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TABLE OF CONTENT

S/N	ARTICLE	PAGE
1.	Assessment of Passengers Satisfaction with Intra –Urban Transport Services in Owerri Municipal Ogbuji, S. I. (Ph.D)	1 – 18
2.	Transit Oriented Development (TOD) as an Urban Design Concept for Enhanced Mobility and Tourism in Lagos, Nigeria Paul Onyebuchi Obi, Nnezi Uduma-Olugu, John Adesina, & Oginni Adeyemi*	19 – 40
3.	Assessment of the Challenges of Urban Transportation In Katsina Metropolitan, Katsina State Suleiman Iguda Ladan & Khadijah Abdullahi	41 – 57
4.	Concession and the Performance of Nigerian Seaports: Users' Experience in Onne Ports Abang, Francis Obi	58 – 73
5.	An Assessment on the Safety of Boat Services In Selected Communities In Lagos State Christy K. Bisiriyu John O. Ayeyemi Adetoyese O. Oguntimehin Ibraheem F. Abdul-Azeez	74 – 89
6.	Assessment of Professional Training Program On Operational Performance Among Freight Forwarders In Lagos Ports, Nigeria Ajayi Peter Adeyinka (Ph.D.), Sile Alex, Irinyemi Benson & Fagbo-Lawal, Babatunde	90 – 112
7.	Impact of Roads Infrastructure On Economic Growth In Zaria Metropolis, Kaduna State, Nigeria Abdulkadir Yahaya Muhammed¹, Salahudeen Hajara², Kawai, M. J.², Abdullahi Lawal	113 – 121
8.	Analysis of Fire Station Location and Road Condition on Service Response Time: A Study of Ogun West Senatorial District of Ogun State, Nigeria Olayinka Waziri OTUN	122 – 138

9. Travel Time Estimation of Sharada Road in Kano 139 – 154
Mujahid Tijjani Tashi, Hashim Muhammad Alhassan (PhD), & Engr. Muhammad Aminu Jika

10. An Assessment of the Significance of Commercial Motor-Cycle to the Economy of Kaduna State. A Case Study of Zango Kataf L.G.A 155 – 165
Kambai Harrison Bobai, Isah Eromi Ibrahim, Luka Shagbo & Aisha Bashir Bala

11. Prediction of Accident Occurrence using Road Geometric Alignment Parameters on the Outer Northern Expressway in the Federal Capital City, Abuja 166 – 181
Engr. Muhammad Aminu Jika, Hashim Muhammad Alhassan (PhD) & Engr. Mujahid Tijjani Tashi

12. Assessment of The Electronic Smart Card Payment System and The Security and Safety Of Public Transport Users In Lagos 182 – 190
Sanni Saheed, Christy K. Bisiriyu, Adetoyese O. Oguntimehin & Ibraheem F. Abdul-Azeez

13. Passenger Trip Characterisitcs as Determinants of Intercity Train Patronage in Nigeria. 191 – 203
Adeolu Oduntayo Dina, Bashiru Adisa Raji & Adedeji Adetola Aroloye

14. The Influence of Urban Land-Use on Criminalities and Safety in Nigerian Public Places: The Case of Abuja Municipal Area Council (AMAC), Abuja, Nigeria 204 – 217
Dr. Fatai, Afeez Olansile PhD

AN ASSESSMENT OF THE SIGNIFICANCE OF COMMERCIAL MOTOR-CYCLE TO THE ECONOMY OF KADUNA STATE. A CASE STUDY OF ZANGO KATAF L.G.A

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ABSTRACT

This study focuses on the significant role of motorcycles in contributing to the economy of Kaduna State, specifically in Zango Kataf Local Government Area (L.G.A). The research utilizes a case study approach, collecting data through surveys and interviews from residents, motorcycle operators, business owners, and local authorities.

The findings reveal that motorcycles have a vital impact on the local economy, stimulating economic activities, providing access to markets, and creating employment opportunities for various stakeholders. The study also examines government policies on motorcycle operations and public awareness of these regulations.

Challenges related to motorcycle operations, such as safety and traffic management, are identified. The study proposes recommendations to address these challenges while maximizing the economic benefits of motorcycles, including infrastructure development, safety measures, stakeholder engagement, and public awareness campaigns.

Overall, the research enhances the understanding of motorcycles' economic significance in Zango Kataf L.G.A. and Kaduna State, offering valuable insights for policymakers, transportation planners, and community stakeholders to develop sustainable strategies that harness motorcycles' potential while ensuring safety and prosperity for the region.

Keywords: Transportation, Commercial motor-cycle (Okada), Operators, Business owners.

1.0 INTRODUCTION

In recent times, motorcycles, commonly referred to as "okadas" or "commercial bikes," have become an essential mode of transportation in both urban and rural regions throughout Nigeria. The northern state of Kaduna, in particular, has witnessed a significant rise in motorcycle usage for commuting and commercial purposes. This surge in motorcycle transportation has had various positive effects, contributing to policy

effectiveness, enhanced security through reduced isolation, and job creation opportunities (World Bank, 2002).

The proliferation of motorcycle services in Kaduna State has resulted in a considerable increase in employment opportunities. The motorcycle industry has given rise to job opportunities for riders, mechanics, spare parts dealers, and other related service providers, positively impacting unemployment rates and enhancing household livelihoods.

In Zango Kataf local government of Kaduna State, motorcycles have filled an important transportation void, especially in areas with limited access to public transportation. They offer a cost-effective and flexible means of transportation for short to medium distances, facilitating easy commuting within both urban and rural areas. Studies by Okada and Dada (2017) emphasize the critical role motorcycles play in connecting rural and urban areas, expanding market access, and promoting economic activities. Many individuals derive their livelihoods from motorcycle ownership, either as riders or through engagement in delivery services (Waziri & Ayo, 2019).

The motorcycle industry has also given rise to entrepreneurial opportunities in Kaduna State. With motorcycles readily available, many individuals have established small-scale businesses such as delivery services, courier services, and transportation services for goods and services. The easy entry into the motorcycle transportation sector has encouraged aspiring entrepreneurs to establish their businesses and contribute to the growth of the local economy.

Furthermore, motorcycle operations in Kaduna State generate revenue for the government through licensing fees, permits, and other regulatory charges imposed on motorcycle operators. Taxes paid by motorcycle riders and related businesses also contribute to the state's tax revenue, which can be utilized for infrastructural development, public services, and social welfare programs. Adewumi and Mohammed (2018) emphasized the need for stricter enforcement of safety regulations and licensing requirements to improve safety and curb illegal motorcycle operations.

Motorcycles have significantly improved access to essential services in Kaduna

State, enabling people to reach healthcare facilities, schools, markets, and other crucial services promptly, particularly in areas with limited infrastructure. Their availability has positively impacted healthcare delivery, education, and overall socioeconomic development, ensuring that individuals can access necessary services without undue constraints.

1.2 Statements of the Research Problems

Before the zero rating of motorcycles in 2008, the lives of majority residents of Zangon Kataf LGA of Kaduna State, was centered on fishing, subsistence agriculture and livestock keeping. They cultivated crops such as millet, sorghum, maize, groundnuts, cotton, sugarcane and rice. Due to overfishing and unpredictable weather, there was a reduction in fish population thus returns from fishing and farming activities diminished and retrenchment of people from service. As a result, majority of the youths and elderly people in the community became jobless thus their sources of wellbeing were lowered, making many to engage in an alternative activities such as motorcycle business for 'survival'. Limited job creation opportunities: While motorcycles provide employment for riders, the sector's potential for creating additional job opportunities remains largely untapped. Exploring ways to expand job creation within the motorcycle industry is crucial for maximizing its contribution to the local economy.

There is a dearth of reliable and up-to-date data on the economic contribution of motorcycles business in the Zango Kataf area. Without accurate data, it becomes challenging to assess the impact of motorcycles on the local economy.

The motorcycle industry in Zango Kataf is predominantly informal, with a significant number of riders operating without proper

licensing or regulation. This informality poses challenges in terms of tracking their economic activities and assessing their overall contribution.

The increase in motorcycle usage has led to a rise in accidents and safety concerns in Nigeria. Addressing these issues is essential to ensure the sustainability of the motorcycle industry while safeguarding public well-being.

Motorcycles, particularly older models, contribute to air and noise pollution. Assessing the environmental impact of the motorcycle sector is necessary to determine the sustainability of its contribution to the economy.

The lack of adequate road infrastructure, designated parking spaces, and maintenance facilities poses challenges for the motorcycle industry in Zango Kataf. Addressing these infrastructure gaps would enhance the sector's productivity and economic contribution.

The absence of a well-defined regulatory framework and effective enforcement mechanisms hampers the optimal growth and contribution of the motorcycle industry. Implementing appropriate regulations and ensuring their enforcement would enhance the sector's economic impact.

While motorcycles contribute to the local economy, relying heavily on a single industry poses risks. Encouraging economic diversification and exploring opportunities in other sectors would help reduce the overreliance on the motorcycle industry and ensure a more resilient economy.

In order to effectively address these problems, stakeholders can gain a comprehensive understanding of the motorcycle industry's contribution to the economy of Zango Kataf, Kaduna State,

and formulate strategies to maximize its positive impact while mitigating associated challenges.

1.3 Aim and Objective of the study

1.3.1 Aim

The aim of this study is to assess the contribution of motorcycle business to the economy of Nigeria using a case study of Zango Kataf Local Government of Kaduna State.

1.3.2 Objectives

The objectives of this study are to:

1. Evaluate the economic significance of motorcycle business in Kaduna state.
2. Identify the key sectors that benefit from the motorcycle operation in Kaduna state.
3. Investigate other business opportunities created by the motorcycle business in Kaduna state.

1.5 Significance of the study

This study will help the government, private sector and interested individual to invest in motorcycle business. It will also help the Kaduna government in policy making and implementation regarding the operation of motorcycle in the state. This study will be ready material for further research.

2.0 LITERATURE REVIEW

Numerous studies have recognized the significant role of motorcycles in enhancing transportation accessibility and promoting economic activities in both rural and urban areas of Kaduna State. Adegboyi and Ogunsiji (2019) revealed that motorcycles play a crucial role in connecting remote communities to markets and essential services, thus contributing to

poverty reduction and income generation. by Owoeye and Owoeye (2018) in Nigeria revealed that motorcycles played a crucial role in providing affordable and accessible transportation, promoting trade, and stimulating economic growth, particularly in rural areas

Adepoju, A. A., & Salihu, A. A. (2020). The role of motorcycles in urban transportation in Nigeria: A case study of Kano metropolis. *Journal of Sustainable Development Studies*, 13(2), 68-82. This article investigates the role of motorcycles in urban transportation and economic development in Kano, Nigeria. It explores the employment opportunities, income distribution, and market dynamics resulting from the motorcycle industry, offering relevant insights for studying the economic contributions of motorcycles in Kaduna State. Onu, C. C., & Adebayo, O. T. (2017). Motorcycle transportation and economic growth in Nigeria: Evidence from Ondo State. *Journal of Economics and Sustainable Development*, 8(5), 21-29.

Adebayo, A. (2018). Motorcycle transportation and economic development in Nigeria: A case study of Lagos State. *African Development Review*, 30(3), 303-315. This study examines the economic contributions of motorcycles in Nigeria, focusing on Lagos State. It explores the employment generation, income distribution, and market dynamics associated with the motorcycle industry, providing valuable insights for understanding the potential economic impact of motorcycles in Kaduna State Ahmed et al. (2020) and Owoyemi and Adekanye (2018) have documented the employment opportunities created by the motorcycle industry in Kaduna State. They found that many individuals, particularly youths, have found employment as motorcycle riders, and others have set up small businesses related to the motorcycle

sector. Also Ogen and Yaya (2019) in their studies found that motorcycle riding provided employment to a substantial number of individuals, especially young men, who otherwise faced limited job prospects.

A study by Adogu et al. (2020) investigated motorcycle-related accidents in Nigeria, including Kaduna State. Their findings indicated that motorcycle accidents were prevalent and led to significant health and economic burdens due to injuries, medical expenses, and lost productivity. Studies by Danfulani et al. (2017) and Umar et al. (2021) reported an increasing trend in motorcycle-related accidents, with factors such as non-compliance with safety regulations, helmet non-usage, and reckless riding behavior identified as contributing factors. Abimiku and Olowokere (2019) explored the regulatory framework governing motorcycles in Kaduna State. They highlighted the challenges of enforcing safety and operational regulations due to limited resources and the informal nature of the motorcycle industry.

This study focuses on the relationship between motorcycle transportation and economic growth in Ondo State, Nigeria. It examines the employment generation, income distribution, and market dynamics associated with motorcycles, providing useful information for understanding the economic contributions of motorcycles in Kaduna State. World Bank. (2017). *Nigeria: Expanding access to finance for micro, small, and medium-sized enterprises*. World Bank Group.

This report by the World Bank provides insights into the role of micro, small, and medium-sized enterprises (MSMEs) in the Nigerian economy. It highlights the potential contributions of the motorcycle industry as an important sector for MSMEs, shedding light on the economic

significance of motorcycles in Kaduna State. Kaduna State Government. (2018). Kaduna State Economic Empowerment and Development Strategy (KASEEDS). Kaduna State Government.

The KASEEDS document outlines the economic development strategy of Kaduna State. It may provide information on the government's perspective on the motorcycle industry's contribution to the economy and its plans for enhancing its impact. This document can be a valuable resource for understanding the policy context and development priorities related to motorcycles in Kaduna State.

These sources provide a starting point for understanding the contribution of motorcycles to the economy, similar case studies, and relevant policy frameworks. Conducting a comprehensive literature review will allow you to explore these sources and identify additional studies, reports, and scholarly articles that provide insights into the specific context of Zango Kataf L.G.A. and its economic contributions.

The literature review highlights the multifaceted impact of motorcycles on the economy of Kaduna State. While motorcycles contribute significantly to transportation access, employment generation, and economic growth, safety concerns, environmental impacts, and security challenges require attention. Existing research provides valuable insights for policymakers and stakeholders to formulate evidence-based strategies to harness the positive economic impact of motorcycles while addressing associated challenges in Kaduna State. However, there is a need for further research to comprehensively assess the environmental impact of motorcycles and identify sustainable solutions for safer motorcycle use in the state.

3.0 METHODOLOGY

3.1 Study Area

Zango Kataf L.G.A. is located in the southern part of Kaduna State, Nigeria. It is one of the 23 local government areas that make up Kaduna State. The L.G.A. is predominantly inhabited by the Kataf people, who are part of the larger Southern Kaduna ethnic groups.

Zango Kataf L.G.A. is known for its agricultural activities, with farming being a major occupation for the residents. The area is endowed with fertile land suitable for the cultivation of crops such as maize, yam, millet, guinea corn, and vegetables. The agricultural sector plays a significant role in the local economy, providing livelihoods for a substantial portion of the population.

In recent years, the motorcycle industry has emerged as an important economic sector in Zango Kataf L.G.A. Motorcycles, also known as okadas, have become a popular means of transportation for both intra-city and inter-city travel. They offer convenient and affordable transportation options, particularly in areas with limited public transportation infrastructure.

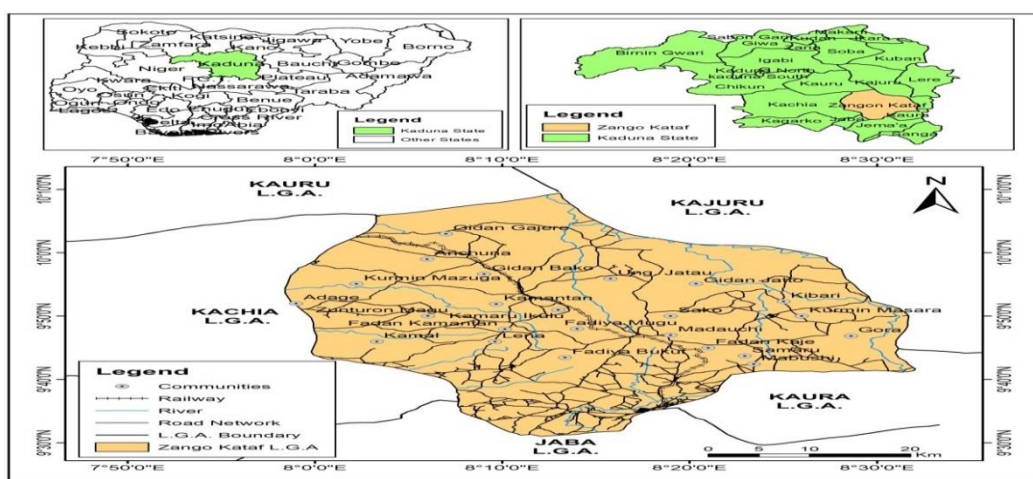
The motorcycle industry in Zango Kataf L.G.A. encompasses various activities. It includes motorcycle riders who provide transportation services to commuters, delivery services for goods, and other entrepreneurial opportunities. These motorcycles play a vital role in connecting communities, facilitating trade, and supporting local businesses.

However, the motorcycle industry in Zango Kataf L.G.A. also faces challenges such as safety concerns, environmental impact, and regulatory issues. Addressing these challenges while maximizing the positive contributions of motorcycles to

the local economy is a key objective of this assessment.

By conducting a case study specifically focused on Zango Kataf L.G.A., this assessment aims to gain a deeper understanding of the economic contributions of motorcycles in this particular area of Kaduna State.

The study explored the employment generation, income distribution, market dynamics, safety concerns, environmental impact, and regulatory framework related to motorcycles in Zango Kataf L.G.A. This localized analysis provides valuable insights into the unique context and dynamics of motorcycle contributions to the economy within this specific study area.



Source: Arc GIS version 10.7

3.2 Types of Data collected

The data for this study are:

Primary Data; Structured questionnaire was used to collect the following data:

- Data on the income generated per day
- Data on household size of the motorcycle operators
- Data on expenditure i.e cost of fueling and maintenance.
- Data on revenue generated to the government; and
- Secondary Data: data on the number of people employed by the motorcycle business in the study area.

3.3 Sources of Data

The types of data stated above were collected from the following sources
Motorcycle Riders in the Study Area
Local Government Representative Motorcycle Unions in the study area

3.4 Sample and Sampling Techniques

3.5 Sample size

The sample size was determined by using Yamane formula: $n = N / (1 + N(e^2))$

Where n stand for Sample size, N stand for the population, e stand for level of error.

$$n = N / (1 + N(e^2))$$

$$n = 1500 / (1 + 1500(0.05)^2)$$

$$n = 1500 / (1501 + 0.05 * 0.05)$$

$$n = 1500 / (1501(0.0025))$$

$$n = 1500 / 3.7525$$

$$n = 400$$

3.6 Data Analysis

Data collected are analyzed using SPSS and EXCEL packages to present the data on tables and charts. The tables and charts are further interpreted and explained to satisfy the given objectives.

Table 1: Socio- Economies Character of the Respondent

Variable	Cases	Frequency	Percent
Gander	Male	81	66.9
	Female	41	33.1
	Total	124	100.0
Age	15-19 years	12	9.7
	25-29 years	5	4
	30-34 years	100	80.6
	40-49 years	7	5.6
	Total	124	100
Marital status	Single	104	83.9
	Married	20	16.1
	Total	124	100
Education status	Primary	27	21.8
	Secondary	11	8.9
	Higher Education	52	41.9
	Vocation	34	27.4
	Total	124	100

Source: Author's field work (2023)

The provided table 1 above presents the percentage distribution of respondents based on four variables: Gender, Age, Marital Status, and Education Status.

The above table revealed that male respondents represents 66.9% while female and commercial motorcycle riders constitute 33.1%. This implies that there are more male respondents than the female respondents.

The table revealed that the age bracket of 15-19 years is been represented by 9.7% of the total respondents, 25-29 years stands as 4%, 30-34 years constitute 80.6% while

40-49 years is represented by 5.6%. It means that respondents within the age bracket of 30-34 years constitute the highest percentage of commercial motor riders.

Furthermore, the table also disclosed that those respondents who are unmarried are more (83.9%) compared to those that are married.

Also, table 1 above shows that respondent with higher education (41.9%) are dominant the study area. Meaning that reasonable numbers of motorcycle riders have attained higher educational level.

Table 2: Type of business

Type of business of respondent	Frequency	Percent
Farmer	97	78.2
Trader	19	15.3
Student / Academic	8	6.5
Total	124	100

Source: Author's field work (2023)

Table 2 above show that Farmer represent 78.2% of the respondents, trader 15.3%, Student/ Academic 6.5%. This means that

the farmers are major beneficiaries of commercial motorcycle operation in the study area

Table 3: Transporting of good of by Motorcycle

Transporting of good of by Motorcycle	Frequency	Percent
Yes	108	87.1
No	16	12.9
Total	124	100

Source: field work (2023)

Table 3, provided above shows the responses regarding the transportation of goods by motorcycle. Those that transport goods by motorcycle is represented by 87.1% while those that claimed they don't

transport goods by motorcycle is represented by 12.9%. this implies that most respondents transports goods by motorcycle.

Table 5: Others Business Opportunities Create By Motor Cycle Top of Form

Others business opportunities create by motor cycle	Frequency	Percent
Motorcycle mechanic business	25	20.2
Motorcycle spare parts business	94	75.8
Motorcycle oil business	5	4.0
Total	124	100.0

Source: field work (2023)

Table 5 above presents data on the other business opportunities created by motorcycles operation. (20.2%) of the respondent are motorcycle mechanic, (75.8%) of the respondents are motorcycle

spare parts sellers and (4.0%) of the respondent are oil business. this implies that motorcycle operation has given rise to more lucrative businesses.

Table 6: Banning of motorcycle operation

Banning of motorcycle operation	Frequency	Percent
Yes	38	30.6
No	86	69.4
Total	124	100.0

Source: field work (2023)

Table 6 presents data on respondents' opinions regarding the banning of motorcycle operations in Kaduna State. From the table it is noticed that majority of the respondents are not in support of banning of motorcycle operation in Kaduna State. The table reveals that 69.4% of the respondents believe that not banning motorcycles is essential for the local economy and its impact on various stakeholders, including commuters,

farmers, traders, and motorcycle operators. The data suggests that motorcycles play a vital role in supporting economic activities and livelihoods within the community and the state at large..

The high percentage of respondents opposing the ban signifies the perceived importance of motorcycles as a mode of transportation and their contribution to the local economy.

Table 7: Government Policy in place respondent

Government Policy in place respondent	Frequency	Percentage
Licensing	9	26.47
Plate number	8	23.53
Registration	9	26.47
Tax	8	23.53
Total	34	100.00

Source: field work (2023)

The above table 7 presents data on respondents' perceptions regarding government policies related to motorcycle operations.

Licensing and Registration represents 26.47%, plate number and tax represents 23.53% of the respondents. This implies that government generates revenue from the operation of motorcycle business.

Table 8: Re-Structuring of motor cycle operation

Re-Structuring of motor cycle operation	Frequency	Percentage
construction of new road for them	12	34.29
timing of motor cycle operation	12	34.29
using motorcycle as feeder vehicles	11	31.43
Total	35	100.00

Source: field work (2023)

The above table 8 presents data on respondents' opinions regarding the re-structuring of motorcycles. Construction of dedicated Road for Motorcycles and Timing of motorcycle operation seems to

be very paramount to the respondents of the respondents. While using motorcycle as a feeder transport is another option in the re-structuring of motorcycle operation in Kaduna State

FINDINGS, RECOMMENDATION AND CONCLUSION

5.1 Findings

It was discovered from the study that commercial motorcycle plays a significant role in stimulating economic activities in Kaduna State. They serve as a crucial means of transportation for commuters, farmers, traders and even students within the State, facilitating trade, access to markets and Schools within and around the State.

The study also unveiled that commercial motorcycles operation has created various business opportunities in the state which ranges from spare parts business to mechanic and sales of motorcycle oil. Entrepreneurs have recognized the potential for starting businesses related to selling motorcycle spare parts, offering maintenance and repair services.

Furthermore, the study revealed that motorcycle operations are efficient feeder vehicles, connecting communities to broader transportation networks or services. This indicates their potential to improve connectivity and accessibility in the area.

Also, it was unraveled that commercial motorcycle has provided employment opportunity to thousands of young people in Kaduna State thereby sending them out of the street and making them responsible.

Additionally, the study showed that commercial motorcycle has generated a lot of revenue for the government through

licensing, tax, plate number registration and so on.

5.2 Conclusion

In conclusion, the assessment of motorcycle operations in the study area has provided valuable insights into the role of motorcycles in the local economy and transportation system. The data reveals that motorcycles play a significant role in stimulating economic activities, serving as essential means of transportation for commuters, farmers, traders, and Students.

The study also highlighted the diverse uses of motorcycles, including the delivery of goods and messages, creating business opportunities for entrepreneurs in the spare parts and mechanic industries.

Moreover, motorcycles have been recognized as feeder vehicles, connecting communities to broader transportation networks efficiently.

5.2 Recommendations

To address these concerns and leverage on the economic potential of motorcycles, policymakers must consider the following recommendations to enhance motorcycle operations and address related concerns:

Construction of dedicated motorcycle lanes or routes/road is key to improving safety and efficiency of motorcycle riders, reducing traffic congestion and enhancing road safety,

implementation and enforcement of safety regulations for motorcycle operators, including the use of helmets and proper licensing could also be a tool for improving

motorcycle operation in the State. There should be specific timing for motorcycle operations in certain areas, especially in densely populated or sensitive zones, to address concerns related to crime, noise, and congestion during specific hours.

Also, the government should integrate motorcycles as feeder vehicles into existing transportation networks to provide efficient last-mile transportation solutions, particularly in areas with limited public transport access.

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