

**UNIVERSITY OF NAIROBI**

**INSTITUTE OF DIPLOMACY AND INTERNATIONAL STUDIES**

**NEXUS BETWEEN EMERGING MODES OF TRANSPORT AND NATIONAL SECURITY:**

**A CASE STUDY OF KENYA**

**EMMANUEL M WANDERA**

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**SUPERVISOR:**

**DR EDWARD WAITHAKA, PhD**

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**06 APRIL 2020**

**DECLARATION**

I declare that this research has not been previously submitted and approved for award of certificate by this or any other university. To the best of my knowledge these dissertation contains no material previously published or written by another person or persons except where due reference is made in the dissertation itself.

Signed ..... Date .....

**EMMANUEL MAKOKHAH WANDERA**

**R47/35857/2019**

This project paper has been submitted for examination with my approval as University Supervisor;

Signed..... Date .....

**DR EDWARD WAITHAKA**

**LECTURER**

**IDIS**

**UNIVERSITY OF NAIROBI**

## **ABSTRACT**

The name 'Boda boda' is synonymous to cycle taxis (both motorized and bicycles) in many parts of East Africa, especially Kenya, Uganda and Tanzania (motos in Rwanda). It originated from the small border town of Busia in Kenya. Small traders in this Kenya-Uganda frontier town (back in the late 1980's to early 90's), needed cheap transport to ferry goods (mainly cooking oil, soaps and other consumer goods from Kenya to Uganda and second hand clothes in the opposite direction). Motorbikes came in handy as cheap, convenient means for ferrying the business people and their wares from one border to the other, hence the name boda boda (border to border).

The purpose of the study was to assess the nexus between emerging modes of transportation specifically the Boda bodas and the national security with a case study of Kenya. This involved the study of the reasons for the growth of the sub sector, impact on the security sector and what has been done by the government to mitigate these security challenges. This study will adopt a secondary analysis research design. Secondary analysis is a research method that involves analysing data collected by someone else. Secondary analysis combines both qualitative and quantitative data sources, to determine the connection between emerging modes of transportation and insecurity within Kenya. This research design determines how the researcher collects, analyses, and interprets the data in the study. Secondary analysis provides answers to a new research question based on observations and investigations of other researchers in the same field.

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# CHAPTER ONE

## 1.0 INTRODUCTION

The transformation of national economies comes with some significant developments in most sectors. One of such sectors, which have been open to change, is the transport sector. Governments in the developing world have been working on physical infrastructure, including the opening up of road networks to and growth in the economy. Transport is facilitating development pivotal to the development of any economy as it facilitates the movement of products and people. A concentration on infrastructure, more so, the development of Marram and Tarmac roads in the rural and urban areas, has culminated in the emergence and growth of new forms of transport, majorly, the use motorcycles to move people and goods, otherwise known as “boda boda”. More players are entering the transport industry in the developing countries.<sup>1</sup> For instance, there is a growth in the usage of online taxi services in Kenya. The new forms of transportation have become dominant, such that it is hard to imagine life without them.

Boda boda increases access to interior places both during the daytime and at night, reducing the chances of people being robbed while on foot. The implication is that they enhance security by helping people to access different places at night. The emerging forms of transportation such as boda boda are popular in Kenya. However, serious concerns are equally emerging concerning the sector, with people linking them to increased crime, the surge in the number of traffic accidents, and impunity. In other terms, Boda boda may have solved the problem of transportation, but it has serious ramifications for public safety.

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<sup>1</sup> Burke (2010):Delhi plans Ban on Autorickshaws<http://www.guardian.co.uk/world/2010/mar/18/delhi-plans-banautorickshaws>.

This study seeks to explore the issues of security surrounding the emerging forms of transportation in Kenya. There is a wider view that boda boda is causing more problems as much as it is enhancing transportation. This chapter serves as the basis for this research study and will have various sections.

## **1.1 Background to the Study**

In Kenya, the high unemployment rate is a major factor that has contributed significantly to the emergence and growth of informal business sector in transportation industry. Many unemployed youths have joined the sector mostly as boda boda riders to sustain themselves as they wait for formal employment.<sup>2</sup> The absence of well-constructed roads, more so in the rural areas and lack of vehicles to operate on the roads, has made boda boda a feasible solution to transportation. The vibrancy of the boda boda sub-sector has also made it favorable for increased movement and accessibility in some urban areas in Kenya.

Unfortunately, the informal transport sector operators including boda boda riders have also been linked incidents of insecurity in some places.<sup>3</sup> The reports indicate that the boda boda sector has degenerated into a nuisance to security, due to lack of proper regulations.<sup>4</sup> Despite the government's policy to streamline the sector and have all the boda boda operators properly trained and registered, the policy is yet to be implemented and hence the disorder in this area. Politicians also use the boda bodas and their counterparts in the matatu industry to engage in political aggression for their selfish gains. As an example, during the 2007 post-election violence in Kenya, majority of the individuals hired to perpetrate violence consisted primarily of boda

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<sup>2</sup>Act Change Transform. *The Bodaboda Lead Early Warning Early Response in Kisumu*, 2016.Last modified September 06, 2019. <https://www.act.or.ke/boda-boda-lead-early-warning-early-response-in-kisumu/>

<sup>3</sup> David, Mwere. NCRC report proposes using NTSA to tame bodaboda sector. *Daily Nation*, 2019.Last modified August 04, 2019. <https://mobile.nation.co.ke/news/Govt-mulls-unleashing-NTSA-on-boda-bodas/1950946-5061066-1nlhwmz/index.html>

<sup>4</sup>Ibid.



boda riders.<sup>5</sup> The boda boda riders also just like other Kenyan youths are also susceptible to radicalization for terror groups like Al shabaab due to unemployment according to reports by the concerned security agencies.

## 1.2 Problem Statement

Institute for Transport and Development Policy (ITDP) indicates that the majority of the emerging economies within Asia, motorized two or three wheelers implanted programs have significantly contributed to the mass motorization process since they prove cost effective and cheap to manufacture, repair, and market as compared to other cars. Furthermore, they can provide a good mobility solution within a range that can go several kilometers.<sup>6</sup> The use of motorcycles is increasingly becoming a critical type of rural means of transport in many African nations<sup>7</sup>.

However, this sector still remains informal and lack proper regulation, not safe and unpredictable. In the Indian capital city, the authority attempts to abandon the popular green and yellow motorized three wheelers by indicating that they contribute to pollution and are source of rude drivers were not successful.<sup>8</sup> The number of motorcycles significantly increased in Kenya after eradication of tax on vehicles under 250cc in 2008 thus reducing the price by half.<sup>9</sup> This led to the enterprise becoming not only a popular method of transport for resident but also proving to be a popular new business in the country. However, the numbers of accidents appear to be spiraling out of control. Another concern of the boda boda is that they are ranked in the third position based on their threats to the national security threats. This places the sub sector

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<sup>5</sup>Act Change Transform. *The Bodaboda Lead Early Warning Early Response in Kisumu*, 2016.Last modified September 06, 2019. <https://www.act.or.ke/boda-boda-lead-early-warning-early-response-in-kisumu/>

<sup>6</sup> Institute for transportation & development policy (ITDP) (2009):Best practices on regulation and Design for motorized and non – motorized Two and Three Traffic.

<sup>7</sup>White et al (2002) Africa’s public transit renaissance <http://www.itdp.org/ST/ST14/ST14.Pdf>.

<sup>88</sup> Burke (2010):Delhi plans Ban on Autorickshaws<http://www.guardian.co.uk/world/2010/mar/18/delhi-plans-banautorickshaws>.

<sup>9</sup>Njagi C: (2014) Embu Manyatta County Officer: personal interview.

directly below terrorism as a threat to the national security based on the police reports. The enterprise is sustainably growing despite the above concerns. There has been little research that has been conducted in this important field concerned with investigating the nexus between the emerging transport networks and increasing threats to national security with an aim making appropriate recommendations. This study focuses on this area, with the aim of influencing policies that can transform the boda boda sector from a security nightmare to a promoter of security in the long term.

### **1.3 Research Questions**

The following three research questions were developed for the study:

- i. Are the emerging transportation networks (boda bodas) in Kenya a threat to security?
- ii. What factors impact the growth of emerging transportation networks (boda boda) in Kenya?
- iii. Has the government instituted policies to safeguard people from the threats emanating from the emerging transportation networks?

### **1.4 Objectives**

- i. To determine the extent to which emerging transportation networks in Kenya affect security.
- ii. To assess the factors influencing growth of the emerging transportation networks in Kenya.
- iii. To evaluate the national policies on curbing the crime that comes from the emerging transportation networks in Kenya.

## 1.5 Literature Review

Transport plays a significant role in the economic development of a nation and, the informal transport subsector which includes the boda bodas is becoming entrenched as a major part of the world economy and a source of employment and livelihood for many.<sup>10</sup> In Jakarta, Indonesia, a wide range of vehicles, from human-powered pedicabs to minibuses, offer regular passenger services. Jakarta's pedicabs, called "Becaks", serve short-distances trips, while motorcycle taxis, offer services over slightly longer distances.<sup>11</sup> The hybrid three-wheeled motor-taxis, called "Bajajs", provide comfort more akin to a private car, while the larger three-wheeled "Bemos" and "Toyokos" carry as many as eight passengers in more crowded conditions. The city has sought to confine the slower and smaller vehicles to peripheral parts of the city and smaller roads, out of concern for safety and traffic discipline. The Bemos are actually registered by the district they serve, and are thus confined to a restricted territory. The mini- and micro- buses are regulated by the City of Jakarta, especially regarding vehicle fitness, fares, and schedules.<sup>12</sup>

Plying the streets of Bangkok, Lagos and other cities of the developing world are fleets of small, low-performance vehicles driven by private operators that serve low-income neighborhoods. In some places, environmental-friendly, pedal-powered modes, like the pedicabs of Manila, provide lifts between markets and squatters whose narrow alleys and walkways are impenetrable by motor vehicles. In other places, like Kingston, Jamaica, station wagons and mini-vans fiercely compete head-to-head with public buses, providing curb-to-curb delivery for a premium fare. And in increasing numbers of cities and towns around the world, dozens of young

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<sup>10</sup>Odhiambo, Vincent Opondo, and Geoffrey Kiprop. *BodaBoda Motorcycle Transport and Security Challenges In Kenya*, 2018, 1.

<sup>11</sup> Cervero, R., 2000. *Informal Transport in the Developing World*. United Nations Commission on Human Settlements, Nairobi, Kenya.

<sup>12</sup> Ibid

men on mopeds and motorcycles congregate at major intersections, offering feeder connections between mainline bus routes and nearby neighborhoods for a reasonable fare.

These privately operated, small-scale services are varyingly referred to as “paratransit”, “low-cost transport”, “intermediate technologies”, and “third-world transport”. The term adopted in this study is “emerging transportation networks”, for this term best reflects the context in which this sector is coming up and cutting across all parts of the world. The term will be used interchangeably with informal transportation modes. While private, small-vehicle, for-hire services, such as taxis, can be found in all cities of the world, what separates informal transport operators from others is that they lack, to some degree, official and proper credentials. That is, they are unsanctioned. In some instances, operators lack the necessary permits or registration for market entry in what is a restricted, regulated marketplace. In other instances, operators fail to meet certification requirements for commercial, common-carrier vehicles such as minimum vehicle size, maximum age, or safety standards. Other violations include lack of liability insurance, absence of a commercial driving permit, and operation of an unclassified or substandard vehicle or motorcycles.

In spite of such transgressions, in many cases the informal transport sector is tolerated by public authorities, allowed to exist as long as it remains more or less “invisible” to most motorists, confined to low-income neighborhoods. Often, however, patrol officers and local “bosses” must be paid off for the right to operate in their “turf”. Informal transport is just one of many sectors of the underground economy that thrives in many third-world countries.

Informal transport is about as close to laissez-faire transportation as can be found. Through the invisible hand of the marketplace, those who are willing to pay for transport services make deals for lifts with those who are willing to provide. Thus, informal transport

involves commercial transactions which distinguish them, as transportation services, from the provision of free lifts, whether by friends, acquaintances, or truck drivers back hauling with empty loads from the marketplace, all common forms of mobility in many poor, rural areas. It is this more limited definition of informal transport, namely ones involving pay for services that is adopted in this study.

Informal transport services are also notable for their role as “gap fillers”.<sup>13</sup> They exist in large part to fill service voids left unfilled by formal public transport operators. Rapid motorization, poor road facilities, and the inability to strategically plan for the future have given rise to horrendous levels of traffic congestion and air pollution in many mega-cities of the developing world. Formal public transport services are rarely up to the task of satisfying escalating demands for travel. Most public transport operators exist as protected monopolies, and accordingly lack the incentive to contain costs, operate efficiently, innovate, or respond to shifting market demands. Buses are often old, break down periodically, and get stuck in slow-moving traffic. Fares are frequently kept low to help the poor, however this reduces revenue intake which in turn precludes service improvements. All too often throughout the developing world, public transit finds itself in a free-fall of deteriorating service and shrinking incomes. It is only because regulations and rules are laxly enforced that unlicensed operators are “informally” able to step in and pick up where public transport operators have left off.<sup>14</sup>

Notwithstanding these benefits, the informal transport sector is blamed for a long list of problems that afflict cities of the developing world. Aggressive and unruly driving among drivers whose very livelihoods depend on filling empty seats all too often causes serious accidents. Excessive competition has produced too many idling and slow-moving vehicles that jam critical

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<sup>13</sup>R. Cervero, Paratransit: The Gap Fillers, *Habitat Debate*, Vol. 4, No. 2, 1998, pp. 8-9.

<sup>14</sup> *Ibid*

intersections. Traffic tie-ups, along with poorly maintained vehicles and low-stroke engine designs, have worsened air pollution. Often times, the sector is chaotic and disorganized.

The fact that nearly identical forms of illegal vans and motorcycle-taxis have surfaced in recent years in different corners of the globe, from Buenos Aires to Bangkok, from Cairo to Katmandu, suggest the presence of powerful underlying forces behind the emergence of informal transport services. Many of the same issues and concerns are being wrestled with by policy-makers across Asia, the Indian subcontinent, Latin America, and sub-Saharan Africa. Such commonalities call for a far-reaching global perspective on this often maligned and vaguely understood sector.

Transport decision-makers at all levels need strategies and approaches that will better rationalize, and when called for, coordinate and integrate informal transport services. An important challenge is to incorporate the informal sector into the mix of legitimate transport offerings so that it continues to provide much-needed and complementary services, but in ways that do not threaten public safety and welfare. It is vital that informal services be delivered, priced, and organized so as to complement and strengthen not only regional transport services but also regional economic and social development as a whole.

In the poorest parts of Africa, half or more of all passenger trips are by micro- or mini-buses. Classes II and III services generally serve male customers in the poorest countries of Africa, while pedicab and non-motorized services tend to focus more on women making short trips to markets and retail centers. Motorcycle taxis often cater for a younger crowd while pedicab users tend to be older.<sup>15</sup> Studies of trip purpose show that informal transport is mainly

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<sup>15</sup> Cervero, R., 2000. Informal Transport in the Developing World. United Nations Commission on Human Settlements, Nairobi, Kenya.

used for non-work activities such as traveling to and from marketplaces and medical clinics.<sup>16</sup> South Africa is an example of how ruthless and deadly unregulated competition can be in the illegal paratransit world. There, rival cartels that control thousands of low-cost minibuses, or “combis”, fight over the most lucrative routes. During the 1990s, more than 2000 people died as a result of paratransit-related violence, according to official statistics.

In Kenya, Boda bodas are becoming one of the leading transportation means for many rural and urban dwellers and have evolved into an informal sector of the transport industry. With this rising popularity, there are worrying concerns that the sub-sector is becoming associated with crime, traffic accidents and impunity, with grave implications for public safety. This situation has largely been attributed to the boda boda sector operating with minimal regulation and control.

The motorcycles are frequently used for the purpose of surveillance by many gangs and criminals. In towns and other cities, they are known as a critical transportation means that aids drug trafficking and contrabands trade. There was a reliable news report indicating the police officers in Nairobi has identified one individual who owns about 250 boda bodas which are primarily involved in drug trafficking. These drug dealers basically use the boda boda riders to help transport deliver the illegal drugs to the respective consumers. Apart from transporting the drugs, the riders of the boda boda have failed to obey the traffic laws and this has contributed for many accidents in the Kenyan roads.

In essence, the boda boda operators have taken control of the major urban centers and towns where they block major roads and highways causing a lot of traffic, taking the pedestrian lanes, and creating disturbance and noise. There have been proposals by stakeholders for the government to “undertake concerted sensitization and awareness education to boda boda

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<sup>16</sup> Ibid

operators and the general public towards road safety and crime free boda boda sub-sector in the country”.<sup>17</sup> Ideally, the design and construction of an appropriate road transport system African continent is the primary challenge since there is lack of accurate and reliable statistical data and information.<sup>18</sup>

## **1.6 Research Hypothesis**

Three hypotheses will inform this study:

(H<sub>0</sub>) The emerging transportation networks (boda boda) are resulting in an unprecedented rise in accidents and armed crime.

(H<sub>1</sub>) Emerging transport networks (boda boda) are on the rise because of unemployment and low cost of operating boda bodas.

(H<sub>2</sub>) The Kenyan government is yet to develop and institute policies on emerging transportation networks as sources of insecurity.

## **1.7 Justification**

### **1.7.1 Policy Justification**

The study is important as it will help unearth the correlation between the emerging modes of transport with more focus on the boda boda subsector and the increasing incidents of insecurity within Kenya. The findings will form a base upon which recommendations will be made which may help policy makers to come up with regulations that will bring order within the subsector, in order to reduce crime and road accidents associated with the sub sector. The findings will also help ministry of transport and traffic police in management of boda boda operators within the country.

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<sup>17</sup>National Crime Research Center. BodaBoda Motorcycle Transport And Security Challenges In Kenya: Summary, 2019, 11.

<sup>18</sup>Wasike, Wilson SK. Road infrastructure policies in Kenya: historical trends and current challenges. No. 1. Kenya Institute for Public Policy Research and Analysis, 2001.



The complication surrounding the question of emerging transportation networks in Kenya is that the issue involves both civilians and security organs. The government has engaged in negotiations, sometimes offering the boda boda operators a chance to have the much-needed licensing and permits as well as the protective equipment. Poor regulation of the sector appears to be a long-term problem; even as government seeks to develop active measures of curbing the insecurity arising from the emerging transportation networks. One can conclude that boda boda will continue to be a source of threat to national security, given the lack of adequate policy measures. It is difficult to distance boda boda from the recurring incidences of insecurity within the country.

### **1.7.2. Academic Justification**

The aim of this study is to generate new knowledge regarding boda boda and security in Kenya. The information generated through this study will be useful to contemporary researchers as well as act as the basis for the upcoming research on similar field of emerging transportation networks and its impacts on security. Completion of this study will result in the attainment of a post graduate diploma in strategic studies. This study will be an exhibition of my excellence in academic work; therefore, opening me up to future possibilities of excellence in the field of academia as well as opening me up for career growth and excellence. The study will be the basis for other studies as I venture in research at other academic levels.

### **1.8 Theoretical Framework**

The main theory relating to emerging transportation networks and national security is the Rational-Choice Theory whose proponents were Gary Becker, Adam Smith and William Jevons. It states that people have opportunities to exercise choice. Most importantly, is the fact that the

opportunities to make a decision may not be equal.<sup>19</sup> According to the rational choice theory, individuals apply rationality to make choices and accomplish outcomes aligned with personal objectives. The obtained results are related to the best self-interests of individuals. The use of the theory of rationality normally results in outcomes that help provide individuals with the desired and best benefit that satisfy the available choices.

An important question worth revisiting concerns the factors that promote aggression, especially when aggression is considered as an independent factor. This necessitates the integration of another theory to help explain the relationship between economic activities, acts of aggression, and national security; that is, the Contingency theory by Fred Edward Fiedler. The theory emphasizes that there is no optimum approach to managing an issue. This theory will be the basis for examining the diverse policy approaches to the taming of the emerging transportation networks. Controls are essential for leveling up operations in the boda boda sector, and making it more secure.

When analyzing emerging transportation networks and national security in Kenya, the focus should be but not limited to two issues; the first one concerns an exploration of the causes of aggression in the emerging transportation networks in Kenya. Secondly, aggression, especially when it is studied from the perspective of a nation. Competition often exists within the state and can take various dimensions, including resources, ethnic, and even the struggle for leadership. Competition necessitates aggression, which further leads to violence. The second view revolves around the aggression that often causes crime and violence. Hypothetically, people who feel aggrieved can engage in certain acts of retaliation with the intention to injure the party that angered them. As custodians of security, the government has the responsible to prevent people

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<sup>19</sup>Richard, W. Harding. "Rational-choice gun use in armed robbery: The likely deterrent effect on gun use of mandatory additional imprisonment." In *Criminal Law Forum*, vol. 1, no. 3, pp. 427-450 (Kluwer Academic Publishers, 1990), 427.

from unleashing the aggression on others. Some people may decide to cause violence because it is a trend; hence, the importance of security agencies in preventing violence in any sector. A point worth footnoting, and which is critical in this study is about the ability of the government to identify the shortcomings in the management of the emerging transportation networks; thereby, promoting peace and order within the transportation sector.

Using the contingency theory, it is possible to examine the question of security in the realms of transport in Kenya, as well as explaining the role of government at both national and county level in ensuring that the emerging transportation networks do not act as breeding grounds for violence and other forms of crimes within the nation.

The rational choice theory will be used in most of the analysis of the study in order to enhance the formulation of more informed recommendations. The whole issue of informal sector especially the emerging transportation networks is about people making choices from the available alternatives and also the customers going for cheaper and more convenient alternatives. Concerning the issue of crime, the theory explains that crime occurs when there are three things; available target, a motivated offender and where there are no authorities to prevent the offence. This means that the policies by the government to regulate the sub sector should focus on the above three factors.

## **1.9 Research Methodology**

This is library-based research; therefore, the data that will be utilized will come from secondary sources. The study will extract data from different secondary sources derived from the library, including journal articles, books, organizational reports, magazines, and newspapers among other references. Most importantly, the research will gather data based the research objectives.

The three key themes that will be analyzed include the link between emerging transport networks and national security in Kenya; factors that have led to the growth of emerging transport networks in Kenya; and the policy shortcomings in addressing the security threats that are associated with emerging transport networks. The essence of this study will be to draw some critical conclusions on each of the themes, a step that will lead to recommendations on how to deal with the security challenges arising from the emerging transportation networks in Kenya.

The research has five chapters. The first chapter will introduce the study phenomena. This will be followed by the findings section, which will be organized into three subtitles based on research. A conclusion and recommendations chapter will then be developed to help draw important points from the findings. The essence of the chapter is to develop scholarly recommendations, which can be harnessed by the policy developers and implementers in the confines of National Security in Kenya. The chapter will also recommend the topic or domain pertaining the emerging transportation networks to breach the gaps within the sub sector.

## CHAPTER TWO

### 2.0 EMERGING TRANSPORTATION NETWORKS AND NATIONAL SECURITY

#### 2.1 Introduction

The transport sector has been changing over the last years with roads being the most common mode of transport. Current developments include the emergence of the informal sector within the transportation domain. With the increasing number of towns across the country, majority of young population are using bicycles and motorcycles. In essence, they congregate the core intersections and offer the feeder links between main bus terminus and routes as well as connect to neighborhoods. Typically, they offer cheap transport modes to many people in the society. The term informal sector can be used to describe the boda boda business sector owing to lack of appropriate legal policies to guide the operation of the firms in the industry.<sup>20</sup>

#### 2.2 The Informal Sector

Many urban services are organized informally, including water delivery, refuse collection, and food supply and emerging transportation modes like boda bodas. According to the World Resources Institute, the urban informal sector currently accounts for anywhere between 30 percent and 70 of the economically active urban population of the developing world. The informal transport sector is just one part of the dual economy that characterizes most developing cities of the world. J.H. Boeke first advanced the theory of economic dualism, distinguishing the livelihoods of indigenous populations from those of colonial transactions

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<sup>20</sup>KaranjaGachichio. "Innovating the funding models for transport megaprojects in Kenya." PhD diss, University of Cape Town, 2018, 47.

through enterprises and firms.<sup>21</sup> It was not until 1970, however, that the informal sector was articulated beyond the singular dimension of economic dualism. In a seminal study of small enterprises in Kenya, the International Labour Organization characterized informal economies in a multitude of ways: ease of market entry and exit, reliance on indigenous resources, extended family ownership of capital, small scale of operations, labour-intensiveness, adaptive uses of technology, the accumulation of skills outside formal education and training, and minimal government intervention and regulation.<sup>22</sup>

The dichotomy between formal and informal sectors can be viewed along several key dimensions. The prevalence of small-scale, labour-intensive, and adaptive services does not fully characterize the informal realm, however. Informal services also inspire difficult yet important social relationships. Vital to their existence are the often highly personalized relationships between service-providers and clients as well as unwritten social norms and codes of behaviour among competitors themselves.

Another important trait of the informal economy is that it fills a vacuum, providing vital public services to poor and marginalized populations whose needs go unmet by local governments.<sup>23</sup> It is on these grounds that strong social justice arguments in favour of its existence are found.<sup>24</sup> While the means of informal workers are “illicit”, their ends are “licit”. Informal services meet basic human needs, generate incomes, and provide a foundation for deprived individuals to raise families in difficult urban situations. There is nothing inherently immoral or criminal about providing poor people transportation, hauled-in water, or meals from

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<sup>21</sup> C. Geertz, *Peddlers and Princes: Social Change and Economic Modernization Two Indonesian Towns*, Chicago, University of Chicago Press, 1963.

<sup>22</sup> International Labour Office, *Employment, Income and Equality: A Strategy for Increasing Productive Employment in Kenya*, Geneva, International Labour Office, 1970.

<sup>23</sup> D. Rondinelli, *Development Projects as Policy Experiments: An Adaptive Approach to Development Administration*, London, Routledge, 1993.

<sup>24</sup> H. de Soto, *The Other Path: The Invisible Revolution in the Third World*, New York, Harper and Row, 1989.

a pushcart. In the case of refuse scavengers, many provide genuine public benefits by recycling wasted products and reducing pressures on landfills.<sup>25</sup> There is an inverse relationship between the size and importance of the informal economy and a nation's wealth and well-being. Economic development brings about the provision of formalized transportation, water-supply, and solid-waste services. It also strengthens the institutional capacity of governments to intervene and regulate the marketplace.<sup>26</sup>

Large cities of the developing world are natural breeding grounds for informal transport services. The absence of reliable formal services has left huge voids that private operators have adeptly filled. Through a combination of tradition, circumstances, and economic need, informal transport services today are most prevalent in sub-Saharan Africa, south and southeast Asia, islands of the Pacific and Caribbean, and equatorial parts of Latin America. Jitneys, shared-ride taxis, for-hire motorcycles, and passenger-carrying pick-ups ply the streets of not only megacities, but rural villages and townships as well.

However, informal services are thought to capture larger shares of vehicular trips in urban than in rural settings since trip distances tend to be longer and more people can afford fares. And while bigger cities have more fully developed public transit routes than smaller ones, they often lack good feeder connections, thus creating a void for pedicabs, motorcycles, and minibuses to fill. In Indonesia's largest cities, for example, informal transport services accommodate an estimated 50 percent of all mass transit trips.<sup>27</sup>

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<sup>25</sup> D. Sicular, *Scavengers, Recyclers, and Solutions for Solid Waste Management in Indonesia*, Berkeley, University of California, Center for Southeast Asia Studies, Monograph No. 32, 1992.

<sup>26</sup> A. Portes. *The Informal Sector: Definition, Controversy and Relation to National Development*. *Review*, Vol. 7, No. 1, 1983.

<sup>27</sup> T. Shimazaki and M. Rahman, *Operational Characteristics of Paratransit in Developing Countries of Asia*, *Transportation Research Record* 1503, 1995, pp. 49-56.

### **2.3 Positive Effects of Emerging Transport Networks to the National Security**

One of the factors that have made the cost of doing business in many third world countries to be high is the transportation costs which translate to higher production cost, modern modes like SGR, tuktuk and boda boda have provided a much cheaper alternative. This has reduced the costs of production hence enhancing production in countries like Kenya. Also, with these modes, both the cargo and passengers can be dropped at their precise points like in compounds as opposed to being dropped at stages where during odd hours they may be exposed to criminals. For example, most cashiers from various enterprises within Nairobi find it convenient to board boda bodas to the bank while transporting money to the bank mostly because it won't attract criminals and also the convenience of being taken up the bank doorsteps.

The main benefit of informal transport which includes boda bodas is that it provides much-needed and much-valued mobility, especially for the poor. Ninety-nine out of a hundred households in the poorest countries of Africa do not own or have access to private vehicles, thus they are entirely dependent on public transport for reaching jobs, markets, medical clinics, and other destinations. Women make up the majority of customers. Where bus and metro services are irregular, unreliable, or non-existent, informal transport operators provide indispensable services. The boda bodas ply routes and enter neighborhoods that are inaccessible by buses. Many navigate along heavily pocked and rutted roads. During periods of heavy rains, they can negotiate roads that are impassable by the formal transportation modes. In Nairobi for example, boda bodas are the only means that can be able to traverse all the roads and access each household.

The important role in connecting poor neighborhoods to job centers is often under-appreciated. In the world's biggest cities, motorcycles, pedicabs, and vans enable tens of



thousands of custodians, chambermaids, sweat-shop and assembly-line workers, and day-laborers to reach their jobs each day. During night shifts, when buses are no longer running, they sometimes are the only means of getting around. In most parts of Kenya for example public transport over short distance is do not operate for 24 hours due to smaller numbers of clients and also insecurity in some areas. In such areas the few people who need to move during the night when public transport modes are not available, utilize boda bodas Low-skilled labour is absolutely vital in providing the maintenance, service, and production inputs necessary to sustain a rapidly industrializing economy. Enhanced mobility increases the transactive space of a metropolitan area, enlarging the labourshed and providing access to enough potential workers so as to keep wages competitive in the global marketplace. Informal transport is often of greater value in delivering workers to the factories and mass assembly plants of the developing world than is realized.

Even though informal carriers provide much-valued mobility for the poor, the costs of atomized, uncoordinated services can quickly mount for many low-skilled day-laborers who are forced to live in informal housing settlements on the peripheries of the world's mega-cities. In the case of Mexico City, for example, the heavily subsidized, low-cost Metro rail system does not reach most barrios on the outer edges of the Federal District. Swarms of colectivo-minibuses have filled the service gap, providing connectivity between Metro terminuses and outlying residences. Because many of the poor living on the fringes make as many as five transfers per day to reach job sites, public transit expenses aboard informal carriers can consume as much as one-quarter of a day's salary.<sup>28</sup>

Increasingly, informal carriers are catering to the mobility needs of middle-class workers as well. Unlicensed commuter vans in Bangkok and SPaulo today directly compete with formal

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<sup>28</sup> R. Cervero, *The Transit Metropolis: A Global Inquiry*, Washington, D.C., Island Press. 1998

bus services, providing consumers with a wider choice of mobility options -notably, travel-time savings, air-conditioned interiors, and guaranteed seats in return for premium fares. Evidence from Brazil, shows that passengers on board clandestine vans particularly value the faster speeds of these unlicensed, limited-stop carriers; based on elasticity estimates, every 10 percent reduction in door-to-door travel times of illegal vans relative to legal buses is associated with an 11.7 percent increase in van ridership, all else being equal. In Kenya especially in larger towns where there are traffic jams during peak hours, bodas bodas become the only fastest modes of transport over the roads and therefore those passengers in a hurry prefer them.

The high rates of unemployment are one of the primary factors that contribute to high poverty levels and led to the emergence of the criminal activities. Worldwide, informal transport provides desperately needed employment for hundreds of thousands of unskilled, young men, many who have just arrived from the countryside in hopes of improving their lives. Informal transport is often a gateway to urban employment. Most drivers hope to eventually do better, finding better paying, safer, and less physically taxing employment.<sup>29</sup> Informal transport often generates enough income to get them established until they can land a better job. In Kenya, most unemployed youth venture into the informal sector to earn a living, boda bodas being one of the most preferred ventures.

In many poor cities, informal transport comprises as much as 15 percent of total employment. In Dhaka, Bangladesh the figure is closer to 30 percent, with a good 100,000-plus men and boys hauling patrons and goods aboard pedicabs for a living.<sup>30</sup> Adding in intermediate goods and services like vehicle maintenance and local vehicle production, assemblage, and parts

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<sup>29</sup> D. Silcock, *Urban Paratransit in the Developing World*, *Transport Reviews*, Vol. 1, No. 2, 1981, pp. 151-168; S. Kartodirdjo, *The Pedicabs of Yogyakarta*. Yogyakarta. Indonesia: Gadjah Macia University Press, 1981

<sup>30</sup> B. Williams, *The Missing Link: Towards Sustainable Urban Transport*, *Habitat Debate*, Vol. 4, No. 2, 1998, pp. 1, 4-5.1 C

retailing increases the percentages even more. The significant employment role played by informal transport is perhaps no surprise given that the transport sector accounts for around 15 percent of the gross domestic products of many industrialized nations. In Kenya, even though the industry does not pay taxes directly, by creating jobs and enhancing business the boda boda industry contributes towards the gross domestic product.

Critics question whether this form of livelihood is, on balance, socially productive. Ultimately, the marketplace is the mediator - if enough customers are willing to pay enough for self-employed operators to make ends meet, then society as a whole is better off. Problems only abound when there are excessive numbers of service-providers. However, one might ask whether society would fare for the worst if many were forced out of the informal transport sector, left to fend for their own on the streets. The result would be increase in crime and illicit activities that are more harmful than informal transport might be. Hence the contributions informal operators make to public treasuries should not be overlooked. By paying taxes on fuel and vehicle registration, and fees for operating licenses, the informal transport sector generates revenues for local governments. Thus, unlike public transport operators, informal operators contribute monies to, rather than siphon them away from, public coffers. Moreover, many drivers have to pay off police officers and public officials for the right to operate, effectively transferring income to lowly paid civil servants. In a roundabout way, the sector relieves local governments of some of the burden of compensating their workers.

It is critical for the government and other policy makers to identify the applicable strategies that can help reduce the high rates of unemployment and help address the problem of poverty in the society. Most youths that would have been victims of drugs and other vices have

found redemption of self-employment through these transport networks.<sup>31</sup> By creating employment to the youth, the sub sector has reduced the issue of overdependence and lack of capacity among the population in general in Africa which has been one of the biggest challenges within the continent. Most youths from poor background can now operate boda bodas and make some savings which they use to further their studies so that they also have an equal chance of becoming more productive people in the society. In Kenya for instance through the parallel education programme which is offered by most universities they can be able to further their studies using the income realized from boda boda and become more productive citizens.

Informal transport is often leaned upon by formal operators to provide feeder connections between neighborhoods and trunk routes. Because feeder services carry fewer customers than mainline services, they tend to cost more per passenger trip. Informal services thus aid public transport operators by improving connectivity as well as off-loading higher cost services. Studies also show that paratransit modes, like pedicabs and jitneys, enhance mobility by compensating for the absence of functional road hierarchies in many cities of the developing world. In southeast Asia, the rich diversity of paratransit offerings produces a hierarchy of services in terms of seating capacities, operating speeds, and geographic coverage that help make up for the lack of good distributor roads and the discontinuity of local streets.

The compensatory role played by informal transport has been particularly essential in light of declining public resources and institutional capacities.<sup>32</sup> In sub-Saharan African cities, the supply of buses available to public transport companies fell by 12 percent between 1986 and 1989, a period when population was growing by 6 to 9 percent. The matatus of Nairobi, the

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<sup>31</sup>Okeyo."Effects of Integrated National Transport Policy on Transport Service Delivery in Nairobi City County, Kenya." PhD diss., Master's dissertation, University of Nairobi, 2016.34,

<sup>32</sup> R. Cervero. Paratransit in Southeast Asia: A Market Response to Poor Roads? Review of Urban and Regional Development Studies Vol. 3, No. 1, 199 1, pp. 3-27.

trotros of Ghana, and the okada of Nigeria have stepped in to make up the difference. In Rio de Janeiro, severe overcrowding on public buses triggered an incursion of 600-plus clandestine buses - or 10 percent of the regional bus fleet - in the early 1990s. In Asia, where recent financial crises have depleted public treasuries and crippled many public services, the informal transport sector has been tacitly called upon to serve rising demands for mobility. In Phnom Penh, which has no public transport system, crossing the city leaves few choices for car-less residents other than riding a bicycle, hiring a cyclo (pedicab), or jumping on one of the city's thousands of motorcycle taxis, called moto-dub (a Khmer version of the French moto-double two-seat motor-scooter).<sup>33</sup>

Besides providing complementarity, informal transport services also tend to enrich service offerings by providing greater diversity and differentiation. In much of the developed world, a "one-size-fits-all" public transport service predominates. Often, the only choices beyond personal car travel are expensive taxis or conventional 55-passenger buses that operate on fixed routes every thirty minutes. There is tremendous diversity in travel preferences - some want fast, comfortable services and are willing to pay a premium fare for them, while others are satisfied to travel more slowly and give up some comfort in return for a break at the farebox. Informal transport enriches the tapestry of urban transport offerings.

As noted, informal transport is resourceful and cost-effective. Hard work and no-frill services keep costs low. The drive to maximize earnings and frequent passenger turnover produce high patronage counts. Unencumbered by petty rules and bureaucracy, independent operators are also ultra-responsive to emerging and shifting market trends. Research shows that commercial jitneys and minibuses confer net economic benefits. One study concluded that each minibus in Kuala Lumpur averaged around US\$ 26,000 (in 1998 currency) in total public

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<sup>33</sup> Asian Coalition for Housing Rights, Moto-Dub Drivers in Phnom Penh, *Housing by People in Asia*, No. 12, 1999.

benefits each year.<sup>34</sup> Studies of minibuses in Hong Kong and jeepney services in Manila have found annual rates of return on capital investments in the range of 100 to 130 percent.<sup>35</sup> As passenger volumes rise above a certain threshold (usually 5,000 or more per direction per hour), the economic advantages of paratransit begin to plummet, reflecting the limitations of small vehicles in carrying large line-haul loads. Accordingly, paratransit best operates in a supporting and supplemental, rather than substituting, role.

The efficiency benefits of informal services likely extend to the formal sector as well. Their existence alongside public bus and rail systems creates competition in the markets, setting in motion competitive pressures on formal operators.<sup>36</sup>

Informal operators can easily alter schedules, routes, and operating practices in response to shifting market conditions. Private minibus and micro-vehicle operators are more likely to craft new, tailor-made services in response to increases in suburb-to-suburb commutes, trip-chaining, and off-peak travel than are public authorities. Their inherent flexibility and sensitivities to changing markets stand in sharp contrast to the rigidities and unresponsiveness of protected monopolies.

Matatus, tuktuk and boda boda networks can easily access almost every point hence enhancing personal security. The sector has also addressed the issue of over dependency within the country, whereby now most unemployed youths can now earn a living and therefore don't have to depend on their parents or guardians for survival. The emergence of the informal transport sector in Kenya has proved instrumental in providing solutions to the problem of unemployment among the youths in the society.

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<sup>34</sup> A. Waiters, *The Benefits of Minibuses*. *Journal of Transport Economics and Policy*, Vol. 13, 1979, pp. 320-334.

<sup>35</sup> G. Roth and G. Wynne. *Learning from Abroad. Free Enterprise Urban Transportation*. New Brunswick, Connecticut: Transaction Books, 1982; E. Lee, *Planning and Control of Paratransit Services in Hong Kong*, *Transport Reviews* Vol. 9, No. 4, 1989, pp. 279-303.

<sup>36</sup> M. Badami, *Improving Air Quality in Delhi*, *Habitat Debate*, Vol. 4, No. 2, 1998, pp. 22-23

## **2.4 Negative Effects of emerging transport networks to the national security**

The emergence of the new modes of transport like boda boda created several loopholes within the security docket that pose a threat to the national security in Kenya. There are numerous threats posed by the networks to the national security especially when it comes to crime and road safety. The increasing incidences of criminal activities by organized criminals and gangs are mostly perpetrated by boda boda operators based on the reports from the security practitioners and experts.

Pressure to regulate and even eliminate the informal transport sector comes from many quarters. A central concern is that the sector is responsible for significant negative externalities, like traffic congestion and accidents that harm public safety and welfare. As largely laissez-faire, unrestricted services in poor cities with high unemployment rates, critics contend that the sector breeds over-zealous competition and predatory behavior. Over competition in terms of too many operators vying for limited numbers of customers crowds the streets and poses accident risks.

The unrestricted market entry leads to excessive supplies of service-providers, and in the quest to survive in the marketplace, cutthroat competition. Traffic slows to a crawl not only because there are too many vehicles but also because drivers cut each other off, stop in middle lanes to load customers, and weave erratically across lanes. Since marketplaces and bus terminals are often near key intersections, the congregation of private informal operators nearby forms bottlenecks that clog traffic upstream.

In addition, many informal services are viewed as inefficient users of road space. While minibuses and three-wheelers generally consume more road space per passenger than conventional buses, this is partly offset by smaller vehicles' maneuverability advantages and faster speeds. Human-powered three-wheelers, or pedicabs, have long been chastised for

jamming up roads, and for this reason many cities in the developing world have banned them. Hanoi authorities estimated that a pedicab (known locally as cyclo) passenger requires an area 20 times larger than that required for one bus passenger. Rather than banning them outright, however, some cities like Yogyakarta, Indonesia and Dhaka, Bangladesh, have provided separate lanes for slower moving vehicles like pedicabs.

Fierce competition for customers invites chaotic and collectively damaging driving behavior. Informal operators frequently head-run on formal, scheduled services, getting in front and arriving first at busy pick-up points. And if demand tapers off, drivers might elect to halt services altogether. In Kingston, Jamaica, illegal operators, called “robots”, have been known to kick everyone off their vehicles, turn around, and head the opposite direction when there is more money to be made going the other way. The drive to maximize personal gain, regardless of how others might be impacted, leads to such unscrupulous behavior. This is the classic “collective action dilemma” wherein private motives are at odds with the larger public interest.

Besides head-running, another common practice among informal operators is poaching. In Rio de Janeiro, illegal van operators hire touts to hang around bus terminals and coax waiting customers to hop aboard a nearby van instead. Another common form of poaching is for illegal vans, pick-ups, and sedans to stop and solicit customers at bus stops, locations where even taxicabs are normally prohibited from stopping.

Perhaps nowhere have the repercussions of cutthroat competition been more serious than in South Africa. There, intense rivalries over turf among private minibus operators have led to full-fledged gang warfare, sometimes with lethal consequences. In Johannesburg, pirate operators have gone to such extremes to eliminate competition as boarding back seats of



legitimate minibuses and shooting their rivals, in what has been dubbed the “death from the back seat” strategy.

Due to hyper-competition, informal operators are notorious for driving aggressively and recklessly. Many are guilty of cutting off cars to pick up fares, blocking lanes to load and unload passengers, overloading, operating unsafe vehicles, ignoring red lights, and excessive cruising and hawking for customers. Some operators knowingly and openly disobey traffic rules, though in fairness, flagrant violation of traffic laws is commonplace in much of the developing world, not just among jitney operators. Others are simply unaware of traffic rules because they have no driver training and are illiterate. Additionally, long, hard working hours cause driver fatigue, a significant contributor to accidents. Safety is also compromised when too many customers are allowed on board. Overcrowding puts children, the elderly, at risk especially when vehicles are abruptly stopped. It also invites pickpocketing and bullying, what have become nearly epidemic problems in parts of Central America. The widespread use of poorly maintained vehicles running on under-inflated, bald tires only increases the risk of accidents. And mixed traffic operations of highly vulnerable modes like motorcycle-taxis and pedicabs invite serious injuries and fatalities.

Minibuses, motorized pedicabs, and for-hire station wagons are gross-emitters of air and noise pollution for a number of reasons: diesel propulsion; absence of catalytic converters; reliance on old, decrepit vehicles with under-tuned engines; frequent acceleration and deceleration in congested traffic; and the prevalence of low-stroke engines. Delhi’s vast population of two-wheel motorcycles (1.8 million) and two-stroke engine-powered auto-rickshaws (78,000) emit more hydrocarbons and carbon monoxide per kilometer than even fully loaded buses.<sup>37</sup> Dhaka’s auto-rickshaws emit 30 times more pollutants than a normal car.<sup>38</sup> Air

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<sup>37</sup> M. Badami, *Improving Air Quality in Delhi*, *Habitat Debate*, Vol. 4, No. 2, 1998, pp. 22-23.

samples collected near a Dhaka auto-rickshaw stand showed concentrations of volatile organic compounds (precursors to the formation of smog) to be 400 percent to 745 percent above accepted standards; concentrations of toluene (a known carcinogen) are also dangerously high.<sup>39</sup> In Calcutta, where auto-rickshaws and private buses of all shapes and sizes handle over 6 million trips on an average weekday, an estimated 60 percent of residents suffer from respiratory diseases attributable to airborne pollutants.<sup>40</sup> Air pollution problems are exacerbated since informal transport operators congregate in densest part of cities where pollutants and contaminants are most easily contained and entrapped. Poor vehicle maintenance, commonplace among cash-strapped informal operators, and the prevalence of poorly refined local gasolines only make matters worse. Thus in a city like Dhaka, where the number of motor vehicles is small by global standards, air pollution is a serious problem because of the predominance of old, poorly maintained two-stroke motorcycles, auto-rickshaws, and micro-buses (auto-tempos).

Unbridled competition is also blamed for “skimming the cream” - i.e., the tendency to operate only along lucrative routes, leaving high-cost, unprofitable services to the public sector. A regulated transportation company, the argument goes, operates in the public interest by plying both money-making and money-losing routes, a practice known as cross-subsidization. Regulators maintain that the public has an obligation to protect carriers from illegal and excessive competition and ensure that franchise-holders receive a fair return on investment. Because public transport operators almost universally incur deficits, however, some counter that private paratransit operators end up skimming losses, not “cream”. And as noted, since many

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<sup>38</sup> M. Karim, Y. Kornori, T Esaki, and S. Ahammed, Mass Transit and Appropriate in Metropolitan Dhaka, Paper presented at the 91st Annual Meeting of the Air & Waste Management Association, San Diego, California, June, 1998.

<sup>39</sup> . M. Karim, Traffic Pollution Inventories and Modeling in Metropolitan Dhaka, Bangladesh, Transportation Research D, Vol. 4, 1999, pp. 291-312.

<sup>40</sup> L. Wadhva and A. Gupta, Transportation Growth in Developing Countries and Sustainable Development Approach: A Case Study of India, Delhi, paper presented at the international conference, CODATU VII, 1996.

informal operators often serve low-density, out-of-the-way places, the amount of deficit-skimming they provide (were public operators to serve these areas) is likely substantial.

In some parts of the world, informal operators have lured such large numbers of customers from public buses that formal services are in serious jeopardy of collapsing. In Buenos Aires, massive losses in patronage have forced dramatic cuts in bus services along some corridors, undermining the ability to coordinate timetables and fare systems due to the loss in critical mass. From 1992 to 1999, franchise bus operators lost 25 percent of their patronage - representing 3 million trips per day - to private for-hire cars (called *remises*) and illegal *colectivo*-vans.<sup>41</sup> While some contend these are problems only insofar as formal operators are reluctant to streamline and restructure services, in reality legitimate carriers often have their hands tied. Many operate under long-term franchise agreements and must pay-off debt for past vehicle acquisitions they were contractually required to make, regardless whether vehicles are on the streets or not.

Left unchecked, the problems posed by unfair and predatory competition often fester with time. This is partly due to the political power base illegal transport operators are able to build. Once they become part of the status quo, and gain a foothold as a major presence in the local transportation scene, it becomes difficult for authorities to gain any kind of significant control over them.<sup>42</sup>

While the above-outlined factors are chief concerns, less tangible factors also account for the anti-paratransit stance of local and provincial governments. Among these are: a cultural predisposition among foreign transportation consultants to expedite automobile flows, many of

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<sup>41</sup> J. Barbero, *Recent Changes and Perspectives in Buenos Aires Urban Transportation*, Buenos, Aires, Metrovias S.A., unpublished paper, 2000.

<sup>42</sup> D. Klein, A. Moore, and B. Reja. *Curb Rights: A Foundation for Free-Enterprise in Urban Transit*, Washington, D.C., Brookings Institution Press, 1997.

whom take only taxis when abroad and fail to appreciate the importance of informal transport to the poor; pressure from foreign lenders seeking to export modern transport technologies to developing regions; and in the drive toward modernization, a mind-set among public officials, especially in image-conscious national capitals, that jitneys and micro-buses are inferior, obsolete modes suited only for backward countries. One must question such perceptions. Among professionals and politicians, only the downside of informal transportation gets recognized, in large part because these individuals experience only the costs and none of the benefits. That is, it is the motoring class that suffers the most from the congestion and on-road safety threats posed by informal operators. Few of these individuals ever need to board a jitney or hire a motorcycle, thus the vital mobility and equity role the informal sector plays is not fully appreciated by those in positions of power.

There is largely an absence of any kind of normative policy framework when it comes to informal transport services. This is reflected by the fact that fairly comparable informal transport services are perceived and treated unevenly in different parts of the developing world. Jakarta's decision to eliminate the pedicab sector by confiscating vehicles and discarding them in the sea stands in contrast to Manila's acceptance of pedal-powered transport as a viable feeder service in several commercial districts of the city. While Nairobi has embraced and tacitly promoted private minibus and pick-up truck services, in Abidjan these commercial services have been all but disbanded.

There have also several incidences of criminal activities on the social media which were captured on CCTVs and most of them show the criminals arriving and leaving the scene on boda boda.. Majority of criminals basically use boda boda as the main means of transport. This is because boda boda can easily to evade road blocks on the suspicion from the security personnel

or the public especially when they have engaged in criminal acts or in possession of dangerous weapons or large amount of money stolen or looted. Drugs and contrabands are also transported on boda bodas to evade police searches by avoiding the main roads and easily mingling and blending with local population.

Also one of the challenges in the fight against terrorists is the easy with which they blend and mix with the local population and to be able to achieve they use boda bodas as one of their preferred modes transportation. This ensures that they don't raise suspicion amongst the locals and also among the various security agencies.

The boda boda transportation is also characterized by ease of maneuverability and that justifies why it is preferred by criminals. In essence, it ensures ease of sneaking and disappearing away from the scene of crime and leaving no or minimal trace. This is as opposed to the use of vehicles where their design, make, and colour as well as registration number plates provide insightful information that can be used in tracing criminals. Based government reports, boda bodas riders engage several crimes that can range from drug, robbery, arms, and human trafficking, murder and other traffic offences are nowadays the leading threats to the Kenyan national security.<sup>43</sup>

## **2.5 Rationale behind emerging transport networks and national security**

Emerging transport networks have both negative and positive side to the country's national security. These networks can be adopted for the good of the country if the government can regulate them. Boda bodas may be detrimental to the national security of a country if criminal gangs are allowed make unlawful use of them.<sup>44</sup> The networks, as studied, have been

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<sup>43</sup><https://www.standardmedia.co.ke/business/article/2001300728/why-bodabodas-are-now-number-three-in-threat-to-national-security>.

<sup>44</sup>Pirie, Gordon. "Transport pressures in urban Africa: practices, policies, perspectives." *Africa's Urban revolution* (2014),42.

adopted by the state for reasons especially in provision of services in remote areas whereby some chiefs and their assistants are provided by motorcycles to enhance service delivery.

The aggregate benefits to the economy arising from the adoption of emerging transport networks are many. The system offers excellent support to the national economic development that goes a long way to food security as well as provision of employment to the youth. Employment and economic development which to some extent can be linked to these networks are necessary for enhancing the country's national security<sup>45</sup>. Eminently, transport networks are a mandatory system for economic development, with exponential effects to the betterment of national security in the long run.

National Transport and Safety Authority (NTSA) has put in place rules and regulations concerning emerging transport networks, aimed at ensuring safety and order within the industry. Rules and regulations formulated by NTSA include but, not limited to the specific number of passengers that are ferried at a time, the gowns such as helmet and reflector jacket, and the qualifications requirements on all drivers using these modes. The government, through the implementation of such policies, has been able to avoid a considerable number of accidents emerging through boda boda networks.<sup>46</sup>

There is however, need for reforms in the existing rules and regulations relating to national security to enhance security within the country. Considering the disorder emerging from boda boda and matatu networks, the country needs to establish the gaps that may be escalating either from existing laws and regulations or its implementation. Integrity is paramount both in the application and in the formulation of new policies meant for emerging transport networks, in order to enhance national security. Most of the African countries have good and effective

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<sup>45</sup>Ibid., 144.

<sup>46</sup>OkeyoGorm Rye "Effects of Integrated National Transport Policy on Transport Service Delivery in Nairobi City County, Kenya." 67.

policies. However, the only challenge has been implementation and enforcement of the national security policies due to corruption. This has significantly led to the rise in cases of insecurity within the informal transportation sector especially the boda bodas.

## **2.6 Conclusion**

Informal transport is the most successful form of suitable transport in the world, although transport sectors in Africa are generally underdeveloped and this constitutes a major challenge to the development of the continent. More significantly is the fact that most of transport investments in Africa focus on promoting motorized transport<sup>47</sup>.

Boda boda, which includes bicycles and motorbikes are low cost-mode of transport which can drastically improve movement of people and goods and enhance the creation of employment, reduce the cost of doing business and reduce the poverty levels and overdependency within the nation. However, if not properly regulated, the industry can pose serious challenges to the national security. The government needs strategies and approaches to help rationalize, coordinate, and integrate the new emerging forms of transport services.

According to the rational choice theory, people make choice according to the alternatives available and they will normally select the alternative that gives them more advantages according to their analyses especially in terms of cost-benefit analysis. Emerging transportation modes like boda bodas offer several advantages as we have seen earlier like for example flexibility, cheaper cost of transportation among others. Therefore, as long as the sub sector still possess these advantages over the formal transportation then more and more passengers will prefer and use the informal modes if the theory is anything to go by. This is because it is the only alternative available that can be able to address their transportation needs at a cost that they are willing

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<sup>47</sup> Layton Bradley & Lauren Jablononiski, Ryan Kirby, Nick Lampe (2007). Bicycle infrastructure development strategy for suburban commuting.” ASME International mechanic Engineering congress and Exposition

to pay. On the other hand, because of several security and regulation gaps the sector also poses a challenge to the national security in terms of crime and road safety among other factors as discussed earlier in this chapter. Criminals take advantage of the gaps within the subsector to make money illegally. For a crime to take place three factors are required; available target, a motivated offender and where there are no authorities to prevent the offence. Looking at the first factor, criminals are always in the society especially where there is no employment. Coming to the second factor, the users of emerging transportation modes are exposed in terms of travelling in smaller groups, travelling on lonely roads at odd hours as opposed to formal networks. There are also no adequate security personnel on these roads at odd hours and therefore all these factors combined contribute to crime within the sub sector.

The government therefore having the sole responsibility of provision of security to its citizens must come up with proper measures to breach the security gaps within the sub sector and ensure that the subsector is protected because it offers vital services to the population and contribute towards the economic growth. The best solution to these security gaps is by focusing on the three factors that have been discussed earlier on if the theory is anything to go by.



## **CHAPTER THREE**

### **3.0 FACTORS INFLUENCING GROWTH OF BODA BODAS IN KENYA**

#### **3.1 Introduction**

These chapter analyses variables that influence the growth of boda bodas in the country like for example lack of employment cost of acquiring and maintaining boda boda and versatility in terms of movement and operations of boda boda. The chapter provides summary of the research from other scholars who have researched on the same topic of interest and makes a scholarly analysis within the theoretical framework.

#### **3.2 Social Economic Implications**

The government of Kenya puts emphasis youth development as contained in the constitution. The common Vision 2030 MTP (2013-2017) incorporates and focuses on the employment creation with specific emphasis of the young population. Based on the vision 2030, the population of Kenya is dominated by the youth in the age group that ranges from 15 to 35 years. In essence, the age group accounts for about 38% of the entire population. Based on this, there is a need to develop specific policies and interventions measures to ensure that the youths are engaged in the various development programs in the country.<sup>48</sup> Unemployment is arguably the leading concerns of Kenyan population. Statistics indicate that above 800,000 Kenyan young populations enter the job market annually. However, only about 10% of the available job opportunities are in the formal business. The rest which consists of the majority are in the while

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<sup>48</sup>Kageha at el (2012) bodaboda operators in Vihiga county. “blessing or a curse”

the informal sector that includes the boda boda operators.<sup>49</sup> However, there is significant economic and social benefit associated with boda boda.<sup>50</sup>

The use of motorcycles has increased more rapidly in Asia than any other part of the world. Currently, the rate of ownership for the motorcycles is in excess of 150 motorbikes per 1,000 people in countries including Laos, Taiwan, India, and Cambodia. Accordingly, Taipei is the leading with an average of 335 motorbikes for every 1000 individuals in 1997.<sup>51</sup> For majority of the young population the ownership of the motorcycle is the first step to owning a personal car.

### **3.3 Lack of Formal Employment**

The main reasons that justifies why certain countries proves successful as opposed to others with regards to the employment creation are the same reason that contributes to the job creation<sup>52</sup>.The poverty commission in Australia (1999) gives a suggestion that the high rate unemployment is the main factor that lead to high levels of poverty. Essentially, approximately 16.6 % of the unemployed individuals live below the poverty line between 1972 and 1973.<sup>53</sup>

In Finland, the combination of recession and collapse of the Soviet Union saw the unemployment rate double between 1991 – 1992 then doubled again the following year and rose by 50 percent the year after that. The overall increase was from an employment rate of 3.2 percent in 1991 to 16.3 percent in 1993.<sup>54</sup> Unemployment is considered as leading determinant of high levels of poverty and exclusion. As a result, the fight against the high rate of unemployment

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<sup>49</sup> Ibid

<sup>50</sup>Mutiso w, (2010): Bodaboda bicycle taxis and their role in their transport systems. Case studies of Kisumu and Nakuru, Kenya.

<sup>51</sup>AdgaraL.W and A. Gupta, Transportation growth in developing countries and sustainable development approach.

<sup>52</sup>Gregory P.G and P.Sheehan (1998).Poverty and the collapse of full employment Austalian poverty.Melbourne Australia.

<sup>53</sup> Ibid

<sup>54</sup> Saunders P,M, Lewns, and Thornhill, A, (2003)Research methods for business students (3 rd Ed) prentice hall(London).

proves important for the wellbeing of the economy. However, the fight against the high rate of unemployment can only be achieved through the creation of job opportunities.<sup>55</sup> Informal new transport sector that includes the Boda bodas can provide the much needed opportunities for employment to many of the unskilled youths.<sup>56</sup> In most of poor urban, the new informal transport sector consists of about 15% of overall employment in Dhaka and Bangladesh. The figure is approximately 30%.<sup>57</sup>

Evidently, the market place is regarded as the mediator and innovator, if there are enough customers who are willing to purchase enough for the operators who are self-employed to help make ends meet, and make the society better off<sup>58</sup>. Problems can only abound when there are excessive number of service providers. However, an individual might ask whether the society would fare well for the worst if many people are forced outperform boda boda industry. This can make them go to the streets thus resulting to increase in crime and illicit activities. Soon after independence the government of Kenya launched session paper number 10 of, 1965 which declared poverty, ignorance and diseases as the priority items that was to be dealt with by the new independent country. However many years after independence, poverty has been on the rise in Kenya<sup>59</sup>.The fund notes further, Kenya was ranked 148<sup>th</sup> among 177 countries in the united nations Development index. UN uses this index to measure a country's development projects in terms of life expectancy, education attainment and standard of living. In 1982 government appointed a presidential committee on unemployment and Chairmanship of Wanjigi with a broad mandate to devise measures to combat unemployment. The committees report (Report of the

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<sup>55</sup>Rapper M(1999),work, wages and welfare :where Is Australian leading? Keynote address, Arod employment forum.

<sup>56</sup>Cervero R, Paratransit: (1998) The Gap fillers,Habitatdebate,vol4,No 2, pp8-9.Constitution of Kenya 2010

<sup>57</sup> Ibid

<sup>58</sup>Barbero J. (2000) Recent changes and perspectives in Buenos Aires urbantransportation, Buenos, Aires, Metrovias S.A unpublishedpaper

<sup>59</sup>I.F.A.D (2010)

presidential committee on unemployment 1982/83) highlighted the growing disparities in incomes equality, and job opportunities between different Socio economic groups. The committee thus took a broad view of the employment problem going beyond the issue of job opportunities. The committee also looked at prospects for increasing productive employment in all the major sectors of the economy and made far reaching recommendations for this.

In Kenya unemployment among the youths a major concern to the development issue.<sup>60</sup> Statistics indicates that approximately 64 percent of unemployed individuals in Kenya are young people. It is interesting to note that 1.5 percent of the unemployed population have formal education that goes beyond the secondary level. The rest that is estimated at 92% have no professional skills and training. The group consists of either idle people or other criminals. Based on the economic survey published in 2010, the number of vehicles registered increased by 32.8 percent to 161813 during 2009. The rise in the number of vehicles is attributed to higher registration motorbikes which rose significantly by about 56.3 percent of all the registered units. Essentially, Motorcycles have become popular means of transport across the country. In rural regions the motorbikes provide solutions for the limited transport options while in the urban areas they have supported the passenger transport as well as the mail delivery GOK (2010). In Kenya, the majority of boda boda riders are do not have informal employment. Therefore, for many unemployed persons, the motor cycle has provided a perfect employment opportunity where people get their daily income that they use for their survival.<sup>61</sup>

Majority of youths completing their studies from various learning institution are finding harder to venture in the formal sector due to education system failing to match with the job

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<sup>60</sup>Gladys M. &Nyachieo M (2013).Creating employment through transport; The youth and (bodaboda) in Kitengera, Kajiado County-Kenya

<sup>61</sup> Ibid

requirement in the formal market leading to the individuals to be only absorbed in the informal sector like for example boda boda<sup>62</sup>.

### **3.4 Low Cost of Acquisition and Maintenance of Motorcycles**

In the past few decades, motorcycles have emerged as a leading means of transport in East Africa where it is commonly known as boda boda.<sup>63</sup> In Kenya boda boda innovation has created an excellent opportunity for many people without jobs as well as help address the shortage of the public transport in the country.<sup>64</sup> Motorbikes in West Africa have emerged in the last decade early in response to poor public service vehicles market as well as relatively unrestricted market entry. The emerging transport network have grown to become a poorly served transport and passengers market and is arguably relatively unrestricted market where firms and other business can enter without any restrictions.<sup>65</sup> In comparison, Kenyan boda boda sector has grown recently due to the introduction of zero import duty on motorbikes making it affordable to many people across the country.<sup>66</sup>

Tsucho capital Kenya in partnership with the Yamaha division launched a pilot scheme in Kisumu to empower the riders to own motorcycles without collateral.<sup>67</sup> The scheme called crux finance to enable a number of boda boda riders acquire their own motorbike by pooling resources and plan requires six riders to register in a group and raise shs 48,000 with each getting a bike in phases of two months.

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<sup>62</sup> Women and Men in the Informal Economy (200) International Labor Organization.

<sup>63</sup> Mutiso W and Behrens (2011) 'BodaBoda' bicycle taxis and their role in urban transport systems case study of Nakuru and Kisumu Kenya.

<sup>64</sup> Kamuhanda R and Schmidt O, (2009): matatu :A case of study of core segment of the public transport market of Kampala ,Uganda, transport reviews, vol29, pp129- 142.

<sup>65</sup> Mahlstein M, (2009): Shaping & being shaped :The regulation of commercial motorcycle operation & social change in calabar, Nigeria, MA Thesis, University of Basel.

<sup>66</sup> Cervero R, Paratransit: (1998) The Gap fillers, Habitat debate, vol4, No 2, pp8-9. Constitution of Kenya 2010

<sup>67</sup> Odhiambo & Dalton (2013) [www.businessdailyafrica.com/boda-boda](http://www.businessdailyafrica.com/boda-boda)

According to Leyland (1999) boda boda means of transport has spread to most regions in Uganda and Kenya where the land allows for easier movement and operation.<sup>68</sup> They can only operate on relatively flat parts and within the urban centers. Regardless of the heavy traffic realized in majority of the towns. Joining the industry is easier as one only needs to acquire or hire a motorbike or a bike and have driving skills. The rest is just the ‘normal’ scramble for customers and one is ready to go. On the other hand, people who have capital and need to make extra cash just need to buy motorbikes and hire them out to riders who can’t afford to buy their own. The payments are usually done on a daily basis as per the agreement. There is mostly no formal process of licensing and this makes the operation much cheaper and easier hence attracting more people. In Kenya, each business has to be registered. Majority of the enterprise in the informal sector including the emerging transportation networks, are not registered by the government making it easy to start and run a business.<sup>69</sup> This means that the owner of this business enjoys all the profits. This attracts more people to come into the informal sector since little is required to operate the business and there is no paying of taxes.

People within the informal sector do not any cost monthly for running their business activities compared to those within the formal sector. This gives them an advantage and therefore encourages the growth of the sector. This attracts more people to the sector especially the poor that cannot afford to the capital required to set up a formal business. Also, most informal businesses like boda bodas do not require physical building or one to rent a room which is attractive to operate the business which is very expensive for a business.<sup>70</sup>

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<sup>68</sup>Leyland J. (1999) Rural travel and transport in Western Uganda – Scoping study. November under assignment to DFID, Uganda.

<sup>69</sup> Hart Keith (1973) “Informal Income-Modern African Studies”.

<sup>70</sup> Ibid

### **3.5 Versatility of boda boda**

Boda boda provides an efficient means of transport that can travel and reach various destinations across the country. The motorbike can use various roads that cannot be accessed by the cars or other public transport vehicles due to their size and flexible. As a result, it is considered as a versatile means of transport in the major cities as it can drop the customers' direct to their door steps. This makes it to become efficient and convenient means of transport to the customers. In essence, the schedules for the boda boda operators are flexible and can enable the users to make appropriate decisions regarding the best route that they can follow. It implies that the operators of boda boda can depend on the customer directives regarding the routes to follow. In densely populated slums like Kibra and Mathare for example some areas can only be accessed by boda bodas because of the road sizes. This has led to growth in the number of boda boda operators in these areas. The same also applies to rural areas which can only be accessed by boa bodas because of the size and conditions of the roads especially during the rainy season.

Most business activities under informal sector are flexible depending on the prevailing conditions which can either be supportive or discouraging. Example if a certain road for example within Nairobi becomes impassable because of heavy rains, within no time lots of boda bodas will be there to take up the task of ferrying the passengers at higher prices. This means that in this type of business, from time to time opportunities come up when the operators rip more and this attracts more people into the business.

### **3.6 Conclusion**

The growth of the boda boda industry is important as it creates job opportunities to people who would otherwise engage in social evils like crime and drug trafficking. It has also

thrived due to poverty as it provides affordable means of transportation to those that cannot afford the formal transportation modes.

Fairly low costs of acquisition and maintenance coupled with its versatility especially on poor roads have also contributed significantly towards the growth of the sub sector. In Kenya with a budget of as low as Kshs 70,000 one can be able to acquire a motorbike and begin operating as a boda boda. For those who cannot be able to raise the money they can hire the same for as low as Kshs 300 per day whereby they can be able to make an average of Kshs 1,000 in a day. When they pay the hiring fee they remain with Kshs 700 which is fair enough for them.

According to the rational choice theory, every person, even when carrying out the most mundane of tasks, perform their own personal cost-benefit analysis in order to determine whether the action is worth pursuing for the best possible outcome and therefore as long as the cost of venturing into and operating the emerging transportation networks is low, the sub sector will continue to grow because many people are attracted by the profits. Also so long there are no formal employment to absorb the youth from higher learning institutions many of them will join the sub sector because it's the only alternative they have according to this theory.

Another factor that is also critical to the growth of the sub sector is the growing number of readily available customers that are willing to use this mode of transportation. After they have done their cost-benefit analysis, most of them prefer this mode because it offers several advantages over the formal modes like public busses. Examples of these advantages are low transportation costs, flexibility in terms operating routes and timings among many others. The informal transportation modes also offer the advantage of transporting both passengers and cargos beyond the formal transportation terminal points which would otherwise be impossible or very expensive to hire public transport. This means that there is a need which the informal



transportation sector addresses and for so long as it still exists within the nation, then this is a sub sector we can't wish away.

## CHAPTER FOUR

### 4.0 POLICIES BY THE GOVERNMENT TO REGULATE BODA BODA SECTOR

#### 4.1. Introduction

The emerging transport networks evidently expose Kenya to various security threats that can compromise the national security. Ever since the rise of boda boda as a major means of transport on Kenyan roads, there have been several reports regarding the security threats in Kenya. A new trend is emerging within the country whereby criminals are increasingly using boda bodas to conduct various criminal activities in the country.<sup>71</sup> As a result, it is important for the government to put in place policies that can help reduce the security threats associated with the emerging transportation networks in the country. Several measures have been put in place to help regulate the boda boda operations in Kenya with an aim of reducing the crime related to this sector. The section addresses the policies that the government of Kenya has implemented to help address the security threat in the Kenyan's emerging transport network especially the boda boda operators.

#### 4.2. The Boda boda SACCOS and Associations

The establishment of the boda boda SACCOS is one of the measures that the government of Kenya has put in place to help address the boda boda related crimes that have been on the rise over the past few years. The government of Kenya has establishment of boda boda associations at various parts of the country to help in the effective management and monitoring of their

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<sup>71</sup> Nyaga, James Kariuki J. "The Influence of Motorcycles/Boda Boda on Community Development in Rural Kenya: a study of the Challenges Facing Motor Cycle Operators in Meru South Sub-County." *Journal of Education and Human Development* 8, no. 1 (2019): 86-92.

activities and operations. The boda boda SACCOs are important in uniting the boda boda operators in the country.

The government through the relevant transport agencies has made it necessary for each boda boda rider to register with one association depending on the regions where they operate from. All boda boda operators are required to become members of a given association so as to be allowed to operate. The aim of registering with such association is to ensure that criminals are not given the opportunity to engage in boda boda operations<sup>72</sup>. In addition, it is required that all members that register to become boda boda operators must get certificate of good conduct from the criminal investigation department. The certificate of good conduct is aimed to ensure that people who operate the boda bodas are not criminals hence reducing crime within the sector.

#### **4.3. Police Checks and Community Policing**

The other initiative that has been put in place to help reduce the security threat associated with boda boda operators in Kenya is the introduction of the police checks and road blocks at various points along the road networks. The road blocks are erected at various points along the roads. At these points every motorist and boda boda operator is required to stop for checks by the road security personnel and traffic police officers. The main aim is identification and ensuring that they comply with all the requirements.

The security personnel can be able to detect those operators that violate the rules and policies that government has put in place to regulate the sector. It can also help in identifying criminals who take the advantage of the emerging transport networks to perpetrate various acts of crime to the unsuspecting citizens.

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<sup>72</sup> Manyara, Charles G. "Combating road traffic accidents in Kenya: A challenge for an emerging economy." In *Kenya After 50*, pp. 101-122. Palgrave Macmillan, New York, 2016.

The establishment of the checks and patrols is another important strategy that the government of Kenya has been using to control the rising crime in the emerging transport sector. The law enforcement officers often conduct random and regular patrols and checks to motorist and boda boda operators. The checks and patrols are conducted both at day time and during the night.<sup>73</sup>

During these patrols and checks, the security officers confirm if the members of the boda boda operators comply with the established rules and regulations. The operators who are found to have failed to comply with the stipulated laws and policies are arrested and appropriate legal actions taken against them. The checks and patrols have helped in identifying some of the criminals who operate as motorist across the Kenyan's road networks and has also acted as deterrence to those who would have otherwise engaged in criminal activities under the disguise of boda boda operators. This has helped improve the security in the new emerging road networks in Kenya.

The other strategy that has helped in addressing the security threat in the Kenya roads as a result of the new emerging security road system is the introduction of the of community policing. Community policing is whereby the society takes an active role in ensuring that there are adequate security measures within the society. The people within the community act as brother's keeper by maintaining a watchful eye on the happenings in the society and revealing vital information to security agents that assists them in curbing insecurity. The participation of

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<sup>73</sup> Wanume, Paul, Paul Nduhura, Benedict Mugerwa, Henry Bagambe, and Jemimah Ninsiima. "The Dangerous Boda Boda Transport Mode: Mitigating an Impending War on the Roads in a Transforming City? Case of Kampala City." (2019).

community in the security operations minimizes cases of crime within the society including those ones that are linked to boda boda operations.

#### **4.4. Limiting Hours of Night Operation and Street Lighting**

Majority of the boda boda related crimes have been reported to take place during the night. Many unregistered boda boda operators normally operate during the night and it is at this time that many of the crimes are perpetrated. To curb this, the government of Kenya has put in place adequate measures to limit the hours of operation for the operators of boda boda. In many occasions, the boda boda operators have been attacked, injured, robbed and in some cases killed by the unknown gangs when operating at night.<sup>74</sup>

Most criminals at night use boda bodas as a mode of transportation while perpetrating crime. Some even hire oblivious boda boda operators to transport them to their areas of operation. During the night it becomes challenging to distinguish between genuine boda boda operators and criminals who disguise themselves as boda bodas. Due to this, the government has limited the number of operating hours for boda bodas at night in to reduce the security threats of the gangs.

Street lighting is also an important factor in addressing security challenges associated with the emerging transport networks in the country. Most crimes take place during the night as the perpetrators take advantage of the cover of darkness. The government has established a program aimed at lighting the streets across various towns within the country. The project aims to provide adequate lighting for the individuals who work during the night and ensure that they

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<sup>74</sup> Ssewanyana, Derrick, Anneloes van Baar, Patrick N. Mwangala, Charles R. Newton, and Amina Abubakar. "Inter-relatedness of underlying factors for injury and violence among adolescents in rural coastal Kenya: A qualitative study." *Health psychology open* 6, no. 1 (2019): 2055102919849399.

are safe and secure from any act of crime at night. Essentially, the program is allocated huge funds from the government budget to ensure that motorists and businesses that operate during the night are able to move from one place to another without any issue and fear of attacks. In addition, the lighting project was aimed at ensuring that Kenya becomes a 24-hour economy. The provision of lighting across the streets in major towns also enhances police patrols at night and makes identification of criminals easier.

#### **4.5. Designated Operating Points and Shades**

There have been efforts by the Kenyan government both at national and county level to provide shades and designated points for the various informal business operators like *juakali* artisans and *boda bodas* to improve their working conditions and also create some order. Although the project is yet to be realized in most parts of the country owing to the larger number of informal business operators, it will be a bigger step towards creating order within the emerging transportation operators. They will be operating from designated points and by doing so they will know each other hence minimizing chances of criminals posing as *boda boda* operators. The security agencies will also find it easier to enforce the regulations concerning this type of business like registration, insurance and being members of SACCOs.

#### **4.6. Gaps in Addressing the Security Threats Emerging From Transport Networks**

Addressing the security threats associated with the emerging transport networks has several challenges. These challenges are contributing to the increasing cases of the crime related to the emerging transport network in the Kenyan economy. The significant challenges associated with the operation of *boda boda* in the Kenyan roads include the weak law enforcement system and other agencies, the culture of impunity among the operators of *boda boda*, unemployment

challenges, drug abuse, unregistered motorcycles and high corruption among many security agencies.<sup>75</sup>

There are proper regulations and policies in place to ensure safety and security within the transportation sector but the biggest undoing has been the implementation. If they are properly implemented, then the incidences of insecurity within the sector will reduce significantly. Poor implementation has been mainly due to corruption and lack of adequate law enforcement agencies especially at night whereby there are very few traffic police.

The other challenge that faces attempts to address the security threat from the boda boda operators is the culture of impunity among the boda boda operators. Many of the boda boda operators are ignorant and do not follow the stipulated laws and rules that regulate the transport sector. This is because the sub sector has not been properly regulated especially when it comes to the enforcement of the regulations put in place. Security enforcement agencies mostly concentrate on the formal transportation modes like public buses.

The unemployment challenge is another major factor that can hinder the effort aimed at addressing the crime related to boda boda sector.<sup>76</sup> The high unemployment the Kenyan economy renders the majority of the youths unemployed and this makes them to engage in many criminal activities in the country.

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<sup>75</sup> Mugwe, Evanson Mwaengo. "An examination of factors influencing safety within the boda boda transport sector in Kenya." PhD diss., Strathmore University, 2018.

<sup>76</sup> Sumbeiywo, Gideon K. "A Framework for Profiling Crime Reported Using Social Media—A Case of Twitter Data in Kenya." PhD diss., United States International University-Africa, 2018.

## 4.7. Conclusion

The government has attempted to put several measures in place to make informal transportation safer both to the users and the public in general which is a good step. The challenge is that these measures have not been fully implemented and these coupled with the gaps that were addressed earlier make the industry a threat to the national security.

The main purpose of the government seeking to regulate this sub sector is to create order, maintain security and safety within this sub sector. As discussed earlier, for crime to take place there have to be the following three factors; available target, a motivated offender and where there are no authorities to prevent the offence. In order for the government to curb crime, the policies need to focus on the three factors. Since the available target is always there because in a democratic state like Kenya citizens are at liberty to move around by the mode of their choice and at any time convenient to them, the best way would be to focus on the other two factors.

To address the second factor, i.e. motivated offenders then we need to ask ourselves why people engage in crime. Most of them do so because they do not have a choice this can be addressed by the government coming up with policies that will create employment like for example development in infrastructure, improved technology and lower costs of doing business so that many youths are absorbed in both formal and informal sector. This will reduce the number of motivated offenders. The government has addressed this factor by reducing the cost motorcycles so that it becomes affordable to those who are not employing and also allowing them to operate their business without restrictions.

The third factor which is lack of authorities to prevent crime has been addressed by the government by having the police putting up roadblocks at various points and conducting patrols



to contain crime. The biggest challenge is that most developing countries including Kenya do not have adequate police force as per the recommended standards of UN. This leaves a lot of gaps opportunity for crimes to occur especially during the night. Even though we have policies in place like night patrols and community poling including the ‘Nyumba Kumi’ initiative. This can also be augmented by the government for example considering augmenting the police force with the national youth service personnel to enhance the night patrols. For example, where you one patrol of three police officers. You could create three patrols by having each officer lead a group of three NYS personnel such that you have more patrols to cover a wider area. This will reduce crime and create order within the sub sector. It will also increase the number of roadblocks and the presence of law enforcement agents in general, which will enhance security within the nation and including within the informal sector. Safety will be enhanced by the adequate enforcement of the existing regulations like putting on safety gear, having a valid driving license and others that will be boosted by the increased number of law enforcement agencies.

## **CHAPTER FIVE**

### **5.0 CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter summarizes the findings from the previous chapters, makes conclusions and comes up with recommendations on the way forward. It also summarizes some of the research from other scholars who have researched on the same topic of interest. The recommendations aim at sealing the gaps within the sub sector so as to enhance security and safety within the sub sector.

#### **5.2 Conclusion**

Based on the findings of the study as summarized above it can be concluded that Bodaboda enterprise have empowered the youth significantly. From the findings, it was also noted that bodaboda enterprise has enabled the youth to cater for food, shelter, clothing, utility bills and school fees. Some are able to make savings after meeting their expenses. The study also established that there is significant correlation between the emerging transportation networks and increased insecurity within the subsector and the nation in general.

There are several challenges that the government of Kenya faces when addressing the crime related to the emerging transport network in the country. The research study has identified various security threats with significant connection to the operation of the boda boda across the country. Although it is recognized that the boda boda operators play a significant role in promoting economic growth, it has led to several cases of security concern in the country. The research indicates that the emerging transport network in Kenya has a significant influence on

the Kenyan security. In addition, it examines the factors that influence the growth of the emerging transportation networks in Kenya.

The notable factors that have contributed to the emergence of the transport networks in the country include high rates of unemployment, cheap prices of the motorcycles and the ease of operating a motor cycle business in Kenya among other factors.<sup>77</sup> The research also evaluated the national policies that have been developed to help address the various crimes that originate from the emerging transportation network in the Kenyan economy. It established that the government has come up with many policies and rules that are aimed at addressing the rising rate of crime in the boda boda sector. The research shows that there are many crime policies that have been implemented to help curb the crime related to the emerging transport network across the Kenyan economy.

One of the policies seen to have largely contributed to the reduction of crime in the boda boda sector is the introduction of the SACCOs and association for the boda boda operators. The associations unite all the boda boda operators together and this makes it easy to monitor and trace their operation throughout the country. As a result, it makes it easy for the security personnel to crackdown on the unscrupulous boda boda operators and thus reduces the rate of crimes in the emerging transportation network. Through the SACCOs they are also able to pull together funds, access bank loans and venture into development activities that boost the members' income. With increased income they become more responsible members of the society who are not willing to venture into criminal activities to get extra cash. They also become more cooperative when it comes to following the laid down regulation

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<sup>77</sup> Nyaga, James Kariuki J. "The Influence of Motorcycles/Boda Boda on Community Development in Rural Kenya: a study of the Challenges Facing Motor Cycle Operators in Meru South Sub-County." *Journal of Education and Human Development* 8, no. 1 (2019): 86-92

Another factor has been street security lighting and community policing whereby people become their brother's keeper. Most criminals used to take advantage of the darkness to perpetrate crime but now with street lighting they are discouraged because they fear being identified by the members of the public and being reported to relevant authorities through community policing initiative. Through devolution, most county governments have introduced street lighting within several Centres within Kenya to enhance business. This has really enhanced security and promote business especially among small scale trades especially within the informal sector.

### **5.3 Recommendation**

Given the worrying trend of the rise in the criminal activities in the boda boda transport sector, it is important to come up with appropriate recommendations that can help address such issues. Essentially, the government should enact various policies to help address the crime related to the boda boda operation and ensure that the safety of the motorist, the road users and all the Kenyan citizens is guaranteed. All the relevant stakeholders in the transport industry and the security sector should take particular emphasis and attention to help change and evolve the emerging transport sector as the crimes related to the boda boda sector continues to rise.

In addition, the emerging transport sector has contributed to an increase in the rate of accidents as well as impunity by the boda boda operators. The research study was not interested in recommending for the abolishment of the boda boda operators but identifying the opportunities that can help improve this important transport network in the country. Based on the findings and conclusion of the research study, various recommendations can be made to help improve the level of security in the public transport network.

The first recommendation is to register to ensure that the centralized database supported by the advanced technology where all the important information of all the boda boda operators are kept. Currently, lack of the appropriate boda boda database in Kenya is a major factor that contributes to the various security threats in the country. It was established in the study that the majority of the boda boda riders engage in major and petty criminal activities.<sup>78</sup> In addition the motorbikes have facilitated the commission of the variety of these crimes. The Kenyan government should ensure that all the boda boda operators are registered and their actions monitored on regular basis. This can ensure that they comply with all the legal requirements and that criminals don't take advantage of this gap to perpetrate criminal activities posing as boda bodas. It will also ensure that the operators have valid insurance requirement to enhance road safety as per the regulations.

It is important for the Kenyan government to ensure that all those interested in becoming operators in the boda boda transport sub sector within the country meet the mandatory requirements before being allowed to operate as motorists.<sup>79</sup> The mandatory requirements should include various issues such as undergoing a formal training in the motorcycle riding, acquiring riding license, getting certificate of good conduct and having protective clothing such as helmets and reflector jackets. This policy is already in place but it has not been properly enforced. Therefore, the government should do more to ensure that it is fully implemented.

The government should also overhaul the entire boda boda industry. Currently, boda boda industry is considered as an informal sector by many people in the country. The perception of

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<sup>78</sup> Kioko, Eric Mutisya. "Conflict resolution and crime surveillance in Kenya: Local peace committees and Nyumba Kumi." *Africa Spectrum* 52, no. 1 (2017): 3-32.

<sup>79</sup> Nyaga, James Kariuki J. "The Influence of Motorcycles/Boda Boda on Community Development in Rural Kenya: a study of the Challenges Facing Motor Cycle Operators in Meru South Sub-County." *Journal of Education and Human Development* 8, no. 1 (2019): 86-92

this important transport industry as informal business sector has made many operators to operate without following polices that regulates the activities of all the stakeholders. The government should officially embark on the programs that can integrate the emerging transport network into a more formal business sector within the economy. This will enhance security and safety within the sub sector through establishment of a more formal operating procedures that will create some order within the sub sector.

The government should also consider increasing the number of security enforcement agents to ensure that the regulations in place are adequately implemented. Specifically, laws should be amended through the normal procedure to augment the police force with the National Youth Service so that there is enough force to implement the regulations especially during odd hours and off tarmac roads.

The government should also have designated stalls and pick up points for boda boda operators and designated routes besides the main road dedicated for that boda bodas to avoid congestion and create some order within populated areas like urban centres which require their services. This will also minimize the number of traffic road accidents. By also having stalls where they wait for their customers, the operators can also be able to form associations that will assist look into their welfare. This will also help in creating and bringing order within the sub sector. This will make pedestrian walkways safer for pedestrian and reduce unnecessary road accidents.

Policies that tend to restrict boda boda movements should also be reviewed for example within Nairobi CBD the movement of boda bods is almost restricted. This affects shops within

CBD which would have liked to offer home deliveries through boda boda modes. Regulations should rather be geared towards having designated routes for boda bodas within CBD.

Law enforcement agencies like city askaris within Nairobi must be discouraged from taking this advantage of vague policies to harass boda bodas within the CBD. This creates disorder within the sub sector and within the city in general. Kenya is a democratic country where every citizen has some rights and freedoms as provided by the constitution and therefore when the law enforcement agents specifically the county askaris have to observe this when enforcing the law. Ugly incidents like whipping assaulting offenders and intimidating them instead arresting them is against the law. It creates a lot of disorder within the city and animosity between the operators and the law enforcement agencies instead of them working together to ensure security and safety within the sub sector.

Also the companies that use boda bodas as service providers should devise some form of self-regulatory frameworks to help curtail the burgeoning menace before the entire operation is put to a complete stop by lawmakers who are seemingly growing impatient. They must also work with the National Transport and Safety Authority (NTSA) to ensure that the Regulations (Operation of Motorcycles) 2014 are fully implemented.

The government should subsidize the cost of motorcycle riders' training and establish motorcycle specific driving schools. This will ensure that the cost of going to training school is affordable to the boda bodas some of them who are poor and cannot afford the current rates at the current driving schools. When the cost of going to driving school is high, most of them learn driving locally and in their operations they always endeavour to evade the security agencies, knowing that they will be nabbed for operating against the law. This leads to disorder and

accidents as they try to evade they security agencies instead of concentrating on observing traffic rules.

The government should undertake sensitization and awareness education to boda boda operators and the general public towards road safety and crime free boda boda sub-sector in Kenya. Most of the boda boda operators are school drop outs who are ignorant of the law and consequences of some of their actions and hence there is need to create awareness and educate them on road safety. They need to know that regulations are for their own good and that they are not there to harass them. There is also need to address unemployment and poverty found to be the major root causes of boda boda related crimes. As a government there is need to come up with policies that that will create employment for the youths.

The National Police Service and other law enforcement agencies should increase intelligence and surveillance of the sub-sector to identify crime patterns, trends and hot spots within the sub-sector. They should also strictly enforce laws and regulations meant to ensure public safety on the roads like wearing of helmets, reflector jackets; carrying only one passenger to ensure strict observance of traffic rules by boda boda riders. The agencies must also uphold integrity and shift focus from the lackluster handling of boda boda sub-sector that has partly been blamed for lawlessness and impunity in the sub sector in Kenya.

The National Transport and Safety Authority in conjunction with the National Police Service should carry out compliance and inspections crack downs on riders who violate traffic rules including motorcycles operating without insurance cover, overloading, over-speeding, operating unregistered motorbikes, riders without licenses, riding under the influence of drugs and alcohol. The NTSA in conjunction with the County Transport and Safety Committees could



also designate specific zones of operation for boda bodas in the Counties. The NTSA in partnership with the National Police Service, County Governments, Boda boda Associations, SACCOs and other stakeholders should undertake concerted civic education and public awareness campaigns on road safety and crime prevention to boda boda operators in all counties.

The County governments should formulate relevant by-laws and policies to govern and regulate operations of the boda boda sector in their areas of jurisdiction. The County governments and other partners should also propose thorough policy to offer targeted support to the boda boda transport sub-sector in formation of Savings and Credit Cooperatives Organizations (SACCOs), sponsoring rider trainings and public awareness campaigns. County Governments should also install street lights and CCTV cameras in their jurisdictions to reduce the confidence of boda boda criminals since this study established that most boda boda crimes occur at night. The County Governments should also assist the sub-sector by constructing sheds for operators that can also act as points of revenue collection from operators.

Motorcycle Sellers should ensure that buyers of new motorcycles undertake statutory registration with Kenya Revenue Authority/National Transport and Safety Authority to help address the issue of unregistered motorcycles that are often used in committing crimes and operate with impunity on Kenyan roads. They should also maintain a database of details of all the buyers of these motorcycles. There have been incidences where criminals on the run abandon the motorcycles and since no one has the records they get away with it.

The financial institutions should work closely with the bodaboda operators, to give them entrepreneurial skills and tips on savings. They should also come up with products targeting to

empower the operators financially by advancing credit facilities to save them from shy locks and brokers.

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