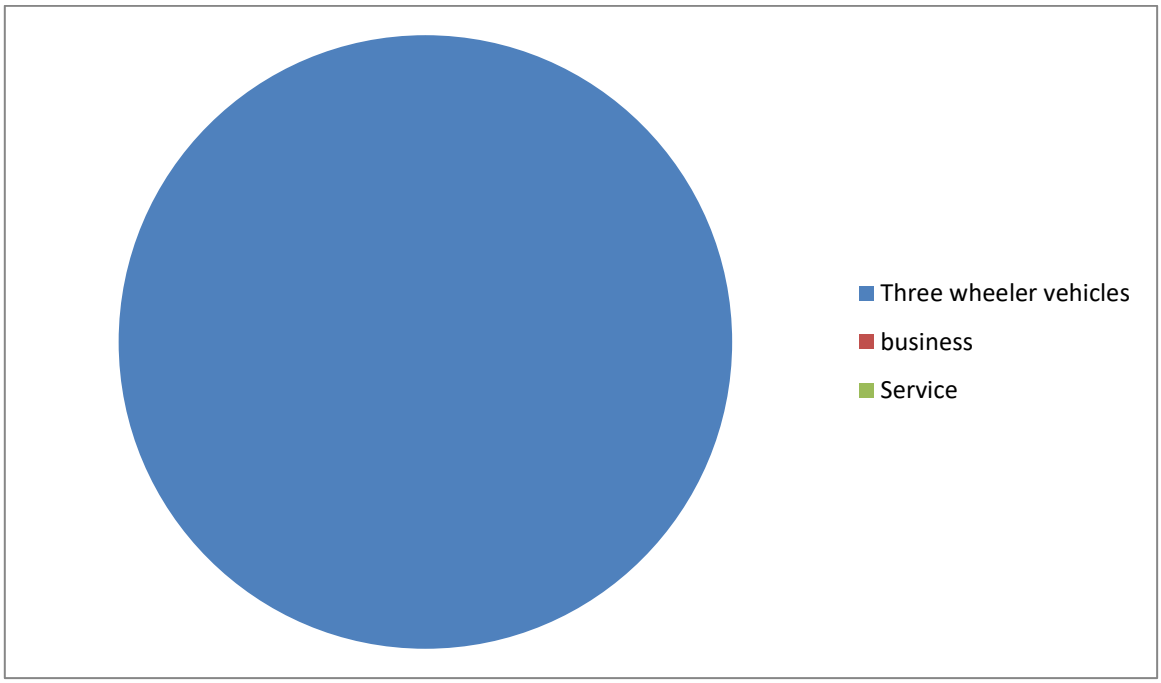
Table 3.5 showing the proportion of respondents currently involved in three-wheeler vehicle-based employment.

Employed occupation	No. of Respondent	Percentage
Three wheeler vehicles	50	100%
business	0	0%

Service	0	0%
Total	50	100%

(Source: Primary data)

Figure **3.5** Showing the proportion of respondents currently involved in three-wheeler vehicle-based employment.



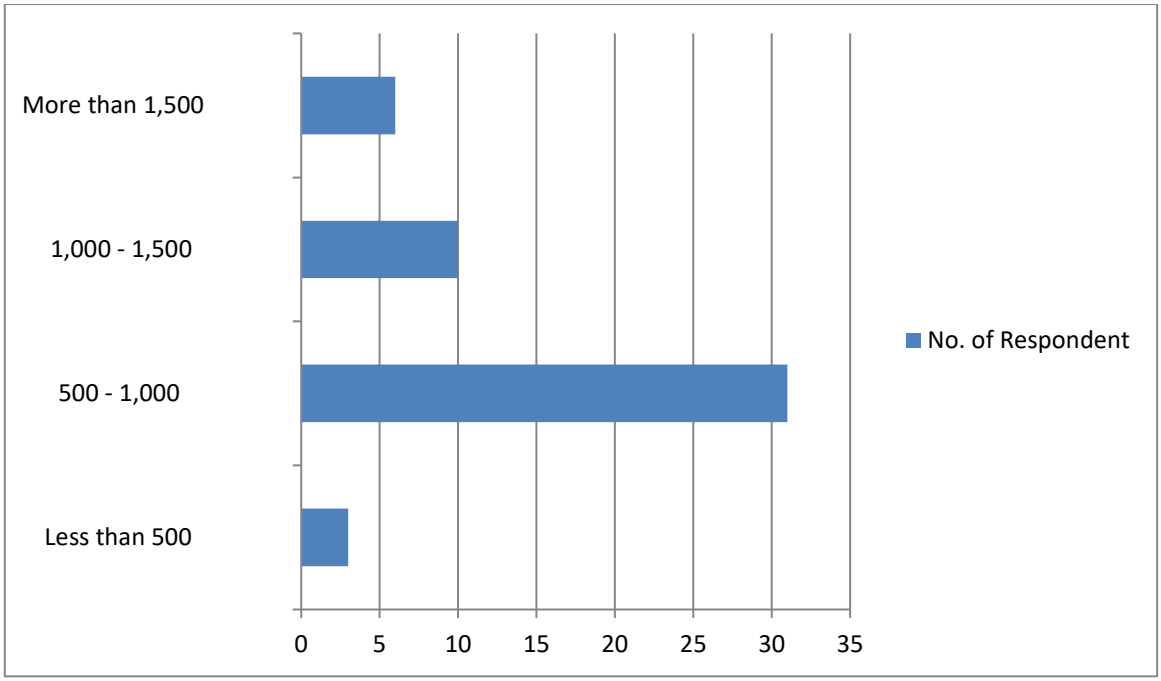
Interpretations : Table 3.5 showing the proportion of respondents currently involved in three-wheeler vehicle-based employment. The data indicates that all the respondents are involved in three wheeler based employment.

Table 3.6 Showing the average daily income of respondents currently involved in three-wheeler vehicle-based employment

Average Daily Income Range	No. of Respondent	Percentage
Less than 500	3	6%
500 - 1,000	31	62%
1,000 - 1,500	10	20%
More than 1,500	6	12%
Total	50	100%

(Source: Primary data)

Figure **3.6** Showing the average daily income of respondents currently involved in three-wheeler vehicle-based employment



Interpretation

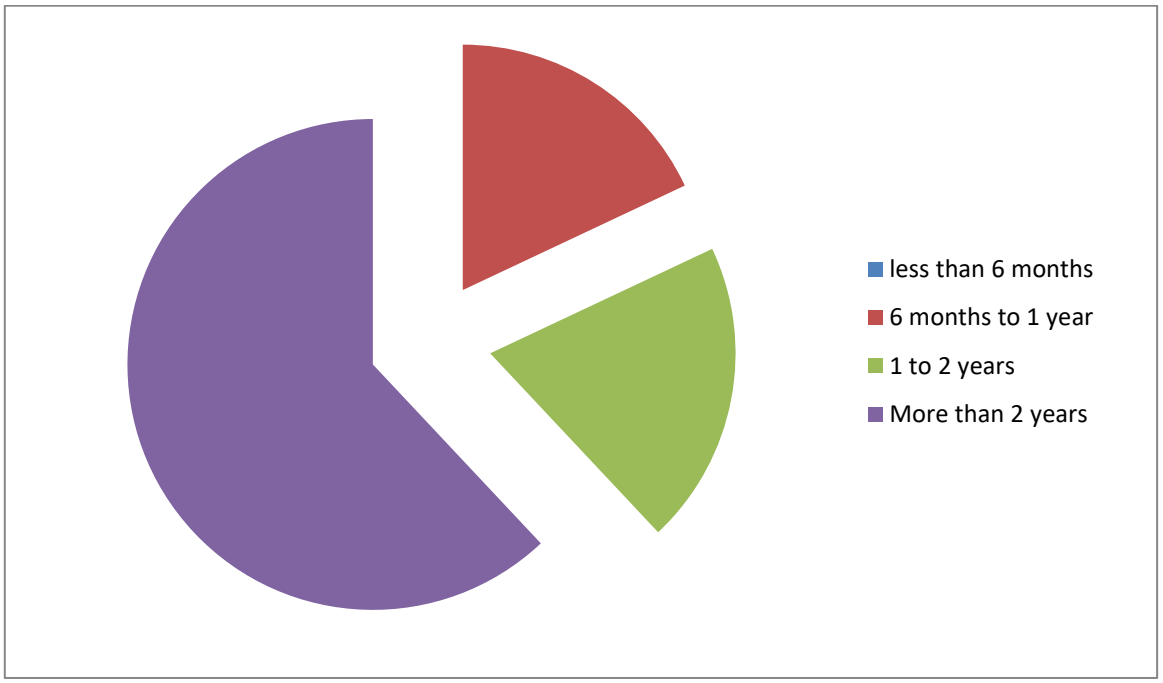
Table 3.6 shows that 6% of respondents have a daily income below 500, reflecting a small group with lower earnings. A significant 62% fall within the 500 to 1,000 range, indicating a substantial majority with moderate incomes. 20%report incomes from 1,000 to 1,500, representing a noteworthy segment with slightly higher earnings. 12 % enjoy daily incomes exceeding 1,500, signifying a smaller subset with comparatively higher earnings.

Table 3.7 Showing the Duration of Operating a Three-Wheeler vehicles

Duration	No. of Respondent	Percentage
Less than 6 months	0	0%
6 months to 1 year	9	18%
1 to 2 years	10	20%
More than 2 years	31	62%
Total	50	100%

(Source: Primary data)

Figure 3.7 Showing the Duration of Operating a Three-Wheeler vehicles



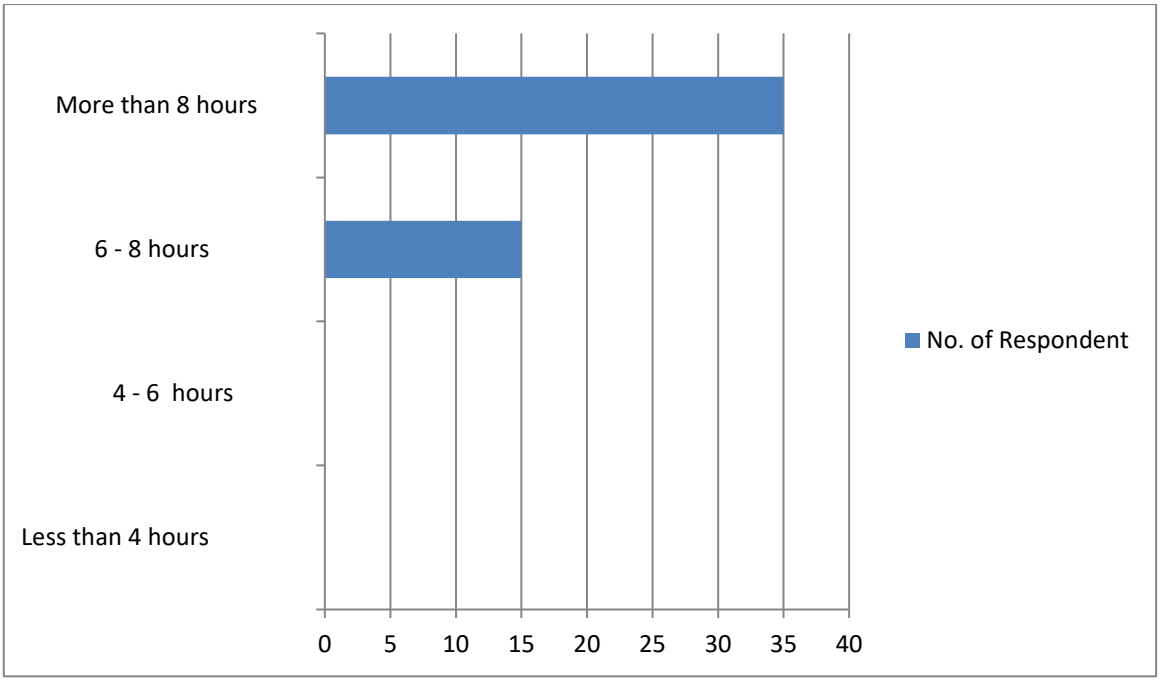
Interpretations : Table 3.7 showing that data on respondents' engagement durations suggests a clear trend: none reported durations less than 6 months, indicating a lack of short-term commitments. Eighteen percent had engagements lasting 6 months to 1 year, 20% between 1 to 2 years, while a substantial 62% reported long-term commitments exceeding 2 years. Overall, the majority of respondents demonstrate sustained and extended engagements.

Table 3.8 Average daily Working hours

Duration	No. of Respondent	Percentage
Less than 4 hours	0	0%
4 - 6 hours	0	0%
6 - 8 hours	15	30%
More than 8 hours	35	70%
Total	50	100%

(Source: Primary data)

Figure 3.8 Average daily Working hours



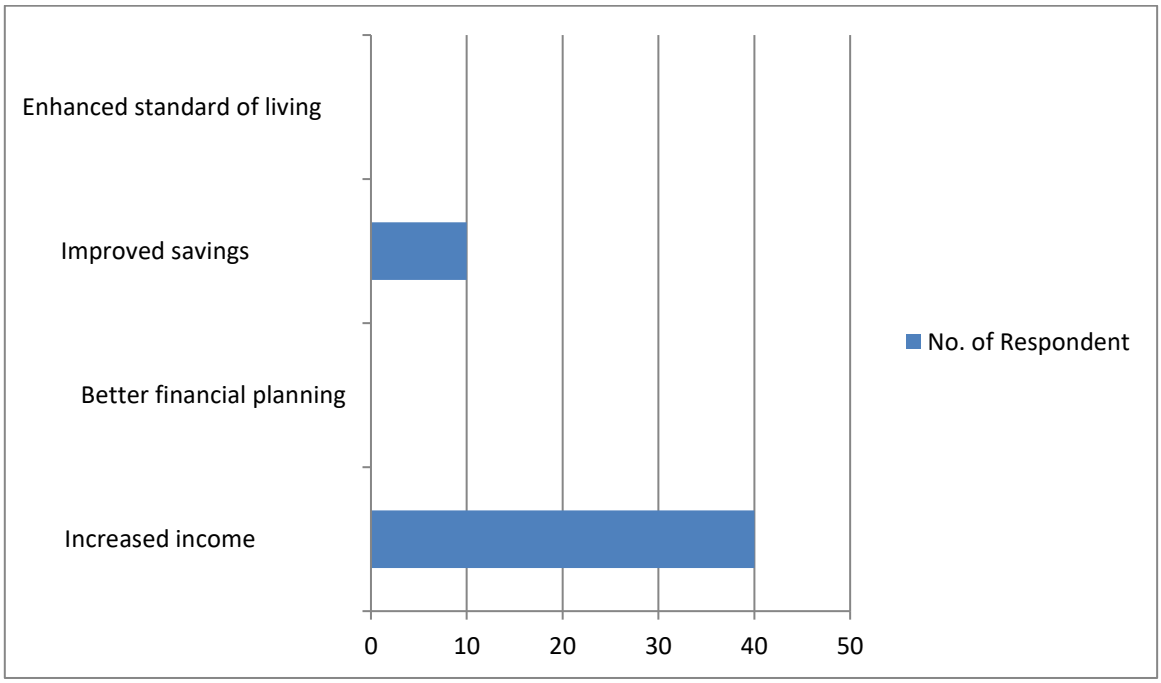
Interpretation: Table 3.8 shows that no respondents reported engagements of less than 4 hours or within the 4 to 6 hours range. Fifteen respondents, constituting 30%, reported engagements lasting between 6 to 8 hours, while the majority of respondents (70%) indicated commitments exceeding 8 hours. This suggests a prevailing trend of longer-duration engagements within the surveyed group.

Table 3.9 Ways Three-Wheeler Business Impacts Financial Stability

Financial Stability Impact	No. of Respondent	Percentage
Increased income	40	80%
Better financial planning	0	0%
Improved savings	10	20%
Enhanced standard of living	0	0%
Total	50	100%

(Source: Primary data)

Figure 3.9 Ways Three-Wheeler Business Impacts Financial Stability



Interpretation: The data in Table 3.9 reveals that a significant number of respondents (80%) reported increased income, indicating a positive impact on financial stability. However, no respondents mentioned improvements in financial planning or an enhanced standard of living, while 20% reported improved savings. This suggests a notable emphasis on

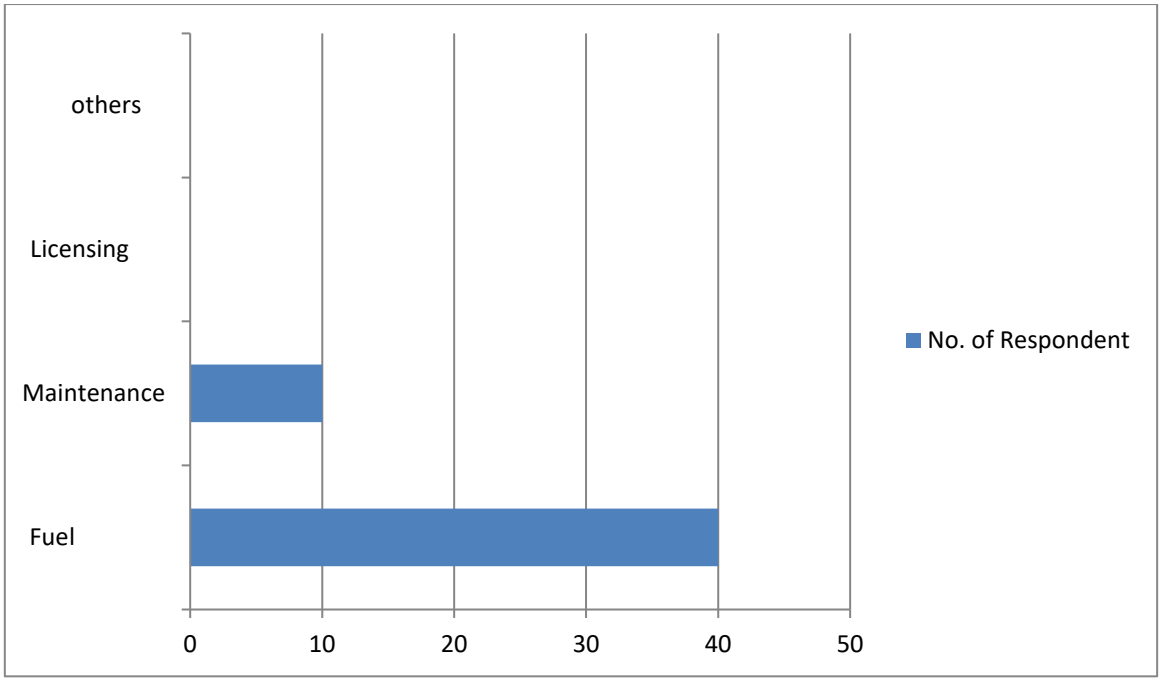
increased income as a key factor influencing financial stability within the surveyed group.

Table 3.10 Showing the main expenses associated with operating three wheeler vehicle

Types of expenses	No. of Respondent	Percentage
Fuel	40	80%
Maintenance	10	20%
Licensing \permits	0	0%
others	0	0%
Total	50	100%

(Source: Primary data)

Figure 3.10 Showing the main expenses associated with operating three wheeler vehicle



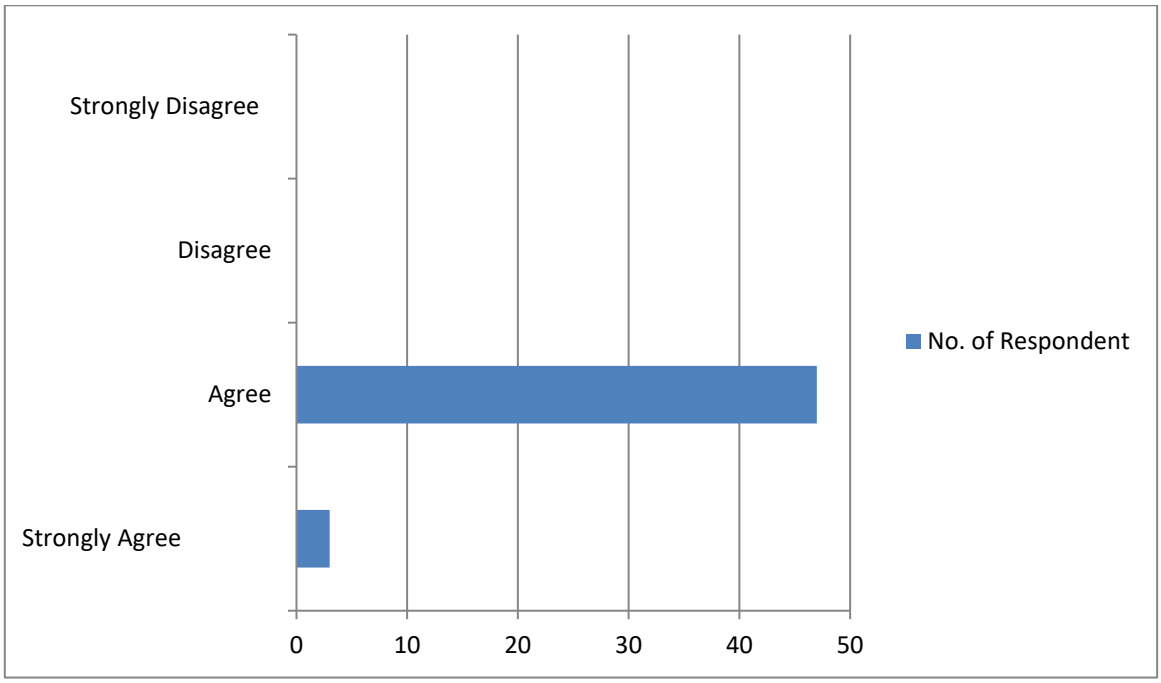
Interpretation: The data on Table 3.10 shows that the majority of respondents (80%) identified fuel as a significant expense. Maintenance expenses were mentioned by 20% of respondents. However, no respondents reported expenses related to licensing/permits or other categories, suggesting a concentrated focus on fuel and maintenance costs within the surveyed group.

Table 3.11 Three-Wheeler Business Contribution to Local Economic Development from respondents' perceptions

Types of Response	No. of Respondent	Percentage
Strongly Agree	3	6%
Agree	47	94%
Disagree	0	0%
Strongly Disagree	0	0%
Total	50	100%

(Source: Primary data)

Figure 3.11 Three-Wheeler Business Contribution to Local Economic Development from respondents' perceptions



Interpretation: The data on Table 3.11 indicates a strong consensus among respondents, with 94% expressing

agreement (47 respondents) and the remaining 6% indicating strong agreement (3 respondents). No respondents reported disagreement or strong disagreement. This suggests a high level of agreement among the surveyed group regarding the types of responses provided.

Chapter 4: Findings, Recommendations and Conclusion

. FINDINGS ,RECOMMENDATION AND CONCLUSION.

This chapter deals with the findings, recommendation, the conclusion derived and suggestions made from the collected data.

Here the study deals with "Three-Wheeler E-rickshaw as mean of reducing unemployment". It was conducted among the people of Nalbari district, For the purpose of study, primary data was collected from 50 E-rickshaw drivers using the questionnaire .Following are the findings of the study.

4.1 KEY FINDINGS :-

1. Demographic Information:

- Age Distribution: The majority of respondents (40%) fall in the 45-54 age range, while no respondents are under 18 or 55 and above.
- Gender: All respondents are male.
- Educational Qualification: 50% have less than a high school education.

2.Employment and Three-Wheeler Vehicle Usage:

- Employment Status: All respondents are currently employed.
- Occupation: 100% of respondents are involved in three-wheeler vehicle-based employment.
- Average Daily Income: The majority (62%) earn between 500-1,000 daily.

3.Duration and Working Hours:

- Duration of Three-Wheeler Operation: The majority (62%) have been operating three-wheelers for more than 2 years.
- Daily Working Hours: 70% work more than 8 hours per day.

4.Financial Impact:

- Ways Three-Wheeler Business Impacts Financial Stability: 80% reported increased income, and 20% mentioned improved savings.

5.Expenses:

- Main Expenses: 80% identified fuel as a significant expense, while 20% mentioned maintenance.

6.Contribution to Local Economic Development:

- Respondents' Perceptions: 94% agree that three-wheeler business contributes to local economic development.

4.2 Recommendations Based on Findings

The following recommendations are suggested:

- Education and Skill Development:

Recommendation: Collaborate with educational institutions and vocational training centers to offer skill development programs tailored to the needs of three-wheeler operators. This can enhance their skillset and potentially open up new opportunities.

- Financial Support for Fuel Expenses:

Recommendation: Explore the feasibility of government subsidies or support programs to alleviate the financial burden of fuel expenses for three-wheeler operators. This could contribute to improved economic sustainability.

- Maintenance Support Initiatives:

Recommendation: Introduce initiatives or schemes that provide financial or technical support for the maintenance of three-wheeler vehicles. This can address challenges related to vehicle upkeep and reduce downtime.

- Community-Based Financial Planning Workshops:

Recommendation: Organize workshops or training sessions within the community to enhance financial planning skills. This could empower operators to manage their income effectively and plan for future financial goals.

- Diversification of Economic Activities:

Recommendation: Explore opportunities for diversification of economic

activities related to three-wheeler operations. This could include providing access to additional income-generating activities or promoting entrepreneurship among operators.

- Government-Industry Collaboration:

Recommendation: Foster collaboration between the government and the three-wheeler industry to address regulatory challenges and streamline licensing processes. This can contribute to a more conducive and supportive business environment.

- Environmental Awareness Programs:

Recommendation: Initiate awareness programs highlighting the environmental benefits of three-wheeler operations. This could include promoting electric or eco-friendly variants and encouraging sustainable practices.

- Network Building and Advocacy:

Recommendation: Facilitate the creation of a community or network of three-wheeler operators. This platform can serve as a forum for sharing experiences, addressing common challenges, and advocating for the interests of the community.

- Inclusion in Urban Planning:

Recommendation: Advocate for the inclusion of three-wheeler operators in urban planning discussions. This could involve considerations for designated parking areas, rest stops, or other infrastructure that enhances the working conditions of operators.

- Research and Development Support:

Recommendation: Encourage research and development initiatives in collaboration with academic institutions to explore technological advancements or innovations that could benefit three-wheeler operators and the industry.

4.3 CONCLUSION

In the realm of three-wheeler vehicle-based employment in Nalbari town, the findings presented in this study provide a nuanced perspective on the socio-economic landscape. The symbiotic relationship between the operators and their three-wheelers emerges as a vital force shaping the economic dynamics of the region. While the study illuminates several positive aspects, such as increased income and a perceived contribution to local economic development, it also uncovers challenges, particularly related to financial pressures and educational disparities among operators.

The journey of three-wheeler operators, often spanning several years with daily commitments exceeding eight hours, reflects a resilient workforce dedicated to their trade. The longevity of engagement underscores the integral role of three-wheeler vehicles in sustaining livelihoods within the community. However, the challenges identified, such as high fuel expenses and limited educational backgrounds, call for targeted interventions to ensure the long-term viability and well-being of these operators.

As we navigate through the complexities revealed by this study, it becomes evident that a holistic approach is needed. Policymakers, community leaders, and stakeholders can collaboratively work towards initiatives that address the identified challenges while amplifying the positive impacts. This may involve targeted skill development programs, financial assistance mechanisms, and educational opportunities tailored to the unique needs of three-wheeler operators.

In essence, this study not only sheds light on the current state of three-wheeler vehicle-based employment in Nalbari town but also serves as a catalyst for

future endeavors. The narratives shared by the operators, the statistical insights gained, and the community's perceptions collectively form a foundation for informed decision-making. By acknowledging the multifaceted nature of this socio-economic landscape, we pave the way for sustainable, inclusive, and impactful measures that can uplift the lives of those intricately connected to the three-wheeler industry in Nalbari.

Location of Nalbari district in Assam , India

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ANNEXURE

Section 1: Demographic Information
1.Age:
Under 18
18-24
25-34
35-44
45-54
55 and above

1.2 Gender:
Male
Female
Other (please specify)

1.3 Educational Background:
Less than High School
High School Graduate
Some College
Bachelor's Degree
Postgraduate Degree

Section 2: Employment and Three-Wheeler Vehicle Usage

2.1 Are you currently employed?
Yes
No
2.2 If employed, please specify your occupation:

2.3 Have you ever been unemployed in the last 12 months?
Yes
No
2.4 If yes, how long were you unemployed?
Less than 1 month
1-3 months
3-6 months
6 months to 1 year
2.5 Are you currently involved in any form of three-wheeler vehicle-based employment?
Yes

No
2.6 How long have you been operating a three-wheeler vehicle?
Less than 6 months
6 months to 1 year
1-2 years
More than 2 years

2.7What is the average daily income generated from your three-wheeler business?
Less than 500
500 - 1,000
1,000 - 1,500
More than 1,500

2.8How many hours do you typically work in a day using your three-wheeler?

Less than 4 hours
4-6 hours
6-8 hours
More than 8 hours

2.9In what ways has the three-wheeler business positively impacted your financial stability?
Increased income
Better financial planning
Improved savings
Enhanced standard of living

2.10What are the main expenses associated with operating a three-wheeler?
Fuel
Maintenance
Licensing/Permits
Other (please specify)
2.11Have you faced any challenges or setbacks in your three-wheeler business that affected your earnings?

Yes
No
(If yes, please provide brief details: _____)

2.12Do you believe the three-wheeler business has contributed to local economic development in your community?

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree
Section 3: Economic Impact
3.1 How has your income changed since being involved in three-wheeler vehicle-based employment?

Increased
Stayed the same
Decreased
3.2 On a scale of 1 to 5, how would you rate your financial stability since being involved in three-wheeler vehicle-based employment?

1 (Very unstable) to 5 (Very stable)

Section 4 : Policy and Regulatory Framework
4.1 Are you aware of the current policies and regulations regarding three-wheeler vehicles in Nalbari?

Yes
No