





Accelerating COVID-19 related 'best practice' in the urban motorcycle taxi sector in Sub-Saharan Africa Country report: Sierra Leone

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 had a considerable impact on the urban transport sector. This report presents and assesses the findings of approximately 60 motorcycle and motor-tricycle taxi operator surveys and approximately 15 key stakeholder interviews conducted in Freetown and Bo, Sierra Leone. The main purpose is to provide evidence-based inputs to policy formulation.

Keywords	Economic activities, Urban transport, motorcycle taxi sector, COVID-19, policy formulation, Sierra Leone, West Africa, best practice	
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ACRONYMS

FGD	Focus Group Discussion	
MCT	Motorcycle Taxi	
MGWU	Motor and General Workers Union	
MoHS	Ministry of Health and Sanitation	
MTA	Ministry of Transport and Aviation	
MTT	Motor-Tricycle Taxi	
MWA	Market Women's' Association	
NACOVERC	National COVID-19 Emergency Response Centre	
RSLAF	Republic of Sierra Leone Armed Forces	
SLCMBRU	Sierra Leone Commercial Motor Bike Riders Union	
SLCTA	Sierra Leone Commercial Tricycle Association	
SLRSA	Sierra Leone Road Safety Authority	



EXECUTIVE SUMMARY

This 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 Sierra Leone. Urban motorcycle taxis and motor-tricycle taxis – locally known as *Kekehs* – provide essential transport services in Sierra Leone 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 somewhat hostile to the motorcycle/ motor-tricycle 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 motorcycle/ motor-tricycle taxi 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: Freetown and Bo. A mixed methods approach was used, conducting ten qualitative interviews with key stakeholders/ informants relevant to the urban motorcycle/ tricycle taxi sector, while approximately 60 short surveys were conducted with the MCT and MTT operators. Country findings were presented to 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 countries – have been used for an aggregated report and policy brief on the impact of the COVID-19 outbreak on the urban motorcycle/ tricycle taxi sector in Sub-Saharan Africa.

Key facts

- For the year 2020, Sierra Leone recorded 79 COVID-19 deaths;
- In response to the COVID-19 pandemic, the Government of Sierra Leone responded with a series of measures, including physical distancing protocols, 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.

Key findings

- Stakeholders generally agreed that COVID-19 and the restrictions put in place negatively affected economic activities in general and the activities of MCTs and MTTs specifically.
- Collaboration between the government and the MCT and MTT unions was generally deemed to be good, according to the stakeholders, and the unions were engaged in developing guidelines for their sectors.
- The increase in transport fares, initially to compensate for the loss in passengers due to physical distancing requirements, were typically left in place, even when restrictions became less strict.
- Previous experiences with Ebola virus and cholera outbreaks were deemed useful for the health sector and Government in handling the COVID-19 pandemic.

Key recommendations

- The use of mobile phones and internet technology by MCT/ MTT operators and passengers increased during the COVID-19 period. The Government should support this further as there a number of benefits to this, such as mobile payments facilitating micro-credit loans for operators and ride hailing apps allowing for safety monitoring.
- The violation of transport restrictions by motorcycle/ tricycle operators was mainly caused by necessity, due to lost livelihoods and limited capacity to absorb financial shocks. Providing a financial safety-net for MCT/ MTT operators would result in higher levels of compliance.
- While the Government was generally perceived as having clearly communicated the restrictions to the MCT/ MTT operators, further improvements are possible by using a wide range of media and social media means.
- Because MCT/ MTT unions were considered to be the most trusted institutions by the operators, further
 collaboration between these and the police/ army, Ministry of Health and the Government more
 generally, will result in better adherence.



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 riders. The rapid spread of urban motorcycle taxis does pose a series of challenges. Bringing 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 Sierra Leone.

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 challenge being addressed during/post COVID-19

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 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 16th 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 (https://www.africawheels.org) 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. 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. Sierra Leone context

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

3.1 COVID-19 in Sierra Leone

The COVID-19 pandemic had a significant effect on Sierra Leone. The country had only just recovered from the 2014–16 Ebola virus outbreak – the worst Ebola outbreak in history – which claimed around 4,000 lives in Sierra Leone. However, Sierra Leone's experiences with the Ebola epidemic may have put it in a slightly better position than many other Sub-Saharan countries. Firm and rapid decisions and actions were taken right from the start, even before the first COVID-19 case was confirmed within the country. The government reactivated its Emergency Operations Centre, which had been established during the Ebola outbreak, with the minister of defence acting as interim coordinator and with most of its members having gained experience in fighting Ebola. Later, the centre was rebranded the *National COVID-19 Emergency Response Centre* (NACOVERC). The NACOVERC structure was copied at district level, and 16 district coordinators were appointed to oversee subnational responses.

On 21st March 2020, President Bio suspended all international flights into and out of the country for four months. On 25th March 2020, Bio announced a year-long state of emergency, and a series of measures were announced. The number of people permitted at public gatherings was set at a maximum of 100. Schools, universities, and places of worship were closed. The preparations for a COVID-19 Health Response Plan were initiated with two scenarios: a 'no confirmed cases' scenario (prevention) and a 'confirmed cases' scenario (containment). Additionally, the government prepared a Quick Action Economic Response, focusing on five components: building and maintaining an adequate stock of essential commodities at stable prices; providing support to the hardest-hit businesses; providing safety nets for the most vulnerable through cash transfers and food assistance; supporting labour-based public works; and providing assistance for the production and processing of local food items to keep businesses in operation and to forestall shortages of locally produced commodities. On 1st April 2020, a three-day lockdown was announced and on 9th April 2020, a 14-day 9pm-to-6am curfew was imposed. A second three-day lockdown was announced starting on 3rd May 2020. The wearing of face masks in public places became mandatory on 1st June 2020. In addition, and very much in line with Ebola-related measures, treatment centres were established for the management of positive patients and isolation centres were allocated for primary contacts of positive patients as a way of containing the spread of the virus.

At the start of May, a total of 124 COVID-19 cases and seven COVID-19 deaths were reported. The government had by now switched to the full implementation of the above-mentioned Quick Action Economic Response Programme and – for the health sector – a COVID-19 Preparedness and Response Plan. By early



June, Sierra Leone had recorded 1,000 COVID-19 cases. Between late May and early June, the country experienced its highest number of average daily COVID-19 cases – 33 cases – but by mid-August the one-week rolling average dropped below ten COVID-19 cases. Over the whole year, Sierra Leone recorded a total of 79 COVID-19 deaths, which all happened during the first few months of the pandemic in the country; 3rd July 2020 was the last date on which the country recorded a COVID-19-related death.

3.2 COVID-19 and urban transport measures

In the first years after its creation in 1964, the SLRTC was the dominant transport provider. However, soon it started to experience competition of private sector service providers, ranging from large intercity buses and urban minibuses (*Poda-Poda*) to (and more recently) motorcycles taxis and motor-tricycle taxis (*Okada* and *Kekehs* respectively). Under current legislation, the Sierra Leone Road Safety Authority is responsible for designating public transport routes as well as for setting fare levels. In 2007, the Road Traffic Act, 2007 was passed in parliament which designated the SLRSA as the singular authority to register and license all vehicles, including motorcycle taxis and motor tricycle taxis. The 2007 Act also permits the commercial operation by MCTs and MTTS on the streets of Freetown and in the rest of the country.

The Government of Sierra Leone introduced stringent measures to curtail the spread of the COVID-19 virus, which affected the MTC and MTT sectors significantly. These measures included hand washing, the use of hand sanitizers and face masks, and loading of only one passenger per trip. As a result of a number of meetings between the MCT unions, MTT unions and the NARCOVERC team, the unions passed on instructions to their members. Furthermore, the unions increased their presence on the street by bringing in more marshals to regulate the sector. They also enforced the use of face masks and hand washing equipment in the various parking lots allocated to the MCT and MTT operators. Importantly, they ensured that no motorcycle operator did take more than one passenger at a time. For the motor tricycle operators, no more than two passengers at any one time were allowed.

3.3 Motorcycle taxi sector in Sierra Leone

There are two major MCT and MTT unions recognised in the country: the Sierra Leone Commercial Motor Bike Riders Union (SLCMBRU) and the Sierra Leone Commercial Tricycle Association (SLCTA). These two have a well-structured hierarchical structure, cascading from the unions' presidents and executive authorities, all the way down to the operators/ riders themselves. There are well-established offices at national, regional, district and zonal levels in the country. The unions have officers – so-called marshals - mandated to ensure that their members cooperate with the law. These marshals help the state's law enforcement officers in their work of ensuring that the sectors are operating with the confines of the law.

The number of motorcycles and motor tricycles in the country remains somewhat unknown, as many of the machines remain unregistered, unlicensed and uninsured. In quite a few cases the operators themselves do not have a driving/ riding license either. The SLRSA is in the process of enforcing registration of all motorcycles in the country. However, the modalities of how exactly to do this are not yet determined. The unions state that there are about 250,000 motorcycles with more than 700,000 riders, but of these only about 80,000 are officially registered operators with a license and insurance cover. Most motorcycle taxis have one, two or even three regular operators. For motor tricycle taxis, it is assumed that the number is around 70,000 with the number of operators only slightly more, as the *Kekeh* is seldom run by two people.

4. Perspectives of key stakeholders on COVID-19 and the motorcycle taxi sector

In this section the data collected through the key informant interviews and focus group discussions (FGDs) is presented, analysed and discussed. In each of the six case study countries approximately 15 interviews were conducted. Due to external circumstances out of the researcher's control, in Sierra Leone five interviews were conducted in the capital Freetown, and another five were conducted in Bo. A full list of key stakeholders interviewed is presented in Appendix A, but these include: traffic police representatives, health workers, motorcycle taxi union representatives, market traders' association representatives, etc. Two FGDs were held, one in Freetown and another in Bo. The 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 government responded to the COVID-19 pandemic through a range of measures to help to stop and/or reduce the incidence of the disease. These included the introduction of face masks, physical distancing requirements, and advocating for the use of hand sanitiser. These regulations, though effective and important for public health, had a considerably negative impact on the socio-economic situation of the people in general and motorcycle and motor tricycle taxi operators more specifically. A key restriction related to the number of passengers that MCTs were allowed to carry at any one time. Before the outbreak of COVID-19, MCTs regularly carried two or sometimes even three passengers, while MTTs typically carried between three and five passengers. However, following the introduction of the restrictive measures – put in place following discussions with the various transport unions – MCTs were only allowed to carry one passenger whilst MTTs were only allowed to carry two passengers at a time.

As mentioned, the transport unions were consulted before the government took these decisions. This notwithstanding, the riders of both the MCTs and MTTs were (understandably) disgruntled and worried as most of them would lose daily income. A zonal leader¹ of the Okada union in Bo City stated:

"We are now facing difficulties with the bike owners as some of them do not want to know whether there are restrictions, diversions, curfews, lockdowns or the like, all they want is their money. This puts a lot of pressure on our boys in the union, leading to a lot of negotiations to understand the pandemic situation in the country" – Okada Union Zonal Leader, Bo.

An interesting consequence of this situation was that many of the operators now realised and more fully appreciated the importance of the union and its executive in protecting them from the bike-owners (typically urban-based business people) and the security apparatus. In Freetown, the situation was somewhat different as the government used talk TV and radio programmes to ask motorcycle and motor tricycle owners to show understanding of the difficult and challenging circumstances the intermediate form of transport providers found themselves in. This somehow cushioned the challenging situation for the operators in the Western

The president of the Market Women's Association (MWA) – an umbrella body for all markets in the country – suggested that the public transport providers responded to the loss in income by increasing their prices, which had a clear knock-on effect:

"We are experiencing a serious hike in the prices of journeys and this was negatively affecting their members all over the country. This is eating into our profit and reduces our profit margin to an extent that we would sometimes hardly break-even. If things continue like this, we may have no alternative but to ask government for some financial help or worst case scenario – close down our businesses" – Market Women's Association President.

4.2 Impact of transport-related measures and consultations of sector

COVID-19 had a debilitating effect on many MCT and MTT operators as some of the transport-related measures were considered rather draconian from the perspectives of the riders. A spokesperson for a group of riders at the Maxwell Khobie park in Bo City stated during a FGD that:

"Our livelihoods have been seriously disrupted and we are concerned that this will harm our progress very negatively. Some of us are senior secondary school graduates who basically try to raise money to go to colleges or university" – MCT Rider, Bo.

MCT and MTT operators specifically refer to the reduction in the numbers of passengers they are allowed to take, which, together with the 'work-from-home' advice of the government, has reduced earnings by 70 to 80%. A public relations officer of the Bo Riders' Association stated:

 $^{^{1}}$ These are 3^{rd} tier executives after the regional and district executives. They actually do the day-to-day management of the bike riders using the Marshals to enforce their regulations.



"Some of our riders, who are fully registered and paying members, have been sent out of their rented apartments for not being able to pay their rent or for being in arrears for several months" – Bo Riders' Association Public Relations Officer.

A senior police officer in Bo East illustrated the dilemma between public health and livelihoods:

"It is a very difficult assignment for us as well, as we use the services of these bikes and we do see the number of people on the roads waiting to be moved from one location to the other, but we have to ensure we look at the bigger picture, which is to protect the larger population from infection from COVID-19" – Senior Police Officer, Bo.

The vice-president of the bike riders' union in Sierra Leone highlighted the level and importance of consultation and collaboration between the government and the MCT and MTT unions:

"The government is so far getting us involved in setting out the rules and regulations governing the COVID-19 pandemic. We are not getting any issues with them in implementing the restrictions and we sometimes even ask the forces to just stand by and see how our own marshals deal with defaulters. They [the okada and kekeh operators] were not happy with the way, especially the traffic police and other police officers, handle them as they [the police officers] have increased their demand [bribes] not taking into account the fact that the pandemic is slowing and continues to slow down their earnings and operations within their various regions, districts and communities" — Sierra Leone Bike Riders' Union Vice President.

4.3 Social or technological adaptations made by motorcycle taxi operators

The Ministry of Health and Sanitation took a leading role in communicating the COVID-19 restrictions and in ensuring that the right public health practices were followed. The COVID-19 procedures and practices were overseen by district teams at a more local level. For Instance, the District Health Management Team (DHMT) in Kenema city led the campaign in their area and according to their head:

"The compliance to rules and regulations by the MCT and MTT riders is quite encouraging, and they must be encouraged to continue, so that we can get out of this menace soonest" – Head of the District Health Management Team, Kenema.

This adherence to the rules was noticed, and according to an outreach coordinator at the Rokel Commercial Bank (a bank that provides loans for the purchase of motorcycles to aspirant bike riders), it made them respond to this by further supporting MCT operators:

"We saw the role played by MCT riders in curbing the COVID-19 so we decided to help several of them by getting access to ownership of new MCTs on loan. This we thought will not only help in reducing the spread of the virus but will also give them self-esteem and confidence to be entrepreneurs" The compliance to rules and regulations by the MCT and MTT riders is quiet encouraging, and they must be encouraged to continue, so that we can get out of this menace soonest" – Outreach Coordinator, Rokel Commercial Bank.

The COVID-19 restrictions also saw the operators making increasing use of pick-up and drop-off arrangements made using mobile phones and internet-based apps. Some of the more affluent people – more likely to own mobile phones – decided to leave their cars at home and use the MTTs for their work-commute. The increased use of mobile phone technologies was also confirmed by a sales executive from Orange Mobile:

"We introduced a number of products to deliberately ensure that cash did not change hands directly during the COVID-19 period. These included Orange Money and Afri-money [which allow you to pay] for your EDSA top-up using Orange and Afri-money" – Sales Executive, Orange Mobile.

4.4 Useful lessons from previous health crises

Based on earlier experiences with the Ebola virus epidemic, the President of Sierra Leone acted swiftly following the first case of COVID-19 in the country. He immediately put mechanisms in place to tackle the pandemic – starting with the creation of an Emergency Operations Centre (EOC) and putting together a team of experts (both local and international) of well experienced virologists and microbiologists. Within the outreach teams of the Ministry of Health and Sanitation, there were nurses who had already undergone



training in handling viral diseases, as well as burial teams and other auxiliary staff (e.g. ambulance staff) who had also already been trained during the Ebola crisis and who were therefore able to hit the ground running.

According to the Chief Medical Officer (CMO):

"These officials and specialists came in with a wealth of experience gained during the Ebola crisis and so the team took-off from an experiential point of view and with requisite confidence to bring the pandemic under control or at least stabilise the situation so that it does not spread and kill people indiscriminately" – Chief Medical Officer.

Generally, the MCT and MTT operators did not innovate, as they saw it is as sufficient to follow the government guidelines and restrictions. According to a Sierra Leone Police traffic unit inspector, the operators do not have the time or mindset to think Innovatively:

"They do not have patience, all of the riders I have met and have been seeing and observing are always impatient, under pressure and want to get all the money they could catch up with in the moment" – Police Traffic Unit Inspector.

Nevertheless, on a few occasions operators introduced new ideas. For instance, one MTT operator fixed a water tap, a wash hand basin and soap dispenser to his motor tricycle, which he could operate from his seat in the front. However, when looking for support to replicate this without success, he abandoned the concept. Other motor-tricycle taxi operators put plastic sheeting between themselves and their passengers at the back. Another innovation commonly used were baskets to drop the fee money in for journeys during the peak of COVID-19 to reduce contact between operator and passenger. Again, this was a short-lived innovation.

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

Of all the public transport types, the motorcycle taxis were considered the safest by the public since these carried only one passenger at a time. Furthermore, operators and passengers do not face each other. The interim coordinator of NARCOVERC, during a radio broadcast, encouraged people to take the necessary precautions and to ensure that they always maintain the stipulated physical distance. This was then followed by a long phone-in session with most callers encouraging each other to use Okadas, as they were considered safer that the other means of transportation available. The Paramount Chief in Baoma chiefdom, Bo district, stated:

"The bikes and tricycles, from my own perspective, had been the safest modes of transport during the COVID-19 pandemic and are just inevitable in their rural (peri-urban) communities as without them there would virtually be no means of reliable transportation in our chiefdoms" – Paramount Chief, Bo District.

He continued by stating that he strongly believed that they should be given the moral, financial and socioeducational support needed to make them effective and efficient.

The government announced that for the duration of the epidemic, they would be more relaxed in enforcing the wearing of crash-helmets for passengers, to reduce the risk of transmission from one passenger to another. An MCT rider interviewed at the Lumley-Regent Road roundabout stated:

"We are very grateful to the Sierra Leone government for granting our passengers the permission to ride on our bikes without helmets as this was disturbing our work and could have led to loss of revenue as most passengers refused to wear the helmets for fear of catching COVID-19" – MCT Rider, Freetown.

A route commander from the Sierra Leone Road Safety Authority corps (SLRSA) observed:

"The use of Okadas and Kekehs has contributed to reducing and controlling the spread of COVID-19 within Sierra Leonean society. They have to a very large extent complied with the regulations with the help of the Marshalls" – SLRSA Route Commander.

5. Motorcycle taxi survey findings

The findings of the MCT surveys are presented in the following subsections. A total of 60 surveys were done in Sierra Leone (30 in Freetown and 30 in Bo). In the process of data collection, the country researchers not only



ticked the survey responses, but also asked the respondents to explain their answers. This allowed for an appreciation of the context and proved to be very useful in the interpretation of the data.

As a clarification, the researchers surveyed more motorcycle taxi operators than motor-tricycle operators, reflecting the fact that the former category outnumbers the latter by six to seven times (although the number of *Kekehs* is increasingly rapidly). As can be seen below, the researchers also included a small sample of car taxi drivers. One reason is that car taxi drivers have also been affected by the restrictions and given that this was more than a box-ticking survey, their perspectives gave further insight. Also, quite a few car-taxi drivers started as motorcycle taxi operators but 'upgraded' their business to a conventional mode of transport. Although it is increasingly difficult to compete with the *Okada* and in particular the *Kekeh*, being a car-taxi driver is a more preferred occupation than being an *Okada* rider.

Car Taxi 8.3%

Kekeh Taxi
(MTT) 13.3%

Motorcycle Taxi
78.3%

Figure 1: Types of transport operators surveyed

5.1 Impact of COVID-19 on the jobs of MCT/ MTT operators

COVID-19 has had a clear negative impact on the livelihoods of the MCT and MTT operators. Because ownership of the vehicles they operate often lies elsewhere – e.g. with a businessperson who loans the vehicle on a hire-purchase basis – their ability to earn the money required to pay vehicle rent and to generate their own salaries depends on the number of fares they can make. COVID-19 and the restrictions put in place by the government resulted in the operators losing income. As is evident from Figure 2 below, the majority of operators surveyed indicated that the impact of COVID-19 was very large and negative.

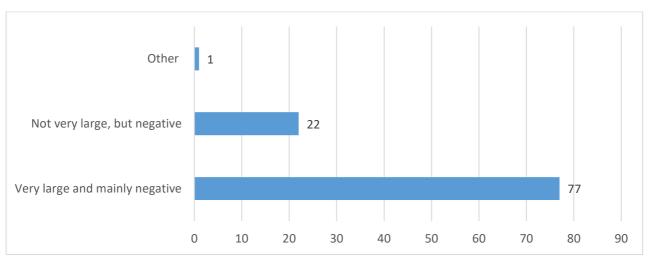


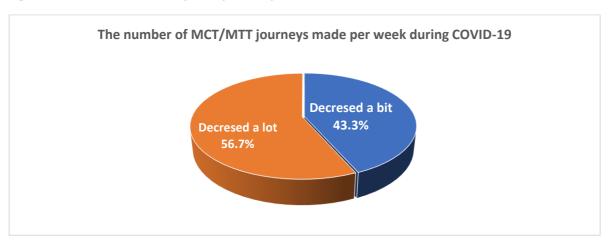
Figure 2: Impact of COVID-19 on the jobs of MCT/ MTT operators

The negative impact of the COVID-19 restrictions was mainly expressed in the reduction of journeys made during the COVID-19 epidemic. Due to reduced economic activities — even outside the periods of lockdown — the number of journeys made by MCT operators decreased, as is evident from the below chart. Many



potential passengers tried to limit their use of motorcycle taxi transport, contributing to the uncertain economic climate faced by MCT operators.

Figure 3: Number of MCT/ MTT journeys made per week



Further and more detailed evidence of the impact of the COVID-19 restrictions on the sectors is presented below.

Table 1: MCT/ MTT journey data for pre-COVID-19 period normal days

	Journeys Per Day	Duration of total trips per day in working hours	Total Distance Per Day in Km
Maximum	50	18	35
Average	47	17	24
Minimum	40	16	20

A journey is defined as travel to a particular destination. Pre-COVID-19 figures for number of journeys on a normal day in Table 1 show an average of 47 journeys with a duration of 17 working hours covering 24 kms.

Table 2: MCT/ MTT journey data for pre-COVID-19 period busy days

	Journeys Per Day	Duration of total trips per day in working hours	Total Distance Of Trips in Km
Maximum	65	16	45
Average	59	16	31
Minimum	40	16	18

On a busy day prior to the COVID-19 period, MCTs and MTTs could make up to 65 journeys in 16 working hours (which includes the waiting periods as well) covering 45 kms, but on average, around 59 journeys per day were made during 16 hours of work covering 31 kms. These numbers started to change during the COVID-19 period, as is evident from the below tables.

Table 3: MCT/ MTT journey data for COVID-19 period normal days

	Journeys Per Day	Duration of total trips per day in working hours	Total Distance Of Trips in Km
Maximum	40	16	40
Average	27	13	26
Minimum	18	10	15

Clearly the number of journeys dropped during the COVID-19 period, with the average and minimum working hours also dropping. The total distance covered gives a more varied picture.



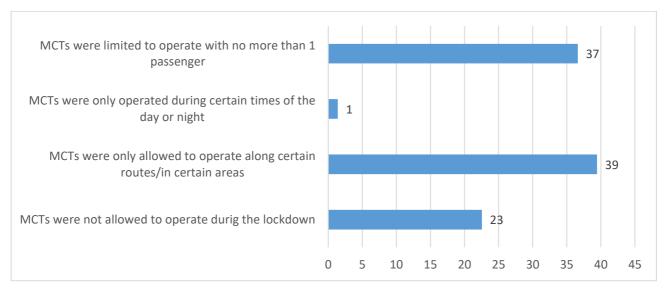
Table 4: MCT/ MTT journey data for COVID-19 period busy days

	Journeys per day	Duration of total trips per day in working hours	Total distance of trips in Km
Maximum	40	16	35
Average	27	13	25
Minimum	20	10	15

The differences between normal and busy COVID-19 periods in the number of journeys made, duration and total distance, is hardly noticeable. Similarly, no typically busy days – normally associated with big social events for instance – took place.

The data showed that 58% of the riders said that they were consulted through their executives, whilst 42% said that they were directly consulted in the formulation of the restrictions and policies during the COVID-19 period (concerning their sector's activities). This is an interesting finding and quite different from other countries, where many operators and unions complained about the lack of consultation. Furthermore, the government also brought in other major stakeholders, such as the other transport unions and the union that handles trailers at the Port Authority.

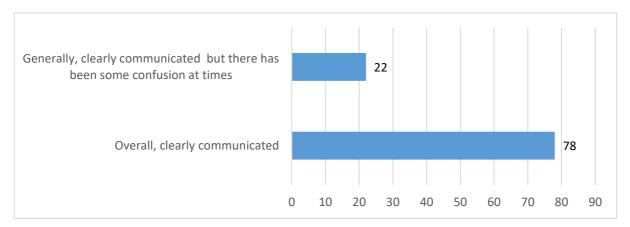
Figure 4: MCT restrictions during lockdown



From Figure 4, it is clear that most operators indicated that they were allowed to operate as long as they limited themselves to operating in certain areas. A slightly smaller group indicated that their operations could continue as long as they adhered to the 'one passenger' rule. Less than a quarter of the surveyed operators indicated that they were not allowed to operate at all.

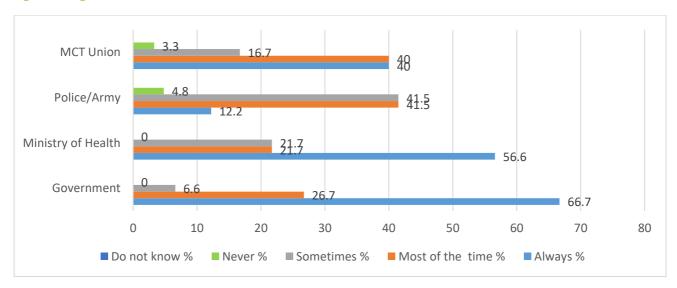


Figure 5: Clarity of communication on restrictions



The communication of the restrictions was a major focus of the government. To ensure a proper flow of information from the NARCOVERC to the general public and stakeholders, the President appointed the Deputy Minister of Foreign Affairs and International Relations as the official spokesperson for NARCOVERC. Before this appointment, there were instances of contradictory messages coming from the Ministry of Information and Communication and the Ministry of Health and Sanitation. From Figure 5 it is evident that the majority of operators felt that the restrictions were clearly communicated.

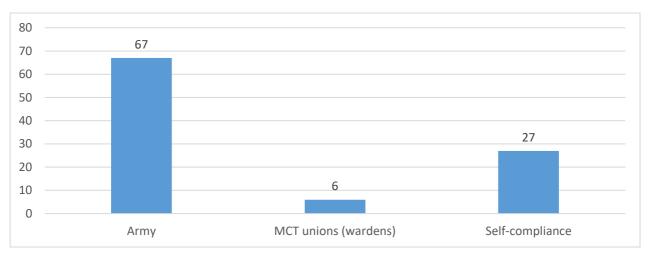
Figure 6: Degree of trust in institutions



Enforcement of laws is normally in the hands of the police, but for the enforcement of the COVID-19 restrictions the army was used extensively. It is worth noting that even though the Sierra Leone police takes primacy in internal security issues, the public generally respects the RSLAF more because it is perceived as a 'no nonsense' force that is not typically involved in corruption.



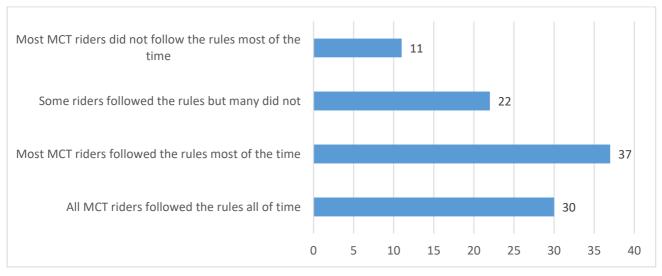
Figure 7: Who enforce(d) the COVID-19 laws



When asking for further details about the enforcement of the restrictions, it became clear that all the MCT operators perceived the enforcement to be more stringent (and much more forceful) compared to normal times.

As mentioned earlier in this report, the operators were generally quite cooperative, as the government in most cases involved them to some degree in the crafting of the laws. This may explain why a higher number – 80% – stated that 'all MCT riders followed the rules all the time' and another 15% stated that most MCT riders followed the rules most of the time. Just 5% said that most MCT riders did not follow the rules most of the time. Generally, there seems to have been good levels of adherence to the restrictions by the operators during the district, regional and national lockdowns.

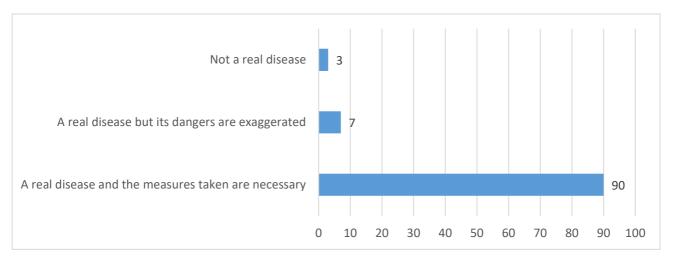
Figure 8: Adherence to restrictions by MCT operators



The survey also looked at what the MCT and MTT operators thought about COVID-19. 83.3% of the respondents agreed that COVID-19 was a real disease and that the measures taken were necessary, with only 13.3% stating that it was a real disease but that its dangers were exaggerated. Only a few percent of the respondents believed that COVID-19 was not a real disease. With so many operators believing that the virus and disease are real, it is easier to understand why so many adhered to the regulations and took heed of the guidelines offered by the government of Sierra Leone.

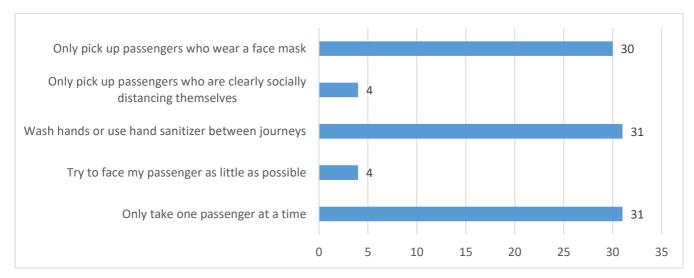


Figure 9: Perceptions of MCT operators on COVID-19



Several measures were taken by the MCT and MTT operators to reduce exposure to and limit the spread of COVID-19. The data collected found that nearly a third stuck to taking only one passenger at a time. Only slightly lower were the numbers of operators who stated that they regularly washed hands or only picked up passengers who were face masks.

Figure 10: Social measures taken to reduce exposure to/ transmission of COVID-19



Technical innovations were limited, although there have been a few examples, as mentioned: one MTT operator equipped his MTT with a water tap, a wash hand basin and soap dispenser which was operated from his seat in the front. He was actively looking for support to further develop and replicate this innovation, but none was forthcoming despite this being broadcasted via mainstream and social media, so the operator gave up after a while. Some other operators put plastic between themselves and their passengers at the back. Another adaption made by some operators was the introduction of baskets to drop money (fee-payments). This was done at the peak of COVID-19 to reduce contact between the operators and their passengers. Again, this happened only for a limited period.



6. Conclusion

Sierra Leone was affected by COVID-19 – as was nearly every other country in the region and wider world – but it seems that due to swift and decisive action by the government, the negative impact – at least expressed in the loss of human lives – was limited. That is not to say that the measures did not have any impact on livelihoods. For the transport sector in general and the motorcycle and moto-tricycle taxi sector specifically, it is clear that the number of journeys decreased considerably during the COVID-19 period. More specifically, the number of journeys made per day and the distance covered were all affected by the COVID-19 measures.

It was encouraging to see that the restrictions imposed by the government and NARCOVERC were in most cases strictly adhered to by the MCT and MTT operators. This can at least be partly explained by the fact that the MCT and MTT unions were consulted by the government and NARCOVERC before rules and restrictions were introduced and enforced. The communication of those rules was therefore also much easier, with lower risks of the unions – and therefore the operators – being unaware or confused by them. This is clearly an added advantage of working closely with the unions.

Most MCT and MTT operators seem to have a good level of confidence in the army (more so than in the police) and they indicated that they were generally satisfied with the way the restrictions were enforced, although enforcement was stricter as compared with normal times.

The MCT and MTT operators overwhelmingly agreed that COVID-19 was a real disease, which again likely contributed to their general adherence to the rules, including those of physical distancing. With a comprehensive government response, there was less opportunity (and perhaps need) to innovate and experiment with further interventions. Finally, based on the stakeholder group discussions, it was agreed that a good number of people who would normally travel using shared-car taxis or mini-buses switched over to the MCTs and MTTs because they were considered to be safer from a health perspective. This in turn may explain why some MCT and MTT operators indicated that the impact of the COVID-19 restrictions was not all negative. If indeed MCTs and MTTs are proven to be a safer mode of transport during an epidemic of an infectious disease, it is worth exploring opportunities for more refined rules and regulations for the intermediate forms of transport. If that were to be the case, an infectious disease may be fought without the necessity for full transport lockdowns.



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APPENDIX A: KEY STAKEHOLDERS INTERVIEWED

Representatives of the following organisations/institutions were interviewed:

- Motorcycle Taxi operators
- Motor tricycle taxi operators
- Ministry of Health and Sanitation
- Motor and General workers Union
- Ministry of Transport and Aviation
- Sierra Leone Road Safety Authority
- Market Women Association
- Sierra Leone Commercial Motor Bike Riders Union
- Motorcycle Taxi Unions
- Sierra Leone Commercial Tricycle Association



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?



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-01a The	e impact of COVID-19	9 on my joh as a	motorcycle ta	xi rider is/was
COAID-GTa IIIC	: IIIIDact OI COVID-T	o co ulliliviou as a	1 1110101111111111111111111111111111111	IXI HUCH 137 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*						
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.

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	

^{**} 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.



6. No restrictions	were imposed o	n the operation	of MCTs		
7. Other and/or e	explain your answ	ver above			
COVID-Q2b Were the a	above restrictions	S			
1. Overall, clearly	communicated b	by the governm	ent and health d	epartment/min	istry
•	rly communicate nfusion at times	d by the goverr	nment and health	n department/m	ninistry, but there has
•	nmunicated by th lowed and what i	_	and health depai	rtment/ministry	, with lots of confusi
4. Other and/or e	explain your answ	ver above			
COVID-Q2c Do you tru	st the following i	nstitutions rega	ording COVID rest	rictions and me	easures 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 moto	orcycle taxi union	s and operators	s been consulted	or involved in o	designing these rules
1. Yes, I have bee	n involved in it m	nyself			
2. I have not bee	n involved in it bu	ut I know my M	CT union has bee	n consulted or	involved in it.
3. No, we, riders	and the unions, h	nave not been c	onsulted or invo	lved in formulat	ting the rules
4. Other and/or e	explain your answ	ver above			
COVID-Q2e Who enfor	ced the above re	strictions? (tick	all that apply)		
1. Traffic Police					
2. Army					
3. MCT unions (th	nrough MCT ward	dens, if in place)		
4. Peer pressure	from fellow MCT	operators			
5. Self-compliand	e				
6. Other and/or 6	explain your answ	ver above			
COVID-Q2f Compared	to normal times,	have those wh	o enforced the al	oove restriction	s been?
1. Much more for	rceful (higher fine	es, confiscation	of motorcycle, e	tc.)	
2. As strict as in r	normal circumsta	nces			
3. More lenient a	re lenient and understanding (not giving fines for instance)				
	explain your answ		•		
COVID-Q2g To what ex					
	itelli wele the ab	ove restrictions	s tollowed by IVIC	i operators:	

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		
CO	/ID-	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		
		Q3a What social measures or innovations have you and other MCT riders taken t it the spread of COVID (tick all that apply)	o reduce	e exposure
	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:		
		Q3b What technological measures or innovations have you and other MCT riders re and limit the spread of COVID (tick all that apply)	taken to	o reduce
	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 or	n 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:		
CO	/ID-	Q4a Previous outbreaks of diseases/pandemics have affected my motorcycle tax	i job	
	1.	Yes, namely (name outbreak/disease)		
	2.	No, not really		
CO	/ID-	Q4b If answered yes to the above question, in what way have previous outbreak	s prepar	ed you:
		 Q5a If you have gained new regular customers what are the reasons quoted for ycle taxis (tick all that apply): 	them sv	vitching to
	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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