







Accelerating COVID-19 related 'best practice' in the urban motorcycle taxi sector in sub-Saharan Africa Country report: Ghana

**COVID-19 Response & Recovery Transport Research Fund** 

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Abstract					
The outbreak of the COVID-19 epidemic and the various measures put in place to mitigate its spread did have a considerable impact on the urban transport sector. This report presents and assesses the findings of approximately 80 motorcycle and motor-tricycle taxi operators and approximately 15 key stakeholder interviews conducted in Accra and Kumasi, Ghana. The main purpose is to provide evidence-based inputs to policy formulation.					
Keywords Urban transport, motorcycle taxi sector, COVID-19, intermediate forms of transport, Ghana, West Africa, best practice					
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## ACRONYMS

BRRI	Building and Road Research Institute
FCDO	Foreign, Commonwealth & Development Office
GHS	Ghana Health Service
GPMOU	Ghana Private Motorbikes Operators Union
HVT	High Volume Transport Applied Research Programme
IMC	IMC Worldwide Ltd
KCCR	Kumasi Centre for Collaborative Research
KNUST	Kwame Nkrumah University of Science and Technology
LIC	Low-income country
MCT	Motorcycle Taxi
MIC	Middle-income country
МОН	Ministry of Health
MoTRA	Motorcycle and Tricycle Riders Association
MRAG	Motor Riders Association of Ghana
MTT	Motor-tricycle Taxi
NMIMR	Noguchi Memorial Institute of Medical Research
PODU	Pragiya and Okada Drivers Union
PPE	Personal Protective Equipment

# **EXECUTIVE SUMMARY**

This country report details the findings of a study on the impact of the COVID-19 outbreak on the urban motorcycle/ tricycle taxi (MCT/ MTT) sector in Ghana. Urban motorcycle/ tricycle taxi operators in Ghana provide essential transport services – despite the fact that they are officially not allowed to operate – and in many cases have shown ingenuity and an ability to adapt and innovate, when responding to different (health) challenges. However, policymakers and regulators remain hostile to the MCT/ MTT taxi sector. The report discusses the measures and restrictions put in place to reduce the spread of COVID-19 relevant to this sector and explores MCT/ MTT operators' perceptions of the acceptability of these restrictions and the extent to which they feel their sector has adapted and adhered to them.

For this report, primary data was collected in two cities - Accra and Kumasi - through qualitative interviews with key stakeholders/ informants and approximately 80 short operator surveys. Country findings were presented and discussed among the key stakeholders in a series of (online) workshops. The results of this report – together with similar research activities in five other sub-Saharan African countries – have been used for an aggregated report on the impact of the COVID-19 outbreak on the urban MCT/ MTT taxi sector in sub-Saharan Africa.

#### **Key points**

- In the first eight months of the COVID epidemic in Ghana, close to 50,000 cases were recorded with just over 300 deaths. The government responded with a series of measures, including physical distancing, restricting unnecessary travel and a three-week lockdown;
- Public transport providers were forced to limit passenger numbers, to comply with physical distancing regulations, and to wear face-masks;
- Motorcycle taxis and motor tricycle taxis, although widespread in Ghana, are officially illegal. Collaboration between the government and the informal unions was therefore limited.

#### **Key findings**

- Key stakeholders indicated that the use of public transport, including intermediate modes of transport, reduced significantly during the COVID-19 epidemic and particularly during the lockdown, as a result of both limited demand and supply;
- Violating transport restrictions by MCT/ MTT operators was mainly caused by necessity, due to lost livelihoods and limited capacity to absorb financial shocks. The increase in transport fares, initially to compensate for the lost passengers due to physical distancing requirements, were typically left in place, even when restrictions became less strict;
- Mobility on Demand services seem to have benefitted from the COVID-19 restrictions limiting public transport providers in their services;
- Stakeholders were divided about whether intermediate forms of transport pose lower risks of COVID-19
  infection and dissemination, but if indeed they do, it was highlighted that varying levels of compliance
  with restrictions and measures by the operators would negate its potential for being a safer form of
  transport.

#### **Key recommendations**

- All transport sector actors including mobility-on-demand providers should be consulted ahead of imposition of restrictions in future pandemics, irrespective of whether they are operating legally or illegally, to ensure better adherence to life-saving measures;
- With financial measures/ support in place for MCT/ MTT operators, a higher rate of self-compliance to the measures and restrictions can be achieved. Furthermore, face-masks and hand sanitisers should be made freely available to operators and passengers;
- Communication of transport-related restrictions in future epidemics should be translated into the local dialects and be championed by the leadership of various transport unions at the local levels. Bottom-up communication would yield more compliance compared to the current top-down communication.

## 1. Introduction

In the last 25 years or so, motorcycle taxis (MCTs) – and more recently motor-tricycle taxis (MTTs) – have fundamentally changed mobility and access in urban sub-Saharan Africa, providing rapid and door-to-door transport, supporting livelihood activities, and facilitating access to essential services, such as health, markets and education. In many African cities, motorcycle taxis – often referred to as *Okadas* in West Africa or *Boda Bodas* in East Africa – are responsible for the majority of transport movements of both people and goods and provide hundreds of thousands of jobs to low-skilled and/or marginalised youth.

During the recent COVID-19 epidemic, urban motorcycle/ tricycle taxi operators provided essential services, including to key health-workers, but also experienced risks of contracting the virus and spreading it, due to their close and multiple interactions with customers. Understanding the impact of COVID-19 – and of the measures taken to mitigate the spread of the virus – on this widespread intermediate form of transport is crucial for planning, managing and operating urban transport services, so that essential services remain accessible for urban dwellers during periods of lockdown or curfews.

While MCT operators have in many cases shown ingenuity and an ability to adapt and innovate when responding to different (health) challenges, policy-makers and regulators often remain somewhat unwilling to engage with (or are even hostile to) the – often informal – motorcycle taxi sector. Furthermore, because of the intermediate and informal nature of the motorcycle taxi sector, policymakers, urban planners and transport regulators tend to overlook its role and potential (as a force for good/ support but equally as a factor in further spreading COVID-19) or are not sure how to engage with the sector and its representatives. Prior to the COVID-19 pandemic, many of the measures taken by African cities to curb or even completely ban motorcycle taxi riding ignored the essential services they deliver and seem to be mainly a response to the rising number of traffic accidents involving or caused by motorcycle taxi operators/ unions and key stakeholders in urban (health) planning and transport together will be essential for the future sustainable socio-economic and environmental development of SSA's cities.

### **1.1** Project aims and objectives

The aim of the project Accelerating COVID-19 related 'best practice' in the urban motorcycle taxi sector in sub-Saharan Africa is to improve understanding of the impact of the COVID-19 outbreak (including the measures and restrictions put in place to reduce its spread) on the urban motorcycle taxi sector in sub-Saharan Africa (SSA), via case studies of three West African countries (Sierra Leone, Liberia and Ghana) and three East African countries (Uganda, Kenya and Tanzania). This report analyses and communicates the data and findings for Ghana.

Knowledge (including false/ ineffective 'knowledge') about how to reduce the chance of COVID-19 infection, through behaviour changes and/or social and technical innovations, may be shared spontaneously among individuals or small groups of riders. However there is limited opportunity to share best practices between motorcycle taxi operators in different cities or between different LICs (and lower MICs). This study's objective, therefore, was to share the findings, best practices, and any social and technological innovations developed/ adapted by motorcycle taxi operators to mitigate the impact of COVID-19. It was intended that by sharing them with urban motorcycle taxi operators and key stakeholders, including policymakers, this would allow for evidence-based rapid interventions. This was done via workshops, a sharing platform freely accessible to all relevant beneficiaries and key stakeholders, and one generic policy brief, together allowing for intra-city, inter-city and international peer-to-peer learning and knowledge exchange.

### 1.2 Transport challenges being addressed during and after the COVID-19 pandemic

Motorcycle taxis play a pivotal role in the provision of urban transport. However, relations and trust between the concerned authorities and motorcycle taxi operators/ unions can be strained at times, possibly affecting the effectiveness of COVID-19 measures and restrictions. This research established:

• If and how the COVID-19 pandemic has affected urban motorcycle taxi services in general;

- If motorcycle taxi operators or unions have been consulted in the COVID-19 measures taken, and what their level of compliance with these has been (including reasons for limited or non-compliance); and
- Social and technological measures and innovations motorcycle taxi operators have introduced to limit infection by or spread of COVID-19.

# 2. Methodology

### 2.1 Summary of approach

This project used a mixed methods research approach, divided into three key activities or work-packages. The three work packages set out below allowed us to collect important data to answer the various research questions, to create opportunities for the key stakeholders and beneficiaries to discuss and access the findings in user-friendly formats, and to learn from peers across different countries and regions. The approach has high utility and was innovative due to the multiple opportunities created for peer-to-peer and peer-to-stakeholder learning, as well as for knowledge exchange at an intra-city, inter-city, inter-national and virtual levels.

### 2.1.1 Work Package 1: Data Collection

In each of the study's case countries, data were collected through key informant interviews and motorcycle taxi/ motor tricycle taxi operator surveys in two cities.

#### 2.1.2 Work Package 2: Sharing of Findings

Data findings, including responses and socio-technological innovations, were discussed in country-level Focus Group Discussions (FGDs) between the country researcher, key stakeholders, and representatives of the beneficiaries. Due to ongoing COVID-19 restrictions in the case-study countries, typically the number of participants in these FDGs had to be limited to comply with regulations.

#### 2.1.3 Work Package 3: Feeding Back Findings from Regional Workshops

Findings from the country studies and FGDs were presented at a webinar on 16<sup>th</sup> April 2021. The webinar participants included the various country researchers and key stakeholders (from all six case-study countries) such as representatives of MCT unions; traffic police; representatives from ministries of health (and other relevant ministries); market board members; city council representatives; transport sector regulatory bodies; and urban planning departments. The key stakeholders were identified by the country researcher based on a country specific literature review at the start of the project. A website and online open-access sharing platform have been developed (<u>https://www.africawheels.org</u>) on which the study's findings are shown, including short videos (of one to two minutes in duration) of MCT operators explaining COVID-19 related challenges they have experienced and how they have overcome these.

### 2.2 Detailed methodology

Data were collected through a mixture of semi-structured qualitative interviews and short surveys. The research objectives set out in the section above were operationalised in five open-ended qualitative questions that were asked to the key informants/ key stakeholders (see Appendix B for the stakeholder interview form). For each case study country approximately 15 key informants were interviewed (see Appendix A for a list of interviewed stakeholders). The questions asked were:

- 1. What have been the impacts/ effects of COVID-19 on urban transport in general and the motorcycle taxi (MCT) sector specifically?
- 2. If transport-related restrictions or a lockdown were introduced, what were the specifics of these, to what extent have motorcycle taxi unions and/or riders consulted in this, and to what extent have MCT riders complied with these?
- 3. Are there any social or technological innovations or adaptions MCT riders can take (or have taken) to reduce exposure and limit the spread of COVID-19?



- 4. Have experiences with and responses to previous outbreaks/ pandemics been used when addressing the current COVID-19 outbreak (for Sierra Leone and Liberia, think Ebola; for other countries, think for instance of tuberculosis, feared to be spread by using shared helmets)?
- 5. If motorcycle taxi transport, from all the modes of public transport (shared-car taxis, mini- and midibuses, etc.) poses the lowest risk of COVID transmission, do you think that motorcycle taxi transport should be promoted?

In addition, further survey questions were designed to provide more quantitative data on these five topics. While some of these survey questions were in a simple 'yes/no' format, others used a Likert scale or provided multiple answers to choose from. MCT/ MTT operators were surveyed in two cities in each of our six study countries, with a total of 60 surveys per country (in the case of Ghana 80 surveys were conducted). The full research instrument is included in Annex C to this report. Since the MCT surveys were (largely) standardised across the 12 locations (two urban settings in six countries), this resulted in an aggregated 'bank' of about 360 surveys. As can happen when conducting surveys in large numbers, in a few cases one or more questions were not answered or correctly recorded. If, and when this happened, it is reflected in the graphs via the N number.

While 60 to 80 surveys can hardly be considered as sufficient for a meaningful quantitative analysis on its own, it is believed by the researchers that because of the way in which surveys were conducted (as described in the above paragraph), together with the key stakeholder interviews, that the data provides insight on par with what would be expected from a rapid appraisal method, for instance. The qualitative and quantitative data, plus the literature reviews, allowed for some level of triangulation to assess the validity of claims and findings.

## 3. Ghana Context

This section provides a short overview of the first eight months of the COVID-19 epidemic in Ghana and how it impacted on the country's transport sector.

## 3.1 COVID-19 in Ghana

The first two COVID-19 cases were reported on 12<sup>th</sup> March 2020. By 15<sup>th</sup> March 2020, four more cases were reported, urging the government to announce the closure of all educational institutions, as well as a ban on public, social and religious gatherings, effective 16<sup>th</sup> March 2020 (1–3). All cases were imported cases, and these were reported in only two regions – Greater Accra and Ashanti Regions. During this period, only two COVID-19 testing centres were operational. The government, through the Ministry of Health (MoH) and the Ghana Health Service (GHS) initiated the mandatory quarantine of all travellers who entered Ghana for a period of 14 days after subjecting them to an initial test. There was also contact tracing of those who tested positive to subject those contacted to the testing process. To halt the importation of the COVID-19 virus, the President of Ghana closed all the borders to human traffic while allowing the movement of goods, supplies and essential cargoes. Despite these measures, the country started experiencing local transmission of the virus among the Ghanaian populace. Therefore, on 27<sup>th</sup> March 2020, the President imposed a two-week partial lockdown on the Greater Accra Metropolitan Area and the Greater Kumasi Metropolitan Areas, the hotspots of the virus, effective 30<sup>th</sup> March 2020 (4).

When the lockdown eventually took effect on 30<sup>th</sup> March 2020, the total cases in Ghana had risen to 152 with five deaths with two recoveries. The lockdown mandated all persons to stay at home unless they had to engage in banking transactions, purchase food, water or medicine, or use a public place of convenience. Health workers and a few other workers were however exempted. The military and the police were deployed to enforce the imposition of the partial lockdown in the affected areas. The government used the lockdown period to undertake an enhanced contact tracing programme. By 10<sup>th</sup> April 2020, a total of 27,346 tests had been performed with 408 positive results. Of these positive results, 396 were active cases with none in critical condition or on ventilators, four recoveries and eight deaths. Eight of the 16 regions had recorded COVID-19 cases with the Greater Region being the epicentre (5). As a result, the President, in his regular update, extended the partial lockdown in the affected areas by one more week (6–7). The lockdown was lifted on 20<sup>th</sup> April (8). During the announcement of the lifting of the lockdown, the mandatory wearing of face/ nose masks

and need for physical distancing came into force. By 31<sup>st</sup> May 2020, the President of Ghana started the phasing of measures in easing of restrictions. At the time, 218,425 tests had been conducted with 8,070 being positive; 2,947 recoveries; 36 deaths and 5,087 active cases. All the regions had reported COVID-19 cases except the Ahafo Region. One of the foremost restrictions eased was the that of religious gatherings but was limited to 100 worshippers for maximum duration of one hour per service. The final year students at Junior High Schools, Senior High Schools and Universities were to resume by mid-June while religious gatherings commenced by 5<sup>th</sup> June (9). A host of other restrictions were eased subsequently. As of 6<sup>th</sup> November 2020, the total cases recorded stood at 48,788 with 47,521 recoveries, 320 deaths and 947 active cases (10). Clearly, according to the Ghana Health Service, the COVID-19 curve has flattened in Ghana with the peak period reached in the last week of June and first week of July 2020. By end of June 2020, though all the 16 regions had recorded cases, these had been managed very well to have relatively lower deaths with high recovery rates. The international airport and all borders were re-opened on 1<sup>st</sup> September 2020 by instituting strict COVID-19 tests of all travellers (11).

The impacts of the COVID-19 pandemic in Ghana, like any other developing country, is enormous. Several private firms laid off staff as they could not afford to pay them for doing no work during the restrictions or the lockdown period. For business entities which retained their staff, some halved the salaries of their staff (12). Only government workers have been spared as they continued to receive full salaries throughout the COVID-19 pandemic period. The government has injected several billions of Ghana Cedis into the economy to cushion it from collapse. Some notable government interventions include provision of free food to poor households during the lockdown, supply of free electricity for three months and absorbing of water bills for several months, stimulus packages for small enterprises and motivational allowance and tax-free salary for the front line health workers for the three months of COVID-19 restrictions (13). Non-governmental organisations like churches and philanthropists also supported affected communities with essential supplies like food, personal protective equipment (PPEs), liquid soaps, hand sanitisers and the like, etc.

### 3.2 COVID and urban transport measures

During the imposition of the partial lockdown in March 2020, the urban transport industry was not left out of the restrictions. Among these restrictions were that intercity passenger transport was banned to prevent transfer of the virus from one region to the other. Only cargo vehicles involved in the food-supply chain and transportation of petroleum products were allowed to undertake intercity or inter-regional movements. For commercial vehicles operating in the cities, they were compelled to reduce the number of passengers in strict compliance with the physical distancing protocols as well as observing other hygiene protocols. Specifically, motorcycles were banned from carrying passengers during the lockdown and beyond (14). The restrictions in the carrying capacity of all transport modes such as taxis, *tro-tros* (mini-buses) and domestic aircraft were lifted on 27<sup>th</sup>July 2020 – meaning they could now carry their full capacity of passengers (15). This also implied that motorcycles could carry passengers henceforth. However, the requirement for the wearing of facemasks in the transport sector continues to be in force. The borders including the international airport, as mentioned earlier, were reopened on 1<sup>st</sup> September 2020.

Passengers and operators in the urban transport sector have largely complied with the COVID-19 protocols through the wearing of face masks and carrying hand sanitizers along their journeys. With respect to the MCT operators, some of them defied the orders not to operate passenger services and these sometimes found themselves in serious trouble with law enforcers. One unofficial measure adopted by MCT operators was the sanitising of the inside of crash helmets meant for passengers before transferring them from person to person. This was to reduce the spread of the COVID-19 virus through personal contact with the crash helmets.

### 3.3 Motorcycle and motor-tricycle taxi sector

Motorcycles and tricycles are increasingly important means of transport, even on roads where conventional public transport vehicles can or already operate, representing about one-tenth of the two million vehicles registered in Ghana. There are, however, significant regional differences, with motorcycles and motor tricycles representing over 90% of all registered vehicles in northern Ghana, and yet only about 15% of registered vehicles in southern Ghana (16). Ghana currently has a legislation that prohibits the operation and use of motorcycle taxis and motor tricycle taxis throughout the country. Ghana's 2012 Road Traffic

Regulations includes a section on 'Prohibition of use of motorcycle or tricycle for commercial purposes', stating, among other things, that: 'a person shall not ride on a motorcycle or tricycle as a fare-paying passenger' (17). A major reason, or justification, for the ban on motorcycle taxis and motor-tricycle taxis is their high involvement in road traffic crashes as most of the riders are not properly trained. Motorcycle (including tricycle) fatalities constituted 27.7% of the annual road traffic fatalities in Ghana in 2018 (18).

It has been suggested in literature that two motorcycle unions exist in the Accra Metropolis (19). The unions the Ghana Private Motorbike Operators Union (GPMOU) and the Motor Riders Association of Ghana (MRAG) though existing on paper, lack official recognition and have virtually no influence over the daily activities of the motorcycle taxi riders. In a recent field study in Accra for the Volvo Project by the authors of this report, the unions could not be located. Instead, a new union, known as the Motorcycle and Tricycle Riders Association (MoTRA) Ghana, emerged. As motorcycle taxis are non-existent in Kumasi, there are no unions in the city. Rather, Autorickshaws (motorised tricycles for passengers) taxis are operational in Kumasi. Two unions were identified, notably, the Pragiya and Okada Drivers Union (PODU) and the Krofrom Pragiya Union. The autorickshaw is locally known as '*Pragiya*'.

## 4. Key stakeholder perspectives on COVID-19 and urban transport

In this chapter the data collected via the key stakeholder/ key informant interviews is presented, analysed and discussed. In each of the six case study countries approximately 15 interviews were conducted (typically about ten with stakeholders in the capital and about five with stakeholders in a second city). Key stakeholders were identified via the literature review, prior to the data collection. A full list of key stakeholders interviewed is presented in Annex I. These include urban transport planners, traffic police representatives, health workers, motorcycle taxi union representatives, market associations representatives, etc. This chapter is organised according to the five semi-structured questions that were asked to the informants.

## 4.1 Impacts of COVID-19 on urban transport

The effects of COVID-19 on the urban transport sector and motorcycle/ tricycle transport specifically was noted by most informants. However, informants typically indicated that the main impact of lockdowns on the sector was a lowered demand for transport services due to fewer socio-economic activities (due to the temporary closure of businesses and the (partial) closure of markets, for example) resulting in a lower demand for public transport services, rather than the other way around (i.e. restrictions on public transport services having a detrimental effect on socio-economic activities). This is illustrated by the below comment of a representative of market association in Kumasi:

"The number of trips we used to make to central market as market women has reduced because we don't get as much sales as before so it is the same with the drivers since we are their immediate customers" – Aboabo Market Association spokesperson, Kumasi.

This is also underscored by a sector representative:

"Generally, the number of trips has reduced in the COVID era. This is due to the fact that some of the masses like educational workers no longer go to work because of the shutdown of educational institutions and other public gathering" – Motorcycle and motor-tricycle taxi union representative.

That is not to say that the transport restrictions introduced, particularly during lockdowns, did not have a direct and detrimental effect on the livelihoods of transport providers. Restrictions varied from place to place, country to country and often reflected the severity/ number of infections of the COVID-19 virus. Moreover, the restrictions and regulations also varied from one transport mode to another. Mini-buses and car taxis typically had to reduce the number of passengers that could be taken at one time, but with demand dropping as well, this had a negative impact on the income generated by conventional modes of transport providers, as exemplified by the statement of a car-taxi driver:

"Before COVID-19, we used to have high patronage of passengers. During the COVID-19 pandemic, the taxi sector has negatively been affected. Our trips have reduced considerably" – Car-taxi operator.

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While motorcycle taxis are officially not allowed to operate in the city centre of Accra during normal times (or for that matter, anywhere else in the country), operators can find a way around this by claiming that they are a private rider, taking a family member with them:

"The Okada [motorcycle taxi] business flourished during COVID-19. The restriction not to carry passengers did not work. The argument that a family motorcycle can transport one of the couples made the enforcement of the restrictions on motorcycle difficult" – Police Service representative.

Apart from when the Accra ban was imposed during the three-week lockdown, according to the following statement, the impact of COVID-19 on the motorcycle taxi operators was minimal:

"Apart from the lockdown during which the MCTs were prevented from operating, COVID-19 has not had any impact on MCT operation. For Accra, most of the motorcycles are into deliveries" – National Road Safety Authority Official.

While the supposed minimal impact is challenged by sector representatives and operators themselves, this statement brings up an interesting aspect: the increase in demand for courier services, with motorcycle taxis particularly suited to fulfilling this demand.

Transport providers sometimes increased their fares to compensate for the seats that had to be left empty due to physical distancing, and in an effort to further recoup some of the lost income, fares were not always lowered to pre-intervention levels after restrictions were eased, as is illustrated by the following comment:

"When the restrictions were introduced, they [car taxi drivers] increased fares to cater for the seats that were left vacant to make way for social distancing, after the ease of the restrictions they still maintained the same fares" – Dr Mensah Market representative, Kumasi.

This particular response by transport providers was corroborated by a Health Services representative:

"When the passenger intake was reduced, the fares were adjusted higher up to make up for the losses. But after bringing back the numbers, they [mini-bus drivers] have refused to reduce the price" – Health Service representative.

Interestingly, and as observed in other countries as well, just prior to the COVID restrictions, people increased their use of public transport services, likely to do last minute shopping or making necessary visits:

"Before the lockdown, there was a sharp increase in traffic activities and then there was a decline especially in car /bus services, which also gave rise to private motorcycles" – National Road Safety Authority Official.

In Ghana, with both the police and army patrolling the streets during lockdown and putting up check-points, there was a high likelihood that operators embarking on non-essential vehicle trips were fined and/or prevented from further travel:

"In the lockdown period, there was strict compliance as the military and police enforced those restrictions. After the lifting of the lockdown, some law enforcers sometimes entered into public transport to inspect wearing of masks by all passengers before the vehicle moved. Those who did not have them were dropped" – Department of Transport Official.

According to the following Police Service representative, this triggered the public in different mobility choices:

"During the three-week partial lockdown in the Greater Accra Metropolitan Area, the restrictions on urban transport put some stress on drivers and passengers. Within this period, the fear of vehicles being stopped or turned back pushed people to travel on foot" – Police Service representative.

Concerns of people over contracting COVID-19 resulted in many opting for on-demand private transport (if they could afford it). The Mobility on Demand services saw their popularity increase:

"The taxis and ride hailing services such as the Ubers, the Bolts and the Yangos, etc., also benefited through advance booking or dropping services which are positive impact" – Police Service representative.

This observation is further corroborated by a conventional car taxi driver:

"The ride hailing services – Bolt and Uber – to some extent have taken over our customers as they [passengers] feel safe using them, compared to us. The Okada have also collapsed our business in the COVID-19 era. I do not take Okada seriously compared to the Bolt and Uber which offer customers lower prices while transporting them from their homes. The Okada only flourished under heavy traffic congestion and in the slum areas" – Car taxi union representative.

The above comments illustrate the flexibility of the transport services sector, further increased by the recent arrival of the Mobility on Demand services. The same car taxi union representative draws attention to another 'unfair' competitive disadvantage the conventional public transport providers have: because they are unionised, regulated and controlled, they have to adhere to the regulations put in place by the government and union, while this is not true for the motorcycle taxis, or so it is argued:

"The taxi union have instituted mechanisms in place to make sure all passengers wear their face masks before leaving the transport terminals whereas the MCTs have no such mechanisms in place and this seems to flourish their business as some people do not like the idea of wearing their face masks regularly – Car taxi union representative.

#### 4.2 Impact of transport-related measures and consultations of the sector

Most countries have responded to the COVID-19 epidemic through a series of measures designed to reduce the chance of virus transmission. With regard to the transport sector, key measures included: restricting the number of services on offer, by cancelling certain routes or imposing curfews; promoting physical distancing, by limiting for instance the number of passengers on a particular type of transport; and introducing hygiene measures to limit the spread, for instance by making the wearing of face-masks or using alcohol hand sanitisers compulsory. In Ghana, operators were also asked to police/ limit the level of conversations between passengers:

"Pragiya [motor-tricycle taxis] were taking two passengers instead of their usual three in adherence to the social distancing protocols despite the fact that they are banned from operating commercially. All other COVID-19 safety protocols were imposed on the motor tricycle taxi sector including the wearing of face masks, and using alcohol-based hand sanitisers regularly" – Police Service official.

Few, if any informants, stated that motorcycle taxi union representatives or the operators themselves were consulted prior to the introduction of what were sometimes rather draconian measures. Generally, key informants argued that this was not and could not be done because of the rapid spread of the virus and the urgency required:

"To be sincere, even the recognised transport operators were not consulted, not to mention the motor tricycle taxi operators whose services are illegal. Generally, the COVID-19 restrictions were an emergency response and there was no time for various consultations which could have delayed taking of some actions" – Police Service official.

This is corroborated by a National Road Safety Authority representative:

"I do not think these transport sector stakeholders such as the unions and in particular the MCT unions were consulted due to the emergent nature of COVID-19. Critical decisions had to be taken" – National Road Safety Authority Official.

Not consulting relevant sectors prior to the introduction of measures seems to be a common issue, not just in developing but also in developed countries:

"The Pragiya/ Adedeta [motor tricycle taxi] unions were never consulted before the president announced the restrictions in the transport sector. Overall adherence to the restrictions can be rated as 50% as many of the Pragiya riders were not adhering to them" – Motorcycle and motor-tricycle taxi union representative.

While the 'emergency' nature rules out long consultation processes, some of the unforeseen effects and lowcompliance levels could perhaps have been prevented if the government would have consulted with the relevant sector representatives. However, limited compliance was often driven by more mundane factors, such as the need and demand for people to use transport services:



"The stranded passengers needed to move so though the transport operators understood the restrictions, this pressure from the passengers led to low compliance at some points in terms of the social distancing in the vehicles. Compliance was at its best where there was security presence. Compliance in wearing of face masks was somehow good but that of social distance was poor" – Health Service Official.

When a mode of public transport is considered illegal (as are motorcycle taxis and motor-tricycle taxis in Ghana) but still widely and commonly used, this creates a difficulty and dilemma: the government and its institutions cannot officially engage with the sector, even if it would be beneficial to do so. The following comment illustrates this dilemma:

"The restriction to reduce passengers was for all the players in the transport sector. The Pragiya [motor-tricycle taxi] was specifically to wear masks and to reduce passengers from three to two. They were not consulted because they are illegally operating. They lacked terminals hence they could not provide veronica buckets to ensure handwashing. However, the capacity reducing and masking were complied with" – National Road Safety Authority Official.

The adherence to the regulations varied from place to place and it is therefore no surprise to see other key informants highlighting for instance the limited compliance with mask-wearing:

"The reduction in the number of passengers was strictly adhered to as passengers often reminded drivers not to exceed certain numbers. However, nose mask compliance was low and some people only put on their masks when they approached the police" – Health Service representative.

Again, compliance with certain restrictions, particularly with those that banned operating, could be limited, not because of a disregard for the rules but out of sheer necessity. Transport operators – particularly those that do not own their vehicles – can very much live from hand-to-mouth and cannot afford to be without an income for more than a few days:

"During the lockdown, motorcycle taxis were not allowed to carry any passenger in a bid to observe the social distancing protocols. Having complied to the restrictions for the first six days, some of our operators came out to operate due to starvation. These riders were often arrested by the police and forced to pay money ranging between GHS300.00 and GHS500.00 or faced court prosecution" – Motorcycle and motor-tricycle taxi union representative.

### 4.3 Social or technological adaptations made by motorcycle taxi operators

In addition to a number of regulatory measures put in place to limit the spread of COVID-19 – in particular, those reducing the number of passengers that can be transported at once – there have been some social and technical adaptions made by the intermediate modes of transport operators (and by some passengers). These are mainly limited to attaching hand sanitisers to the motorcycle or motor-tricycle, or cleaning the inside of the helmet with a sanitiser before handing it to the next passenger:

"The Okada riders usually hang mobile hand sanitisers on the bike or pockets while operating (Police Service representative); There was the disinfection of the passenger helmets with hand sanitizers before transferring among passengers" – Health Service representative.

As can be seen from the following quote, a health service representative highlighted the measure to provide disposable theatre head caps to their staff, to further reduce contact with a possibly infected area when wearing a shared motorcycle helmet:

"With our riders (GHS), we admonished them to cover their head with the disposable theatre head gears before wearing their assigned helmets. This could be an innovation from us" – Health Service representative.

Expecting MCT operators to follow the advice and mitigating regulations, let alone them coming up with social or technological adaptions to further reduce the exposure and limit the spread of COVID, presumes that the operators believe that COVID-19 is a real virus/ disease and that public health interventions do have some positive impact. This is not necessarily the case. Just as in more developed countries, in developing countries

there are many who question the existence of COVID-19 and/or the effectiveness of the measures they are asked by government authorities to take to prevent the spread:

"Most of them [motor tricycle operators] do not wear the nose mask and they talk a lot. At times, I just pay them off and terminate the trip when even I am not [at] my destination. A lot do not believe the disease is real, but we have no doubt that this virus is even getting worse – Aboabo Market Association spokesperson, Kumasi.

Another market association representative highlighted a fatalistic mentality that is perhaps not uncommon among people involved in dangerous occupations such as navigating busy traffic situations while riding an exposed motorcycle taxi or motor-tricycle taxi:

"Most of them trusted God and did nothing. Whenever they are cautioned they retort that if one is destined to die by the disease or contract it, nothing can prevent that. So how will a person with this mentality ever think of innovating a new method to help reduce the level of transmission?" – Dr Mensah Market representative, Kumasi.

### 4.4 Useful lessons from previous health crises

Sierra Leone and Liberia – close to Ghana – were only recently at the epicentre of the worst Ebola crisis in history, so it therefore comes as no surprise to see a number of similarities in responses and behaviour to the current COVID-19 crisis in these countries. Uganda has experienced much smaller Ebola outbreaks, or better put, Ebola cases, in its territories bordering the DRC. While perhaps the most relevant disease, Ebola is not the only highly infectious disease from which lessons could have been learned and testing protocols put in place:

"Safety restrictions and hygiene protocols in cholera outbreaks are similar and can be translated to the COVID-19 protocols except that COVID-19 is airborne and cholera is waterborne" – National Road Safety Authority Official.

The following statements confirms that experiences in dealing with cholera have been useful in dealing with COVID-19, but the interviewee brings up an additional aspect, namely the challenge COVID-19 poses with regard to social practices:

"COVID-19 did not shock us too much. In terms of cholera, the handwashing, eating warm food, not buying food from unhygienic places. However, the cultural shock that came with COVID-19 was [not giving] the handshake. This was so engrained within our culture and very difficult for us all" – Police Service representative.

During the West African 2015/16 Ebola crisis, SSA countries either (temporarily) closed their borders for travellers from the affected countries or introduced stringent health monitoring measures. This may have informed similar measures during the initial COVID-19 wave:

"During the Ebola, our government closed our border, preventing people from entering the country. So this might have informed our government to close our borders to prevent the spread of the COVID-19" – Police Service official.

While there are clearly sections within society who expressed doubt about the existence of COVID-19 (e.g. Motor tricycle operators, according to the above quote by the market association spokesperson) other groups within society have responded with compliance to the regulations and seem to have little doubt about its existence or its potential severity:

"For the case of cholera in Ghana, people usually don't pay heed to sensitization to prevent contamination but in the case of this disease, people have handled it with much [more] consciousness than I have ever seen with any other disease in Ghana" – Aboabo Market Association spokesperson, Kumasi.

A final comment alludes to the fact that some diseases more common in Africa can sometimes be perceived as 'fake' or a 'hoax' by conspiracy theorists. However, according to this interviewee, the fact that the devastating impact of COVID-19 first happened in the Far East and Western world offered African countries an opportunity to learn from those countries' responses and refuted the argument that it was a 'fake' disease, made up to undermine Africans and African nations: "We saw on television and social media how the sickness had killed several of the whites, so before it got here, we were somewhat prepared because a lot of education had gone on" – Dr Mensah Market representative, Kumasi.

## 4.5 Motorcycle taxis as a low-risk means of transport?

There are several factors that can make the likelihood of COVID-19 transmission lower for motorcycle taxi and motor-tricycle transport than for more conventional modes of public transport. Both modes of intermediate transport carry fewer passengers per trip and both modes typically have considerable fresh-air flows around the operator and passenger(s). On the other hand, the wearing of helmets for motorcycle taxi transport can be a potential source of virus transmission, particularly if it is integral rather than an open face helmet. An increasing number of regular motorcycle taxi passengers use their own helmets.

So do the interviewees agree with the proposition that motorcycle taxis and tricycles pose less risk, and if this would be the case, should their use be promoted? About two thirds of the respondents challenged the notion that the intermediate forms of transport pose lower risk, mainly due to limited compliance of the operator with measures put in place:

"If only they [motor tricycle operators] would observe the protocols, it can be promoted (...) I don't believe it poses the lowest risk but I don't also agree that government should ban their operations" – Aboabo Market Association spokesperson, Kumasi.

A similar point is raised by a health service representative, arguing that motorcycle taxis could be safer if they would not share passenger helmets:

"One helmet is being transferred among passengers and the passenger contact with the rider makes the Okada riskier for COVID-19 compared with conventional transport" – Health Service representative.

Obviously, the very close contact between a passenger and the operator is further cause for concern.

Other respondents make the case that more conventional modes of public transport can have good measures in place and thus pose a lower risk of transmission than the intermediate modes of transport:

"No, COVID-19 or no COVID-19, we need to look at the safety of their operators. The large vehicle might even have [better] COVID-19 protocols in place than the tricycle. So far as there are persons [in] contact, even if the numbers are low, there could be transmission" – National Road Safety Authority Official.

A similar argument is made by a Police Service representative, particularly highlighting the opportunity for physical distancing in a larger vehicle:

"Due to the closeness between the rider and passenger, there is a higher risk of infection on the motorbike. Larger vehicles like buses can observe better social distancing protocols than motorbikes. Hence, I do not agree to the assertion that MCTs pose lower risk and will not recommend them for use in the COVID-19 era transport" – Police Service representative.

It should perhaps not come as a surprise that the motorcycle and motor-tricycle representative takes a different view here:

"COVID-19 spreads faster in an enclosed area due to the exhaled air circulating among the people. But with the Pragiya, there is free circulation of air making the risk of COVID-19 lower. Hence, the service of Pragiya should be promoted in the COVID-19 era to reduce the risk of COVID-19 spread" – Motorcycle and motor-tricycle taxi union representative.

Another sector representative wholeheartedly agrees:

"Yes, Okada should be promoted during the COVID-19. Most of the MCT passengers do not touch the bike which makes the MCTs pose lower risk of COVID-19 transmission unlike the conventional transport services where passengers have to touch the doors and seats which make them prone to the COVID-19 spread" – Motorcycle and motor-tricycle taxi union representative.

To conclude, a key issue (for Ghana) is again the informal nature of motorcycle and motor tricycle transport. If allowed and formalised, it could be regulated:

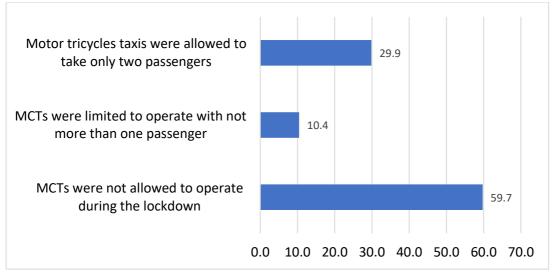
"We may promote MCT transport if only we form associations/ groups, train and license them and allow them to operate. If they flout the rules, their licenses are revoked. Since they are useful in beating traffic congestion. Until that is done, we should not allow them. Regarding COVID-19, if the occupants observe the COVID-19 protocols, the risk will be low. This boils down to training" – Health Service representative.

# 5. Motorcycle taxi survey findings

## 5.1 Findings

Below the findings of the motorcycle taxi/ motor tricycle surveys are presented. Approximately 80 surveys were conducted, spread equally over two cities (Accra and Kumasi). The country researcher, when collecting the survey data, approached this exercise as more than a 'box-ticking' event, and typically asked the respondents to explain their answer to gain a better appreciation of why such an answer was given. This understanding proved to be useful for the interpretation of the data as well as for the workshops.





In Ghana, the lockdown seemed to have particularly affected the operation of motorcycle taxis. While this form of transport service is officially not permitted in Ghana, there are large areas where the police will not penalise motorcycle taxi operators. During Ghana's lockdown, a majority of respondents mentioned that this was no longer the case. Motor tricycles, though also outlawed, were generally allowed to provide their services – if indeed the passengers were travelling for essential business purposes – but were often limited to two passengers maximum and in some cases, just one passenger (See **Table 1**).

	No. of journeys in pre-COVID- 19 normal day	No. of journeys in pre-COVID- 19 busy day	No. of journeys during COVID- 19 normal day	No. of journeys during COVID- 19 busy day	No. of journeys during COVID- 19 lockdown normal day	No. of journeys during COVID- 19 lockdown busy day
Average	32	48	17	25	1	2
Minimum	6	10	0	0	0	0
Maximum	75	150	45	60	15	20

#### Table 1: Comparison of number of journeys

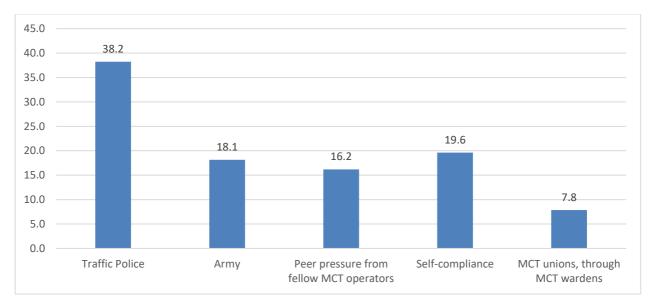
In Table 1, the average number of journeys completed by MCTs/ MTTs, as expected, was highest in the pre-COVID-19 period, followed by during COVID-19 with the lockdown period recording the fewest. While the

majority of respondents stated that they provided few if any services during the three week lockdown period, some provided a fair number (15 and 20 journeys are listed). Busy days experienced higher numbers of journeys than normal days for all the three periods.

#### Table 2: Comparison of length of journeys

	Length of trips (mins) per day in pre-COVID- 19 normal day	Length of trips (mins) per day in pre-COVID- 19 busy day	Length of trips (mins) per day During COVID- 19 normal day	Length of trips (mins) per day during COVID- 19 busy day	Length of trips (mins) per day during COVID- 19 lockdown normal day	Length of trips (mins) per day during COVID- 19 lockdown busy day
Average	249	410	161	269	11	22
Minimum	30	60	0	0	0	0
Maximum	900	950	875	950	180	360

**Table 2** shows the duration (in minutes) of all trips made per day by a motorcycle/ tricycle operator added together (so excluding the time spent cruising around to look for passengers). Dividing the average total minutes through the average total number of trips (table 1) gives the average duration of a trip. Doing this for the six scenarios shows that the shortest trips were taken during a normal non-COVID-19 day (on average just below eight minutes per trip) while the longest trips were taken during lockdown on a normal and busy day (11 minutes per trip). However, with the number of cases being rather small (particularly so for the lockdown scenario) one should be careful with reading too much into this. With fewer motorcycle/ tricycle taxis operating during lockdown, it does make sense that those lucky enough to board a taxi would not just do so for a very short journey.

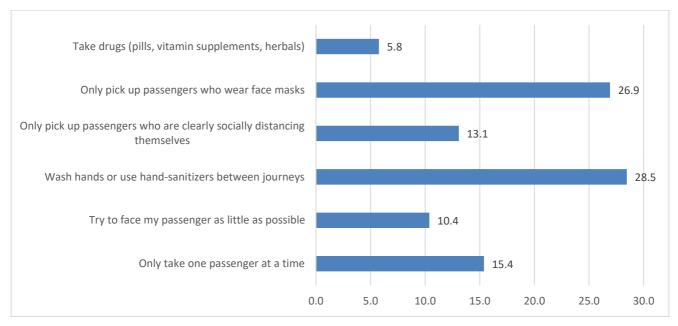


#### Figure 2: Who enforce(d) the restrictions?

Restrictions, as is clear from **Figure 2** above, were mainly enforced by the traffic police. Peer pressure and self-compliance were also listed in considerable numbers. Without any consultation or attempt by the government to work together with the motorcycle taxi unions, it comes as no surprise that these were hardly involved in enforcing restrictions. This seems like a missed opportunity.

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### Figure 3: Social measures taken to reduce COVID-19 by MCT/ MTT operators



From **Figure 3**, it is clear that a range of measures were taken by the intermediate transport providers, with some more popular than others. It is encouraging to see that the one option that is arguably the least helpful – taking drugs – was indeed opted for in the fewest occasions. The 'holy trinity' of washing hands, wearing face-masks and physically distancing, are the three most frequented responses.

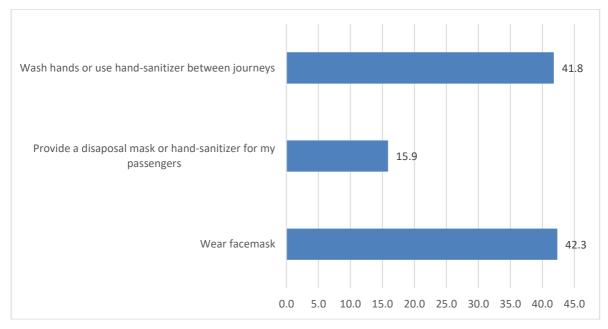
In **Figure 4**, both the rider of and passenger of a motor tricycle taxi are spotted wearing their face masks. The passenger is sanitizing his hands with an alcohol-based sanitiser.



#### Figure 4: A MTT rider wearing a face mask

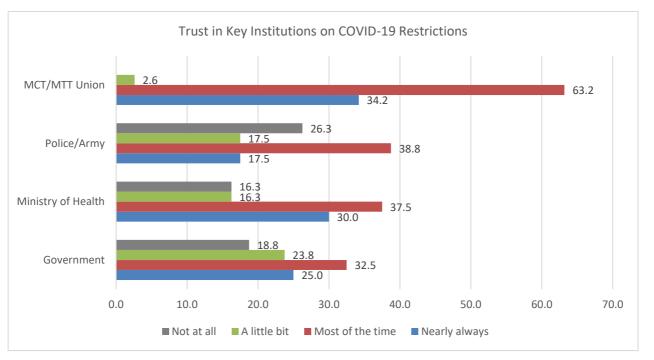
Accelerating COVID-19 related 'best practice' in the urban motorcycle taxi sector in sub-Saharan Africa – Ghana Country Report





Clearly, providing a disposable mask or hand-sanitiser for passengers was not a popular choice (See **Figure 5**). This is probably due to the costs involved (although it was raised above that some operators sold these to their customers) and because many passengers were already wearing their own face-masks and/or had their own hand-sanitisers.





Again, it seems that the limited role of the MCT/ MTT unions in enforcing and/or promoting compliance of its members with the COVID-19 restrictions has been somewhat of a missed opportunity here, given the high levels of trust most operators have in their unions, as compared to the other institutions listed. While the Ministry of Health is in second place, it is only slightly better performing/ trusted slightly more highly than the Government and the police/ army (See **Figure 6**).

## 6. Conclusion

As part of measures introduced to reduce the spread of COVID-19 in Ghana, a series of measures were put in place including compulsory physical distancing, prohibiting non-essential travel, and instigating a three-week lockdown imposed on the Greater Accra and Greater Kumasi Metropolitan Areas. Motorcycle taxis in particular were prevented from operating while motor-tricycle taxis (and all other conventional transport modes) were compelled to reduce their passenger numbers during the lockdown.

To better understand the nature and impact of COVID-19 on the urban transport sector in Ghana, this study used a mixed methods approach consisting of qualitative interviews with key informants on the topic of motorcycle/ motor tricycle taxis, as well as surveys of motorcycle/ motor tricycle taxi operators. The study was conducted in Accra and Kumasi, the main epicentres of the COVID-19 epidemic in Ghana. Findings from the stakeholder interviews indicated that transport activities were reduced considerably in the COVID-19 epidemic period, particularly during the lockdown, due to limited demand and supply of transport services. Ride-hailing services rather benefited from the COVID-19 restrictions as they were perceived by the public to be safer. To compensate for lost revenue due to the requirement for physical distancing, transport operators. Stakeholders were of the view that the urgency for measures to combat the COVID-19 epidemic did not allow for consultation with the transport stakeholders. For the motorcycle and motor-tricycle sector, they could not have officially been consulted regarding the various transport restrictions in any case, because they are officially outlawed.

The study found that violation of transport restrictions by motorcycle/ tricycle operators was mainly caused by necessity, due to lost livelihoods and limited capacity to absorb financial shocks. Social and/or technical innovations were limited beyond those advised by the government and health experts. Some operators sprayed the passenger helmets with disinfectants while others tied bottles of hand sanitiser to their vehicles. Stakeholders suggested that Ghana's experience with Cholera outbreaks provided some help in dealing with the COVID-19 outbreak. Stakeholders were divided on the point of whether intermediate forms of transport pose lower risks of COVID-19 infection and dissemination, but if indeed they do, it was highlighted that varying levels of compliance with restrictions and measures by the operators would negate its potential for being a safer form of transport.

The motorcycle/ tricycle surveys showed that the majority of operators indicated that they were not allowed to operate during the lockdown period. Restrictions, according to the survey, were enforced by the traffic police (38%) but nearly 20% of respondents stated that they self-complied with the restrictions. Collecting only passengers wearing a face mask (27%) and washing hands/ using hand sanitizers (29%) were the most common social/ technical measures taken by the survey respondents. The MCT/ MTT unions were most trusted by the survey respondents on COVID-19 issues, with the police/ army, Ministry of Health and the government trusted considerably less more generally.

While there is a general perception that Ghana has dealt well with the epidemic, evidenced by the low number of COVID-19 deaths, the impact on the public transport sector has been significant. Better coordination and collaboration, particularly between the government, its ministries and institutions, and the motorcycle taxis and motor tricycle taxis (represented via their unions) could have reduced the negative impact on the sector as well as being of help in fighting the pandemic. The obvious way to make this possible is to investigate ways of legalising and then regulating this intermediate means of transport.

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# **APPENDIX A: LIST OF KEY STAKEHOLDERS**

#### Representatives of the following organisations/institutions were interviewed:

- Motor Traffic and Transport Department (MTTD), Ghana Police Service Ashanti Regional Headquarters
- Aboabo Market Association, Asokore Mampong Municipality
- Dr Mensah Market Women's Queen, Kumasi Metropolis
- Ghana Health Service, Ashanti Regional Health Directorate
- Kumasi Stadium Taxi Rank (PROTOA), Kumasi Metropolis
- National Road Safety Authority (NRSA), Ashanti Region
- Pragiya and Okada Drivers Union (PODU), Asokore Mampong Municipality
- MTTD of Ghana Police Service, Accra Central Division
- Department of Transport, Accra Metropolitan Assembly
- Ghana Health Service, Headquarters, Accra
- Ghana Health Service, Greater Accra Regional Health Directorate
- Motorcycle and Tricycle Riders Association (MoTRA) Ghana
- National Road Safety Authority, Greater Accra Region
- MTTD of Ghana Police Service, Kaneshie Division, Accra
- Kaneshie Taxi Union (Co-operative), Kaneshie Market, Accra

# **APPENDIX B: KEY STAKEHOLDER INTERVIEW QUESTIONS**

**Project Title:** Accelerating Covid-19 related 'best practice' in the urban motorcycle taxi sector in sub-Saharan Africa

**Introduction:** This survey/interview is funded by UK Aid via the High Volume Transport Programme in order to better understand the impact of COVID-19 on the transport sector, and specifically the motorcycle taxi sector, in 6 African countries. Participation in the survey/interview is voluntary and there is no financial compensation available, but the researchers do hope that your responses will help to inform policy makers and practitioners to develop good and evidence-based interventions. Your answers will be anonymised, so we will not link your name to your answers and aggregated with other responses. However, we do ask you to provide your name and mobile number, in case we want to contact you again for further questions and/or to share with you the findings of our study.

Signature of interviewee

Interview number (to be linked to name and phone-number of interviewee, kept on a separate piece of paper)

Date:

Location:

Name of data collector:

**COVID-Q1** What have been the impacts/effects of COVID-19 on urban transport in general and the motorcycle taxi (MCT) sector specifically?

**COVID-Q2** If transport-related restrictions or a lockdown were introduced, what were these specifics of these, to what extent have motorcycle taxi unions and/or riders consulted in this and to what extent have MCT riders been in compliance with these?

**COVID-Q3** Are there any social or technological innovations or adaptions MCT riders can take or have been taken to reduce exposure and limit the spread of COVID?

**COVID-Q4** Have experiences with and responses to previous outbreaks/pandemics been used when addressing the current COVID outbreak (for Sierra Leone and Liberia, think Ebola, for other countries, think for instance tuberculosis, feared to be spread by using shared helmets)?

**COVID-Q5** If motorcycle taxi transport, from all the modes of public transport (shared-car taxi, mini and midibus, etc.) poses the lowest risk of COVID transmission, do you think that motorcycle taxi transport should be promoted? Accelerating COVID-19 related 'best practice' in the urban motorcycle taxi sector in sub-Saharan Africa – Ghana Country Report

# **APPENDIX C: MOTORCYCLE/ TRICYCLE OPERATOR QUESTIONS**

**Project Title:** Accelerating Covid-19 related 'best practice' in the urban motorcycle taxi sector in sub-Saharan Africa

**Introduction:** This survey/interview is funded by UK Aid via the High Volume Transport Programme in order to better understand the impact of COVID-19 on the transport sector, and specifically the motorcycle taxi sector, in 6 African countries. Participation in the survey/interview is voluntary and there is no financial compensation available, but the researchers do hope that your responses will help to inform policy makers and practitioners to develop good and evidence-based interventions. Your answers will be anonymised, so we will not link your name to your answers and aggregated with other responses. However, we do ask you to provide your name and mobile number, in case we want to contact you again for further questions and/or to share with you the findings of our study.

#### Signature of interviewee

Interview number (to be linked to name and phone-number of interviewee, kept on a separate piece of paper)

Date:

Location:

Name of data collector:

Member of motorcycle taxi union: YES/NO

Motorcycle taxi operator or motor-tricycle taxi operator:

**COVID-Q1a** The impact of COVID-19 on my job as a motorcycle taxi rider is/was:

- 1. Very large and mainly negative
- 2. Very large but mainly positive
- 3. Not very large, but negative
- 4. Not very large, but positive
- 5. No real impact, either positive or negative
- 6. Other and/or explain your answer above .....

**COVID-Q1b** During the COVID-19 the number of MCT journeys I made/make per week:

- 1. Increased a lot
- 2. Increased a little
- 3. Remained more or less the same
- 4. Decreased a bit
- 5. Decreased a lot
- 6. No journeys were made at all
- 7. Other and/or explain your answer above .....

	Pre-Covid normal day	Pre-Covid busy day	During Covid normal day	During Covid busy day	During Covid- lockdown normal day	During Covid- lockdown busy day
Number of journeys per day*						busy duy
Duration of total number of trips in time (hours per day)						
Duration of total number of trips in distance (kilometres per day)						

\*For the interviewer: while exact number may be difficult to recall, key is to find out relative changes between the various column categories.

\*\* For the interviewer: while the exact length in time or kms may be difficult to recall, key is to find out relative changes between the various column categories.

**COVID-Q1c** Please explain the reasons for the changes in the boxes in the above table.

**COVID-Q2a** What restrictions on MCT riding were introduced during the lock-down? (please tick all that apply)

1.	MCTs were not allowed to operate during the lockdown	
2.	MCTs were only allowed to operate along certain routes/in certain areas	
3.	MCTs were only operated to operate during certain times of day or night	
4.	MCTs were limited to operate with no more than 1 passenger	
5.	MCTs were only allowed to operate if following certain health measures, such as	

- 6. No restrictions were imposed on the operation of MCTs
- 7. Other and/or explain your answer above .....

COVID-Q2b Were the above restrictions

- 1. Overall, clearly communicated by the government and health department/ministry
- 2. Generally, clearly communicated by the government and health department/ministry, but there has been some confusion at times
- 3. Not clearly communicated by the government and health department/ministry, with lots of confusion over what is allowed and what is not allowed.
- 4. Other and/or explain your answer above .....

#### **COVID-Q2c** Do you trust the following institutions regarding COVID restrictions and measures taken?

	Always	Most of the times	Sometimes	Never	Do not know
The government					
The health department/ministry					
The police/army					
Motorcycle taxi unions					

COVID-Q2d Have motorcycle taxi unions and operators been consulted or involved in designing these rules?

- 1. Yes, I have been involved in it myself
- 2. I have not been involved in it but I know my MCT union has been consulted or involved in it.
- 3. No, we, riders and the unions, have not been consulted or involved in formulating the rules
- 4. Other and/or explain your answer above.....

**COVID-Q2e** Who enforced the above restrictions? (tick all that apply)

1.	Traffic Police	
2.	Army	
3.	MCT unions (through MCT wardens, if in place)	
4.	Peer pressure from fellow MCT operators	
5.	Self-compliance	
6.	Other and/or explain your answer above	

**COVID-Q2f** Compared to normal times, have those who enforced the above restrictions been?

- 1. Much more forceful (higher fines, confiscation of motorcycle, etc.)
- 2. As strict as in normal circumstances
- 3. More lenient and understanding (not giving fines for instance)
- 4. Other and/or explain your answer above .....

#### COVID-Q2g To what extent were the above restrictions followed by MCT operators?

- 1. All MCT riders followed the rules all of time
- 2. Most MCT riders followed the rules most of the time
- 3. Some riders followed the rules but many did not

- 4. Most MCT riders did not follow the rules most of the time
- 5. All MCT riders did not follow the rules at any time
- 6. Please provide examples of how rules were broken by MCT riders .....

COVID-Q2h Do you think that COVID is?

- 1. A real disease and the measures taken are necessary
- 2. A real disease but its dangers are exaggerated
- 3. Not a real disease
- 4. Other and/or explain your answer above.....

**COVID-Q3a** What social measures or innovations have you and other MCT riders taken to reduce exposure and limit the spread of COVID (tick all that apply)

1.	Only take one passenger at a time	
2.	Try to face my passenger as little as possible	
3.	Wash hands or use hand-sanitizer between journeys	
4.	Only pick up passengers who are clearly socially distancing themselves	
5.	Only pick-up passengers who wear a facemask	
6.	Only drive people around who I know	
7.	Take drugs (pills, vitamin supplements, herbals, traditional medicine, etc.)	
8.	Other and/or explain your answer above:	

**COVID-Q3b** What technological measures or innovations have you and other MCT riders taken to reduce exposure and limit the spread of COVID (tick all that apply)

1.	Wear a facemask	
2.	Provide a disposal mask or hand-sanitizer for my passengers	
3.	Wash hands or use hand-sanitizer between journeys	
4.	Clean my motorcycle regularly with disinfections where passengers sit or hold on to.	
5.	Only pick up passengers if booked via a mobile phone call	
6.	Made a design adjustment for my motorcycle taxi	
7.	Other and/or explain your answer above:	

COVID-Q4a Previous outbreaks of diseases/pandemics have affected my motorcycle taxi job

- 1. Yes, namely (name outbreak/disease)
- 2. No, not really

**COVID-Q4b** If answered yes to the above question, in what way have previous outbreaks prepared you:

.....

**COVID** - **Q5a** If you have gained new regular customers what are the reasons quoted for them switching to motorcycle taxis (tick all that apply):

1.	Another mode of transport not available on my route	
2.	Frequency of other modes is reduced	
3.	Irregular service from other transport modes	
4.	Fear of Covid19 infection from using other modes of transport	

5.	Easier to socially distance from other passengers on motorcycle taxis	
6.	Other passengers not wearing masks and/or following government guidance	
7.	The journey now takes much longer on other transport modes	
8.	Other reasons (please specify)	

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