



ORIGINAL RESEARCH ARTICLE

Appraising the Prevalence of Road Traffic Accidents and Its Impact on Socio-Economic Well-Being of Communities along Mubi-Yola Highway, Adamawa State, Nigeria

Nuhu H. Tini

Department of Urban and Regional Planning, Faculty of Environmental Sciences, Adamawa State University, Mubi, Nigeria

ARTICLE INFO

Article History:

Received 30th November 2025

Revised 3rd December 2025

Accepted 5th December 2025

Keywords:

- Traffic accidents;
- Highway;
- Prevalence;
- Spatial clustering;
- Community well-being

*Corresponding Author:

E-mail: nuhutini@gmail.com

Phone: +2348146548899

ABSTRACT

Road Traffic Accidents (RTAs) represent a major public health and socio-economic concern globally, with low- and middle-income countries bearing the highest burden. This study assesses the prevalence of road traffic accidents and their impact on the socio-economic well-being of communities along the Mubi-Yola highway in Adamawa State, Nigeria. A descriptive cross-sectional approach was adopted, utilizing accident records from law enforcement agencies. Individual interviews were also conducted with the staff of FRSC and NURTW, passengers, pedestrians, and other road users along the Mubi-Yola Highway to generate data for analysis. Findings revealed a high prevalence of RTAs, with frequent involvement of commercial vehicles, motorcycles, and pedestrians. The major causes identified include over-speeding, poor road conditions, driver fatigue, and inadequate enforcement of traffic regulations. Spatial clustering and hot-spots of traffic accidents along the corridor were noted at Fachi, Kwanan Sigiri and Vunaklang Junction with frequencies ranging from 10.1 to 13. The socio-economic impacts of road traffic accidents on well-being of the communities comprise loss of breadwinners, increased medical and burial expenses, long-term disabilities, disruption of economic activities, and heightened poverty levels among affected households. The study concludes that RTAs along the Mubi-Yola highway **do** not only pose significant public health risks but also exacerbate socio-economic vulnerabilities within the region. It recommends improved road infrastructure, strict traffic law enforcement, driver education programs, and provision of accessible emergency response services to mitigate accident rates and their adverse consequences on community well-being. The significance of this study lies in its potential to inform policymakers and road safety advocates, emphasizing the urgent need for targeted interventions.

Introduction

Road traffic accidents (RTAs) constitute one of the most critical public health challenges globally, with particularly severe consequences in low- and middle-income

countries such as Nigeria. The World Health Organization (WHO, 2018) estimates that approximately 1.35 million people die each

year as a result of road traffic. Tens of millions of people sustain non-fatal injuries which often result in long-term disabilities. Currently, road traffic injuries are ranked as the eighth leading cause of death globally, and projections suggest that by 2030, RTAs will become the fifth-leading cause of death worldwide (WHO, 2018).

In Africa, RTAs rank among the leading causes of death, particularly among young and economically productive age groups. In spite of having only 2% of the world's motorization, Africa accounts for 16% of global road deaths, indicating a disproportionately high burden. The region bears such an unequal problem, recording the highest percentage of vulnerable road users worldwide (WHO, 2018; Adeboye et al., 2016). Although several road safety measures have been implemented, their effectiveness remains limited, as road crashes continue to rise due to expanding transport systems and increasing vehicle use (Onyemaechi et al., 2016).

In Nigeria, road transport remains the dominant mode of movement for people and goods, but it is characterized by poor infrastructure, inadequate enforcement of traffic regulations, vehicle overloading, and risky driver behaviors (Ogunmodede et al., 2012). Nigeria faces a growing road safety crisis, with road crashes becoming an urgent concern. Due to an underdeveloped rail system and a high dependence on road transport, the country experiences a large number of RTAs annually. In spite of interventions by the Federal Road Safety Corps (FRSC), significant progress in mitigating road crashes remains elusive. According to FRSC data, between 2010 and 2014, over 27,000 people lost their lives, while nearly 100,000 individuals sustained injuries in 48,841 recorded road crashes (FRSC, 2015). More recent reports indicate that 5,053 fatalities were recorded in 2016 across 9,694

road crashes, reflecting a slight decline from the 5,440 deaths recorded in 2015, despite an increase in accidents (FRSC, 2017).

The Mubi-Yola highway in Adamawa State is a major arterial route linking urban and rural communities, facilitating trade, agriculture, and social interaction. However, numerous reports indicate recurrent accidents involving passenger buses, trucks, and private vehicles are regularly recorded along the route. Despite repeated interventions such as public sensitization campaigns, vehicle inspection policies, and highway patrols, road safety indicators on this corridor remain poor. The route has become notorious for frequent accidents, resulting in loss of life, injuries, damage to property, and adverse socio-economic effects on communities. The prevalence and severity of RTAs along Mubi-Yola highway not only pose a public safety concern but also affect household livelihoods through medical costs, loss of breadwinners, and psychological trauma. Consequently, understanding the incidences, patterns and impacts of these accidents is essential for evidence-based interventions to improve road safety and mitigate their effects. This study therefore seeks to investigate the prevalence of RTAs and its socio-economic impacts on communities along this critical highway.

Material and Methods

The material and methods employed in this research are described in this section. It specified the study area, types of data collected, data collection techniques, and data analysis techniques.

The Study Area

The study area forms most parts of the Adamawa Central Senatorial Zone. It lies between Longitude 12°20' E and 13°40' E and Latitude 9°20' N and 10°20' N (Figure 1). The Mubi-Yola Highway stretches from Mubi North Local Government Area of Adamawa

State through Hong, Gombi, Song, Girei, and Yola North Local Government Areas, spanning a distance of approximately 120 km. The study area is bounded in the North by Borno State and Michika LGA. Cameroon Republic and Maiha Local Government LGA in the Northeastern part, while it is bounded by Shelleng and Demsa Local Government

Areas in the South. According to Ambrose (2020), Mubi North LGA has a land area of 924.32 km², Hong LGA covers 2,753.20 km², Gombi LGA is 1,953.56 km², Song LGA 4,325 km², Girei LGA measures 1,151 km², while Yola North LGA has 111.85 km², making a total land area of 11,218.93 km².

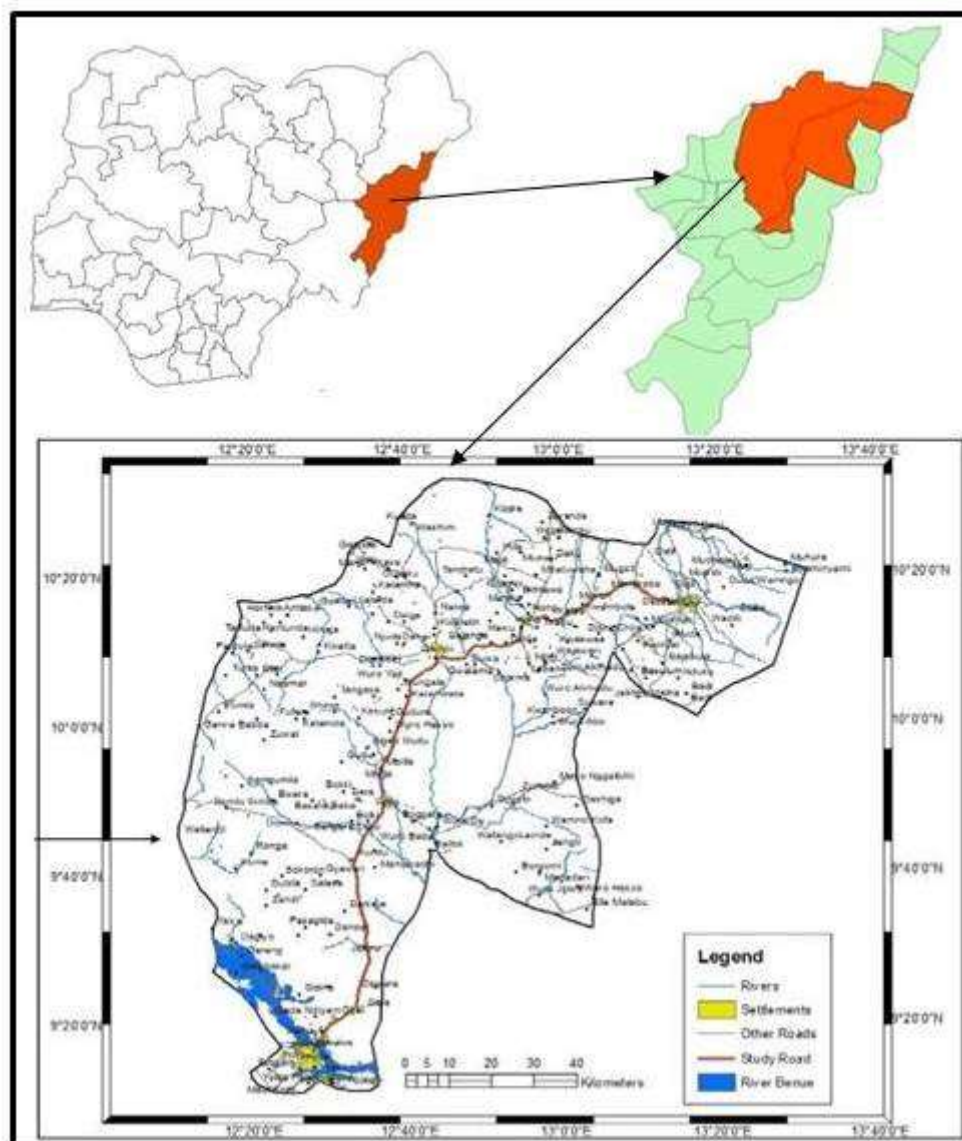


Figure 1: Study Area

Methodology

In this research, the staff of FRSC, and NURTW, passengers, pedestrians, and other road users along the Mubi-Yola Highway was

interviewed. The researcher approached individuals at strategic points along the highway, such as rest stops, parking areas, motor parks and bus terminals. Historical

accident record data were obtained from FRSC reports and subjected to trend analysis, allowing for an assessment of accident occurrences over time and identifying patterns in accident rates and accident-prone areas along the highway. The human and socio-economic losses were obtained from previous researches and google search. GPS was employed to capture the precise coordinates of accident-prone areas along Mubi-Yola highway, GIS mapping capabilities were also employed to visually represent the spatial distribution of accident-prone areas.

Results and Discussion

Prevalence of Road Traffic Accidents along Mubi-Yola Highway

The prevalence of road traffic accidents between the year 2020 and 2024 along Mubi-Yola highway is illustrated in Table 1. The data shows distinct patterns in road traffic accident occurrences across the six affected Local Government Areas (LGAs). In 2020, Mubi recorded two children and eight adults involved in road traffic accidents, resulting in one minor injury, one serious injury, and one fatality. Hong reported a substantially higher incidence with eight children and 44 adults affected, including two minor, five serious, and two fatal cases, highlighting significant traffic safety concerns in this locality. Gombi documented one child and 24 adults with only one minor injury, suggesting relatively lower severity. In Song, eight children and 33 adults were involved, with two minor injuries, three serious injuries, and two fatalities, indicating considerable accident severity. Girei reported five children and 30 adults with one minor, one serious, and one fatal case, while Yola-North recorded the lowest figures; one child and three adults—with two serious injuries and no fatalities. This distribution demonstrates that areas such as Hong and Song consistently experience higher accident rates and severities, likely attributable to road hazards including sharp bends, potholes,

increased traffic during market days, and infrastructural deficiencies requiring targeted interventions.

The 2021 data reveal a general decline in the number of accidents involving both children and adults across most LGAs compared to 2020. Mubi reported one child and 10 adults with one minor and two serious injuries. Hong had three children and 32 adults affected, recording one minor, four serious, and one fatal accident. Gombi observed an increase to three children and 27 adults, with two minor, four serious, and three fatal cases, reflecting persistent risk. Song recounted six children and 18 adults, with two minor, four serious, and two fatalities. Girei recorded four children and 25 adults, with one minor, three serious, and one fatal case, while Yola-North had three children and five adults involved, resulting in two minor and one serious injury. Despite the overall reduction in incident numbers, Hong and Gombi remained areas of concern due to continued high counts of serious and fatal accidents, often linked to excessive speeding, dangerous overtaking, and challenging road alignments.

In 2022, a further reduction in total accident occurrences was noted, especially regarding child involvement. Mubi recorded one child and five adults with three serious injuries but no minor cases. In contrast, Hong experienced a slight increase, involving 26 adults with two minor, two serious, and two fatal accidents. Gombi reported one child and 32 adults, with three minor, three serious, and one fatal case. Song recorded three children and 23 adults, reporting one minor, one serious, and three fatalities. Girei documented three children and 18 adults with one minor, two serious, and one fatal case. Yola-North involved one child and 12 adults, with three minor, one serious, and one fatal injury. The persistence of severe accidents in LGAs such as Hong and Song

underscores the need for sustained road safety measures and infrastructure improvements.

Similarly, the 2023 results indicate modest improvements in road safety overall, although serious and fatal incidents continued in specific locations. Mubi reported one child and five adults with three minor and one serious injury. Hong involved four children and 19 adults, recording one minor, five serious injuries, and two fatalities. Gombi, with no children but 27 adults, had two minor, 1 serious, and two fatal accidents. Song recorded six children and 23 adults, with three minor, six serious injuries, and two fatalities. Girei documented three children and 22 adults, with one minor, three serious, and one fatal case. Yola-North involved 10 adults with one minor and two serious injuries and no fatalities. Although some LGAs, particularly Gombi and Yola-North, showed progress, persistent high severity in Hong and Song indicates that targeted interventions remain necessary.

Finally, in 2024, there was a slight increase in the overall number of reported accidents, but a reduction in fatalities was observed, suggesting improvements in certain safety measures. Mubi reported two children and nine adults with only one serious injury. Hong recorded one child and seven adults, reporting one minor, no serious injuries, and two fatalities. Gombi involved 7 adults with two minor and one serious injury. Song reported three children and 12 adults with two minor and two serious injuries. Girei recorded two children and 14 adults, with one minor and two serious injuries. Yola-North, involving five adults, reported one minor, one serious injury, and no fatalities. This decline in fatal outcomes across several LGAs is a positive trend; however, the persistently high severity in Hong and Song emphasizes the need for continuous, focused road safety strategies in these areas.

Generally, the temporal trends of road traffic accidents shows a declining pattern in total persons involved. It is observed that the highest number of persons (167) was recorded in 2020. This outcome corroborates that of Adeloye et al. (2016) who reported that high road crash burden in Nigeria. The lowest number of persons (57) involved in accident was recorded in 2024. This gradual decline suggests that there is possible improvement in law enforcement. Another reason could be increase in awareness campaigns. It could also be as a result of reduced traffic flows probably due to security situations

The data similarly reveals that serious injuries were at peak in 2021 and 2023 (18 cases each). This indicates that injuries were persistent despite the overall decline in accidents. However fatalities fluctuated between four and eight per year, while 2024 saw the lowest (4 fatalities). Ogunmodede et al. (2012) expressed that high fatalities are experienced on major roads of the country. According to Odero et al. (2003) similar patterns are found in Kenya. Afukaar (2003) observed speeding as major cause of road traffic accidents on Nigerian highways. This reinforces the universality of highway safety challenges.

The spatial patterns of the road traffic accidents indicate that Hong LGA, consistently experienced highest involvement in accident. This could likely be due to dense settlement, high transport activity and poor road maintenance. Yola-North records lowest traffic accident, reflecting better urban controls. Gombi and Song LGAs experienced regularly high severity (fatalities, serious injuries). Victim demographics reveal that adults comprised 87% of victims. Children involvement in traffic accident was significant in Hong and Song LGAs. The vulnerability of children as shown by this result underscores lack of protective measures.

Spatial Clustering and Accident Hotspots along Mubi-Yola Highway

The location of accident prone areas along the Mubi-Yola highway was investigated and the result is illustrated in Figure 2. The outcome exhibits varying levels of risk, as indicated by their accident frequencies and corresponding colour codes. The map reveals a clear distinction between areas with low, moderate, and high accident rates, providing valuable insights into road safety concerns in the region. This research adapted thresholds (5–7, 7.1–10, 10.1–13) consistent with methods used in Nigerian GIS hotspot zoning to represent low, moderate and high risk locations respectively (Afolahan, et al. 2022).

In the low-risk category, represented by green areas (with frequencies ranging from 5 to 7), several locations emerge. Mile Tara in Hong LGA recorded 5 accidents, marked as a lower-

risk area necessitates attention due to poor road conditions and common negative drivers' behaviours like speeding. Similarly, Hospital Junction and Murke Hill in Song LGA, both with 5 accidents, are positioned in proximity to healthcare and residential areas, which increase traffic flow and the likelihood of accidents. The foregoing mentioned locations often face challenges due to sharp bends and limited visibility, making road improvements essential. Federal Housing Junction in Girei LGA, with 7 accidents, also falls under the low-risk category. The existence of road curvature, residential-traffic mixing, and visibility are critical issues resulting to road accidents—as seen in Nigerian hotspot studies discussed by Afolahan, et al. (2022). The interaction of residential traffic with major highways here indicates the need for enhanced traffic management.

Table 1: Prevalence of Road Traffic Accident along Mubi-Yola Highway (2020–2024)

Year	LGA	Persons Involved		Severity of Accident		
		Children	Adult (M/F)	Minor	Serious	Fatal
2020	Mubi	2	8	1	1	1
	Hong	8	44	2	5	2
	Gombi	1	24	1	-	-
	Song	8	33	2	3	2
	Girei	5	30	1	2	1
	Yola-N	1	3	-	2	-
	TOTAL	25	142	7	13	6
2021	Mubi	1	10	1	2	-
	Hong	5	32	1	4	1
	Gombi	3	27	2	4	3
	Song	6	18	2	4	2
	Girei	4	25	1	3	1
	Yola-N	3	5	2	1	-
	TOTAL	22	117	9	18	7
2022	Mubi	1	5	-	3	-
	Hong	-	26	2	2	2
	Gombi	1	32	3	3	1
	Song	3	23	2	5	3
	Girei	3	18	1	2	1
	Yola-N	1	12	3	1	1
	TOTAL	9	116	11	16	8

2023

Mubi	1	5	3	1	-
Hong	4	19	1	5	2
Gombi	-	27	2	1	2
Song	6	23	3	6	2
Girei	3	22	1	3	1
Yola-N	-	10	1	2	-
TOTAL	14	106	11	18	7

2024

Mubi	2	9	-	1	-
Hong	1	7	1	-	2
Gombi	-	7	2	1	-
Song	3	12	2	2	1
Girei	2	14	1	2	1
Yola-N	-	-	-	1	-
TOTAL	8	49	6	7	4

Source: Federal Road Safety Corps RS 3.1 HQ

Moderate-risk areas, depicted in yellow (with frequencies between 7.1 and 10), include Kwanan Yaji in Gombi LGA (8 accidents) reflects transit nodes where traffic volumes and reckless driving converge. This result is similar to the built-up highway junctions in Kaduna or Abuja which showed intermediate accident levels due to mixed traffic and infrastructure gaps (Olajuyigbe, et al. 2014). As an important transit point on the Mubi-Yola highway, the moderate accident rate reflects a combination of high traffic volumes and reckless driving behaviours. The risks posed by such locations suggest the need for improved road signage and speed regulation to reduce accident occurrences.

The most hazardous areas, shown in red (with frequencies ranging from 10.1 to 13), include several significant locations. Vuno Klang Junction in Girei LGA stands out with the highest recorded frequency of 13 accidents, making it the most dangerous site along the highway. The steep gradients, heavy traffic, and nearby commercial activities increase the likelihood of accidents, particularly during peak hours. Similarly, Fachi in Hong LGA and Kwanan Sigire in Song LGA, both with 12 accidents, represent high-risk areas. Fachi is often affected by poor road conditions and

reckless driving, while Kwanan Sigire's location near sharp bends contributes to its accident rate. The mapped categories for low (5–7), moderate (7.1–10) and high (10.1–13) crash frequency locations align well with established GIS risk-mapping practices in Nigeria. GIS-based analyses across Nigerian highways consistently reveal clustered patterns of crashes—with high-risk zones at sharp bends, intersections, built-up areas, and zones of poor road infrastructure. For instance, a study on the Zaria–Kaduna Expressway identified hotspots around intersections, bridges, sharp bends, and built-up sections, with contributing factors like over speeding (27.7 %), tyre bursts (17.6 %), and loss of control (15.5 %). Similarly, research on the Akwanga–Gwantu road found that hotspots occurred at sharp bends (21.7 %), potholes (22.6 %), built-up areas (48.5 %) and bridges (7.2 %), with leading causes echoing those above (Madaki and Samuel, 2021).

The consequences of these accident-prone locations are profound. They often experience traffic congestion and delays, increasing transportation costs for commuters and businesses. Safety concerns rise significantly, affecting the confidence of road users and posing risks of fatalities. Disruption to

Costs of Medical Care and Burials: Another severe economic effect of RTAs is costs of medical care and burials. Survivors of serious accidents often require long-term and expensive medical treatment, including surgeries and physiotherapy. For instance, a collision near Hong in 2023 led to the hospitalization of five passengers for over two months, incurring treatment costs exceeding ₦3 million, as reported in a local media brief (Daily Scope, 2023). In addition, funeral expenses for fatal accident victims further burden low-income families. In rural communities like Song or Gombi, families may have to sell assets or take loans to finance such costs, pushing them into debt cycles.

Long-Term Disabilities: RTAs are a leading cause of permanent disabilities which is a key health impact in Nigeria. Survivors may suffer spinal cord injuries, limb amputations, or severe brain trauma. Along the Mubi-Yola route, where motorcycles and poorly maintained vehicles dominate transport, even minor crashes lead to life-altering outcomes due to the lack of protective gear and poor emergency response. According to Olumide et al. (2016), 20% of Nigerian accident survivors develop permanent physical impairments, drastically affecting their ability to work and function independently.

Burden on Health Facilities: The inadequate health infrastructure in towns along the Mubi-Yola highway—such as in Song, Gombi and Hong—means that local clinics are often overwhelmed when accident victims are admitted. Emergency surgeries, intensive care, and specialist treatments are typically unavailable, requiring referrals to far-away hospitals in Yola or Gombe. This overloads tertiary hospitals and delays treatment, often worsening patient outcomes (Adoga & Iduh, 2020).

Family Disintegration: The loss or incapacitation of a family member due to RTAs results in broken families and disintegration of social roles. For example, the death of a father may lead to children dropping out of school, mothers seeking low-paid jobs, and the erosion of household stability. Studies have shown that children orphaned by road crashes are more likely to experience neglect and reduced educational attainment (Okonkwo, 2019). In Adamawa State, social workers have reported a rise in family displacement following major traffic accidents along the Mubi-Yola highway.

Psychological Trauma: Survivors, witnesses, and bereaved family members suffer from psychological trauma, including post-traumatic stress disorder (PTSD), depression, and anxiety. In a survey by Adediran et al. (2021), over 30% of road accident survivors in Nigeria exhibited symptoms of long-term psychological distress. Along the Mubi-Yola route, affected individuals often lack access to counselling services, exacerbating mental health challenges within the community.

Fear and Disruption of Mobility: Frequent accidents instill fear among road users, leading to the avoidance of certain routes, especially at night are a serious impact on the communities. For example, communities around Gombi and Mararaban Mubi have reported declining night-time commercial activities due to fear of accidents involving heavy-duty trucks and reckless drivers. This affects not only transport operators but also traders, students, and civil servants who rely on mobility for their livelihoods.

Loss of Workforce Productivity: Apart of the direct victims, RTAs leads to broader losses in community productivity. Injured individuals often require care from relatives, taking additional people out of the labour force. Additionally, public service delivery suffers when government staff are injured or killed en route to assignments. In 2022, an accident involving a team of health workers from Yola to Mubi resulted in two fatalities and the temporary suspension of immunization campaigns in northern districts (Adamawa MOH, 2022).

Disruption of Educational Attainment: In communities along the Mubi-Yola Highway, RTAs often result in children being orphaned or withdrawn from school to support household incomes. A study by Ibrahim and Musa (2020) on accident-affected families in northern Nigeria found that children from such households are twice as likely to drop out of secondary school compared to others. In one 2023 case in Gombi, the children of a deceased teacher were relocated to extended family homes, causing interruption in their education and psychological instability.

Destruction of Vehicles and Goods in Transit: RTAs also result in the loss of commercial vehicles, motorcycles, and goods in transit, which affects both small-scale traders and large businesses. For example, a major accident near Hong in April 2023 led to the destruction of two transport vehicles carrying agricultural produce and textile goods worth over ₦15 million. Small-scale merchants in Mubi markets reported delayed supplies, losses in income, and inflationary pressures on their goods due to repeated accidents disrupting logistics (Daily Scope, 2023).

Rising Unemployment and Underemployment: Victims of road accidents, especially those who sustain permanent injuries, often lose their jobs or become unemployable. Many commercial motorcycle riders along the Mubi-Yola route suffer fractures and amputations from crashes, reducing their chances of continuing in the trade. This pushes individuals into underemployment or economic dependency, leading to increased demand for social support systems that are already overstretched. Nationally, it is estimated that 15% of physically disabled individuals in Nigeria were victims of road traffic crashes (Okonkwo, 2019). **Strain on Law Enforcement and Judiciary:** The investigation, prosecution, and mediation of road traffic offences and accident-related disputes place a strain on the police, traffic agencies, and the judiciary. According to reports from the Adamawa State Police Command, over 60 accident-related civil and criminal cases were pending in local courts in 2023 alone, many involving disputes over insurance, driver culpability, and compensation (Adamawa Judicial Review, 2023). These processes often delay justice and compound the emotional trauma for affected families. **Insurance System Pressures and Informality:** Nigeria's vehicle insurance system remains largely ineffective, particularly in rural areas. Most vehicles and motorcycles operating along the Mubi-Yola highway are either uninsured or carry expired third-party coverage, making compensation for accident victims nearly impossible. This fuels out-of-pocket spending, delays in repairs, and further impoverishment. A report by the Nigerian Insurance Association (2021) shows that less than 30% of road users in the North-East have valid insurance, underscoring the systemic weakness in financial protection mechanisms.

Gendered Economic Impacts: Women are disproportionately affected by RTAs, especially in their roles as caregivers and informal traders. In most of the communities, women often bear the burden of caring for injured family members, leading to reduced participation in income-generating activities. Moreover, when male breadwinners are lost, women are forced into unstable jobs with little protection or support. This gendered economic vulnerability perpetuates cycles of poverty among widows and female-headed households (UN Women Nigeria, 2022).

Policy Recommendations

Given the multifaceted impact of RTAs on individuals, families, and communities, a multi-pronged policy response is required to reduce accidents and manage their consequences along the Mubi-Yola Highway. Such policies comprise the following:

Improve Road Infrastructure: Areas with high accident frequencies, such as Vuno Klang Junction, Kwanan Sigire, Kwanan Faci, Doubeli and Girei require immediate infrastructural interventions. This includes resurfacing roads, constructing speed breakers in accident-prone zones, and improving signage and lighting to enhance visibility and reduce collisions, particularly at night. Clear and reflective road signs should be installed to guide drivers and warn of curves, pedestrian crossings, or animal zones.

Strengthen Law Enforcement: The enforcement of traffic regulations should be intensified by the Federal Road Safety Corps (FRSC) through patrols and enforce the existing 100 km/h limit, especially in high-risk zones such as Mararraba, Gombi, and Hong. This is to address issues such as over speeding, reckless driving, and overloading. The Federal Road Safety Corps (FRSC) and Nigerian Police Force (NPF) should be equipped with modern tools such as speed

cameras and Breathalyzer to ensure compliance and reduce dangerous driving behaviours. Mobile testing units should also be introduced to check commercial drivers for substance abuse, which is a known risk factor in Nigerian road crashes.

Driver Education and Sensitization: Regular training programs should be organized by the Federal Road Safety Corps to educate drivers on safe driving practices, the importance of adhering to traffic rules, and the dangers of risky behaviours such as speeding and distracted driving. Public awareness campaigns targeting drivers and travellers can help foster a culture of road safety. Moreover, local governments should partner with NGOs to conduct road safety workshops for motorcycle riders, commercial drivers, and school pupils. Radio and community meetings should promote the use of child seat belts and helmet use among youth and minors.

Emergency Response Enhancement: Strengthening emergency medical response systems along the highway is crucial for reducing fatalities and serious injuries. This can include establishing well-equipped trauma centers at strategic points, improving ambulance services, and training first responders in life-saving techniques. Mini trauma centres should be established in key towns (e.g., Song, Gombi) along the corridor to reduce referral times for critical cases. First aid kits, trained personnel, and ambulance services should be made available at local primary health centres.

Conclusion

The prevalence of road traffic accidents along the Mubi-Yola highway is alarmingly high and has far-reaching consequences on the socio-economic fabric of surrounding communities. Beyond the immediate loss of lives and injuries, RTAs contribute to financial hardship, loss of income, psychological

distress, and increased dependency ratios within households. These impacts underscore the urgent need for multi-sectoral interventions involving government agencies, road safety authorities, health institutions, and local communities. Enhancing road safety infrastructure, enforcing traffic regulations, promoting public awareness campaigns, and establishing efficient emergency medical services are essential strategies for reducing accident frequency and mitigating their socio-economic consequences. Addressing these challenges will not only improve road safety but also enhance the overall well-being and economic stability of communities along the Mubi-Yola corridor.

References

- Abubakar, I. A. (2021). Road Traffic Accidents and Human Casualties in Adamawa State, Nigeria. *Journal of Transport and Logistics*, 5(2), 88–102.
- Adamawa Judicial Review. (2023). *Traffic Offences and Case Backlog in Local Magistrate Courts*. Internal Report.
- Adamawa State Ministry of Health (MOH). (2022). Accident Impact on Health Missions in Northern Adamawa. *Official Health Report*, December 2022.
- Adamawa State Ministry of Health. (2022). *Health Budget Allocation and Emergency Services Report*. Yola: Government Press.
- Adamawa State Ministry of Health (MOH). (2022). Accident Impact on Health Missions in Northern Adamawa. *Official Health Report*, December 2022.
- Adeloye, D., Thompson, J. Y., Akanbi, M. A., Azuh, D., Samuel, V., Omoregbe, N., & Ayo, C. K. (2017). The Burden of Road Traffic Crashes, Injuries and Deaths in Africa: A Systematic Review and Meta-Analysis. *Bulletin of the World Health Organization*, 95(8), 546–556.
- <https://doi.org/10.2471/BLT.16.185807>
- Adediran, M. O., Adebayo, A. M., & Aluko, A. A. (2021). Psychological Effects of Road Traffic Accidents in Nigeria. *Nigerian Journal of Psychiatry*, 19(1), 42–50.
- Adoga, A. A., & Idub, A. (2020). Road Accident Response Challenges in Northern Nigeria. *Health Services Insights*, 13, 1–7.
- Afolahan, A., Easa, S.M., Abiola, O. S., Alayaki, F. M., & Folorunso, O. (2022). GIS-Based Spatial Analysis of Accident Hotspots: A Nigerian Case Study. *Infrastructures* 2022, 7(8), 103; <https://doi.org/10.3390/infrastructures7080103>.
- Daily Scope. (2023). Five Hospitalized in Mubi-Yola Road Crash. *Adamawa Daily Scope*, April 12, 2023.
- Federal Road Safety Corps (FRSC) Annual Report (2015). Retrieved from <http://frsc.gov.ng/wp>
- Federal Road Safety Corps (FRSC) Annual Report (2017). Retrieved from <http://frsc.gov.ng/wp>
- Federal Road Safety Corps (FRSC). (2021). Road Traffic Crash Data. Retrieved from <https://frsc.gov.ng/road-traffic-crash-data/>
- Ibrahim, Y., & Musa, A. M. (2020). Educational Disruption in Accident-Affected Households: Evidence from Northern Nigeria. *Nigerian Journal of Educational Research and Evaluation*, 19(3), 89–98.
- Madaki, B. R. & Samuel, A. (2019). Geospatial analysis of road traffic accident hotspots along Zaria-Kaduna expressway. Department of Economics Volume 1, No. 1 2019. Faculty of Social Sciences Nasarawa State University, Keffi, Nigeria
- Nantulya, V. M., & Reich, M. R. (2002). The Neglected Epidemic: Road Traffic

- Injuries in Developing Countries. *BMJ*, 324(7346), 1139-1141.
- Nigerian Insurance Association (NIA). (2021). *Road Users' Insurance Penetration Report*. Abuja: NIA Publications.
- Odero, W., Khayes, I.M., & Meda P.M. (2003). Road Traffic Accident in Kenya: Magnitude Causes and Status of Intervention, *Injury Control and Safety Prevention*: 10:53-61.
- Okonkwo, E. (2019). The Socio-Economic Consequences of Road Traffic Deaths in Nigeria. *International Journal of Social Sciences*, 11(4), 301-313.
- Olajuyigbe, A. E., Ogan, V., Adegboyega, S., Fabiyi, O.O. (2023). Spatio-Temporal Analysis of Road Accidents in Abuja, Federal Capital Territory (FCT), Nigeria Using Geographical Information System (GIS) Techniques. January 2014, *Journal of Scientific Research and Reports* 3(12) DOI:10.9734/JSRR/2014/6325
- Olumide, A. O., Owoaje, E. T., & Adebayo, A. M. (2016). Long-Term Disabilities from Road Traffic Accidents in Nigeria. *African Journal of Medicine and Medical Sciences*, 45(3), 215-222.
- Onyemaechi, N., & Ofoma, U. R. (2016). The public health threat of road traffic accidents in Nigeria
- A Call to Action. *Ann Med Health Sci Res*, 6(4), 199-204. doi: 10.4103/amhsr.amhsr_452_15
- Ogunleye, B. O., Olukanni, D. O., & Lawanson, O. A. (2021). Road traffic congestion in Lagos, Nigeria: An examination of causes, effects, and management. *Sustainability*, 13(4), 1881.
- UN Women Nigeria. (2022). *Gender and Economic Recovery in Conflict-Affected Northern Nigeria*. Abuja: UN Women Country Office.
- WHO. (2018). *Global Status Report on Road Safety 2018*. World Health Organization.
- Zemba, A.A, Tukur, A.L., and Ezra, A. (2020). Local government Areas; In *Adamawa State in Maps* 2nd Ed. Yola, Paraclete Publishers. Pp 6-18.