



Urban crime and livelihood implications among the motorcycle taxi riders in Dar Es Salaam City- Tanzania



Emmanuel January Munishi ^(a) Kirumirah Mubarack Hamidu ^(b) *

^(a) Senior Lecturer, Development studies, College of Business Education, Tanzania

^(b) Assistant Lecturer, Development Studies, College of Business Education, Tanzania

ARTICLE INFO

Article history:

Received 16 March 2022

Received in rev. form 19 May 2022

Accepted 29 May 2022

Keywords:

Motorcycle taxi, crime, livelihoods, urbanisation, Dar es Salaam

JEL Classification:

O18, H10, M38

ABSTRACT

The motorcycle taxi business is increasingly becoming one of the key livelihood strategies in the urban settings of Sub-Saharan Africa. However, crime against operators is threatening the subsector and jeopardizes the livelihood of motorcycle riders. This study examines urban crime and its implications on the livelihoods of motorcycle taxi riders in Dar es Salaam Tanzania in a bid to recommend strategies for alleviating the looming crime. Based on the qualitative design, data were collected using in-depth interviews, focus group discussion and indirect observations with a sample of 100 motorcycle taxi-riders. Thematic data analysis was employed based on the five themes [aka assets] pre-determined from the sustainable livelihood framework namely natural, physical, human, social and financial assets. Findings show that crime has negatively impacted the motorcycle taxi riders' livelihoods through erosion of the livelihood assets. Accordingly, in order to alleviate the crime, relevant authorities should devise a well-defined mechanism of sharing crime information, use of technology such as the GPRS system and security cameras around the city, ensure the availability of the police and prompt response to crime incidence through night security patrols and sharing reliable contacts, provision of security and crime education and awareness to the riders. Others are ensuring an effective, communication system between and among the motorcycle riders e.g. through phones, WhatsApp groups, and other social media, and use of ID cards by the riders for easy identification and traceability whenever they fall victims of crime.

© 2022 by the authors. Licensee SSBFNET, Istanbul, Turkey. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).

Introduction

Urbanisation process in the Sub-Saharan Africa (SSA) is one of the public concerns. It is reported that, the SSA, is the fastest urbanising region with an annual rate of around 3.6%; and it is hypothesized to double or triple in the next 40 years (Olvera, Plat & Pochet, 2019; Tacoli, 2017; Avis, 2016). Despite the fact that urban centres are growing at an alarming rate, public transport has been a great challenge in this region. Thus, motorcycles have been used widely as a major form of public transportation. Today, motorcycle taxi riding is one of the opportunities or rather livelihood strategy (Tacoli, 2017; Munishi, 2013). Named as 'bodaboda' in East Africa and 'okada' in Nigeria, Motorcycle Taxis in SSA and Tanzania in particular has been expanding annually. It has, moreover, been associated to employing a number of youths mainly due to rapid urbanisation and alarming unemployment situation (Mbegu & Mjema, 2019; Tacoli, 2017; Avis, 2016). Indeed, in 2017 Motorcycle taxi transportation trade in Africa was estimated to cross \$9 billion by 2022.

It has been reported that motorcycle taxi transport in Africa has been fuelled by rapid urban population growth, higher youth unemployment rates, public transport collapse, the emergence of the unregulated, poorly maintained and dangerously driven minibuses and the extreme traffic congestion (Muhindo, 2020; Kiruga, 2019; The Citizen, 2014, 2013; Chakwizira, 2013; Msigwa, 2013). In such a situation, motorcycle taxi transport has been associated to saving time and money in congested cities by shortening

* Corresponding author. ORCID ID: 0000-0002-6126-9906

time of ferrying people, goods and services from one part of the city to another (The Citizen, 2013, August 17). In Tanzania, although current data of *bodaboda* riders is not known, data shows that, as of May 2013, there were total of 10,036 registered motorcycle taxis in Tanzania and at least 4,432 in Dar es Salaam alone, and the actual figure is most likely be much higher (Caroline, Neil, R., 2015; Mugarula, 2014).

Unfortunately, motorcycle taxi riding business has been flawed with the crime threat (Tacoli, 2017; Munishi, 2016). In the first place, motorcycle taxi operators are themselves a target of criminals and fall victims of being robbed off their motorcycles, and on the other hand, riders are involved in the crime through participating or colluding with robbers and steal from various city residents including their own customers. (The Citizen, 2013; Tarimo, 2013). This form of crime has been widely reported in some parts of Dar es Salaam and elsewhere in Tanzania. Theft of motorcycles is further associated with high demand of motorcycle engines for manufacturing fishing boats in Lakes Victoria, Nyasa, Tanganyika and the Indian Ocean in Tanzania (The Citizen, 2013). Existing literature associates urban crime to factors related to high urban population and cultural diversity that attracts individuals and groups with various backgrounds and behaviours (Munishi, 2016; Shopeju, 2007;). Other factors include urban poverty and inequalities (Msoka, 2014) urban development that attract both opportunities and threats such as crime as well as authorities' failure to respond to urbanisation forces, e.g. f provision of settlements health, education, water, and sewage disposal facilities (Munishi, 2016).

Considering the role it plays in improving the livelihoods of the riders, a number of interventions have been made in Tanzania to generally improve the Motorcycle Taxi riding operations as well as alleviating the crime situation associated with this livelihood activity in particular. NMB Bank and MasterCard Foundation have extended financial support of TZS 5 billion to help riders run business successfully and contribute to the country's economic growth (Malanga, 2021; Daily News, 2020). Moreover, Transaid has carried out capacity building programme for the motorcycle taxi riders across the country (Caroline & Neil, 2015). Specifically, the police force in collaboration with the public have, at different moments, apprehended victims of the crime (The Citizen, 2013). While the problem still prevails, previous research has paid inadequate attention to the Bodaboda Taxi riding in relation to crime. One strand of research in this area has only paid attention to the negative side of Bodaboda motorcycle business focusing on increased accidents, insecurity, pollution and traffic as well as poverty cycle existing in the Bodaboda operators' communities (Mbegu, & Mjema, 2019). Also, a study by (Nguyen, Nickenig, Vissoci, Joelson, Pesambili, Haglund & Gerardo, 2018) focused on injury prevalence and safety habits of bodaboda drivers in Moshi, Tanzania. Further research focused on challenges faced by youth in conducting Bodaboda business in Dar es Salaam Tanzania (Tarimo, 2013). While Bodaboda passengers have been regarded as ultimate victims of crime, none of the studies looked into how Bodaboda riders have been victims of crime and how such crime cripples their livelihood. In the presence of such a knowledge gap, researchers decided to conduct this study to dig out realities of the phenomenon. The study assessed the impact of such crimes by looking at different assets as given by the sustainable livelihood framework.

This work is guided by the Sustainable Livelihood framework (SLF). According to the SLF sustainable livelihoods refers to an individual's or household's capacity to maintain its wellbeing [overcome the vulnerability context] without eroding the resources base (DfID, 2000). Such capacity is determined by the access to and ownership of assets, notably natural, physical, human, financial and social capitals. Human assets encompass skills, knowledge, ability to labour and good health, while physical assets include basic infrastructure (transport, shelter, water and energy) and communication facilities. Social assets entail social resources (meaningful networks, membership of formal and informal groups, relationships of trust, and access to wider institutions of society) that people draw upon in pursuit of livelihoods. Financial assets include cash money, savings, supplies of credit or regular remittances and pensions, while natural assets include aspects such as land, water, wildlife, biodiversity and other environmental resources (DfID, 2000). As applied to this study, the researcher examined the extent to which crime on Bodaboda riders erode the motorcycle taxi operators' natural, physical, human, financial and social assets.

Literature Review

Accordingly, existing literatures (Owusu, 2016; Houston et al., 2002) maintain that crime has critical impact on the social capital. Among other thing, it leads to breakage of social networks among the school children and communities in urban areas who fear to congregate due to fear of insecurity resulting from crime. In South Africa the situation of insecurity emanating from crime has prevented children in some households from spending time outside with other children, a situation that destroys a sense of community and of social cohesion in communities (Houston, 2002). This situation is also been witnessed in Central America crime related violence and shocks have also negatively impacted on the social capital (Tellman, Alaniz, Rivera, & Contreras, 2014; Levine, 2016).

A study by Hove, Ngwerume & Muchemwa (2013) associate insecurity created by crime to financial capital destabilization. Such crimes prevent the able-bodied people from effectively and meaningfully participating in economic activities due to the crime related fear. It has been as evinced in different parts of Africa that communities fail to participate in various material production activities such as farm work as rightly observed among the security guards and pastoral communities in Tanzania (Munishi, 2016; 2013).

Crime poses harmful impact on human capital too. This is witnessed in cases where crime acts as an impediment towards developing some aspects of human capital notably skills and knowledge as witnessed in south African communities where children have failed to attend school due to insecurity situation emanating from crime as evidenced (Houston, 2002). In Rwanda, the crime related fear has contributed to household failure to produce enough food as well as afford health, education and housing due to failure to participate in productive work and earn the necessary income for acquiring these needs (Smit 2012). These same effects have as well

been captured among Maasai security guards in Dar es Salaam Tanzania (Munishi, 2016). Specifically, Maasai pastoral communities in the norther eastern Tanzania were found to have fallen victims of crime while working as security guards a situation that contributed to the depletion of human labour resulting from the ill-health and deaths of migrants (Munishi, 2019; 2013;)

Equally at the natural capital level some households fail to engage in livestock as well as crop farming due to fear of the perceived crime (Smit et al., 2012). On this context, Munishi (2013) informs that, crime threat experienced by the Maasai security guards in urban areas further jeopardised the households' livelihoods through the erosion of aspects of human, financial and natural assets in terms of finance, food, health and shelter, given that it diminishes livestock and agriculture, which were among their main livelihood determinants in the migrants' sending areas.

Some studies related to crime and livelihood have been undertaken, however, to the best of researchers' knowledge, no study has specifically directed its efforts towards understanding the aspect of urban crime and how such crimes affect the livelihood of motorcycle taxi riders in the context of Africa and Tanzania in particular. Moreover, none of these studies, have been systematically and meaningfully structured around the livelihood framework. This current study attempts address this knowledge gap.

Methods

This study was carried out in Dar es Salaam and included all the five municipalities of Dar es Salaam notably Ilala, Kinondoni, Temeke, Kigamboni and Ubungo. The study adopted qualitative approach with a phenomenological design. As suggested by Cresswell (2010), the design was used because the researcher wanted to document experiences told by Bodaboda riders on how crimes face them. In this study, data was collected through individual in-depth interviews (IDI) with 100 motorcycle taxi operators, 20 from each of the five municipalities of Dar es Salaam who were obtained conveniently. In IDI the researcher asked a similar set of questions to all interviewees with an exception of more probing to respondents who gave insufficient information. Moreover, 5 Focus Group Discussion (FGDs) of 6 individuals in each session were conducted. In each municipality, one vibrant Bodaboda parking yard was used as an FGD centre. In this regard one parking centres was used i.e. Magufuli Bus Terminal in Ubungo, Kusutu/Mtendeni Primary school in Ilala, Biafra in Kinondoni, Kivukoni in Kigamboni and Benjamin Mkapa National Stadium in Temeke Municipality. Discussions started after permission from the park chairperson and involved riders and a few passengers. The researcher tabled an issue and allowed participants to contribute their ideas and was the moderator with other research assistants recording the proceedings of the discussions. Convenient sampling was used to recruit both riders and passengers who were willing to share their views on the topic of the study.

Before participating in the interviews, research ethical considerations were made clear to the participants based on the qualitative research ethical guidelines. The freedom to participate and withdraw from the study, privacy, confidentiality and other ethical guidelines were adhered to. The collected data were transcribed and the Swahili transcriptions were translated into English, typed and saved as text documents. Content analysis of the transcriptions was performed in MAXQDA 10 [VERBI Software, Marburg, Germany]. In order to capture relevant issues, the researcher read and re-read all the text to familiarize with the collected data. Then open coding was done to ensure that no important issues in relation to the guiding framework were omitted. Due to the fact that the main issues were given in the framework, the researcher upon successfully coding all the data, important supporting contents were obtained and used to feed the main theme To ensure that the obtained data suit in the major themes, a critical scrutiny of all subthemes was done. Thus, every asset was grouped with its relating issues (paragraphs), a definition to each of them was added and a complete detailed explanation is given in the subsequent section (Golafshani, 2003). To facilitate this all during coding exercise themes identification and definition were made clear and agreed among the investigators. In this case during coding exercise investigators would ensure that all coded segments agreed with the predetermined themes as previously suggested in the literature. Secondly researchers practiced peer debriefing a process of engaging or allowing more than one peers or qualified experts to objectively relate the obtained themes and the predetermined ones and established the extent to which they agreed or disagreed with diverted. This involved allowing a qualified, impartial colleague to review and assess all coded segments as well as the methodology used to arrive the at the final themes.

Analysis and Findings

The impact of crime on the livelihoods of Motorcycles Taxi Operators in Dar es Salaam

In this section, researchers present findings on the impact of crime on the livelihoods of the Motorcycles Taxi Operators in the urban setting based on the sustainable livelihood framework. The findings are therefore structured around five themes [aka five assets] of the sustainable livelihood framework namely physical, human, natural social and the financial asset. These assets as stated earlier are the major themes on the findings were built upon.

The impact of crime on natural asset

In this context, natural assets include aspects such as land, water, wildlife, biodiversity and other environmental resources (DfID, 2000). In this study it was noted that crime eroded the natural asset of the operators and their families in various ways. Firstly, in such instances where riders are robbed off their motorcycles, some of them are inclined to sell off some aspects of natural assets such as pieces of land, agricultural produce such as crops and trees as well as livestock in the villages in order to buy another motorcycle

that had been stolen from them. This further pushes them into livelihood constraints because these aspects of natural assets such as land and livestock were very much depended upon by families in terms of livelihoods. One of the respondents attested the way he lost a piece of land in the village in the bid to compensate for a stolen motorcycle:

As we stated earlier these motorcycles do not belong to us. They belong to our bosses. This is why whenever they get lost we have to buy new ones and give them back to the bosses. Last year [2020], I was attacked by robbers who pretended to pose like customers. Luckily they did not kill me. Therefore, immediately they released me I thanked God for not being killed but I had to save money and buy a new motorcycle for my boss. Failure to do this he could have taken me to court because the contract requires me to pay it.

In summary crime negatively affected various aspects of natural asset such as land, livestock, and environmental related resources as observed in the table below.

Table 1: Impact of crime on natural Asset

Impact of crime on natural Asset	Negative %	Rank
Loss of land to repay motorcycle	91	1
Loss of livestock to repay motorcycle	89	2
Loss of agricultural produce such as crops and trees	51	4

The impact of crime physical asset

Physical assets include basic infrastructure (transport, shelter, water and energy) and communication facilities (DfID, 2000). Accordingly, it was noted that some aspects of physical assets of the victims [motorcycle taxi operators] were also severely eroded in various ways. Firstly, they had to sacrifice some aspects of physical assets such as houses, their own motorcycles. Moreover, robbers would take away some items like mobile phones, watches, neckless/ chains, rings to mention just a few in order to compensate for various damages that emanated from the various forms of crime. One of the operators when describing the situation, he said:

These robbers are too bad. Sometimes, if they don't find you with money they end of taking whatever you have. Last time they encircled me with my friend took our expensive watches, gold neckless as well as mobile phones. This is a big problem because if someone takes away your phone you have double tasks that is buying a new one as well as entering all of your information afresh. You lose a lot of useful contacts for your livelihoods.

Another respondent stated

Last year [in 2020] one of friends was kidnaped by some men when he had ferried a customer to one the neighbourhood here in Bagamoyo. It happened that when he was dropping a customer there appeared around three men who covered his face using a black cloth, tied him up and put him into a sac before they put him in the motor vehicle. His motorcycle, phone and money were taken. As for him, he was thrown in a trench around Kimara and was rescued by a group of people who saw movements in the sack, opened it and rescued him out of danger of losing his life as he was tied and could hardly breathe.

In such situations when physical assets including motorcycles phones and money are taken, their impact is always felt not only by riders but also their families. The situation although targets rider's physical assets, their impact is inflicted on their economy. Just like the contention by the sustainable livelihood strategy, disturbance on riders' physical assets hampers sustainability of their income and makes them vulnerable to poverty.

Therefore, as a result of crime, various aspects of physical capital such as shelter, transport equipment e.g. mobile phones were affected. While many aspects were mentioned to fall under this aspect, loss of shelter to repay debts, loss of motorbikes and mobile hand sets were the most affected assets that people lost as a result of crime.

Table 2: Impact of crime on physical Asset

Impact of crime on physical Asset	Negative %	Rank
Loss of shelter to repay debts	96.5	1
Loss of transport machine e.g. motorcycle	95	2
Loss of equipment e.g. mobile phones	89	4

The impact of crime on human asset

In this context, human assets encompass skills, knowledge, and ability to labour and good health (DfID, 2000). In this scenario, a number of motor cycle riders lose their various aspects of human capital as a result of different forms of crimes they face. While a

number of them during the scramble for the motorcycle with robbers, end up getting accidents which lead them to serious injuries which at the end run them short of skills, abilities and ultimate good health. In an encounter with respondents, most of whom are riders, attested various losses of human capital that emanated from crime. They explained that they experienced serious injuries and at time life time disabilities once attacked by robbers. Indeed, a number of them regrettably lost life once kidnaped and bitten up by the robbers. This would also happen indirectly that is being involved in the course of trying to avoid or running away from the robbers. For example, some respondents affirmed that they had been involved in the fatal accidents when running away from the robbers. Some of the respondents overworked and sometime worked up to very late hours or at night in order to generate extra funds for buying motorcycles that they had lost as a result of crime as well as raise income for families. Such a situation endangers their health and makes them vulnerable to good health. Indeed, while overworking jeopardized the health of the operators working up to late hours further pushed them to crime and other dangers. In a nutshell, the loss of skills and knowledge, labour and good health have been a result of bodaboda related crimes.

Table 3: Impact of crime on human Asset

Impact of crime on human Asset	Negative %	Rank
Lack of access to skills and knowledge	94	1
Shortage of labour due to ill health	91.5	2
Health hazards e.g. involvement in accidents	90	4

The impact of crime on social asset

Social asset includes networks that a person creates with others as a result of getting used to them. Patronage, neighbourhoods, kinship, relations of trust and mutual understanding and support, formal and informal groups, shared values and behaviours, common rules and sanctions, collective representation, mechanisms for participation in decision-making, leadership (Serrat, 2017).

Social asset was also reported to have been severely eroded by crime. Respondents explained that crime jeopardized their useful networks or rather relationship with various people or social networks such as losing trust with their useful networks as well as entering into conflicts with various people. This further denied them some social and economic benefits that they would have obtained from these useful networks. One of the respondents affirms:

I entered into conflicts with my friends and relatives simply because I failed to settle my debts after losing their motorbike to a crime incidence. I could not pay the debt anymore because I didn't have income.

He added that;

...since I didn't have a motorbike that guaranteed my income I could no longer be trusted by the shop owners and other social groups (merry go round) run by friends. Indeed the trust is lost because friends have developed negative social image towards me. My former boss whose motorcycle was stolen no longer trusts me because he thinks that I colluded with the robbers. I really have difficult time to prove to my boss that the motorcycle was stolen and not otherwise.

Such situations, apart from being dangerous to riders' lives, they have a serious connection towards their financial fortunes. In most cases, when one loses a motorbike and branded all sorts of names, it is hard for another person to give him another motorcycle as all people will be suspicious of him thinking that he will collude with more robbers. Such a situation deprives such victims a chance of earning more from this kind of a booming economic activity.

Table 4: Impact of crime on social asset

Impact of crime on social asset	Negative %	Rank
Disconnection from social networks	99	1
Being denied trust	98.5	2
Being denied access to groups/ institutions	97	4

The impact of crime on financial asset

Aspects of financial asset in this context include cash money, savings, and supplies of credit or regular remittances and pensions (Serrat, 2017). Accordingly, crime jeopardized financial assets of the operators in various ways. First, it was through loss of cash. Some operators argued that those who happened to be attacked by robbers they lost a lot of cash that they had collected. Secondly vendors had to incur losses of buying new motorcycles and compensate their bosses. Thirdly operators spent a lot of money to pay

for healthcare services mainly to treat injuries that had been caused on them by the robbers. Sometimes health services were very expensive due to the severe injuries that they would sustain.

Respondents also stated that their financial assets were indirectly eroded by crime. This was through disturbances resulting from legal proceedings after being attacked by robbers and end up losing some of their belongings. This, according to them, reduced their work time which led to among other things decline of daily savings. Another way in which financial asset was eroded was through shouldering extra financial burden that resulted from paying the stolen motorcycles as well as buying a new. They also had to incur extra financial burden as they have to service debt for the stolen motorcycle as well as the newly bought one at the same time.

Table 5: Impact of crime on financial asset

Impact of crime on financial asset	Negative %	Rank
Legal proceedings costs	99	1
Shouldering extra financial burden	98.5	2
Incurring extra financial burden	97	4

Therefore to summarize the entire study, motorcycle related crime have resulted into a number of negative impacts ranging from natural to financial assets as presented in Figure 1.

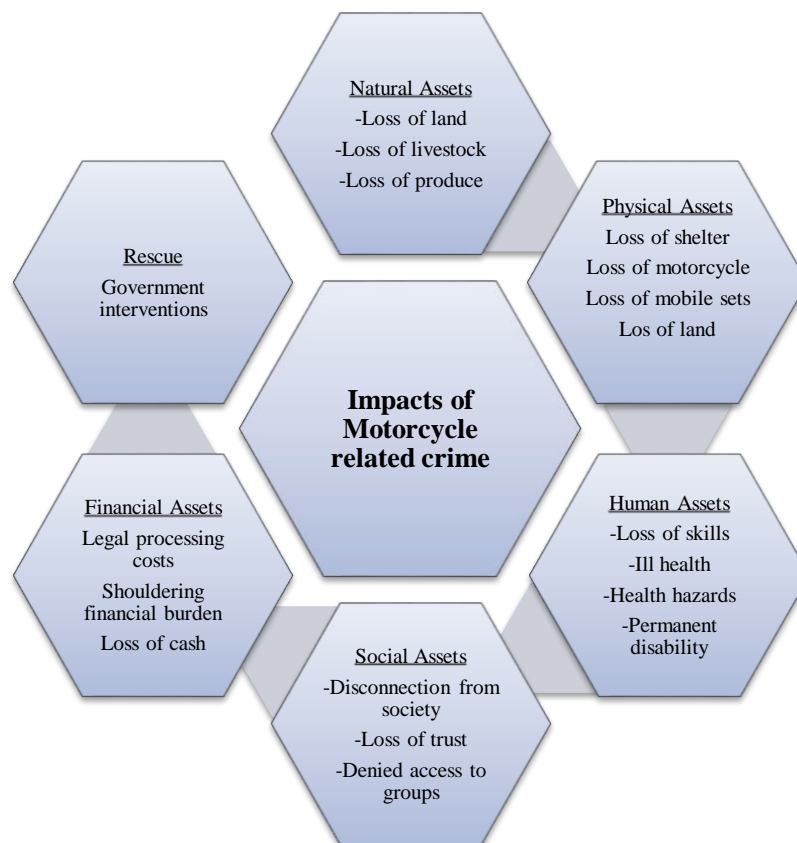


Figure 1: The impact of Motorcycle taxi riding related crime on livelihood

Conclusion

This work assessed urban crime and livelihood implications among the motorcycle taxi riders in Dar es Salaam city- Tanzania in the bid to recommend strategies for alleviating the crime and subsequently improve the livelihoods. The study has established that crime has negative implications on the operators’ livelihoods. This is to say that crime has negatively affected [eroded] the operators’ human, physical, social, financial and natural assets which are the critical aspects of their livelihoods. Natural Asset level operators lost assets like livestock, pieces of land, harvests such as maize and fruits in a bid to address crime related challenges such as obtaining health services, paying for the lost property such as motorcycle and other valuables. The operators either sold out these aspects to

obtain money for addressing the crime related loss, or the assets were confiscated by various people in order to compensate for the loss that had emanated from the crime.

At the physical assets level the operators lost aspects such as houses, their own motorcycles, items like mobile phones, watches, neckless/ chains, rings to mention just a few in order to compensate for various damages that emanated from the various forms of crime, just like it happened with the physical assets. At the human asset level, the riders experienced, psychological stress resulting from crime for both the riders and their family members. Physically speaking, riders experienced injuries and deaths resulting from the crime that impeded them from effectively developing human capital notably failing to pay for education and health services of their children and other family members and friends who depend on the business both directly and indirectly. They also experienced psychological stress and pressure that emanated injuries as well as deaths.

At social asset level, the riders lost trust of their meaningful networks as a result of losing motorcycles. This is because motorcycle taxi riding was an important livelihood activity that gave them positive social and financial image and status. The business guaranteed them things like loans that were important for leading their personal and family lives. Indeed, financial asset was the most affected aspect. Vendors had to spend a lot of money to buy new motorcycles. More importantly, raiders' daily income either stopped or declined due to the loss of their motorcycles' as well as health challenges emanating from the crime.

Recommendations

As can be observed from the findings and conclusion sections, crime threat severely jeopardises the livelihood of the motorcycle taxi riders suggests a dire need for alleviating the threat. Accordingly, in order to alleviate the crime, there should be a well-defined mechanism of sharing crime between the motorcycle taxi riders and the security authorities to facilitate timely follow up of crime issues. Use of technology e.g. GPRS system should be improved in such a manner that it will be possible to switch off the machine remotely by the GPRS staff themselves in case of the motorcycle theft.

Following the above findings this section provides possible recommendations aimed at alleviating crime incidences in the city in the context of motorcycle taxi business. Accordingly, in order to alleviate crime, there should a well-defined mechanism of sharing crime between the motorcycle taxi riders and the security authorities to facilitate timely follow up of crime issues. One of the ways of doing this is through use of technology such a GPRS databases that informs on the motorcycle destinations, the kind of passage being served and the related details. For example, GPRS system should be improved in such a manner that it will be possible to switch off the machine remotely by the GPRS staff themselves in case of the motorcycle theft. Another, recommendation relates to building capacities of the motorcycle riders on the security related issues. They need to be informed on the security precautions measures to be taken in order to avoid crime as well as cope with crime. In this case security authorities such as the Police should work hand in with the motorcycle riders in realising this.

Again, relevant authorities such as the ministry of internal affairs and security through the police force should regulate the business of motorcycle spare parts to ensure that stolen parts are not sold in these shops. Regular check-up should be done and arrest the culprits whenever they are found. This is because motorcycle spare parts business is among the factors that fuel motorcycle crime and theft in particular.

There should be more improved communication between and among the motorcycle riders engaged in the taxi business. This is because, smooth communication among the riders can save lives of those who may fall victims of crime challenge. They should communicate with each other through phones, WhatsApp groups and other social Medias when whenever they doubt a passenger or when they found themselves in threatening work environment.

Riders are further encouraged to use of ID cards for easy identification and traceability in case they happen to fall victims of the crime threat. Moreover, relevant urban authorities such as the local government in collaboration with the police force should install security cameras in differ parts of the city to both prevent as well as help deal with crime incidences. Moreover, police force should ensure that they are always reachable through phone as well as respond instantly once notified of any crime incidence from among the motorcycle riders.

Acknowledgement

Author Contributions: Conceptualization, EM., KH.; Methodology, EM., KH.; Data Collection, EM., KH.; Formal Analysis, EM., KH.; Writing—Original Draft Preparation, EM., KH.; Writing—Review And Editing, EM., KH. All authors have read and agreed to the published the final version of the manuscript.

Institutional Review Board Statement: Ethical review and approval were waived for this study, due to that the research does not deal with vulnerable groups or sensitive issues.

Data Availability Statement: The data presented in this study are available on request from the corresponding author. The data are not publicly available due to privacy.

Conflicts of Interest: The authors declare no conflict of interest.

References

- Avis, W.R. (2016). *Urban Governance (Topic Guide)*, Birmingham, UK: GSDRC.
- Caroline, B., Neil, R. (2015). *Tanzania motorcycle taxi rider training: Assessment and development of appropriate training curriculum Final report Transaid May 2015*. International Conference on Transport and Road Research, May 1-27.
- Chakwizira, J. (2013). Searching for sustainable urban transport solutions for Africa: a case study of the Greater Johannesburg region in South Africa. *WIT Transactions on The Built Environment*, 130, 175-186.
- Daily News (2020), *Tanzania_ Over 4,000 Bodaboda Riders Use NMB Mastaboda: AllAfrica. Tanzania Daily News*. <https://allafrica.com/stories/202004230304.html>.
- DfID (2000), *Sustainable Livelihood Guidance Sheets: Department for International Development UK*, London.
- Geography: Special Issue, 8(1), 1–10.
- Golafshani, N. (2003). Understanding Reliability and Validity in Qualitative Research. *The Qualitative Report* 8/ (4) . <http://www.nova.edu/ssss/QR/QR8-4/golafshani.pdf>
- Houston, J., & Prinsloo, J. (2002). Organisation for service-a comparison between youth institutions in Michigan, United States of America and Pretoria, South Africa. *Acta Criminologica: African Journal of Criminology & Victimology*, 15(1), 42-50.
- Hove, M., Ngwerume, E. T., & Muchemwa, C. (2013). The urban crisis in Sub-Saharan Africa: A threat to human security and sustainable development. *Stability*, 2(1), 7,1-14, DOI: <http://dx.doi.org/10.5334/sta.ap>
- Kiruga, M. (2019). *African cities grapple with two-wheeled transport conundrum; Boda boda blues: The African Report*, Nairobi.
- Levine, S. (2016). Livelihood recovery in post-conflict northern Uganda. *Feinstein International Institute*, 29.
- Malanga, A.N. (2021, April 27). NMB eyes ‘Bodaboda’ riders with Sh5bn in loans scheme. *The Citizen*, 2021, April 27, available at: <https://www.thecitizen.co.tz/tanzania/news/business/nmb-eyes-bodaboda-riders-with-sh5bn-in-loans-scheme-3378638>.
- Mbegu, S., Mjema, J. (2019). Poverty Cycle with Motorcycle Taxis (Boda-Boda) Business in Developing. Countries: Evidence from Mbeya-Tanzania. *OALib Journal*, 6(8), 1–11.
- Msigwa, R. E. (2013). Challenges facing urban transportation in Tanzania. *Mathematical Theory and Modeling*, 3(5), 18-26.
- Msoka, C.T. (2014), Criminal bands and the future of urban Tanzania: In M. Heidi & M. Mia (Eds.), *Claiming the city: Civil society mobilisation by the urban Poor*, Pp 185-192, and Uppsala: Uppsala University.
- Mugarula, F.M. (2014, April 29). Government moves to make bodabodas safer in Dar. *UrbanAfrica*, 2014, April 29.
- Muggah, R. (2014). Deconstructing the fragile city: exploring insecurity, violence and resilience. *Environment and Urbanization*, May 16.
- Muhindo, S. (2020), *Are Goma’s motorcycle taxi drivers’ heroes or villains? The London School of Economics and Political Science: July 13th, 2020*.
- Munishi, E. (2013). Rural-urban migration of the Maasai nomadic pastoralist youth and Resilience in Tanzania. Case studies in Ngorongoro District, Arusha Region and Dar es Salaam City. (PhD Thesis), Freiburg University, Freiburg, 2013.
- Munishi, E.J (2019). Rural-Urban Migration and Resilience Implications on the Maasai Households’ In North- Eastern Tanzania. *African Journal of Applied Research*. Vol. 5/ (2), pp. 24-44, <http://www.ajaronline.com>, <http://doi.org/10.26437/ajar.05.11.2019.0>
- Munishi, E.J. (2016). Coping with urban crime and resilience factors. The case of the Maasai security guards in Dar es Salaam, Tanzania. *Journal of Sociology and Development*, 1(1), 60–79.
- Nguyen, T. D., Nickenig, J. R., Joelson, T., Pesambili, M., Haglund, M., Gerardo, C. J. (2018). Injury prevalence and safety habits of boda boda drivers in Moshi, Tanzania. A mixed methods study”, *PLoS ONE*, 13(11), 1-16.
- Olvera, L.D., Plat, D., Pochet, P. (2019). *Looking For the Obvious: Motorcycle Taxi Services in Sub-Saharan African Cities. Manuscript number JTRG_2017_540_R3*.
- Owusu, G. (2016). Introduction: Urban crime and poverty nexus. *Ghana Journal of Geography*, 8(1), 1-10.
- Serrat, O. (2017). *The sustainable livelihoods approach: In Knowledge solutions (Pp. 21-26)*, Springer, Singapore.
- Shopeju, J. (2007). *Urbanisation and crime in Nigeria: ASSET Series*, 2(1), 154-163.
- Smit, P., van Eijk, A., & Decae, R. (2012). Trends in the reaction on crime in criminal justice systems in Europe in 1990–2007: A comparison of four European regions. *European Journal on Criminal Policy and Research*, 18(1), 55-82.
- Tacoli, C. (2017). *Migration and Inclusive Urbanization (Issue September):* <https://www.un.org/en/development/desa/population/events/pdf/expert/27/papers/V/paper-Tacoli-final.pdf>.
- Tarimo, J. (2013). Challenges faced by youth in conducting bodaboda business at Mbezi Juu Ward: A Case of makonde area in Kinondoni District. Master’s Thesis, Mzumbe University, Morogoro, 2013.
- Tellman, B., Rivera, A., Alaniz, R., & Contreras Mojica, D. (2014). *Violence as an obstacle to livelihood resilience in the context of climate change*. [Working Paper]. UNU-EHS Working paper series, Bonn, Germany: United Nations University - Institute for Environment and Human Security (EHS). Available at: <http://collections.unu.edu/view/UNU:2859#viewAttach>.
- The Citizen (2013, August 17). Inside bodaboda crime syndicates. *The Citizen*, 2013, August 17, available at: <https://www.thecitizen.co.tz/tanzania/news/inside-bodaboda-crime-syndicates-2495574>.
- The Citizen (2014), “Study. Why ‘Bodabodas’ rule The Citizen”, Friday November 14 2014, *The Citizen*, 2014, available at: <https://www.thecitizen.co.tz/tanzania/news/study-why-bodabodas-rule-2518032>.

The Citizen, (2013). Inside Bodaboda crime syndicates. Saturday August 17 2013. *The citizen*, 2013, available at: <https://www.thecitizen.co.tz/tanzania/news/inside-bodaboda-crime-syndicates-2495574>.

Publisher's Note: SSBFNET stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



© 2022 by the authors. Licensee SSBFNET, Istanbul, Turkey. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).

International Journal of Research in Business and Social Science (2147-4478) by SSBFNET is licensed under a Creative Commons Attribution 4.0 International License.