

## Effect of road infrastructure decay on insecurity in Kwara and Kogi states, Nigeria

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### Abstract

The bad state of the road network in Nigeria has brought untold hardship to the people. The dilapidated condition of various roads across the country is one of the major causes of insecurity on Nigerian roads. Hence, the need to examine the effect of road infrastructure decay on insecurity along Lokoja-Okene-Kabba-Egbe-Ilorin express road in Kwara and Kogi States, Nigeria. The specific objectives of the study are to assess the effect of road infrastructure decay on the occurrence of kidnapping, highway robbery and food insecurity along Lokoja-Okene-Kabba-Egbe-Ilorin express road in Kwara and Kogi States respectively. The study adopts survey research design. Primary data were generated via questionnaire designed in four likert scale. The population of this study is 2,796,139. The population is a finite population and is large, therefore, the entire population was not studied. This study employs scientific sampling technique determination designed by Krejcie and Morgan (1970) that recommends a sample size of 384 for a population above one (1) million. The study employs simple ordinary least square regression technique as a tool of data analysis. The study found that road infrastructural decay has significant positive effect on kidnapping, highway robbery and food insecurity along Lokoja-Okene-Kabba-Egbe-Ilorin express road. The study concludes that road infrastructure decay has the potential to bring about increasing level of insecurity along Lokoja-Okene-Kabba-Egbe-Ilorin express road roads. Lastly, the study concludes that good road is essential to food security in Kogi and Kwara States. The study recommends that there should be conscious efforts on the part of governments at all levels in the country to allocate adequate funds for the improvement of roads in the country.

**Keywords:** Food Insecurity; Highway Robbery; Insecurity; Kidnapping; Road Infrastructure Decay

### 1. Introduction

The poor status of the country's road network has caused immeasurable suffering for the people. One of the biggest causes of instability and deadly incidents on Nigerian roadways is the deteriorating state of numerous roads across the country. Apart from road accidents, the poor state of Nigerian roads makes it difficult for vehicles to move quickly and safely, causing journeys to be not only delayed but also exceedingly expensive and dangerous.

Documentation of insecurity occurrences, on the other hand, is sparse and restricted to a few reports filed at various police stations and offices along the roadways. However, figures on the level of highway crime in Nigeria are difficult to come by, but the high rates of crime and violence keep the highways bloody and boiling. The Lokoja-Okene-Kabba-Egbe-Ilorin highway, the Abuja-Lokoja highway, and a slew of other highways around the country are frequent targets for these attacks.

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Many motorists were concerned about the similar patterns of these robbery incidents, especially because police patrol vehicles and people could be seen fairly close to the scenes of such thefts. Insecurity and genuine risks to life and property loom big on roadways, despite the public-private cooperation that propels important government programs and policies. These tracks of difficulties are duplicated in increasing scale from Lagos to Benin, Lokoja to Abuja, Lokoja to Ilorin, Enugu to Port Harcourt, to name a few. However, the importance of making roadways peaceful and enjoyable for drivers and passengers cannot be overstated. Nigeria's government and security agencies are faced with a massive undertaking (Okunola, 2009; Ojinma et al., 2014).

In general, the state of transportation infrastructure has been deplorable. For many years, Nigerian roads have been in poor shape. The situation is so dire that some parts of the country are almost cut off from the rest of the country. Many settlements in rural areas are isolated, and many more have been isolated without access to the rest of the country. Furthermore, the various modes of transportation have not been properly linked. It's worth noting that the route that connects the country's north and south passes through the states of Kwara, Kogi, Niger, and Ekiti. The highway has a large level of traffic. Because transit vehicle drivers speed and such vehicles are suspected of transporting passengers, states become vulnerable and breeding grounds for a slew of traffic-related criminal cases that result in the loss of lives and property. Inadequate security on the country's highways has made them dangerous.

This study investigates the impact of deteriorating road infrastructure on insecurity in the states of Kwara and Kogi, based on the foregoing context.

The high number of road deaths in Nigeria is due to the nature of Nigerian roads and the crime rate at various points during a journey. Looking at our routes from North to West and East to South reveals that unless immediate action is made to remedy this abnormality, not much can be accomplished in terms of economic revitalization. Nigeria's road network spans 195,500 kilometers across the country. State highways cover around 32,000 kilometers. Around 30% of federal roads are in poor condition due to a lack of maintenance, while up to 75% of local government roads are in poor shape (Atack et al., 2010; Donaldson & Hornbeck, 2016).

Studies on infrastructure decay and insecurity are not many; the few studies that are in existence are studies that are carried out in USA, Saudi Arabia, South Africa, and Ghana, such studies are (James et al., 2015; Wright & Ribbens, 2016; Sam & Abane, 2017; Andrews et al., 2018). However, the empirical studies on infrastructural decay and insecurity in Nigeria are the works of Omidiji and Ibitoye (2010) and Onatere-Ubrurhe (2015). Omidiji and Ibitoye (2010) focused on Ekiti State express road that passes through Kogi State to Abuja, this present study will focus on the Federal roads that links Kwara State to Kogi State. Likewise, the empirical work of Onatere-Ubrurhe (2015) focused mainly on how road infrastructural decay affects highway robbery with the use of secondary data. This current study employs primary data and it also captured some of the security concern of road users which includes highway robbery and kidnapping. These are some of the research gaps this current study filled.

The major objective of this study is to examine the effect of road infrastructure decay on insecurity in Kwara and Kogi States, Nigeria. The specific objectives of this study are to;

- Examine the effect of road infrastructure decay on kidnapping along Lokoja-Okene-Kabba-Egbe-Ilorin express road.
- Determine the effect of road infrastructure decay on highway robbery along Lokoja-Okene-Kabba-Egbe-Ilorin express road.
- Assess the effect of road infrastructure decay on food insecurity in Kwara and Kogi States.

### 1.1. Statement of the Hypotheses

- **H<sub>01</sub>:** Road infrastructure decay has no significant effect on kidnapping along Lokoja-Okene-Kabba-Egbe-Ilorin express road.
- **H<sub>02</sub>:** Road infrastructure decay has no significant effect on highway robbery along Lokoja-Okene-Kabba-Egbe-Ilorin express road.
- **H<sub>03</sub>:** Road infrastructure decay has no significant effect on food insecurity in Kwara and Kogi States.

This study focuses on the effect of road infrastructure decay on insecurity in Kwara State and Kogi State over the period of 1999 to 2021. This study is limited to Lokoja-Okene-Kabba-Egbe-Ilorin express road. The choice of the period is to capture the events that took place within States during the periods of continuous democratic dispensation and how road infrastructure decay impacts on insecurity in Kwara and Kogi States.

The paper is structured into five sections. Following this introduction, section two is concerned with literature review. Section three discussed the methodology adopted for the study; section four discussed the results, while section five provides the conclusion and recommendations.

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## **2. Literature review**

### **2.1. Conceptual Framework**

#### *2.1.1. Road Infrastructure Decay*

Any component of a road, highway, or construction site that does not fulfill the criteria for a safe road is considered road infrastructure deterioration. In Nigeria, the most common faults that result in injuries or car damage include inadequate road shoulders, uneven lanes, uneven pavement, incorrectly designated signs, faulty stop lights, construction incompetence, and municipal negligence (Fulmer, 2009). As a result, road infrastructure decay refers to a condition in which the roads are either non-functional or in a poor state.

#### *2.1.2. Insecurity*

Danger, hazard, uncertainty, a lack of protection, and a lack of safety are all synonyms for insecurity. Insecurity is defined as a state in which members of a society are unable to carry out their regular activities due to threats to and negative disruptions to their lives and possessions. Insecurity, according to Beland (2005), is a condition of worry or anxiety caused by a real or perceived absence of protection. It refers to a lack of or insufficient protection from danger. Insecurity is defined as the absence of peace, order, and security.

#### *2.1.3. Kidnapping*

Kidnapping is described by Inyang and Abraham (2013) as the forcible seizure, taking away, and unlawful detention of a person against his or her will. It is a common law offense, and the important element is that the victim's action was unwelcome. Fage and Alabi (2017) proposed a different definition, defining kidnapping as the forcible or fraudulent abduction of an individual or a group of individuals for causes ranging from economic, political, and religious to self-determination struggles.

#### *2.1.4. Highway Robbery*

Robbery is defined as the act of taking or attempting to take something of value by using force, threats of force, or instilling fear in the victim. Robbery is defined as the taking of another's property by force or fear with the intent to permanently deprive the individual of that property; it is a larceny or theft carried out by an assault. The precise definition of the offense may differ depending on the jurisdiction.

#### *2.1.5. Food Insecurity*

Food insecurity, defined by Bovell et al. (2015) as "restricted or unpredictable access to enough food for all household members to live active and healthy lives," has been linked to poor health outcomes across all age groups in the United States.

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## **3. Empirical Review**

### **3.1. Road Infrastructure Decay and Kidnapping**

Sam and Abane (2017) adopted triangulation research design and routine activities theory to assess passenger safety and security interventions of public transport operators in Ghana. The findings of the study showed inadequate security measures at public parks and on highways which increases passengers' vulnerability to intentional criminal and antisocial acts such as robbery, assault, and baggage theft while on public transport.

Oyinloye et al. (2022) assessed the effect of road infrastructure decay on kidnapping and highway robbery in Nigeria. The study adopted exploratory research design while content analysis of publicly available archival documents was employed. Secondary data were generated via journals publication, the internet, library, and other documented materials relevant to the study. The study relied solely on secondary data. The literature was obtained through searches in publicly available material. The study revealed that road infrastructural decay is one of the factors responsible for highway robbery and kidnappings on the Federal and inter-state roads.

### 3.2. Road Infrastructure Decay and Highway Robbery

In Nigeria's public transportation system, Omidiji and Ibitoye (2010) researched crime and road crash prevention. Drivers from commercial transportation businesses and government-owned corporations were among the participants. Participants included passengers travelling from the states of Ekiti, Kogi, and Kwara to Abuja and Lagos. The majority of drivers and passengers agreed that armed robbers routinely strike on their routes during journeys, resulting in road traffic crashes, according to the survey.

At the county level in Georgia, James et al. (2015) investigated the association between interstate highways and crime. The study looked into whether differences between urban and rural areas have an impact on this relationship. According to the study, the number of interstate routes boosts crime dramatically. In contrast, Onatere-Ubrurhe (2015) suggested a model for predicting future Highway Armed Robbery occurrences based on an examination of existing patterns in HARIs in Nigeria from 2009 to 2014. HARIs are on the rise in Nigeria, according to the study.

In South Africa, Wright and Ribbens (2016) investigated the link between crime and road safety, as well as the influence of criminal activity on the road environment. The study found that illegal actions on the road go well beyond simply committing traffic violations, and that they can have a severe influence on the road network's and broader road environment's safety. Andrews et al. (2018) investigated the consequences of substandard roads on the transportation system, as well as its maintenance and service costs, in the Gushegu District of Ghana's Northern Region. The findings revealed that substandard roads had an impact on the transportation system, as they caused frequent vehicle breakdowns and raised maintenance costs.

### 3.3. Road Infrastructure Decay and Food Insecurity

Mosa et al. (2014) looked into the effects of inadequate infrastructure on food security challenges at the household and community level in the Ntambanana area. Poor infrastructure and insufficient support from key organizations were discovered; roads were in poor condition, limiting access to market facilities and other destinations; and small-scale farmers' performance was hampered by a lack of an efficient and effective transportation system.

Ezeabasili et al. (2014) investigated how infrastructure for water, irrigation, transportation, food processing, storage, and marketing will increase food security. The study provides useful data and information for efficient planning and implementation of the minor irrigation project, as well as a focus on market access so that agricultural products can be successfully linked through value-adding stages to the farmer. Adefalu et al. (2014) investigated the impact of a weak road transportation network on crop production in one of Kwara State's rural agrarian local governments. The study found that their area's weak road transportation network has resulted in a decrease in income, a longer time to move produce to more buoyant markets, and high transportation expenses.

The empirical work of Yeboah (2015) investigated the influence of condition of road transport infrastructure on rural agricultural development in the Jaman South district of Kaduna State. The study purposively sampled 387 farmer households and 84 drivers. It was found that most of the road networks linking the various communities to the main market were unpaved and immotorable during the rainy season.

Abur et al. (2015) analysed the impact of rural road infrastructure on productivity farmers in North Central Nigeria. The study employed multiple regression models to analyze data. Findings of the study showed that access to good roads has significant effect on farmers' output right from point of accessing farm inputs to point of disposing produce. The effects of road mobility on agricultural output in the Ayamelum Local Government Area of Anambra State, Nigeria, were investigated by Orakwue et al. (2015). They discovered that road transportation had both positive and negative effects on agricultural development and the overall socioeconomic level of the towns in the research area.

Bradbury et al. (2017) looked at how road conditions affected the quality of agricultural produce and small-scale farmers' access to markets. The study discovered that low-cost engineering measures may be employed in the primary transportation sector as part of community-driven development projects, and that the government should provide the necessary support and interventions.

From 1985 to 2014, Ogunleye et al. (2018) investigated the effects of road transport infrastructure on agriculture sector development in Nigeria. The study's findings demonstrated a favorable and statistically significant link between road transportation infrastructure and agriculture sector development. Boroh and Nwakanma (2018) investigated the role of infrastructure in the agricultural sector's development. According to the report, the lack of these fundamental infrastructures can stymie agricultural development. In Ikere-Ekiti, Ekiti State, Nigeria, Olorunfemi (2018) researched

rural road transportation difficulties and food security. According to the findings of the study, the area's weak road transportation system impedes agricultural production, increasing food insecurity.

In Oyo State, Nigeria, Daud et al. (2018) investigated the impact of infrastructure on the profitability of food crop production among rural farming households. The findings revealed that rural infrastructure is critical to agriculture production output in the study area. In Idanre Local Government Council Areas, Ondo State, Nigeria, Olorunfemi (2020) investigated how road infrastructural difficulties have hampered agricultural development. The findings revealed that high transportation costs and unpredictable transportation services as a result of the research area's poor road conditions have hampered effective agricultural development.

## 4. Theoretical Framework

### 4.1. Social Strain Theory

Robert K. Merton, an American sociologist, coined the term "social strain" in 1938. According to the thesis, social systems may compel citizens to commit crimes. Strain can be structural, referring to societal processes that filter down and influence how an individual views his or her own needs. Individual strain refers to the frictions and aches that an individual experiences when he or she searches for ways to meet personal requirements. These sorts of stress can infiltrate society's social structures, pressuring citizens to become criminals.

He claimed that all communities assign specific aims to their members while also providing socially acceptable techniques or means of reaching those goals. The method worked successfully as long as a majority of people had a fair possibility of achieving their objectives. If, on the other hand, the majority of the population fails to meet the socially imposed goals, they get disillusioned with society and seek for alternate ways of behaving.

Some people may reject both the tactics and the end purpose, opting to leave society completely. Merton suspected they were planning to conduct offenses like unlawful drug use. Rebellion is another adaptation that could lead to criminal behavior: some people may desire to replace the means and aims with new ones, which could lead to illegal protest or political violence in some instances.

## 5. Methodology

The study employs survey research design. This study focuses on towns along Lokoja-Okene-Kabba-Egbe-Ilorin express roads, these towns are Lokoja, Okene, Kabba, Aiyere-Gbede, Mopa, Isanlu, Egbe Omu-Aran and Ilorin. These towns are in Kwara and Kogi States, the population of these towns are presented in the table below;

**Table 1** Population and Sample Size of the Study

S/N	Towns	Population Projection 2016-03-21	Computation	Number of Respondents Selected from each Town
1	Lokoja	692,050	$692,050/2,796,139*384$	95
2	Okene	468,422	$468,422/2,796,139*384$	64
3	Kabba	210,422	$210,422/2,796,139*384$	29
4	Aiyetoro-Gbede	25,000	$25,000/2,796,139*384$	4
5	Mopa	54,437	$54,437/2,796,139*384$	8
6	Isanlu	220,000	$220,000/2,796,139*384$	30
7	Egbe	27,198	$27,198/2,796,139*384$	4
8	Omu-Aran	148,610	$148,610/2,796,139*384$	20
9	Ilorin	950,000	$950,000/2,796,139*384$	130
Total		2,796,139	2,796,139	384

Source: National Population Commission, 2021.

The population of this study is 2,796,139, the population is a finite population and is large, therefore, the entire population was not studied. This study employs scientific sampling technique determination designed by Krejcie and Morgan (1970) that recommends a sample size of 384 for a population above one (1) million.

This study randomly select the sample size which consist indigenes of the towns along Lokoja-Okene-Kabba-Egbe-Ilorin expressway where a significant part of the roads are bad in order to get their opinion on how road infrastructural decay affects insecurity in their vicinity. Likewise, Divisional Police Officers of the police stations, Nigeria Security and Civil Defence Corps offices, Federal Road Safety Corps around the Lokoja-Okene-Kabba-Egbe-Ilorin expressway were interviewed and their responses also form part of the primary data that was used in making the findings of the study. Lastly, Federal Roads Maintenance Agency (FERMA) and drivers of transport companies such as Ola Express, Royal Riders, Winners Express and Kwara Express were interviewed in order to get the required information needed for this study.

The researcher adopts primary method of data collection using Questionnaire as instrument of data collection. Four points Likert-Scale of Strongly Agreed (SA) Agreed (A), Disagreed (D) and Strongly Disagreed (SD) were used. This study employs the Ordinary Least Square (OLS) regression technique to determine the effect of infrastructural decay on insecurity in Kwara and Kogi States.

**5.1. Model Specification**

Simple OLS regressions analysis enables the study to express the effect of Infrastructural decay on insecurity in Kwara and Kogi States.

$$KIDP= \beta_0 + \beta_1RIDE + \varepsilon \dots\dots\dots (1)$$

$$HIGR= \beta_0 + \beta_1RIDE + \varepsilon \dots\dots\dots (2)$$

$$FINS= \beta_0 + \beta_1RIDE + \varepsilon \dots\dots\dots (3)$$

Where;

RIDE = Road Infrastructure Decay

KIDP = Kidnapping

HIGR= Highway Robbery

FINS= Food Insecurity

$\beta_0$  = is the constant or coefficient of intercept

$\beta_1$  = the corresponding coefficient for the respective independent variable

$\varepsilon$  = stochastic error term

**6. Data analysis and results**

**H<sub>01</sub>:** Road infrastructural decay has no significant effect on kidnapping along Lokoja-Okene-Kabba-Egbe-Ilorin express road.

**Table 2** Model 1 Summary

Model 1 Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
					R Square Change	F Change	df1	df2	Sig. Change	F
1	0.978 <sup>a</sup>	0.957	0.957	0.13760	0.957	8475.029	1	382	0.000	

a. Predictors: (Constant), RIDE

The Coefficient of Determination (R<sup>2</sup>) of 0.957 indicates that about 95% of the likelihood of kidnapping to occur on the expressway is explained by bad road. The remaining 5% is attributed to other independent variables not captured in the regression model. The F-Statistic of 8475.029 and its corresponding P-value of 0.000 indicates that model 1 is fit and the independent variable is properly selected used.

**Table 3** Coefficient for Model 1

Coefficientsa for Model 1						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.136	0.036		-3.750	0.000
	RIDE	0.994	0.011	0.978	92.060	0.000

Dependent Variable: KIDP

From table 3 above, the regression result confirms that road infrastructure decay (RIDE) has positive significant effect on the likelihood of the occurrence of kidnapping along Lokoja-Okene-Kabba-Egbe-Ilorin express road. The coefficient of road infrastructure is 0.994, the coefficient is positive. This means that bad road will translate to increase in the likelihood of kidnapping to occur along Lokoja-Okene-Kabba-Egbe-Ilorin express road. This effect is significant as the significance value of 0.000 is less than the significant level of 0.05. Thus, we do have sufficient reason to reject the null hypothesis, we therefore conclude that road infrastructural decay has significant positive effect on kidnapping along Lokoja-Okene-Kabba-Egbe-Ilorin express road.

**H<sub>02</sub>:** Road infrastructural decay has no significant effect on highway robbery along Lokoja-Okene-Kabba-Egbe-Ilorin express road.

**Table 4** Model 2 Summary

Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
					R Square Change	F Change	df1	df2	Sig. Change	F
1	0.871a	0.759	0.758	0.34539	0.759	1200.016	1	382	0.000	

Predictors: (Constant), RIDE

The Coefficient of Determination ( $R^2$ ) of 0.759 indicates that about 75% of the likelihood of highway robbery to occur on the expressway is explained by bad road. The remaining 25% is attributed to other independent variables not captured in the regression model. The F-Statistic of 1200.016 and its corresponding P-value of 0.000 indicates that the model is fit and the independent variable is properly selected and used.

**Table 5** Coefficient for Model 2

Coefficients a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.654	0.091		-7.190	0.000
	RIDE	0.938	0.027	0.871	34.641	0.000

Dependent Variable: HIGR

From table 5 above, the regression result confirms that road infrastructure decay (RIDE) has positive significant effect on the likelihood of the occurrence of highway robbery along Lokoja-Okene-Kabba-Egbe-Ilorin express road. The coefficient of road infrastructure is 0.938, the coefficient is positive. This means that bad road will translate to increase in the likelihood of highway robbery to occur along Lokoja-Okene-Kabba-Egbe-Ilorin express road. This effect is significant as the significance value of 0.000 is less than the significant level of 0.05. Thus, we do have sufficient reason to reject the null hypothesis, we therefore conclude that road infrastructural decay has significant positive effect on highway robbery along Lokoja-Okene-Kabba-Egbe-Ilorin express road.

**H<sub>03</sub>:** Road infrastructural decay has no significant effect on food insecurity in Kogi and Kwara States.

**Table 6** Model 3 Summary

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.964 <sup>a</sup>	0.930	0.929	0.17780	0.930	5048.424	1	382	0.000

a. Predictors: (Constant), RIDE

The Coefficient of Determination ( $R^2$ ) of 0.930 indicates that about 93% of the likelihood of food insecurity in Kwara and Kogi States is explained by bad road. The remaining 7% is attributed to other independent variables not captured in the regression model. The F-Statistic of 5048.424 and its corresponding P-value of 0.000 indicates that the model is fit and the independent variable is properly selected and used.

**Table 7** Coefficient for Model 3

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.300	0.047		-6.411	0.000
	RIDE	0.991	0.014	0.964	71.052	0.000

Dependent Variable: FINS

From table 7 above, the regression result confirms that road infrastructure decay (RIDE) has positive significant effect on the likelihood of the occurrence food insecurity in Kwara and Kogi States, Nigeria. The coefficient of road infrastructure is 0.991, the coefficient is positive. This means that bad road will translate to increase in the likelihood of food insecurity to occur in Kwara and Kogi States. This effect is significant as the significance value of 0.000 is less than the significant level of 0.05. Thus, we do have sufficient reason to reject the null hypothesis, we therefore conclude that road infrastructural decay has significant positive effect on food insecurity in Kwara and Kogi States, Nigeria

## 7. Discussion of findings

The result from the simple ordinary least square regression showed that road infrastructure decay causes kidnapping along Lokoja-Okene-Kabba-Egbe-Ilorin express road. Kidnappers carry out their activities on the road because the roads are in bad condition. While driving, there are various points that vehicles have to slow down; kidnappers take advantage of this to abduct people. These are some of the views held by Ugwuoke (2011); Ojughana et al. (2018); Oyinloye et al. (2022).

It was revealed that road infrastructure decay cause highway robbery along Lokoja-Okene-Kabba-Egbe-Ilorin express road. Existence of bad roads is largely associated with the incidents of highway robbery along Lokoja-Okene-Kabba-Egbe-Ilorin express road roads. This is the submission of Omidiji and Ibitoye (2010); Usman (2014); James et al. (2015); Onatere-Ubrurhe (2015); Wright and Ribbens (2016).

The result indicated that road infrastructure decay increases food insecurity in Kwara and Kogi States. Existence of bad roads is largely associated with the occurrence of food insecurity in Kwara and Kogi States. This is the submission of Ogunleye et al. (2018) Boroh and Nwakanma (2018); Olorunfemi (2018); Daud et al. (2018); Olorunfemi (2020).

## 8. Conclusion and recommendations

The study concludes that road infrastructure decay has the potential to bring about increasing level of kidnapping and highway robbery along Lokoja-Okene-Kabba-Egbe-Ilorin express road roads. The condition of Federal and State roads across the country is horrible giving the level of bad roads across the length and breadth of the country. Bad roads are



one of the factors responsible for the increasing wave of kidnappings and highway robbery along Lokoja-Okene-Kabba-Egbe-Ilorin express road roads. Lastly, the study concludes that good road is essential to food security in Kogi and Kwara States.

According to the report, administrations at all levels in the country should make intentional efforts to devote appropriate finances for road improvement. Reconstruction of substandard roads, as well as the reactivation and upgrading of existing highways, should be prioritized, particularly in areas where highway robbery and kidnapping are common.

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## Compliance with ethical standards

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### *Disclosure of conflict of interest*

No conflict of interest.

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