



Enhancing understanding on safe motorcycle and three-wheeler use for rural transport

Final Country Report: Uganda



Transaid, Amend and TRL

RAF2114A

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Abstract

This Uganda Country Report presents the Uganda-specific findings of the project 'Enhancing understanding on safe motorcycle and three-wheeler use for rural transport and the implications for appropriate training and regulatory frameworks'. This project was carried out in Ghana, Kenya, Tanzania and Uganda between September 2017 and January 2019.

Based on the findings of a comprehensive literature review and a stakeholder mapping and engagement exercise, an in-depth study was designed, including a number of activities that were carried out in all four countries and a number of country-specific activities. Activities included reviews of the regulatory framework and training, a survey of the benefits and disbenefits of motorcycle and three-wheeler taxis, key informant interviews and focus group discussions. In Uganda, one activity involved interviewing those members of rural communities who only rarely or never use motorcycle taxis, to understand the reasons why and the challenges they face.

The study has revealed that motorcycle taxis are very important for rural travel, and are very popular among rural communities. They are especially important for health-related trips and also provide economic advantages, creating employment and supporting agriculture.

As well as the many benefits that motorcycle taxis provide, riders and passengers also suffer from crashes, crime, abuse and health issues, and they create safety risks for other road users. A very small proportion of people in rural communities does not – or cannot – use motorcycle taxis, but for the vast majority they are the most common form of day-to-day transport.

The results of the study can be used by the Ugandan government and others to better understand the issues related to motorcycle taxis in rural areas and to develop policy and practice to maximise their benefits and minimise the disbenefits. This will include uptake of two manuals that have been developed as part of this project: a motorcycle taxi instructors' manual and an operating manual for motorcycle taxi associations.

Key words

Motorcycles, Motorcycle taxis, Three-Wheelers, Rural transport, Rural access, Safety, Training, Regulatory framework, Enforcement, Uganda

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Research for Community Access Partnership (ReCAP)

Safe and sustainable transport for rural communities

ReCAP is a research programme, funded by UK Aid, with the aim of promoting safe and sustainable transport for rural communities in Africa and Asia. ReCAP comprises the Africa Community Access Partnership (AfCAP) and the Asia Community Access Partnership (AsCAP). These partnerships support knowledge sharing between participating countries in order to enhance the uptake of low cost, proven solutions for rural access that maximise the use of local resources. The ReCAP programme is managed by Cardno Emerging Markets (UK) Ltd.

www.research4cap.org

Acronyms, units and currencies

AfCAP	Africa Community Access Partnership
AsCAP	Asia Community Access Partnership
DFID	Department for International Development (United Kingdom)
GBP	British pound sterling
HIV/AIDS	Human Immunodeficiency Virus / Acquired Immune Deficiency Syndrome
km	Kilometre(s)
NGO	Non-governmental organisation
NRSC	National Road Safety Council (Uganda)
PMU	Programme Management Unit (of ReCAP)
PPE	Personal protective equipment
ReCAP	Research for Community Access Partnership
TLB	Transport Licensing Board (Uganda)
TRL	Transport Research Laboratory
UGX	Ugandan shilling (GBP 1 = UGX 5,122, at 1 st July 2018)
UNRA	Uganda National Roads Authority
UK	United Kingdom (of Great Britain and Northern Ireland)
UKAid	United Kingdom Aid (Department for International Development, UK)
UNRA	Uganda National Roads Authority
USD	United States dollar (GBP 1 = USD 0.75724, at 1 st July 2018)
VAT	Value Added Tax
WHO	World Health Organization

Executive summary

The project 'Enhancing understanding on safe motorcycle and three-wheeler use for rural transport and the implications for appropriate training and regulatory frameworks' was carried out in Ghana, Kenya, Tanzania and Uganda between September 2017 and January 2019.

The use of motorcycles in many African countries has increased greatly in recent years. Motorcycles are often used as taxis, with riders¹ charging a fare to carry passengers or goods. In rural areas, motorcycle taxis play a crucial role in connecting people to services and farmers to markets, and in many countries motorcycles are the most commonly found vehicle on rural roads. As motorcycles often travel off the road, along paths and tracks, they have changed the nature of rural transport, effectively 'widening' the impact of roads.

Motorised three-wheelers are also used in some countries, although their numbers are far fewer, especially in rural areas.

In some African countries, including Ghana, the use of motorcycles and motorised three-wheelers to carry fare-paying passengers is banned, although these bans are not always enforced, especially in rural areas. In Uganda, the use of motorcycles as taxis is legal, but the use of motorised three-wheelers as taxis is illegal.

The overall aim of this project is to improve knowledge and understanding concerning effective ways of enabling rural people to benefit from the safe use of motorcycles and three-wheelers, with an emphasis on rural motorcycle taxis, rider training, appropriate regulatory frameworks and realistic enforcement methods.

This Uganda Country Report provides a brief introduction to the project and then describes the findings of the Uganda research activities. It presents brief conclusions and a set of recommendations specific to the Ugandan situation. However, for more detailed discussion and more comprehensive recommendations, the project's Final Report will be of interest to readers.

¹Throughout this report, the term 'rider' is used to mean the driver or operator of a motorcycle or three-wheeler. The term rider does not include passengers.

1 Introduction

The research project 'Enhancing understanding on safe motorcycle and three-wheeler use for rural transport and the implications for appropriate training and regulatory frameworks' was carried out by a consortium led by Transaid and including Amend and TRL (the UK's Transport Research Laboratory).

1.1 Research Objectives

The overall aim of the project was to improve knowledge and understanding concerning effective ways of enabling rural people to benefit from the safe use of motorcycles and three-wheelers, with an emphasis on rural motorcycle taxis, rider training, appropriate regulatory frameworks and realistic enforcement methods.

1.2 Research Countries

The research project covers four countries: Ghana, Kenya, Tanzania and Uganda, shown in Figure 1.



Figure 1 The four project countries

According to the latest data available from the World Health Organization (WHO, 2015) at the time that this project was developed, motorcycles and motorised three-wheelers made up 23% of the total registered vehicle fleet in Ghana, 37% in Kenya and 34% in Tanzania. Comparable data was not available for Uganda at the time this project was developed, but more recent WHO data published during the course of this project put the figure for Uganda at 59% (WHO, 2018).

1.3 Research Methodology

Three main activities were conducted across all four project countries. These activities were:

- A review of motorcycle and three-wheeler taxi-related regulatory framework and enforcement methods
- A review of motorcycle and three-wheeler taxi rider training
- A survey of benefits and disbenefits of motorcycle and motorised three-wheeler taxis among riders and other users in rural areas

An investigation into the potential of technology to enhance safe motorcycle and three-wheeler use for rural transport was also carried out in three of the project countries – Kenya, Tanzania and Uganda – and also in Rwanda, which is known throughout Africa as a centre for mobile phone technology. Ghana was not included in this investigation.

In addition, country-specific activities were undertaken, addressing specific research gaps identified during the Inception Phase. These activities were:

- In Ghana, reanalysis of existing motorcycle and three-wheeler related data with a rural focus
- In Kenya, a study to understand the health-related benefits and impacts of motorcycle and threewheeler use
- In Tanzania, the development of two manuals: one to improve the operations of motorcycle taxi associations, and one for rider training
- In Uganda, investigations to understand the barriers to motorcycle and three-wheeler taxi use faced by some members of the study communities

Following completion of the research activities, a draft country discussion paper was produced for each of the four countries, based on an initial analysis of the data.

These draft discussion papers were presented at a series of workshops – firstly a 4-day workshop that brought two key government stakeholders from each of the four countries together with the project team, and secondly four 1-day workshops (one in each country) of around 30 stakeholders each.

These workshops allowed the project team to present the initial findings of the different research activities, including comparisons between the four countries, and provided opportunity for questions to be asked and ideas to be shared.

1.4 Background to Motorcycles and Three-Wheelers in Uganda

Uganda was the first country in East Africa in which motorcycles were used as taxis, first being noted in the 1980s. The now-ubiquitous term 'boda boda' (meaning 'border to border') was coined at the Uganda-Kenya border, where first bicycles and later motorcycles were used to transport people between the two border posts.

Latest data from the WHO shows that in 2016, there were over 940,000 registered motorcycles and three-wheelers in Uganda (WHO, 2018), which makes up 59% of the total vehicle fleet – the joint highest proportion of the four countries in this study, together with Tanzania.

Public perception of motorcycle taxi riders has been tainted by the reckless driving that leads to crashes and the strong link between motorcycles and crime, with them being used as getaways in thefts. Riders often complain that they are ignored by government, that they are treated badly by drivers of four-wheeled vehicles, and that they are at risk of attack.

Attempts to regulate the sector have largely been unsuccessful. Anecdotally, this is in part due to the link between motorcycle taxi associations and politics. For example, measures taken to mandate motorcycle taxi riders to carry two helmets and reflective jackets were reversed in the face of opposition from riders and owners. The government is now reluctant to challenge the associations.

Despite the challenges facing the sector, motorcycle taxis remain an important means of transport. In some rural areas, they are the only means of motorised transport, even in emergencies. In 2015, a project piloted an emergency transport scheme based on the participation of rural based motorcycle taxi riders.

2 Research Findings in Uganda

2.1 Stakeholder Mapping and Engagement

During the Inception Phase of the project, from 20th to 22nd November, four members of the project team attended the ReCAP Inter-Regional Implementation Meeting in Kampala, Uganda. The Kenya National Expert and Motorcycle Safety Specialist presented an introduction to the project and progress update during a plenary session at this meeting.

Further face-to-face meetings were held with the following stakeholders:

- Uganda National Roads Authority (the AfCAP partner institution)
- Uganda Police, Department of Traffic and Road Safety
- Representatives of five motorcycle taxi associations
- Representatives of the motorcycle taxi riders' workers' union
- Management of the NGO SafeBoda

In total, the stakeholder mapping exercise in Uganda identified a total of 17 stakeholders who have some responsibility or interest related to motorcycle and three-wheeler taxis in rural areas, representing government, private sector, and civil society. A full list of these stakeholders can be found in the project Inception Report.²

2.2 Review of Regulatory Frameworks and Enforcement Methods

Motorcycle and three-wheeler taxi-related legislation is found in the Traffic and Road Safety Act 1998 and the Traffic and Road Safety (Motorcycles and Motorised Tricycles) Regulations, 2016.

The use of both motorcycles to carry passengers and/or goods for a fare is permitted in Uganda, on the condition that the vehicle is licensed by the regulatory body – the Transport Licensing Board (TLB). Uganda prohibits the use of three-wheelers for hire or reward, although the legislation provides for one exception where "*The Minister may, by Statutory Order authorise a person to use a motorised tricycle, built with a canopy, as an ambulance in hard to reach areas*".

Two key areas where Ugandan legislation differs from that in Kenya and Tanzania is that there is no requirement for motorcycle taxi riders to belong to registered associations, and there is no legislation covering riders' responsibilities and behaviour.

As part of this study, interviews with officials at the TLB as well as with Traffic Police officers – at both the national and the local level – revealed that there are numerous challenges facing the enforcement of motorcycle taxi-related legislation in Uganda, both in rural and urban areas.

A common topic of conversation during interviews with officials was negative political interference in enforcement, and again, this was found to be the case in both rural and urban areas. Upon being stopped by a police officer, or upon being taken to a police station, a motorcycle taxi rider may make a phone call to a contact who is well connected politically. This will often result in the rider being allowed to proceed without charge, and may have implications for the arresting officer. While the ability of politicians to cause the dismissal of an officer is limited, it is not uncommon to hear of them influencing transfers of officers to different departments.

Due to this interference, officers are sometimes reluctant to stop motorcycle taxi riders. When they do stop a rider for an infringement, they are more likely to give education and advice rather than charge the rider with an offence. This reduces the enforcement capability of the police.

²<u>http://www.research4cap.org/Library/BishopBarber-AmendTransaid-2017-</u> EnhancingUnderstandingSafeMotorcycleThreeWheelerUse-Inception-AfCAP-RAF2114A-180130.pdf

Challenges of enforcement

"As a police officer, you may perform an operation during which you arrest a motorcycle man who is not a wearing helmet. You impound his vehicle and tell him to go and buy a helmet. Then a local political leader, perhaps a member of parliament, calls and tells you to let him go. You therefore find yourself in a dilemma with regards to what to do. The police have therefore resorted to simply talking to the riders and educating them about the importance of wearing helmets."

During interviews, no reference was made to politicians owning motorcycle taxis as a business, or about their interference and protection of the riders. Rather, it was noted that negative political interference is greater in an election year, when it is possible that the politician would be seeking to protect riders to gain their votes.

In the different districts where interviews were carried out, police officers were found to take different approaches to enforcement. For example, in some areas officers strongly enforce the law to carry no more than one passenger, issuing an 'express fine' of UGX 100,000 to those riders caught with two or more passengers. In other areas, officers turn a blind eye to riders with two passengers 'on humanitarian terms', but will arrest those carrying three or more passengers.

Motorcycle taxis are required by law to be licensed by TLB. However, according to TLB officials, there are only around 10,000 registered motorcycle taxis in Uganda, out of an estimated total of between 300,000 and 500,000 motorcycles. One reason for this is thought to be the high cost of obtaining an operator's licence, which is UGX 295,000. One official interviewed as part of this study said that riders feel that the requirement of having a licence is the government extorting money from them.

Legislation requires that motorcycles used to carry fare-paying passengers are covered by a minimum of third party insurance in order to obtain their operator's licence. However, police officers explained how in the case of a motorcycle crash, the insurance provider will often assign blame to the rider and will refuse to pay out. Even when claims are successful, they present a large administrative and time burden to process, and the eventual pay-out can be very small. The Insurance Regulatory Authority is planning changes to the insurance system for motorcycle taxi riders, although it is feared that this will increase premiums and so reduce the number of riders who buy insurance.

While there is no law requiring motorcycle taxi riders to be part of an association, the majority of police officers interviewed felt positively towards associations and believed they helped in reducing crime and in tracking down the culprits, as well as improving safety by enforcing standards among members. However, one officer said that associations were "just there to collect fees".

It was noted that officers thought that in rural areas riders may be more disciplined because they are known in the community and that if they ride dangerously or behave badly (for example, if they knock someone down) they can be traced more easily and can be suspended from their 'stage' (taxi rank). In rural areas, motorcycle taxi stages are very important, as they are the main location where riders meet passengers.

2.3 Review of Motorcycle and Three-Wheeler Taxi Rider Training

In Uganda, as for all other classes of vehicle, a motorcycle rider is legally required to have undertaken formal training from a driving school. This project's survey of benefits and disbenefits found that only 2% of motorcycle taxi riders had undergone any formal training.

The Ministry of Works and Transport produced the Uganda Motorcycle Curriculum in 2014 and also created a user manual. The curriculum covers topics including traffic signs, regulations, defensive driving and customer care. All of the driving school trainers interviewed as part of this study confirmed that they own a copy of the document.

The TLB maintains a list of registered driving schools, including those that offer motorcycle training. However, interviews with managers and trainers of some of these schools have revealed that demand for training is very low. Country View Driving School, which operates in three locations across Uganda, offers a two-week motorcycle training course, has two training motorcycles and one licensed motorcycle trainer. The school's director explained that demand for this is very rare. It is widely recognised that most new motorcycle riders learn the basic skills they need to drive from fellow riders.

However, recent innovations within the motorcycle taxi sector in Uganda have increased the demand for training, although mainly in Kampala. Ride-hailing firms Uber and Taxify, and the local SafeBoda, employ experienced motorcycle taxi riders and provide them with training before they start work. SafeBoda's website claims that their "drivers all receive extensive training to make them the safest and most professional drivers on the street" (www.safeboda.com).

The local organisation Tugende offers microfinance to support motorcycle taxi riders to buy their own motorcycle. One of the terms of the financing agreement is that riders must complete a three-week course on safety, company rules and customer service.

In rural areas, the Bushenyi Vocational Institute offers courses in motorcycle mechanics, and the On Course 4WD Training School provides off-road motorcycle training, although it is not targeted at motorcycle taxi riders.

Traffic police officers, while not conducting rider training, do conduct regular road safety sensitisation activities as part of community policing. This is often conducted twice a month at county level and once a month at the sub-county level. The Traffic Police and Ministry of Works and Transport are planning to partner together to deliver motorcycle rider training.

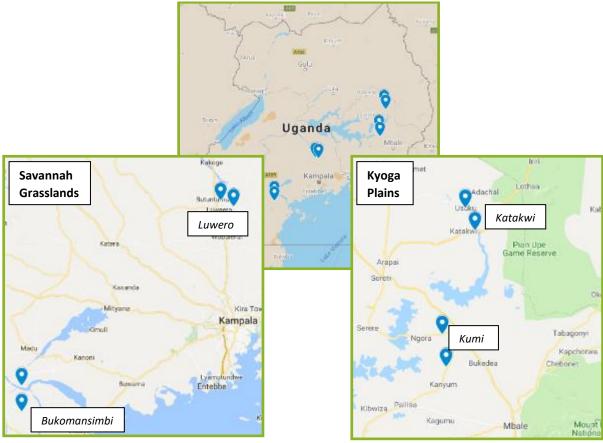
2.4 Survey of the Benefits and Disbenefits of Motorcycle and Three-Wheeler Taxis

2.4.1 Survey locations

The survey of benefits and disbenefits was carried out in eight different settlements across Uganda. Table 1 outlines the eight settlements, Figure 2 shows their locations within Uganda, and more detailed information is provided in Tables 2 to 5 and Figures 3 to 6.

Agro-Ecological Zone	Region	District	Settlement
Savannah Grasslands	Central	Bukomansimbi	Bulenge
Savannah Grasslands	Central	Bukomansimbi	Butenga
Savannah Grasslands	Central	Luwero	Butuntumula
Savannah Grasslands	Central	Luwero	Kabakedi
Kyoga Plains	Eastern	Katakwi	Omodo
Kyoga Plains	Eastern	Katakwi	Usuk
Kyoga Plains	Eastern	Kumi	Mukongoro
Kyoga Plains	Eastern	Kumi	Nyero

Table 1 Survey Settlements, Uganda



Source: Google Maps

Figure 2 Maps of Uganda, showing survey locations

Information about the settlements was obtained through interviews with local leaders, discussions with local people and general observation by the project team. This information should be considered as a snapshot of what was found during the short visit to each settlement, rather than a comprehensive profile.

Table 2 Settlements in Bukomansimbi District

E	Bulenge Trading Centre	Butenga Village
Location and access	 0 03 36.0S 31 36 58.0E (to be confirmed) 148 km from Kampala city 12 km from district centre (Bukomansimbi town) 43 km from nearest sealed road More remote 	 0 03 14.0N 31 36 54.0E (to be confirmed) 136 km from Kampala city 51 km from district centre (Bukomansimbi town) 70 km from nearest sealed road More remote
Transport options	 Motorcycle taxis are most common means of transport. No 3-wheelers 4-wheel car taxis also available Seasonal variations in access and transport availability: difficult during rainy season 	 Motorcycle taxis are most common means of transport Taxis and bicycles also available Seasonal variations in access and transport availability: difficult during rainy season
Population	 460 people approx. Manychildren, young people and elderly Majority are Baganda ethnic group, but also Banyarwanda 	 120 people approx. Many children, young people and elderly More females than males Mainly Baganda and Banyarwanda ethnic groups
Economy	 Agriculture: coffee, maize, beans and groundnuts Motorcycle taxis provide employment and business opportunities 	 Agriculture: coffee and elephant grass are most popular cash crops Beans and maize are grown for subsistence
Recent development	 Rakai Health Sciences Project offers HIV/AIDS related services Catholic church supports savings groups 	 Development of trading centre has improved opportunities for small business Availability of mobile phones and motorcycle taxis has improved accessibility
Local issues	Water shortages. Only one borehole supplies water to the area	 HIV/AIDS particularly among male population Lack of capital for crop inputs Limited land for cultivation Water shortages. Only one borehole supplies water to the area

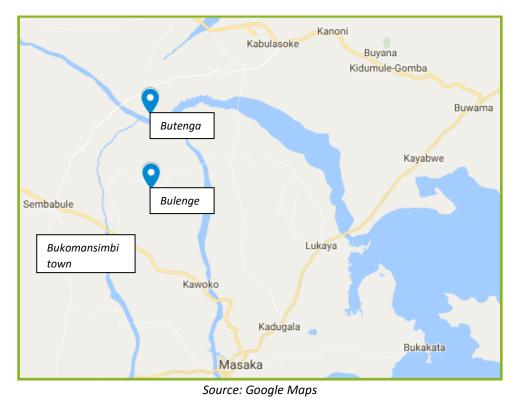


Figure 3 Map of Bulenge and Butenga

Table 3 Settlements in Luwero District

	Butuntumula Trading Centre	Kabakedi Village
Location and access	 0 52 54.6N 32 29 57.9E 67 km from Kampala city 6 km from district centre (Luweero town) 1 km from nearest sealed road 'Less remote' 	 0 51 15.3N 32 33 29.1E 68 km from Kampala city 8 km from district centre (Luweero town) Main access road is sealed where it passes through the village 'Less remote'
Transport options	 Motorcycles, one three-wheeler (to transport goods) and bicycles Some seasonable variation in transport availability: difficult during rainy season 	 Motorcycles are main means of transport Bicycles also exist Farmers collectively use trucks to transport produce to market
Population	 300 people approx. Majority aged 17-40 years old. More females than males Baganda are the predominant ethnic group, Bululi also present 	 630 people approx. Young population Baganda are the predominant ethnic group, Bululi also present Population is increasing
Economy	Agriculture: coffee and pineapples (cash), beans, maize, matoke (subsistence)	 Some small-scale trade Agriculture: coffee and pineapples for sale
Recent development	 Hydroelectric power plant opened recently, enabling small business to grow NGOs active in HIV/Aids education and child rights 	 Introduction of electricity has improved living conditions Road passed through the village was sealed in early 2018
Local issues	 Limited land for cultivation Shortage of water with borehole not functioning 	 Motorcycle taxi riders have no training, licences or helmets. But few reported crashes A small number of motorcycle robberies



Source: Google Maps

Figure 4 Map of Butuntumula and Kabakedi

Table 4 Settlements in Katakwi District

	Omodo Village	Usuk Village
Location and access	 1 55 06.4N 33 57 45.6E (to be confirmed) 376 km from Kampala city 8km to district centre (Katakwi town) 8 km from nearest sealed road 'Less remote' 	 2 00 44.4N 33 57 53.4E 387 km from Kampala city 16 km to district centre (Katakwi town) 16 km from nearest sealed road 'More remote'
Transport options	 Motorcycles and bicycles are predominant modes of transport Seasonal isolation in some areas due to poor road condition during rainy season 	 Bicycles are predominant modes of transport Also motorcycles, and one three-wheeler Trucks used to transport produce to markets Roads can become impassable during rains
Population	 300 people approx. Majority from the Itesot ethnic group and some Karamoja Children form largest proportion of population 	 Usuk is made up of around 8 very small hamlets 4,000 people approx. Main ethnic group is Itesot Young population
Economy	Agriculture: cassava, sorghum, ground nuts,	 Agriculture: ground nuts, cassava, millet, sorghum, potatoes, yams and beans Animal rearing
Recent development	Roads are better maintained and some improvements made to school infrastructure	Action Aid have income generating projects in the area (animal rearing and cultivation support)
Local issues	Limited market for sale of crops grown	Concern about lack of productivity among young people



Source: Google Maps

Figure 5 Map of Omodo and Usuk

Table 5 Settlements in Kumi District

	Mukongoro Trading Centre	Nyero Village
Location and access	 1 19 58.8N 33 52 56.7E (to be confirmed) 225 km from Kampala city 25km to district centre(Kumi town) 25 km from nearest sealed road 'More remote' 	 1 28 17.2N 33 51 55.5E (to be confirmed) 243 km from Kampala city 7.5km to district centre(Kumi town) 7 km from nearest sealed road 'Less remote'
Transport options	 Motorcycles, taxis and bicycles No three-wheelers Accessible all year round 	 Motorcycles, taxis and bicycles No three-wheelers Accessible all year round
Population	 1,500 people approx Main ethnic group is Ateso, but also a mix of others 	 8,000 people approx. People are from the Iteso ethnic group
Economy	 Small businesses at the trading centre Agriculture: potatoes, maize, millet, ground nuts, sorghum, cowpeas, soya peas 	Agriculture: ground nuts, maize, sorghum, millet and potatoes
Recent development	 Motorcycle taxis were introduced to the area only around two years ago (2016) Hydroelectric power is available locally 	 A motorcycle training school exists in the village The village also has an Infectious Disease Institute
Local issues	 Motorised transport (including motorcycle taxies) is not affordable to majority of the population 	Fear of crimeSecurity issues relating to travel at night

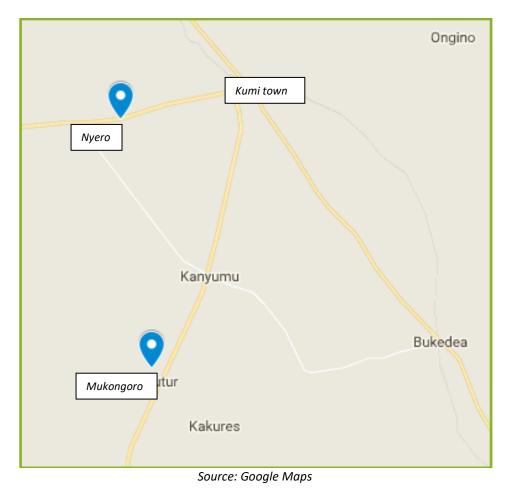


Figure 6 Map of Mukongoro and Nyero

2.4.2 Survey respondents

A total of 260 questionnaires were completed across the eight different Ugandan settlements. Table 6 shows the breakdown of the survey respondents.

	Motorcycle taxis			Motorised three-wheeler taxis					
	Riders	Passengers	Vehicle owners	Freight owners	Riders	Passengers	Vehicle owners	Freight owners	Non- users
Number of Respondents	99	90	21	24	0	1	0	1	24

 Table 6
 Survey Respondents, Uganda

It was notable that while the survey team was able to find people who fell into the non-user category, they had to make deliberate efforts to do so such as consulting with local leaders, as the vast majority of people in the study settlements were regular users of motorcycle taxis. Also, only one motorised three-wheeler was found being used.

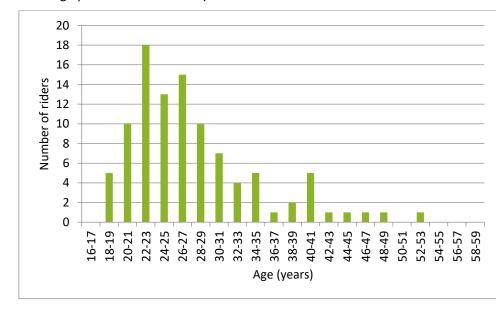


Figure 7 shows the age profile of the motorcycle taxi riders.

Figure 7 Age profile of riders interviewed, Uganda

The chart shows that the vast majority of riders who were interviewed were between 20 and 30 years. They had an average age of 28 years. Of the 101 riders interviewed, all were male.

Eighty-four percent of riders interviewed had completed no higher than primary school level education, suggesting that it is possible to enter this profession with relatively low levels of formal education.

Forty-six percent of riders said they are a member of a motorcycle taxi association.

Eighty-one percent of riders said they own a mobile phone in working order, and 24% of all riders said that they have access to internet on their phone.

Figure 8 shows the ages and gender balance of passengers.

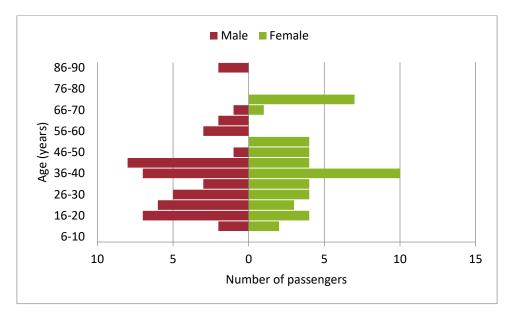


Figure 8 Age profile and gender of passengers interviewed, Uganda

The chart shows that the majority of male passengers who were interviewed were under 40 years old, while female passengers tended to be older. The average age of female passengers interviewed was 42 years, and the average age of male passengers interviewed was 37 years. Fifty percent of passengers interviewed were female, and 50% were male. Four percent of passengers interviewed were observed as having a form of disability.

Seventy-five percent of passengers said that they owned a mobile phone in working order, with 29% of phones having access to the internet.

Almost half (49%) of survey respondents said that their overall opinion of motorcycle taxis is 'Excellent' or 'Good'. Only 6% said 'Very bad' or 'Bad', with the remaining 45% being ambivalent.

2.4.3 Access and mobility

Ninety-four percent of passengers said that it was either 'very easy' or 'quite easy' to access a motorcycle taxi – the highest of the four countries in the study. Passengers value riders who they know and trust, and who ride safely. The data also shows that in many areas, motorcycles are simply the only type of motorised transport available.

Going to a taxi stand is the most common way for passengers to find a motorcycle taxi (44%), while 35% of passengers most commonly summon a rider using a mobile phone.

Of the four countries in this study, it is in Uganda where motorcycle taxis are most important in providing access to health facilities, with sixty-eight percent of passengers interviewed saying they had used a motorcycle taxi for non-emergency access to a health facility, and 95% of riders saying that they transport people to health facilities for non-emergency cases – both of these percentages being the highest of the four countries in this study.

Motorcycle taxis are also used in emergency situations, as is shown in Figure 9. As is also the case in the other countries in this study, rural Uganda has limited ambulance services, especially between the home and the first level health centre.

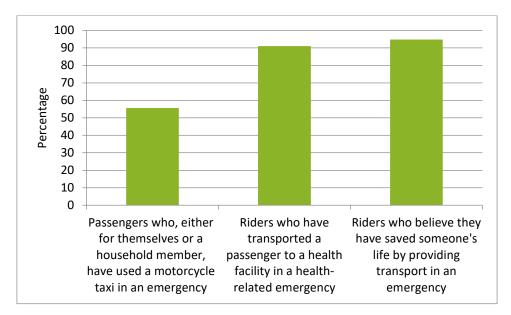


Figure 9 Use of motorcycle taxis in an emergency in Uganda

The chart shows that 56% of passengers said either they or a member of their household had used a motorcycle taxi in an emergency. Ninety-one percent of riders reported that they have transported passengers to a health facility in an emergency. And while this is rider perception and has not been verified, 95% of riders believe they had saved a life by providing transport in an emergency.

Transport for pregnant women

A rider in Uganda told us of the time he rushed a pregnant woman to hospital:

"In my village, there was a pregnant lady giving birth at home, but the baby had difficulties coming out. I was called and rushed her on my motorcycle to the nearby hospital for urgent medical attention."

The survey showed that motorcycle taxis are particularly important for female farmers and business people, with 81% of freight owners being female. The main items being transported by motorcycle taxi were agricultural produce (48%) or items for sale in a shop (26%).

Among the people who said that they do not use motorcycle taxis, 44% said that the main reason is because they are unable to afford them, 29% said they are physically unable to use them, and 24% said they are afraid of crashing.

2.4.4 Economics and finance

Motorcycle taxis are used to generate income for both riders and owners in rural areas. The majority of riders (73%) reported that the 'best thing about motorcycle taxis' was earning money or generating employment.

The survey found that after paying all expenses related to operating the motorcycle taxi, the average rider's profit for the last seven days – according to the riders themselves – was around UGX 29,260 (GBP 5.71). Using the latest Gross National Income figures from the World Bank (<u>data.worldbank.org/country/uganda</u>), average weekly income in Uganda in 2017 was around GBP 8.86 – although it should be noted that this includes both rural and urban populations. At GBP 5.71 for riders, the survey found that their weekly profits were 64% of the national average.

The average reported daily profit – after paying all expenses – for riders in Uganda, was around GBP 1.40. This compared to an average daily profit of GBP 1.02 that the riders reported earning from their previous jobs.

Of the 46% of riders who said that they belonged to a motorcycle taxi association, the vast majority (almost 98%) paid a one-off joining fee averaging around GBP 4.10. Almost one-third (31%) of riders paid a monthly fee, averaging GBP 1.43. Members of associations were found to have earned higher average profits in the last seven days: around GBP 4.69, compared to non-members with an average profit in the last seven days of GBP 3.81. This is shown in Figure 10.

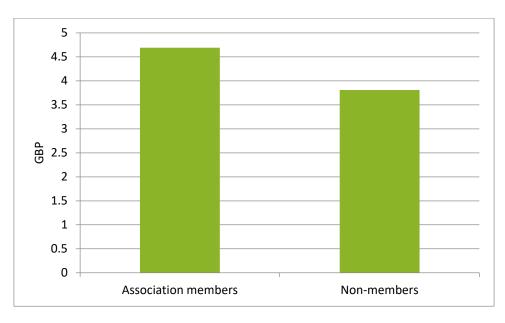


Figure 10 Rider profit in last seven days in Uganda

Only 13% of motorcycle taxi riders said they owned their own vehicle, which is by far the lowest of the four countries involved in the study. Forty-six percent were owned by a friend or family member and the remainder were used by the rider through a commercial arrangement with the owner, with 1% being on a microfinance scheme.

The average purchase price of the motorcycle was around GBP 628, and 75% of riders who owned the vehicle themselves had bought it as a one-off, lump-sum purchase. For those riders who hired the motorcycle from a third party, the daily hire charge was GBP 1.76.

Riders said they pay more in unofficial bribes and 'dashes' to police and/or other government officials (daily average of GBP 0.16) than they do in official fines (daily average of GBP 0.08). Uganda is the only one of the four countries where this is the case.

For passengers, the average cost of a trip is GBP 0.10 per kilometre, which is the cheapest of the four countries. The average cost of transporting freight by motorcycle is GBP 0.0082 (0.82 pence) per kilogram kilometre.

During both night-time and when it is wet, the average cost of a trip increases in comparison to when it is day-time and when it is dry, respectively. The greatest increase is at night, perhaps due to riders' concerns about crime. The night-time fare increase is over 130%, perhaps due to riders' concerns about crime. The wet weather fare increase is more than half (57%).

2.4.5 Injuries

Fifty-five percent of riders and 73% of passengers said that 'the worst thing about motorcycle taxis' was the risk of the rider or passenger being a victim of a crash or injury.

In the study, data was collected only on injuries which riders said occurred while they were riding a motorcycle or three-wheeler taxi on a rural road, and which resulted in them either losing money, requiring medical attention or affecting their family life.

Figure 11 shows the frequency of injuries suffered by motorcycle taxi riders.

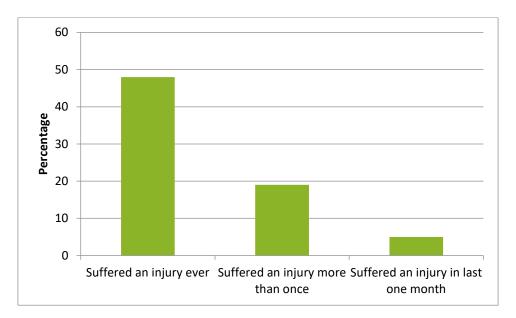


Figure 11 Frequency of motorcycle taxi rider injuries in Uganda

The chart shows that 48% of motorcycle taxi riders said that they had suffered an injury ever. Nineteen percent had suffered more than one injury, and 5% had suffered an injury within the last one month.

In the case of the worst injury suffered by riders within the last three years, 17% of riders said that the most severely injured part of their body was their head, face or neck. Forty percent of all injuries were described by the rider as 'Moderate', with 26% as 'Severe' and 34% as 'Minor'.

Again, looking only at the worst injury suffered by riders within the last three years, 77% of riders missed at least one day of normal activity as a result of the injury – this was the lowest of the four countries. Of these, 33% missed more than one week of normal activity – again, the lowest of the four countries. One rider missed over four months.

Seventeen percent of riders said that they are still suffering some physical impact from the injury, 8% said they are still suffering some psychological impact, and 6% said that they are still suffering some economic impact.

Of the riders who had suffered an injury, only 34% had been carrying a passenger at the time of the crash that resulted in the injury. 'Collision with animal' and 'Single vehicle crash / fall' (both 30%) were the most common types of incident. Only 16% percent of riders said that they had been travelling at over 50 kph at the time of the crash, and only 2% had been travelling at over 80 kph – both of these were the lowest of the four countries.

Twenty-eight percent of riders said they were wearing a helmet at the time of the incident – the lowest of the four countries.

Fifteen percent of passengers reported that while travelling on a motorcycle taxi in a rural area they had suffered an injury that either resulted in them losing money, requiring medical attention or affecting their family life. This was the highest of the four countries involved in the study. Passengers judged 'other road user action' and 'roadway condition/damage/obstacle' (both 25%) to be the most common causes of crashes.

Of the interviewees who said they very rarely or never use motorcycle taxis, 24% said that this is because they are afraid of crashing.

2.4.6 Health issues

Twenty percent of riders said that they have suffered from health issues that they attribute to riding a motorcycle, such as respiratory problems or eye problems.

2.4.7 Crime and personal security

Twenty-four percent of riders said that they think the risk of the rider or passenger being a victim of crime is the worst thing about motorcycle taxis, and a further 5% said the worst thing is motorcycle taxis being used to commit crimes. This total of 29% of riders who think that the worst thing about motorcycle taxis is crime-related is by far the highest of the four countries in this study.

Fifteen percent of riders said that they have been a victim of crime, verbal abuse or threats, which again is the highest of the four countries. Of those riders, 80% have been victims of either theft (without force), robbery (using force) or assault (without taking property). Crimes took place most commonly at night and on rural roads, and cash was the item most commonly stolen.

Seven percent of passengers said they had been a victim of crime, verbal abuse or threats while using a motorcycle taxi, which is the highest number of the four countries.

2.4.8 Access to services and protective equipment

The vast majority of riders interviewed said they had either been taught by friends or family, or were self-taught, while only 2% had ever attended a driving school. The main reason cited for not attending formal training was too expensive (53%).

Only 10% of riders interviewed had a driving licence, only 4% had a motorcycle taxi operator's licence, and only 24% had insurance.

Only 25% of riders reported that they 'always' wear a helmet – the lowest of the four countries in this study. Only 41% of riders said that they own a helmet, which is the lowest ownership level of the four countries. Fifty-four percent of riders said they sometimes wear a helmet and 15% said they never wear a helmet. Riders said that helmets are uncomfortable, hot and restrict their hearing and vision. Eight percent of riders said there was no need to wear a helmet. Sixty-two percent of riders said that passengers never ask for a helmet.



Figure 12 A motorcycle carrying pineapples in Luwero District

2.5 Investigations into the Potential of Technology to Enhance Safe Motorcycle and Three-Wheeler Use

2.5.1 Findings - mobile phone technology

The mobile phone technology identified as being used in relation to motorcycle and three-wheeler taxis in Uganda includes:

- Simple calls and text messages
- Mobile phone contact lists
- Messaging 'apps'
- Ride-hailing 'apps'

Riders interviewed during the study explained that mobile phones are an integral part of operating a motorcycle or three-wheeler taxi. Riders have the numbers of their customers saved in their phones, and vice versa. As well as communicating with customers, riders use mobile phones to communicate between themselves, sharing advice and intelligence.

Several ride-hailing apps exist in Uganda, including the global giants Uber and Taxify, Kenyan companies Little Cabs and Mondo Ride, and the local SafeBoda. The focus of the global and Kenyan apps is on regular four-wheel car taxis, although they also offer motorcycle and three-wheeler taxi services, while SafeBoda is specifically focused on motorcycle taxis.

SafeBoda is a Ugandan company that is using modern technology to provide safer rides to motorcycle taxi passengers, while also aiming to increase profitability for riders and strengthen regulation of the industry. The company's focus is on both road safety and personal safety. Riders are professionally-trained, and the company has strategic partnerships with the Kampala Police, the Global Road Safety Partnership and the Shell Foundation. The fact that riders are connected to a respected organisation, and that riders are registered and can be tracked, means that they tend to be trusted by passengers more than independent riders. Riders are trained to be polite and to be sensitive to the needs of different groups of passengers, including women. A report by the Shell Foundation shows that women speak very favourably about SafeBoda and its riders (Nesbitt-Ahmed and Fraser, 2017).

All of the ride-hailing apps are currently operating exclusively in urban areas. Challenges of operating in rural areas include insufficient customer density, low levels of ownership of smartphones, unstable internet connections and security issues / fear of crime.

Tugende is a microfinance company, which offers loans to motorcycle taxi riders to buy their own vehicles. It markets its services to riders through bulk SMS and internet. It has provided more than 7,000 loans to riders, totalling more than USD 7million (over GBP 5.3 million). The company claims that incomes double if a rider uses their own motorcycle taxi, rather than leasing it. Tugende's model is effectively lease-to-own, with loans being repaid in 20 months or less. Ownership allows riders to save money they would normally spend renting a vehicle, and provides accumulated savings in the value of a paid-off motorcycle. Riders who participate in the scheme also receive road safety training, and have the option of buying life insurance and health insurance. The company has the support of development partners and philanthropic foundations.

Training motorcycle taxi riders to transport pregnant women to health facilities

As part of the Merck for Ugandan Mothers (MUM) programme, Transaid implemented an emergency transport scheme (ETS) utilising motorcycle taxis with specially-trained riders, to transport pregnant women to health facilities. Riders reduced fares for pregnant women being transported where previously exploitative pricing had made transport unaffordable.

Riders were incentivised to offer reduced fares through substantial training and a commitment to promote ETS riders as a safe and preferred means of transport to the wider community.

A total of 3,720 women were transported over a seven month period and the average journey cost for pregnant women reduced by up to 41.6%. Results also showed reduced journey times and an increased willingness by riders to provide credit to female passengers. A qualitative survey targeting ETS users pointed to high levels of satisfaction and awareness of the scheme.

2.6 Investigations into Barriers to Motorcycle Taxi Use

2.6.1 Interviewees

Two-thirds of the fourteen people interviewed were observed by the interviewers as being below average in terms of relative wealth status in the area where they live, based on their home environment and clothing. More than half of the interviewees were disabled, for example paralysed or blind, or suffering from a chronic medical condition, such as epilepsy or HIV/AIDS. A fifth of the interviewees were aged over 70 years; a further fifth were below 30 years old; and the remainder were between 30 and 50 years old.

2.6.2 Barriers to motorcycle taxi use

For individuals who were able-bodied but very rarely or never used motorcycle taxis, the most common constraint was affordability. These people were mainly farm-hands and small-scale subsistence farmers who struggled to earn enough money to be able to pay for personal transport.

People with disabilities or a medical condition cited numerous different reasons for not using motorcycle taxis. Many of these related to their condition, and included fear of not being able to mount or dismount a motorcycle, failing to stay on a motorcycle while in transit, concerns about discomfort, and not being able to manage on their own once they reached their destination. For some respondents in this category being able to use a motorcycle taxi was perceived to be a physical impossibility; for others, the need to rely on other people for assistance was seen as a major barrier to use.

Quotes: Disability and motorcycle taxi use

"I do not use a motorcycle taxi because my legs are paralysed and I cannot sit on it....I cannot even stand.....Someone can lift me up and put me on a motorcycle taxi, but when it comes to getting down, I cannot if there is no one to support me. It means I will fall off." Male, 59 years, disabled

"It is falling that I fear... the fact that I can use only one hand, it means that I cannot balance." Male, 38 years, disabled

"A taxi is better for a disabled person like me...With a motorcycle, by the time you reach a long distance the body is already tired, the bumps, so you reach when you are already worn out..." Male, 73 years, disabled Age also affects an individual's willingness to use motorcycle taxis. Interviewees above 70 years old cited discomfort (including not being able to sit comfortably for long periods; being bounced around on poor quality roads); fear of episodes of poor health while riding (such as dizziness affecting the ability to hold on); and a fear of falling due to speed as reasons not to use motorcycle taxis. All stated a preference for a different type of taxi, such as motorised three-wheelers.

Quotes: Older people and motorcycle taxi use

"I don't want to use a motorcycle taxi at all. I have fear instilled in me, especially because of my age, I think I might fall. Possibly I would try a three-wheeler, since it's a bit more comfortable and I could sit on it the way I am seated now and I will hold myself tightly and I will be a bit firm." Female, 81 years

*"I would take a car [instead of a motorcycle taxi] because I can sit comfortably while leaning on the seat."*Female, 84 years

Able-bodied and disabled interviewees and those with a medical condition all mentioned other reasons as barriers to using motorcycle taxis. Most prominent among these other barriers were concerns about safety. For the disabled respondents and those with a medical condition, concerns about motorcycle rider risk-taking and lack of road safety helped reinforce the concerns that they had about their own physical capacity to navigate use of these vehicles.

All respondents commented on the poor skills of some motorcycle taxi riders, their tendency to speed and take risks (which included drinking alcohol and using marijuana when riding), and the frequent crashes involving these motorcycles. The fiercest criticisms were aimed at younger riders (usually aged below 20 years) who were said to lack both training and the maturity to act responsibly. Many interviewees indicated that if they were to use a motorcycle taxi in future, they would prefer to use older riders who were known to them personally to avoid putting themselves in danger. Some interviewees suggested an age limit for riders (i.e. at least 20 years old), as well as improvements to rider training and licensing, and requiring riders to carry identification.

Quotes: Concerns about younger, less-experienced riders

"I cannot board a motorcycle of a young rider because I fear I may be thrown down given that he is young; he may have just learnt how to ride. I look for older riders of 28 years or 30 years because such people are old enough, but not 18 year olds." Female, 53 years, below average wealth

"These are just young boys....They just learn from the Trading Centre; a person can ask a rider who is experienced that help to teach me how to ride!people who know them don't accept to be carried because they fear they can easily throw them down. So a passenger will say ...I want so and so, he is the one who knows how to ride well." Male, 28 years, below average wealth

Lack of affordability was cited as a barrier to motorcycle taxi use for every day, routine activities by many of the respondents. In contrast, the vehicles are heavily relied upon in health and other perceived emergencies. In the latter case, one respondent described how his son's wife had given birth to twins at a distant health facility. She had felt it imperative to reach the health facility as quickly as possible so that she could perform a traditional ritual that would protect the twins' health. This was considered an emergency and a motorcycle taxi was used. Almost all respondents were able to describe a situation where a family member or neighbour had been taken to a health facility by motorcycle taxi in the event of perceived severe illness.

Quotes: Lack of affordability of motorcycle taxis

"I really like using motorcycle taxis but my challenge is money. At times I lack money to use for transport." Female, 53 years, below average wealth

"If I am not sick or any emergency that requires me to use a motorcycle taxi, then I cannot use it because I really don't need it." Female, 34 years, below average wealth

"It is poverty, which limits me. You can be charged 2000/- for a certain distance then again you are told put fuel for 5000/- so when you add up all those expenses it becomes a lot compared to the income." Male, 39 years, below average wealth

Personal security was another concern among interviewees, with some citing fears of robbery while in transit. One blind woman, who very occasionally used motorcycle taxis, described in detail how she protected herself from robbery by tying the money for various stages of her journey into her clothing using handkerchiefs. Travelling at night was seen as dangerous by almost all interviewees.

A further personal security issue that came up during the interviews was the perceived linkages between motorcycle riders and sexual abuse of passengers. Several respondents mentioned fear of female passengers being raped by motorcycle taxi riders. Some respondents argued that young female passengers put themselves in danger by sitting astride a vehicle and wearing inappropriate clothing, thereby sexually 'provoking' the rider. All of the suggested solutions to this issue related to the behaviour of female passengers – wearing conservative clothing, sitting side-saddle, and avoiding travelling at night. None of the people interviewed spoke about the inappropriateness and illegality of riders' behaviour towards their female passengers, or offered solutions to change riders' behaviour. The comments from non-users about sexual assault suggest an underlying fear and distrust of riders, especially riders who they do not know.

Quite a few respondents linked motorcycle taxis with other types of criminal activity - either that the vehicles were used to commit crimes or that the riders themselves were at risk of being attacked or having their vehicles stolen. The fact that some street-level robberies were known to have been carried out by individuals riding motorcycles had affected some of the respondents' attitudes towards motorcycle taxis in general. One respondent indicated that riders wearing helmets could not be identified by potential clients and this acted as a deterrent to use. This respondent suggested that riders should not wear helmets for this reason.

Quotes: Perceived linkages between motorcycle taxis and criminal activity

"My daughter... was walking on the street. She had her bag which contained a phone and 80,000 shillings and she was going to buy medicine from the clinic. These people on a motorcycle came and grabbed her bag. It was broad day light and everyone was looking. It was the passenger... I think it was planned because when the girl raised the alarm, the rider just increased the speed and rode off."Female, 53 years, blind

"I wish the government could beef up security to stop those crimes because most of the motorcycles are stolen, riders are killed and whenever they go to work one has to get worried about whether he will come back alive or not. They are always killed and dumped in a swamp – that is where they always find their dead bodies." Female, 84 years

"The problem is that they use them [motorcycle taxis] to commit crimes; they kill people and even go away with the motorcycles." Male 38 years, disabled

"....one thing I have seen that I don't like with motorcycle taxis is the helmets because those helmets make some of us fail to identify people." Female, 53 years, chronic health condition

2.6.3 Impact of not using motorcycle taxis on day-to-day lives and livelihoods

All of the people interviewed recognised that motorcycle taxis have many benefits, especially in comparison to the other modes that were affordable to them – walking and bicycles (and in one case, a bicycle wheelchair). Benefits of motorcycle taxis cited by interviewees included:

- Enabling small-scale farmers to take surplus produce to the market;
- Enabling community members to visit relatives who live elsewhere, thereby maintaining social connectedness; and
- Enabling people to attend important social gatherings, thereby fulfilling their wider community responsibilities

Some of the interviewees suggested or implied that by not using motorcycle taxis, some economic and social activities and opportunities are not open to them. Several respondents indicated that being able to use motorcycle taxis would enable them to access a greater variety of goods and services, including better health care. The implication was that they felt they were missing out on key aspects of development as a result of their lack of access to motorcycle taxis.

Quote: Transport barriers affect access to goods and services

"I would go to different places, especially far places. Even going to the health facility I would use it. I would go to places like Kumi, Bukedea, Pallisa because they are far and you cannot walk on foot.....in Mukongoro here there are things that are not in those shops so you can go and shop from those places. Then a hospital like Ongino is in Kumi and that is where people here are referred. So you cannot go on foot up to there when you are carrying fire wood, jerry cans and items to be used in the hospital." Male, 25 years, below average wealth

"I don't have money so I rarely go [to the market].... I would go if I had money for transport because riders want cash." Male, 28 years, below average wealth

The research also hinted at how important being able to travel is in order to remain socially connected. The latter, in turn, is important for an individual's mental health and general wellness (Lamblin *et al*, 2017; Ottman *et al*, 2006).

Quotes: Social connectivity and motorcycle taxi use

"There are times when people use motorcycle taxis to go for funerals, but I end up not going because I don't have money for transport. In most cases I don't attend those burials." Female, 53 years

"It is because I don't have anywhere to go, so I don't see any reason why I should use a motorcycle taxi." Female, 24 years

"I would be able to move very fast, do what I want, and come back home in time to meet my family. Then I would also go and visit my relatives who are very far." Male, 28 years

"You cannot enjoy a motorcycle taxi when you don't have anywhere to go." Male, 59 years, disabled

Some of the interviewees recognised that despite themselves not personally using motorcycle taxis, their availability in the local area has nonetheless had a positive impact on their lives. For those who can afford to, it is possible to send a motorcycle taxi rider and to ask him to perform an errand, without needing to leave the home. Such errands may include collecting items (including medication) from a shop, market or relative. Together with motorcycle taxis, the advent of mobile phones, and also mobile money, has reduced the need for travel and so has made day-to-day life easier for some less-mobile rural people. Such uses of mobile phones mentioned by the interviewees included:

- Paying for an item using mobile money, and asking the motorcycle taxi rider to collect it
- Conducting business without the need to travel for face-to-face meetings
- Keeping up with relatives and friends without the need to travel

3 Stakeholder Consultation

A series of workshops was held in September 2018, to present the draft Country Discussion Papers and share the initial findings from the research activities. Firstly a 4-day workshop was held in Ghana, bringing two key government stakeholders from each of the four countries together with the project team. Secondly, a 1-day workshop was held in each of the four project countries, each one bringing together between 20 and 30 key local stakeholders.

3.1 Draft Country Discussion Papers

Upon completion of the Research Phase, four Country Discussion Papers were drafted – one for each country. These summarised the initial findings of the research, and were presented ideas for points of discussion at the stakeholder workshops.

The points for discussion arising from the research activities in Uganda were identified as:

- The critical importance of motorcycle taxis for rural transport
- The need to improve road safety and personal security
- The need to improve rider training
- The need to improve rural transport for the elderly, disabled and other vulnerable members of the community

3.2 4-Day, 4-Country Workshop

The 4-day, 4-country workshop was held from Monday 3rd to Thursday 6th September 2018, in Ghana.

A summary of discussions at this workshop is included in the full Final Report for this project.

3.3 1-Day Uganda Workshop

The 1-day Uganda workshop was held on Monday 24th September, in Kampala.

The workshop allowed the project team to present the initial findings of the different research activities, including comparisons between the four countries, and provided opportunity for questions to be asked and ideas to be shared. A list of attendees of this workshop is included in Annex 1.

3.3.1 Summary of workshop discussion

Rider training and sensitisation

It was acknowledged that rider training and sensitisation is critical for improving the safety of motorcycle transport services, especially as Uganda has some of the highest crash rates. Uganda has a challenge in training because it lacks training facilities compared to other countries such as Kenya.

Workshop participants suggested that the government, NGOs and other stakeholders will need to make deliberate and coordinated efforts to increase the quantity and quality of training provided and ensure that people in rural areas can benefit. Opportunities for training should be increased and the Inspectorate of Vehicles office that manages testing should also have outreach capability so riders do not have to travel too far to undertake a test.

Opportunities for public/private partnerships should be explored to improve access to training, for example through polytechnic schools at a regional level that could be trained to provide training. Such institutions could also serve as venues for 'mass testing'.

One workshop participant suggested that training schools should be incentivised. For example, Tugende contracts training schools to train riders. Tugende also ensures that riders who buy motorcycles from them have a public service vehicle licence and third party insurance.

Enforcement

It was generally agreed that enforcement of motorcycle and three-wheeler related legislation in rural areas should be strengthened.

It was suggested that the police need to be supported by local leaders and political leaders to sensitise and enforce existing regulations. This can be done after the police has empowered the local leaders, such as the leaders of the associations who can help to take up these roles. Political interference in the work of the police needs to be reduced.

Improving the standard and increasing the use of helmets

The study's main survey showed that in Uganda helmet use was lower than in the other focus countries: only 25% of riders in Uganda said they 'always' wear a helmet. This was debated and three key issues were identified: 1) Riders should be sensitised about helmet use,2) There is a lack of availability of helmets in rural areas, and 3) Helmets in Uganda are generally of low quality.

Ideas that were put forward to address these issues included:

- When a motorcycle is sold second-hand, the owner should be required to buy one helmet and the rider should be required to buy one helmet. The intention of this is to ensure that all motorcycles have two associated helmets.
- The quality of helmets should be improved, although it was acknowledged that concerns about quality are not the major reason why many riders do not use them.
- Visual images of motorcycle accident victims who have suffered head injuries should be used in sensitisation messages, as a shock tactic to help riders to understand the risks they and their passengers face.

Associations

The benefits of mandating motorcycle riders to belong to associations were acknowledged. However, the Secretary of the NRSC advised that they had consulted with lawyers that the outcome was that people are free to associate or not associate and so there was no option to force them by law to associate in Uganda.

Issuing of driving licences

It was generally agreed that the processing of licenses should be decentralised and brought closer to the riders, possibly within 50 km.

Cost of motorcycle taxi operating licences

The Secretary of the NRSC acknowledged that the cost of operating licenses for motorcycle taxis is high for people in rural areas and possibly could be reviewed.

Insurance

Sensitisation is needed on the need/benefits of insurance. Currently costs are high and difficult for riders to afford. The third party policies do not benefit riders so they are not keen to get insurance – often their only incentive for buying insurance is so that they are not arrested by the police. It was suggested that advocacy is required for improved third party insurance which covers the rider as well. Tugende has done this for its riders so there is a precedent that could be explored.

Three-wheelers in rural areas

The findings of the study showing the benefits of three-wheelers in rural Ghana were presented to the workshop. Upon seeing these, the Secretary of the NRSC suggested that perhaps three-wheelers could be allowed to operate commercially in rural areas of Uganda. However, he identified that the challenge would be to prevent them from operating in Kampala, as there is no desire to allow them to operate there.

4 Conclusions and Recommendations

The project's full Final Report contains detailed discussion that pulls together the findings from the four project countries, and provides recommendations.

The discussion covers how motorcycle taxis are of critical importance for rural transport in all four countries, and this was found to be even more so in Uganda than in the other countries – in particular of health-related transport. For example, Uganda had:

- The highest proportion of passengers who said they had used a motorcycle taxi for both nonemergency access to a health facility and in an emergency.
- The highest proportion of riders who reported that they have transported passengers to a health facility both for emergency and non-emergency cases.
- The highest proportion of riders who believe that they have saved someone's life by providing transport in an emergency.

However, several of the disbenefits identified in Uganda were found to be more evident than in the other countries. For example:

- Ugandan riders earn far lower profits than riders in the other countries.
- Vehicle ownership among riders is lower in Uganda than the other countries.
- Uganda has a far higher rate of crime and abuse against both riders and passengers than the other countries.
- Ugandan riders have a high rate of crashes with animals.

Of the recommendations made in the Final Report, the following are of particular relevance to Uganda:

- The governments should consider legalising the use of motorised three-wheelers as taxis on low volume rural roads.
- Effective management of the rural motorcycle and three-wheeler taxi sector will involve cooperation between different areas and different levels of government. As well as cooperation between government departments, the government will need to cooperate with the private sector – including, for example, driving schools and the insurance industry – and civil society, including motorcycle taxi associations.
- Strong efforts are required to address political interference. Technocrats, perhaps supported by civil society and the private sector, should educate and advocate politicians to ensure they understand the consequences of their actions, and to explain how they can be part of the solution rather than the problem.
- The robustness of the testing and licensing process should be increased.
- Driving schools' capacity to operate in rural areas should also be increased, for example through the provision of local government bursaries.
- Governments should require that motorcycle taxi riders belong to associations. Associations should be supported and overseen by local government authorities.
- Efforts should be made to reduce the risk and severity of crashes, including through training and use of personal protective equipment, especially helmets.

- Enforcement should be strengthened gradually, supported by sensitisation activities.
- Research should be carried out into the use of motorcycles and three-wheelers in urban areas and on highways.

Of the three study countries in which the use of motorcycle taxis is legal, Uganda appears to be the country in which rural communities are most reliant on them, in particular for emergency and non-emergency access to health facilities. However, it also appears that the benefits motorcycle taxis provide are being undermined, in particular with riders making very low profits and suffering high rates of crime.

Motorcycle taxi associations may be part of the solution to address these issues. For example, by associations supporting riders to obtain loans to buy their own motorcycles, riders would be able to make more profit. And by registering riders and establishing communication networks, it may be possible to improve security.

While it has been identified that the government cannot mandate riders to form associations, efforts should be made to promote the benefits of associations to riders in rural areas, including through use of the associations manual that was developed as part of this project.

Of the four study countries, Uganda has the highest proportion of riders who have been injured, and the second lowest – after Ghana – percentage of riders who have received training. Efforts are needed to improve training, including through the adoption of the training manual developed as part of this project. The two manuals – the training manual and the manual for associations – which were developed through this project's Tanzania-specific activities, are currently being made generic, so that they can be applied to other countries.

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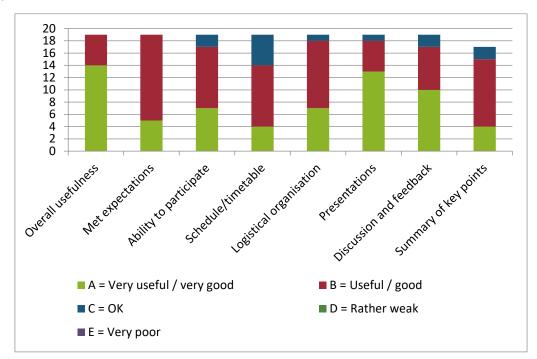
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Annex 1 1-Day Uganda Workshop Attendees

	Name	Organisation	Position
1	Dr Stephen Kasiima	Uganda Traffic Police	Director for Traffic and Road Safety
2	Winstone Katushabe	Ministry of Works and Transport,	Commissioner for Transport,
2	winstone Katusnabe	Uganda	Regulations and Safety
3	Mr Kirungi	Uganda Police	Inspector of Vehicles
4	Patience Nuwenyine	Transport Licensing Board	Secretary
5	Ronald Amanyire	National Road Safety Council	Secretary
6	Nalugo Bettinah	Traffic Police - Dept of Traffic and Road Safety	Staff Officer
7	Karim Kibuka	Uganda Police	Principal Inspector of Vehicles
8	Dr John Baptist Wanyaye	Ministry of Health	Commissioner of Uganda Ambulance Service
9	Felix Odongkara	AA Uganda	Chief Executive
10	Eng. Paul Sselunjoji	Tugende	Operations Manager
11	Dr Olive Kobusingye	Makerere University	Director, TRIAD Project
12	Barbara Mwanje	Safe Way Right Way	Chief Executive
13	Opus Samuel	Uganda Police	Traffic Police, Katakwi
14	Echody Emmanuel	Omodo village	Boda rider
15	Makune William	Luwero village	Deputy CAO
16	Buyinza Ronald	Boda Association	Chairperson and rider
17	Mayanja Badru	Bukomansimbi village	Deputy CAO
18	Omoding James	Nyeri village	Local leader
19	Okalebo Charles	Nyeri village	Boda rider
20	Leah Musenero	UNRA	Research Fellow
21	Okwakui Suzan	Ditto's Office	ADHO-Mat
22	Susan Mutesi	Makerere School of Public Health	Research Assistant / Coordinator
23	Dr Elizabeth Ekirapa- Kiracho	Transaid / Amend	Project Uganda National Expert
24	Caroline Barber	Transaid	Project Quality Assurance Chair
25	Aggie Krasnolucka- Hickman	Transaid	Project Communications and Knowledge Management support

Annex 2 1-Day Uganda Workshop Evaluations

This chart shows the responses to the evaluation form completed by the participants in the one-day workshop.



All participants (100%) rated the overall usefulness of the workshop as 'Very useful' or 'Useful'.