

Enhancing understanding on safe motorcycle and three-wheeler use for rural transport in Democratic Republic of Congo

Progress Report



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Cover photo: Kim van der Weijde (Kisangani, Democratic Republic of Congo)

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Abstract

This Progress Report details progress between April and July 2019 of the project ‘Enhancing understanding on safe motorcycle and three-wheeler use for rural transport and the implications for appropriate training and regulatory frameworks in DRC’. Strong advancements have been made during the reporting period and all deliverables are on track. The survey of benefits and disbenefits of motorcycles taxis and three-wheeler in rural areas has been translated into French and Lingala and ethical approval has been granted. A review of motorcycle and three-wheeler taxi-related legislation, training and enforcement has been completed. A wide range of stakeholders have been engaged and have shared their insights on motorcycle taxis and three wheelers. The survey was carried out in two Provinces to obtain information from riders, passengers, taxi owners and owners of freight, as well as members of the community who do not use motorcycle or three-wheeler taxis. A total of 296 interviews were successfully completed and the preliminary findings are presented in this progress report.

Key words

Motorcycles, Motorcycle taxis, Three-Wheelers, Rural Transport, Rural Access, Safety, Training, Legislation, Policy, Africa, DRC

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.

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Acronyms, Units and Currencies

AfCAP	Africa Community Access Partnership
ANC	Antenatal care
ANIPTMC	Association National des Initiateurs et Propriétaires des Taxi-Motos du Congo
AsCAP	Asia Community Access Partnership
CBT	Compulsory Basic Training
Cc	Cubic Capacity (engine size)
CDF	Congolese Franc (0.00049 Pound sterling)
CNPR	La Commission Nationale de Prévention Routière
CONADEP	Commission Nationale de Delivrance des Permis de Conduire
DFID	Department for International Development (United Kingdom)
DPS	District Provincial Santé
DRC	Democratic Republic of Congo
GBP	British Pound Sterling
GPS	Global Positioning System
INPP	Institut National de Préparation Professionnelle
JICA	Japanese International Cooperation Agency
MONESCO	Mission de l'Organisation des Nations unies pour la stabilisation en République démocratique du Congo / The United Nations Organization Stabilization Mission in the Democratic Republic of the Congo
PMU	Project Management Unit (of ReCAP)
ReCAP	Research for Community Access Partnership
TRL	Transport Research Laboratory
UK	United Kingdom (of Great Britain and Northern Ireland)
UKAid	United Kingdom Aid (Department for International Development, UK)
USD	United States Dollar (0.82 Pound sterling)
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 March 2019. In February 2019 the research was expanded to a fifth country, DRC.

The use of motorcycles has increased greatly in Africa in recent years. Motorcycles are often used as taxis, with riders charging a fare to carry passengers or goods. In rural areas, motorcycle taxis play a crucial role in connecting people to services and farms to markets, and in many countries motorcycles are the most commonly found vehicle on rural roads. In some countries, including Ghana, the use of motorcycles to carry fare-paying passengers is banned, although these bans are not always enforced, especially in rural areas. Motorised three-wheelers are also used in some rural areas, although their numbers are far fewer.

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 Progress Report details progress to date during the research phase, which began in April 2019 following completion of the Inception Phase.

During this period a review of legislation, training and enforcement related to motorcycle and three-wheeler taxis was carried out. The main legislation in DRC is the ‘*Code de la Route*’. A decentralised approach means that the Provinces can adapt the national level legislation according to their needs, although an updated version of the ‘*Code de la Route*’ is currently under review by the Ministry of Transport and Communication in DRC. The main legislation governing motorcycle taxis and three-wheelers has been reviewed by the project team and is deemed to cover most of the required elements. However, implementation of the legislation is a significant challenge. Most riders do not follow the ‘*Code de la Route*’, they are largely untrained, do not have driving licences, vehicle registration, business licences to carry passengers nor insurance. Despite the tremendous reliance on motorcycle taxis by the population, the sector remains fragmented and informal. There are very few training schools that provide motorcycle training and there is a lack of demand from riders. In DRC, a new system that requires mandatory training is under review and a draft curriculum has been developed. Associations have an important role to play in self-regulation of the sector and they have high membership levels.

A wide range of stakeholders have been engaged and have shared their insights on motorcycle taxis and three wheelers. Such stakeholders include the Ministry of Transport and Communication, motorcycle taxi and three-wheeler associations, training schools, hospitals and health facilities and development partners.

The survey of benefits and disbenefits of motorcycles taxis and three-wheelers in rural areas was translated into French and Lingala and ethical approval was granted at the start of July 2019. The questionnaires covered wide-ranging topics: accessibility and mobility; economics and finance; injuries and health issues; crime and personal security; and access to services and protective equipment. This survey was carried out in July in two different Provinces (Kinshasa and Kisangani), in a total of three locations and within two different villages in each location. The five surveys in English and French can be found on the [Transaid Knowledge Centre](#).

The survey aimed to gather information from riders, passengers, taxi owners and owners of freight, as well as members of the community who do not use motorcycle or three-wheeler taxis. A total of 296 interviews were successfully completed, which is 146 more than the sample of 150 interviews that was proposed in the Inception Report. This sample size means that the results of the survey can be compared in a meaningful way with the surveys from the first four countries, undertaken in 2018. There is considerable

interest from stakeholders in DRC on such cross-country comparison. Preliminary findings from the survey are presented in this Progress Report and detailed analysis will take place in August.

The surveys were completed on the 30th July 2019. The survey team found that people living in rural areas in DRC rely heavily on motorcycle taxis. In some areas they are the only means of transport available. Motorcycle taxis provide an important means of connecting people with health care services, for emergency and non-emergencies. Motorcycle taxis provide economic opportunities, particularly for young men and traders, especially agricultural traders. However, there are considerable risks associated with both riding a motorcycle taxi commercially as well as for the passengers who use them. Risks are seen to be higher in more urban locations due to the speed that riders drive and the higher traffic volumes. Risks are also seen as higher for women who sometimes sit side saddle on a motorcycle. Crime and personal security is also a concern for riders and passengers, with verbal abuse being common. The number of minor or moderate motorcycle related crashes is likely to be underreported to the authorities. Most riders are not trained and do not possess driving licences, vehicle registration or the required business permits to operate their motorcycles commercially. Vehicle insurance is also rare.

In September a draft DRC discussion paper will be shared with stakeholders, and in October a dissemination workshop will take place in Kinshasa.

1 Introduction

The research project is being carried out in the Democratic Republic of Congo (DRC), and builds upon similar research that was undertaken in 2018 in Ghana, Kenya, Tanzania and Uganda. All five countries are shown in Figure 1.

Figure 1 The five project countries



The project is being supported by the Government of DRC through the local AfCAP partner institution, specifically Cellule Infrastructure, in the Ministry of Infrastructure, Public Works and Reconstruction¹.

Contractually the project started on 25th February 2019 and will run until 31st December 2019.

The purpose of this report is to update Cardno and the local AfCAP partner institutions on progress and to raise relevant issues that have surfaced during this period. This Progress Report builds on the Inception Report which was submitted to Cardno at the end of March 2019.

2 Background

The use of motorcycles has increased greatly in Africa in recent years, both in urban and rural areas. In many African countries, in rural areas, motorcycles are often the most commonly found vehicle, and journeys that were previously made by foot or bicycle are now made using a motorcycle. This has been shown in previous research completed by ReCAP in Ghana, Kenya, Tanzania and Uganda, and is certainly the case in DRC. Additional research conducted by AfCAP and ReCAP has explored the benefits and challenges of this increase in motorcycle use in rural areas, as well as user needs, constraints and policy issues (Starkey, 2016). More information regarding this research can be found in the [ReCAP Rural Access Library](#).

¹Cellule Infrastructure, or the Infrastructure Unit, is a technical body of the Ministry of Infrastructure Public Works and Reconstruction (MITPR), with administrative and financial autonomy.

Motorcycles are often used as taxis, with riders² charging a fare to carry passengers or goods. In rural areas, motorcycle taxis play a crucial role in connecting people to services and farms to markets. They provide employment, largely for young men who hire the motorcycles to operate as taxis on a temporary basis, and also a form of income for the motorcycles' owners.

Motorcycles often fill a gap in the provision of 'conventional' transport services such as minibuses and rural taxis, by providing transport directly from people's homes to main roads, village centres and essential services such as hospitals and markets. Supported by the now widespread use of mobile phones in rural Africa, motorcycle transport is very convenient, and as such is very popular with rural populations.

However, motorcycle transport in rural areas is certainly not without risk. Previous AfCAP research has found high rates of crashes and injuries among rural motorcycle taxi riders, and while many of these crashes are relatively minor single-vehicle incidents, others have been found to cause more serious injury. A serious injury to a household's principal income earner can push an entire family into poverty.

Attempts by governments to regulate the use of motorcycle taxis have largely failed to keep pace with the rapid influx of motorcycles into the continent and the high demand for their services by populations.

Based on research completed in Ghana, Kenya, Tanzania and Uganda, it is clear that the number of motorised three-wheelers in rural Africa is also increasing, although to nowhere near the same extent as motorcycles. While no literature was available to verify if this is the case in DRC, the survey of benefits and disbenefits will bring additional insights.

3 Progress on activities

Four main activities are being conducted in DRC in two Provinces. These activities are:

1. A review of motorcycle and three-wheeler taxi-related policy and legislation, and of their implementation and enforcement
2. Review of motorcycle and three-wheeler taxi rider training
3. Ongoing stakeholder engagement
4. A survey of benefits and disbenefits of motorcycles and motorised three-wheelers among riders and other users in rural areas

Activities one through three have been completed, and activity four is currently in progress. A summary of the progress on all activities is included here.

At the time of writing this inception report the survey of benefits and disbenefits of motorcycles and motorised three-wheelers had taken place but the analysis had not been completed. As such future reports will be able to comment much more fully on the research findings in the rural areas.

3.1 A review of motorcycle and three-wheeler taxi-related policy and legislation

Government policy and legislation related to motorcycle and motorised three-wheeler taxis in African countries has often failed to keep pace with the rapid growth of their use. Similarly, the implementation and enforcement of policy and legislation has also presented challenges to governments.

This activity is looking at the policy and legislation in DRC, as well as how regulations are implemented and enforced. Strengths and weaknesses will be assessed, as well as compared with the previous countries in order to consider how good practice could be applied in DRC and vice versa in the other project countries.

² Throughout 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.

It should be noted that policy and legislation in DRC has been developed at the central level. However, since decentralisation, Provinces have been empowered to be responsible for the establishment and implementation of motorised transport legislation. Despite this fact, it was evident from discussions with government stakeholders that Provinces remain reliant on the laws established in Kinshasa Province, and particularly by Kinshasa City. The project team was not able to find any examples of where the legislation had actually been adapted at the Provincial level, although some stakeholders at the Provincial level suggested that this was in process. It is important to note that verifying the level of adaptation and the progress of this in all Provinces in DRC would only be possible by visiting all 26 Provinces, which was beyond the scope of this project. Consequently policies, legislation and training material were primarily sourced from bodies localised in Kinshasa City. Equally, stakeholders responsible for the development and monitoring of these documents were also found here. While regional ministries, policymakers, and enforcement agencies were identified, the majority of sources of information were referenced back to Kinshasa City.

This topic will be further discussed at a stakeholder meeting planned on the 17th October 2019.

3.1.1 Legislation

The review of government policy and legislation is complete. The following key documents have been carefully reviewed:

- *Code de la Route*
- *Manuel De Remise A Niveau Des Conducteurs Des Vehicules Automoteur Et Motocycles En Republique Democratique Du Congo* (Manual for the Upgrading of Drivers of Motor Vehicles and Motorcycles in the Democratic Republic of Congo)
- *Arête No. SC/148 / BGV/MIN.TTCA/PLS/2010 – Portant Reglementation et Exploitation des Motocycles destines au Transport des Personnes et des Biens dans la ville de Kinshasa* (Regulation and management of motorcycles for transport of people and goods in the city of Kinshasa)
- *Arrête No. SC/024/BGV/MINTRA/FINECO & IPMEA/PLS/2012 du Relatif à la taxe de stationnement et/ou d'arrêt dans la Ville de Kinshasa* (Order No. SC / 024 / BGV / MINTRA / FINECO & IPMEA / PLS / 2012 relating to the parking and / or stopping fee in the City of Kinshasa)
- *Arrête No. SC/231/BGV/MIN/FINECO & TRATCA/2011 du 13 Sept 2011 Portant Fixation du Tarif des Transports en Commun des Personnes et des Itinéraires Officiels à Parcourir sur Toute L'étendue de la Ville de Kinshasa* (Order No. SC / 231 / BGV / MIN / FINECO & TRATCA / 2011 of 13 September 2011 Setting the Tariff for Public Transport of People and Official Itineraries to travel throughout the city of Kinshasa)
- *Arrête No. SC / 057 / BGV / MIN / FINECO & IPMEA/ 2013 du 28 March 2013 Fixant les Taux des droits, Taxes et Redevances à percevoir a l'initiative du ministère provincial des transports, sports, jeunesse et loisirs. "Secteur des Transports"* (Order No. SC / 057 / BGV / MIN / FINECO & IPMEA/ 2013 of 28 March 2013 fixing the Rates of Fees, Taxes and Fees to be collected on the initiative of the provincial Ministry of Transport, Sports, Youth and Recreation. "Transport Sector")

Some key aspects of the legislation are summarised as follows:

The key legislation for motorcycles and three-wheelers is the '*Code de la Route*' or the Road Code, which is a national level law. Overall, all stakeholders referred to the '*Code de la Route*' as the central guidance document. In general, rider curriculum, training and examination are based on this document. As put by the Minister of Transport and Communication, regulation can be found in the '*Code de la Route*'. This document while developed nationally is implemented provincially.

Regulation related to driving (and riding) has theoretically been allocated to the individual Provinces. According to the Secretary General of the Ministry of Transport and Communication, this decentralised approach has contributed to the lack of quality assurance of driving schools, and an absence of minimum standards for any training curriculum. This also pertains to the lack of specific criteria for instructors. Without a national standard and regulation in place, the Secretary General went on to say that the Provinces would proceed as they see fit in terms of motorcycle regulation, and that there would be no basis

upon which to supervise the Provinces. It is therefore the belief of the Ministry that national guidance/standards should be put in place.

DRC's road legislation and regulations were mostly adapted from other countries, such as Belgium and Morocco. DRC continues to draw on international documents for the development of similar legislation.

According to the *Ville Province de Kinshasa's Bureau d'Engins et Cyclomoteurs*, motorcycle owner/riders are required to have:

- Valid vehicle registration and licence plate
- Valid driving licence
- Bi-annual '*contrôle technique*' or mechanical inspection of vehicles
- Annual vignette or registration sticker
- Valid vehicle insurance
- Business licence (if applicable)

The cost of registering a motorcycle and obtaining a licence plate is 40 USD³. The vignette, a motorcycle tax, is a recent introduction in Kinshasa Province and there are plans for a large sensitisation effort. The vignette, which is already in place for cars, has yet to be activated for motorcycles due to a lack of political will leading to a waived tax. The vignette will cost 21 USD for motorcycles and 25 USD for three-wheeled vehicles.

Registering motorcycles is deemed important by the government in order to manage theft and improve the recovery of motorcycles, which is a common occurrence in Kinshasa Province. While it is necessary for motorcycles to have a licence plate, according to the '*Bureau d'Engins et Cyclomoteurs*', only 10,000 of the estimated 300,000 motorcycles in Kinshasa City have this in place. According to the Ministry of Finance, who are involved with vehicle registration, the lack of motorcycle registration and the enforcement of this is largely due to decentralisation and that the law was not enforced at a Kinshasa Province level until last year. According to the '*Association de Chauffeurs*' or Association of Drivers, historically, those who did pay for a licence plate and registration did not then receive the necessary documents and receipts from the government, which has also made many riders hesitant to register. Finally, the lack of registration is also partly attributed to a lack of means to pay for registration, which is comprised of a fee, a bank tax, and a commune tax. Generally the motorcycles that have a licence plate are supported by private businesses.

Clear laws are in place regarding motorcycles; the requirements to wear helmets which are 'attached' (secured by a chin strap), carriage of passengers and goods, lighting and braking requirements, and mechanical inspection of vehicles (every 6 months for passenger carrying vehicles including motorcycles and three-wheelers).

While in country, the project team noted few, if any, motorcycle riders or passengers wearing a helmet, let alone an attached one (i.e. with the chin strap secured). While unable to ascertain motorcycle mechanical condition through observation in passing, it was clearly noted that other passenger carrying vehicles, such as taxi-buses (minibuses), clearly were not compliant with legal requirements. Examples of this are: windscreens badly cracked; side windows completely missing; light clusters and headlights smashed/missing; and inoperative handbrakes (requiring a driver's assistant to follow the minibus on foot and place a block of wood behind the rear tyre whenever the vehicle stopped in traffic to prevent the vehicle rolling back) which would lead to the conclusion that the legally required six-monthly inspection of vehicles carrying passengers (article 191) are not being conducted or enforced. This would presumably also be the case for motorcycle or three-wheeler taxis.

3.1.2 Licensing system

In Kinshasa Province, it is the responsibility of the state, specifically the '*Commission Nationale de Délivrance des Permis de Conduire*' (CONADEP), to issue driving licences. Obtaining a licence requires a medical vision test, a practical exam, and a theoretical exam. The Director General of Ground Transport, or

³ DRC uses both CDF and USD

'*Direction Generale des Transports Terrestre*' at the national Ministry of Transport and Communications is responsible for the development of the exams.

Since the 11th of September 2017, there has been a 'suspension' of the licensing system in Kinshasa Province. The Ministry has 'shut' the old system for the issuance of driving licences with the intention of introducing a new licensing system, however to date this has not yet been done. The previous system of issuing licences continues informally for riders and drivers despite the ban. Those that have obtained a licence via the old system in the interim will be required to take a theoretical based refresher training course in order to revalidate their licences once the new system is in place.

Previously, the licensing system based in Kinshasa Province was responsible for the issuing of licences for all of DRC. This responsibility has now been decentralised to individual Provinces. According to regional and national stakeholders, various Provinces, including Tshopo and Kinshasa, are actively updating their policies and legislation.

The new licensing system, once effected, will require students to follow a course at a recognised driving school and pass theoretical and practical exams at the driving school. Upon passing the exam, the student will receive a certificate or '*brevette*' that they can present to the provincial Ministry of Transport and Communication in order to obtain a licence. A representative of the provincial Ministry of Transport and Communication must be present at the practical exam as a member of the examination panel. This differs to the old licensing system, where attending a driving school was not required. Students were able to pass their theoretical and practical exam at the Ministry of Transport and Communication if they did not have a certificate from a recognised school. Another aspect of the system is that drivers must undergo refresher training followed by an exam to assure they have the basic necessary knowledge every five years in order to maintain their licence. This is understood to also be applicable to motorcycle riders.

The '*remise a niveau*', or training update, is currently offered for free by the government, who then issue a '*brevette*', which can be handed into the Ministry of Transport and Communication in return for an updated licence. The training is given two hours per day for a period of four days, with an exam on the fifth day. While the retraining is offered for free, the cost of acquiring a new licence is 35 USD. According to the Ministry of Transport and Communication, there have already been 20,000 drivers retrained through three centres designated for this. It is important to note that this is different from the refresher training that is offered by CNPR for those holding a valid licence.

3.1.3 Enforcement

According to the Ministry of Transport and Communication, the motorcycle sector, which is an informal sector, is not well regulated. Due to a lack of enforcement, most riders do not have a licence, register their vehicles, or know the contents of the '*Code de la Route*'. There are difficulties in controlling whether riders have licences. It is the responsibility of the police and CNPR to regulate this, however it is not carried out.

Where regulation was originally organised at a national level, this power has now been delegated to the individual Provinces. According to the Ministry of Transport and Communication, there is no capacity to manage these activities at a national level, and so they have divided the responsibility to an increased number of ministries in an attempt to manage the regulation more effectively.

According to the Ministry of Transport and Communication, police are also focusing on automobiles, and not motorcycles. There is no reprimanding of riders or passengers who do not wear helmets or riders who have too many passengers on their motorcycle. There is also no evidence of formal police training having been undertaken.

Specific actions of motorcycles that are going unregulated, besides from not having the necessary documents and registrations, include: driving in the middle of the road, not respecting lights or road signs, driving four motorcycles wide instead of in single file, not having the necessary equipment (i.e. helmets),

not respecting pedestrians, and carrying too many passengers. These topics are apparently covered during the required re-training.

There are also incidences of corruption from the police. For example, when performing checks for driving licences, vehicle registration, or insurance, if the rider does not have the necessary documents the police will expect a payment of between 5,000 CDF to 25,000 CDF before they release the rider. L'Association nationale des initiateurs et propriétaires de taxis motos du Congo (ANIPTMC) claims that as long as riders are expected to pay these 'fees', riders will not be able to pay the contribution to their association, the fee to obtain the necessary documents such as a licence and vehicle registration, nor training.

According to the '*Bureau d'Engins et Cyclomoteurs*', it is difficult to ensure that activities such as registration and licensing are carried out. There are new motorcycles entering Kinshasa every day. The '*Bureau d'Engins et Cyclomoteurs*' believes that if there is increased enforcement of the law pertaining to riders then they will adhere more strictly to the requirements.

3.2 Review of Motorcycle and Three-Wheeler Taxi Rider Training

There is currently no national curriculum for driving or riding. However, both the national Ministry of Transport and Communications and CNPR (*la Commission Nationale de Prévention Routière*/National Road Safety Commission) are in favour of the development of such a curriculum in order to improve the competence of riders and drivers.

There is a '*Remise a niveau*', or upgrade handbook, issued in 2018 for drivers of vehicles and motorcycles in the Democratic Republic of Congo. This handbook has a module specific to motorcycle riding and contains clear advice and recommendations for riders to follow which goes beyond the basic law. For example, while confirming that a suitable helmet is required, the handbook goes on to recommend the wearing of gloves, jacket, trousers and boots with clear explanations as to why these should be worn. Surprisingly the handbook also contains advice on signals one rider can give another, including a V-sign with fingers to convey a greeting; or signalling, with the right foot, thanks for facilitating the overtake manoeuvre, or trailing a foot to indicate an area of ground that is slippery (hand signals could also directly point to such areas). However, in describing the carriage of baggage it refers to using side panniers and a tank bag which clearly indicates this handbook was not developed specifically for DRC (or any other African country) or properly adapted to the situation in DRC. Normally, in DRC and greater SSA Africa, cargo that is carried on a motorcycle is varied in size and weight and would greatly exceed the capacity of panniers and tank bags, leaving them largely unused.

While regulations relating to motorcycle and three-wheelers can be found in the '*Code de la Route*', according to the Ministry of Transport and Communication there is no document that follows on from this to give guidance to driving schools on the curriculum and its contents. The Secretary General also explained that there is no law specifically designed for motorcycles. Nearly all stakeholders agreed that motorcycle riders are not trained, and that they also do not seem to demonstrate a desire to be trained. Even if a student attends a driving school and does not pass the exam, they are still able to obtain a licence as they do not need to provide the certificate of successfully completing training prior to sitting a basic driving test.

Training for motorcycle riders is essentially the same as that for car drivers, as both follow the '*Code de la Route*'. The aspects that differ are in the practical training, and some driving schools give an additional module or segment related to motorcycles during the theoretical course. The one driving school that offers motorcycle training, of the eight that are currently recognised by the government in Kinshasa, has one instructor who provides the practical training. The school does not possess a motorcycle of its own for the instructors; instead the instructor would ride as a pillion passenger. This instructor was surprised when the project team indicated an expectation that the instructor did not ride as passenger while training and he explained that it was necessary for him to be on the motorcycle in order to assist the student rider in

balancing the bike. This action alone suggests a lack of training on the basics required before permitting a rider onto the road, such as that found in the UK's Compulsory Basic Training (CBT) requirements.

This one school offered a course aimed specifically at motorcycle riders, although the content was essentially the same as that for student car drivers. This course was priced at 300 USD for a three-week course where practical training would take place one-on-one for one hour per day, following an initial theoretical module. An accelerated two-week course was offered for 350 USD. An eight-hour refresher course was also available at 160 USD. These prices are out of reach of the average prospective motorcycle rider, who earn an estimated average of 8 USD per day. This was also demonstrated by the fact that in the previous 12 months the school had only trained six riders. The reason that was given by other driving schools for not offering motorcycle training was based on the lack of demand.

Recognised driving schools must meet specific requirements for registration. These include:

- A physical address
- Grounds where the practical training can be conducted
- Office infrastructure including a desk for the director and secretary of the school
- A classroom with a board to write on
- A computer and projector
- Viable equipment such as a car
- Qualified personnel to give the training
- A bank account
- Proof of payment of taxes

Once the schools have proven that the above requirements are in place, an agreement will be put in place between the school and the provincial Ministry of Transport and Communication. In principle, the school is reviewed each year to ensure that they are still meeting minimum requirements. If the school fails to comply with the requirements, the agreement will be retracted and will not be allowed to function as a recognised school. Historically, some schools have been closed due to a failure to comply with minimum standards, of which several have succeeded in regaining their status.

Each of the eight recognised schools has numerous branches spread throughout the city. Every centre has at least one instructor, although they can have more depending on their capacity.

Previously, all driver training schools were required to be reviewed by CNPR prior to becoming a recognised school. CNPR reviewed all school plans, their review was then passed to the Ministry of Transport and Communication prior to the authorisation of the school. This is no longer carried out however, as the decentralisation process has given all responsibilities to provincial ministries.

Generally, the Director of the school will be responsible for determining the competency of each instructor, and which requirements they must meet. This is generally assessed through exams and includes a thorough understanding of the '*Code de la Route*'. According to the feedback of two driving schools, most instructors were trained at other driving schools, although driving schools were also ready to train their own instructors if this was necessary. When one driving school was questioned on the government's involvement in monitoring the quality of their instructors, they explained that no monitoring occurs anymore, and that the state is negligent in this area.

Qualities that driving schools were looking for in an instructor included having a calm demeanour, a comprehensive understanding of the material, an ability to understand (empathise with) the student, patience, having a licence for a minimum of three to four years, and having received their baccalaureate.

The '*Bureau d'Engins et Cyclomoteurs*', responsible for monitoring driving schools, is currently in progress of surveying the number of instructors in Kinshasa and to what level they have been trained, as there is nothing specific in law relating to the competence and experience of instructors. When questioned what

qualifies as a 'good instructor', the '*Bureau Engins et Cyclomoteurs*' responsible for managing driving schools referenced having a good comprehension of the '*Code de la Route*' and that his or her students finish their training with a good comprehension as well. Furthermore, instructors should follow the refresher training that is organised by the state, however this is difficult to enforce due to a lack of means from the state. A number of training school managers mentioned that their instructors were trained at other driving schools in Kinshasa, however these schools have since ceased training and there is now no clear mechanism to train and accredit instructors.

The '*Bureau d'Engins et Cyclomoteurs*' responsible for driving schools is now in the process of developing a minimum standard that trainers must meet to be considered a recognised instructor. This will be defined by a checklist which is currently being developed at the national Ministry of Transport and Communication.

The Bureau shared several points in which they believe schools require improvement, these include:

- A school's capacity to teach riding techniques and hazard perception while riding
- A school specialised in motorcycle training
- Harmonisation of curricula amongst all recognised schools
- A curriculum for the training of driving instructors that meets a set minimum standard

There are, according to the head of the '*Bureau d'Engins et Cyclomoteurs*', two or three experts in Kinshasa who are capable of evaluating the proficiency of trainers, however he states there is a need to have 10-15 who can evaluate instructors. The project team was unable to ascertain the competence or background of these two or three experts.

There is also an issue regarding unrecognised driving schools in Kinshasa. Unrecognised schools are not adherent to the minimum requirements of driving schools and are thus unregulated. Yet they are popular due to their affordability in comparison to recognised schools. According to the '*Bureau Engins et Cyclomoteurs*' responsible for monitoring driving schools, it is riders who have been trained by informal schools that are causing the majority of accidents due to a lack of proper training, though no evidence for this was provided.

There is currently no data relating to the number of licences that have been issued nor where students trained. However, according to the '*Bureau d'Engins et Cyclomoteurs*' responsible for driving schools this data is now in the process of being collected. Once this is available, a clearer picture of the successes/failures of the current driver/rider training regime will become more evident.

3.3 Stakeholder engagement

During the Inception Phase of the project, we had identified 20 stakeholders who could likely contribute to the project, to provide valuable information or to have influence over use of the project's findings and implementation of its recommendations. A full list of these stakeholders and the preliminary results of the scoping trip can be found in the project Inception Report. Secondary interviews were conducted with these stakeholders during the review of legislation and training. These stakeholders are located in Kinshasa Province and are mostly involved in national level decision making. The results of these interviews are therefore integrated into Section 3.1 and 3.2 which discuss legislation, training and enforcement. Additional opportunistic interviews of stakeholders were carried out during the survey phase of the research with provincial level stakeholders involved in regulation and implementation. These stakeholders can be found in Table 1. A summary of these stakeholder engagements are discussed next, and the complete meeting notes can be found in Annex 1.

Table 1 Stakeholder Engagement – Tshopo Province

Stakeholder Organisation	Interviewee
Ministry of Transport and Communication – Kisangani Province	Mr Jean Pierre Litema Yeni
Ministry of Transport and Communication - Technical Services Department – Kisangani Province	Mr. Papy
Institut National de Préparation Professionnelle (INPP)	Mémoire Maxime Bapeke
University Teaching Hospital - Kinsangani	Dr Roger Amisi Kitoko
Hôpital du Cinquantenaire de Kisangani	Dr Bambale – Joint Director
Centre Santé de Base (Primary health Facility) – Babingi	Nurse
Centre Sante de Reference – Zone de Sante Lubonga - Batiagayi	
Police Routiere (traffic police)	Chief of Division
Cellule Infrastructure	Steve Nyembwe

General

The rapid increase in the number of motorcycle taxis in Tshopo Province has largely been driven by the poor conditions of the road, limiting the accessibility of other motorised forms of transport. Three wheeler transport has also been introduced in the area, but to a lesser degree than motorcycles.

Challenges

Since its introduction, the motorcycle sector has been considered an informal sector, with riders and motorcycles being largely unregulated, exhibiting poor riding habits, and being difficult to manage. Most riders have had no formal training and many operate without driver licences and do not wear helmets. Especially in areas with higher volumes of traffic, there are a large number of crashes. Excessive alcohol consumption is also associated with motorcycle riders.

Advantages

Despite these challenges, motorcycles are generally considered a crucial mode of transport that offer the population increased opportunities for employment, increased access to social services between urban and rural populations, medical centres, markets, for social trips, and other economic benefits. The majority of motorcycles are not owned by riders, rather they are rented from the owner by the rider.

Crashes

Regarding the specific number of crashes in Kisangani, the police have a limited amount of data because riders often avoid involving the police. The police are generally only summoned when there is a death or serious injury caused by the crash.

Implementation and Enforcement

It was a unanimous opinion that riders generally lacked legally required documents such as driver’s licences, vehicle registration, insurance, a work permit, and a *vignette*. The authorities advise that the process to obtain these is relatively simple, however riders are both unable to afford these services, or otherwise believe that these documents are not necessary. The licensing system in Tshopo Province is also currently suspended, as it is in Kinshasa Province, until a new system is put in place.

The police in Kisangani explained that motorcycles are currently not being controlled by traffic officers in terms of rider behaviour, as well as their ownership of the legally required documents and protective equipment. The traffic police have been advised to focus on minimising traffic jams rather than stopping and fining riders. This directive has come from the central government and is linked to the ‘grace period’

that happens most years for a two-three month period and often during the holiday season. Furthermore, when the police were carrying out their road traffic duties regarding regulating motorcycles (outside of the grace period), the police cited a poor ability to control riders. Riders often refused to stop for police and showed poor behaviour towards the police, including threatening the police by coming to the station 'en masse' to threaten the police.

Training

The project team identified one formal training centre that offers motorcycle training in Kisangani - the *Institute National de Preparation Professionnelle* (INPP). The INPP provides professional training across DRC – offering both long-term vocational training as well as refresher training for industry. Specifically relating to motorcycles, the INPP in Kisangani has a dedicated building and two motorcycles which were donated by JICA specifically for training. The INPP has three trainers, who specialise in driver training and mechanical training. The training is currently two months long (two hours per day) and has an accelerated option that takes one month, with four hours of training per day. While the INPP in Kisangani offers training to motorcycle riders in the Province, they advised that the demand for this type of training is extremely low. The Association of Motorcycles believed that this training is not affordable for motorcycle riders.

The police have also been involved with the Ministry of Transport and Communication and Division of Transport regarding the introduction of training and sensitisation activities. For example, together with Mission de l'Organisation des Nations Unies pour la stabilisation en République démocratique du Congo (MONUSCO), a two day sensitisation was given for approximately 200 riders.

Opportunities

As in Kinshasa Province, the Tshopo Provincial Minister of Transport would like to harmonise training standards, and believes that local context must be taken into account. Currently the Ministry is reviewing the regulations that are in place for all vehicle classes and have commissioned a study to help determine which changes are necessary. The Division of Transport is also planning to conduct some refresher training/seminars for motorcycle taxi riders but there is not a clear timeframe for this activity.

The Motorcycle Association of Tshopo Province, the Ministry of Transport and Communication, and the Division of Transport agreed that working in collaboration with one another to increase sensitisation and training opportunities for riders was welcomed. There are some challenges to implementing this, however, as the Motorcycle Association is currently suspended due to irregularities.

According to INPP in Kisangani, all actors (riders, Ministry of Transport and Communication, INPP) have different needs that need to be addressed and more coordination is required. For example, consideration of the cost of organising quality training, as well as creating demand for the training. There is also a need to focus on licences, registration of motorcycle taxis, and enforcement to ensure that riders have these documents. This will allow for the proper identification and safe operation of motorcycles.

Health Sector Perspectives

From the point of view of hospital staff, motorcycles offer both advantages and disadvantages relating to health. For example, the tertiary hospital in Kisangani serves a population living up to 350 km away. One of the most common forms of transport to the hospital is by motorcycle taxi. While most cases come from a distance of 15-18 km, some also travel from 350 km away and that can take five days, by a number of different modes of transport, especially if the route is bad. This is similar for the other tertiary hospital in Kisangani, who receive the majority of their patients by motorcycle. This hospital explained that patients have no other choice of transport. In more rural areas, it was explained by the '*Centre de Sante*' (primary health facilities) and '*Centre de Sante Base*' that motorcycles were used to reach their facilities for non-urgent or minimally urgent visits, but were especially important if referral to the referral hospital or the tertiary hospital is necessary. Three-wheelers are often not accessible in rural areas.

However, the hospital also treats a lot of motorcycle crash victims, who suffer from head injuries, injuries to limbs, concussion and paralysis. Some of the patients die from their injuries, and the hospital regularly receives cases where there have been multiple casualties from one crash. This is not surprising, as many of the motorcycle taxis are carrying multiple passengers. One doctor attributed much of this to the fact that “The riders don’t respect the rules, police or even their customers”. Furthermore, the secondary tertiary hospital attests that the condition and design of the roads has contributed to the number of road crashes. The roads in the town are too narrow for the numbers of motorcycle taxis using them, “every day there are accidents”. Staff at both hospitals also agree that a lack of helmets significantly contributes to the problem and that this should be more strongly enforced. Further challenges include the time it takes from the actual crash to receiving medical care and that patients often can’t afford to pay for their treatment.

In more rural areas where there is significantly less traffic, the ‘*Centre de Sante*’ and ‘*Centre de Sante Base*’ indicated that they see significantly fewer road accidents caused by motorcycles and few to no deaths. The severity of crashes was also deemed lower than in more urban areas. However, these centres did report that they have seen an increased number of hernias in male patients who work as motorcycle ‘taxi-men’, inflamed testicles, as well as back pain and problems with their vision.

One rural ‘*Centre de Sante*’ did explain that access to motorcycles locally was at times limited during the day, when all motorcycles have gone to work in more urban areas. While this was an exceptional finding, it carried a great impact for the community, who often have to wait several hours to find a motorcycle for transport, also because there is no cellular reception in the village.

3.4 Associations

3.4.1 Associations in Kinshasa Province

According to the associations, recognition as a formal association requires several documents, such as various judiciary documents and a ‘favourable opinion’ from the Ministry of Justice. According to the *Ville Province de Kinshasa: Bureau Engins et Cyclomoteurs*, these documents ensure that associations are aligned with the national laws of DRC.

Association of Drivers

The Association of Drivers includes a mixture of vehicle types including cars, motorcycles, three-wheelers, buses, and minibuses.

The requirements to be a part of the association include being a driver, not being a salaried driver in a separate sector, and having a valid driving licence. The members are required to read the regulations and articles of the association. There is no joining fee, however they have to buy a membership card for 2,000 CDF. There is also a ‘*cotisation*’ or contribution of 500 CDF per day. These costs are apparently used to cover the costs of managing the association.

This particular association works with the Kinshasa Provincial Ministry of Transport and Communication, however this was not the case with the other association that was interviewed. The association directors are not paid and claim to work voluntarily, however they do receive some compensation for their role. The advantage of being a member of the association is having a large voice that represents and protects its members. Within this association, there are a total of eight members who govern the entire district. Within Kinshasa Province there is a committee of communes that has oversight over their respective commune, in addition to a commune representative. Within each commune there are subsections. These members are all a part of a committee, who represent their communes during meetings and when addressing problems that are raised by their members. The association argued that it feels forgotten by the government in the sense that they do not receive any financial support, despite the fact that they are performing a public service.

Association National des Initiateurs et Propriétaires des Taxi-Motos du Congo (ANIPTMC)

This association has its headquarters in Kinshasa, however they have various branches throughout the country. There are over 93,000 members in Kinshasa, and over 441,000 members in DRC. Members have an identification card that shows they are a member of the association. Members include both riders and owners, although approximately seventy percent are riders. The association has internal articles. In order to become a member, an individual must be a rider or owner, and must be able to prove their personal identification. There is no requirement for a driver's licence, nor insurance.

The association offers a 'parking' or a motorcycle stage for their members to operate from, which are shared between 10-15 members. A daily contribution of 500 CDF, including 200 CDF for using the stage, is expected of their members, however only about 10 percent of members currently pay the fee. Those that do not pay the fee are allowed to remain members, however they are not eligible for the benefits of the association. These benefits include assistance from the association if there has been an accident, 'participation', such as financial support, in social events such as marriages and births. In the case of a fatality, the association will pay for a portion of the funeral costs and help with making the arrangements. A funeral will generally cost 400 USD, of which the association will pay between 30-50 percent of the costs. The association will also apparently sponsor the education of up to 8 children from the family through secondary school, or 40% of the costs if there are nine children or more.

The structure of the association includes a president at national, provincial, territorial, and commune levels. Association staff work as volunteers and are not paid a salary. Similar to the association of drivers however, it seems they do receive some kind of compensation from the contributions that are paid by members. The association does not interact with the government and does not receive any support. The association advised that "they do not occupy [themselves] with politics, or vice versa".

The association would like to be involved in training, however they are lacking the means to do so. Challenges identified by the association include a lack of support from the government despite having to follow their regulations, a lack of hospitals specialised in head injuries, a lack of means to sensitise their members, and a lack of sensitisation from governmental organisations around road safety. Furthermore, the association requests that the government begins supporting associations through a fund that will allow for motorcycles to be purchased on credit and the initiation of a training centre which takes into account that most of their riders are illiterate.

3.4.2 Associations in Tshopo Province

Motorcycle Association Structure

The Association of Motorcycles was established in 2003 with 100 members following the introduction of the first motorcycles in Kisangani in 2001. Currently the association has approximately 7,000 members, comprised of both motorcycle taxis and three-wheelers, however there are fewer than 50 three-wheelers. The total number of motorcycles is estimated (by the association) to be around 50,000 in Kisangani and the surroundings, and 60,000 in the wider Tshopo Province, including Kisangani. The association serves both urban and rural riders, who are identified by a membership identification card. An identification card costs 1,000 CDF. Members are required to pay a weekly 'cotisation' or membership fee of 500 CDF, however in reality this does not occur.

The Management Committee is organised into a president, two vice presidents, a secretary, and a treasurer. The association is also represented at local levels through communal and territorial level management committees. The riders internally organise themselves concerning their parking, or taxi stands. There is generally a cost associated with this that seems to be organised amongst riders.

The motorcycle association in Tshopo claimed that they are not linked to the motorcycle association in Kinshasa.

A motorcycle that is not privately owned may have three to four riders associated with it. The daily payment to owners depends on the brand of the motorcycle, and generally costs between 8,000 CDF and 12,000 CDF. For example, a Haujin costs 10,000 CDF and a Tevens costs 12,000 CDF.

The average motorcycle taxi rider earns between 15,000 and 20,000 CDF per day, however this varies depending on the time of day and the number of hours worked. Costs that are deducted from these earnings include the daily payment to the owner (where applicable) and fuel. On average, a rider will use three to four litres of fuel per day, but it depends on the trips they make.

Motorcycles have a vast range. The association cited that riders have been known to travel over 1,000 km to various border crossings, such as Uganda and Rwanda. This is especially the case when a passenger requires private and 'assured' transport. A trip to Kampala, for example, takes three days and costs 300-400 USD, not including immigration or border crossing fees.

Rider benefits

Being a part of the motorcycle association offers riders a means of identification through their association identification card. The association cited this as one of the main benefits of being a member. Additional support that is offered is in the form of social assistance, especially through financial means when there is a significant event. Examples of such events include:

- The loss of the parent of a member
- The theft of a motorcycle
- Sickness of a rider that leads to a lack of ability to care for their family
- Hospital bills associated to a motorcycle crash
- Incidents with the police where there is a need for negotiation regarding costs and other consequences

Challenges cited by the Association

According to the Provincial Ministry of Transport and Communication, the activities of the motorcycle association are currently suspended. The association also admitted that they have been criticised on their financial capacity and management. It is unclear if this is the reason for the suspension.

During a meeting, the association verbally advised that during the last three years (2016-2019) there have been 13 deaths and approximately 50 crashes recorded by the motorcycle association amongst its members. However, this figure was not verified by the project team. Moreover, it was noted by the association that if they also consider clients who were killed or injured in crashes, this number increases, although it is unclear to what degree. The association did not make reference to other road users who may have been killed or injured.

The association reported that there are many incidents involving the police where riders are stopped for not following the 'Code de la Route' or for not having the necessary documents. The police will at times take riders to the police station in order to make negotiations on penalties and payments. These negotiations are also made directly when the rider is stopped.

Riders often do not have the means to obtain and maintain all the necessary documents including a driving licence, registration, vignette, mechanical vehicle inspection, work permit, and insurance.

During political events, such as elections, there are periods of 'observation', where the police do not actively pursue violations of the law. These periods witness high levels of vandalism, especially of motorcycles and a high level of motorcycle theft during this period. The association must reorganise after this period to identify which riders are "true riders" and which are actually operating with stolen motorcycles. Equally during normal periods, bandits are a large problem for riders. The association advised that in some cases, riders are drugged through their food or drinks, after which bandits steal their motorcycles. Since one motorcycle generally has more than one rider, incidents of theft or crashes affects multiple people.

According to the association, riders currently do not follow any rider training. The association explained that one reason for this is the loss of income that would result from the time spent in training. Riders generally struggle to provide enough to feed their families, therefore the impact of missing a day of work would be large. The training is also cited as too expensive for riders. For example, the training that is available with INPP for 110,000 CDF is not considered affordable to taxi riders. This lack of financial means also restricts their willingness to buy safety equipment, such as helmets, and to arrange the necessary documents such as a driver's licence, registration and insurance. There is also currently a suspension of the driving licence system in the Province of Tshopo, similar to the situation in Kinshasa Province.

The association believes that riders do not wear helmets in part because there is a lack of enforcement from authorities and because it is considered too hot. The associations advise that there is good access to helmets of different levels of quality in Tshopo, however this was not verified.

Health problems, that the association identifies, relating to riding includes back pain, respiratory problems and eye problems. This is thought, by them, to be caused by the state of the road and the dust. Generally riders do not have health insurance. In respect to passengers, many women sit 'side-saddle', which puts them at a much greater risk of falling from the motorcycle.

Political implications

The association claims to partner with the Ministry of Transport and Communication on various subjects. For example, they facilitated the process with the Ministry of Transport and Communication to introduce a driving licence specifically for motorcyclists that are more accessible than the regular driving licence. The association has been in contact with the Ministry of Transport and Communication for a long period to discuss the potential of introducing a course or seminar, however concrete plans have not yet been put in place. They are also working on a project with the Ministry of Transport and Communication that will help identify riders functioning as motorcycle taxis.

Riders are also used as vessels to transmit messages, for example, for political parties during elections. The riders will travel in 'caravans' and shout in the streets to pass on their message. This is believed to be more effective than using the radio because of the amount of attention it attracts.

Opportunities

When questioned on approaches that will improve rider conditions, the association recommended creating an all-encompassing document specific for taxi motorcycles that is affordable and can replace the various documents that are currently required by law. It was also advised that riders are trained on the 'Code de la Route' and how to manoeuvre their motorcycles in specific situations. However, riders are not likely to give up a day of work to attend a course without receiving some sort of compensation. The main concern of riders is increasing their profits. The associations say that training should therefore also give access to material or equipment, as this is not their priority.

The association is willing to work together with the Ministry of Transport to establish a course focused on improving rider knowledge on the 'Code de la Route' and hazard perception, as well as to transmit messages from the Ministry of Transport and Communication to its members. The association believes that riders are inclined to listen to association leaders.

3.5 Survey of benefits and disbenefits of motorcycles and motorised three-wheelers

A full understanding of the benefits and disbenefits of motorcycles and three-wheelers in rural areas is required to help decision-makers develop appropriate and effective policies and legislation that can realistically be implemented and enforced.

The findings of this activity will give decision-makers a balanced view of the benefits and disbenefits of motorcycles and three-wheelers in rural areas, from the point of view of those people who own, ride and

use them, and will also give insights into non-user perspectives. It will thus add to the overall body of knowledge on the benefits and disbenefits of motorcycles and three-wheelers for rural access.

In DRC the survey was carried out in three different locations. Two locations were in Tshopo Province and one in Kinshasa Province. In each location two different villages were selected.

The survey comprised interviewing people from five different user groups:

1. Riders of motorcycles and three-wheelers
2. Passengers of motorcycle and three-wheeler taxis
3. Owners of motorcycle and three-wheeler taxis
4. Owners of freight, who use motorcycle and three-wheeler taxis to transport their goods
5. Non-users – people who very rarely or never use motorcycle and three-wheeler taxis.

The questionnaires covered the following topics:

- Overall opinions
- Economics and finance
- Access and mobility
- Injuries and health issues
- Crime and personal security
- Access to services and protective equipment

3.5.1 Progress to date

To allow for meaningful comparison with the first four countries, the same questionnaires were used in DRC. They were just contextualised for use in DRC with some minor modifications.

The tools were then translated into French as well as Lingala. Ethical approval was granted in July through the University of Kinshasa.

Training of four research assistants and three interviewers (who would undertake the survey in Kinshasa Province) took place between the 19th and 22nd of July. The senior members of the team had already pre-tested the French version of the questionnaires with the target groups. The training was facilitated by two Professors from the University of Kinshasa's School of Public Health and was supported by two of the wider project team from Transaid who were able to ensure consistency with the approach taken in the first four countries. The three day training covered an introduction to the research, a detailed review of the five questionnaires as well as a review and validation of the French translations to ensure the correct nuances were respected. During the first day of training a member of the ethical approval committee visited the group. He advised that the committee had no issues with approving the research and stressed the importance of making sure respondents knew that the survey was voluntary and they had the right to decline. He also stressed that the research assistants and interviewers should accurately record the responses from respondents and bring back the 'reality from the field'.

The Kinshasa Province research team stayed in Kinshasa Province and pre-tested the survey on Monday 22nd July. They then conducted the survey between 25th and 29th July.

Five of the team travelled to Tshopo Province on Monday 22nd and between the 23rd and 25th of July they trained six interviewers to cover two locations in Tshopo. During this period stakeholder meetings were also conducted in Kisangani with the DPS (*District Provincial Sante*), Ministry of Transport and Communication, the motorcycle taxi association of Kisangani (MotoKis), a training facility and the traffic police. Visits to two hospitals, one primary health care facility and one referral health facility were also made.

On the 26th July the research team in Tshopo Province split into two groups to conduct the survey in two different locations.

English language questionnaires can be found in the project’s [Phase 1 Progress Report](#), which can be found on the ‘Motorcycle Safety’ page of the ReCAP website.

3.5.2 Survey Locations

The survey of benefits and disbenefits was carried out in six different sites across DRC. Table 1 outlines the six settlements and more detailed information is provided in Tables 3 to 6.

Table 2 Survey Settlements, DRC

Location	Province	Health Zone	Village	# of interviewees
Rural, but 9km from Kisangani	Tshopo	Lubunga	Batiagayi	99
Rural, but 8km from Kisangani	Tshopo	Lubunga	Lula	
Rural - 90km from Kisangani	Tshopo	Wanie Rukula	Babingi	100
Rural - 23km from Kisangani	Tshopo	Wanie Rukula	Madula	
Rural – 105 km from Kinshasa city	Kinshasa	Maluku I	Impini	97
Rural – 120 km from Kinshasa city	Kinshasa	Maluku I	Musabu	

Information about the settlements was obtained through the Ministry of Health’s site profiles, 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 3 Settlements in Lubunga, Tshopo Province

	Village: Batiagayi Health Zone: Lubunga, OSIO Route: Opala	Village: Lula Health Zone: Lubunga, Ngene Ngene Route: Ubundu
Location and access	<p>GPS:</p> <ul style="list-style-type: none"> • 9 33 13.2S 33 56 27.2E • Latitude : N 0° 26'45'' • Longitude : E 25° 9'12'' • Altitude : 400.6m • 9km from district centre (Kisangani) along the Opala route • 9 km from nearest sealed road • Less remote location (although to access Kisangani motorcycle and canoe must still be used) 	<p>GPS:</p> <ul style="list-style-type: none"> • Latitude : N 0° 26'47'' • Longitude : E 25° 11'38'' • Altitude : 413.1m • 8km from district centre (Kisangani) along the Ubundu route • 8 km from nearest sealed road • The location is 8km from Kisangani but the road is in a total state of disrepair
Transport options	<ul style="list-style-type: none"> • Motorcycles and bicycles are the main modes of transport • Accessible all year round by motorcycles and bicycles 	<ul style="list-style-type: none"> • Motorcycles and bicycles are the predominant mode of transport. Bicycles also very common. • Motorcycles and bicycles are used all year round
Population	<ul style="list-style-type: none"> • Village of Batiagayi: 1,467people • Ethnic groups include: Alengola, Bakumu, Bambole, Batopoke, Bangandu, Lokele, Bazimba and Batetela. The Walengola, Bakumu and Bambole people are indigenous to the area. 	<ul style="list-style-type: none"> • Village of Lula: 840 people • Ethnic groups include: Baniamituku, Basoko, Bamongo, Walengola and Batopoke.
Economy	<ul style="list-style-type: none"> • Dependent on agriculture and livestock. The most cultivated products are cassava, rice and squash. Young motorcyclists are in the minority as the majority of young people are farmers. 	<ul style="list-style-type: none"> • Agriculture dependent, mainly cassava and rice. • Many young people are farmers, some young men work as motorcycle taxi riders
Recent development	<ul style="list-style-type: none"> • The arrival of motorcycles, mobile phones, television channels 'canal plus' and 'startimes' are considered recent developments in the village. The motorcycle taxis have created employment for young people and facilitated mobility of the population. 	<ul style="list-style-type: none"> • The introduction of motorcycle taxis and mobile phone are considered as developments for the village. The motorcycle taxis have created employment for young people and facilitated mobility of the population.
Local issues	<ul style="list-style-type: none"> • Land conflict • Long distances to travel to draw water from undeveloped springs • After the rain, large puddles form on the road (unsealed) which becomes slippery 	<ul style="list-style-type: none"> • Land conflict • Long distances to travel to draw water from undeveloped springs • After the rain, large puddles form on the road (unsealed) which becomes slippery

Table 4 Settlements near Wanie Rukula, Tshopo Province

	Babingi Village	Madula Village
Location and access	<ul style="list-style-type: none"> Latitude : <ul style="list-style-type: none"> o S 0 degrees 3'21" Longitude <ul style="list-style-type: none"> o E25 degees 35'1" Altitude :431m 32 km from BCZ (Bureau Central de Zone de Sante) of Wanie Rukula 90 km from Kisangani 	<ul style="list-style-type: none"> Latitude : <ul style="list-style-type: none"> o N 0 degees 27' 57" Longitude <ul style="list-style-type: none"> o E 25 degrees 22' 20" Altitude :431m 35 km from BCZ (Bureau Central de Zone de Sante) of Wanie Rukula 23 km from Kisangani
Transport options	<ul style="list-style-type: none"> Motorcycle taxis are the main means of transport used in the village Accessible all year round by motorcycle taxi 	<ul style="list-style-type: none"> Motorcycles have become the main transport for the village as they are less expensive than other motorised transport Accessible all year round
Population	<ul style="list-style-type: none"> 5,199 people Many young people 	<ul style="list-style-type: none"> 8,256 people Many young people
Economy	<ul style="list-style-type: none"> Agriculture dependent - mainly maize, cassava and rice Driving motorcycle taxis is the main income-generating activity for young men 	<ul style="list-style-type: none"> Agriculture dependent - mainly maze and cassava Driving motorcycle taxis is the main income-generating activity for young men
Recent development	<ul style="list-style-type: none"> Motorcycle taxis have brought some mobility and economic activities 	<ul style="list-style-type: none"> Motorcycle taxi riders are able to pay medical bills more easily than other social classes in the village
Local issues	<ul style="list-style-type: none"> No mobile phone network coverage No drinking water No irrigation system 	<ul style="list-style-type: none"> No drinking water sources

Table 5 Settlements in Maluku I, Kinshasa Province

	Impini Village	Musabu Village
Location and access	<ul style="list-style-type: none"> Latitude : S 4° 2'17'' Longitude : E 15° 48'54'' Altitude : 704.4m 105 km from Kinshasa city centre 25km from the main sealed road 70km from the BCZS 70km from the General Hospital 	<ul style="list-style-type: none"> Latitude : S 4° 1'59'' Longitude : E 15° 50'27'' Altitude : 665.1m 120 km from Kinshasa city centre 27 km from the main sealed road 80km from the BCZS 80km from the General Hospital
Transport options	<ul style="list-style-type: none"> Access is difficult, especially during the rainy season Motorcycles are predominant mode of transport 	<ul style="list-style-type: none"> Access is difficult, especially during the rainy season Motorcycles are predominant mode of transport There are also trucks which transport agricultural products During the rainy season the village is inaccessible with an increase in the cost of transport
Population	<ul style="list-style-type: none"> 1,243 people More younger people than older people Ethnic groups: The Tekes are dominant. Followed by the Yaka and Mbala 	<ul style="list-style-type: none"> 4,500 people approx. Ethnic groups: The Yakas are dominant, followed by the Tekes and Mbala
Economy	<ul style="list-style-type: none"> Agriculture dependent, mainly cassava Other products are aubergines, chillies, tomatoes, okra and maize. 	<ul style="list-style-type: none"> Agriculture dependent, mainly cassava Other products are aubergines, chillies, tomatoes, okra and maize.
Recent development	<ul style="list-style-type: none"> The motorcycle taxis have helped to open up the village, allowing goods to be transported to the city for trade. 	<ul style="list-style-type: none"> The motorcycle taxis have helped the village to develop. There are now shops where you can find all the food found in Kinshasa. It also helped to open up the village.
Local issues	<ul style="list-style-type: none"> No drinking water No electricity No schools Not well-developed roads 	<ul style="list-style-type: none"> No drinking water No electricity Not well-developed roads

3.5.3 Survey respondents

The interviews covered five different user groups. Motorcycle and motorised three-wheeler taxi riders were approached at their 'stands' or 'arrets' (where they congregate waiting for passengers), while passengers, vehicle owners, freight owners and non-users were identified through household surveys.

A total of 296 people participated in the survey of benefits and disbenefits of motorcycle and three-wheeler taxis. Table 6 shows the breakdown of the survey respondents.

Table 6 Survey Respondents, DRC

	Motorcycle taxis				Motorised three-wheeler taxis				Nonusers
	Riders	Passengers	Vehicle owners	Freight owners	Riders	Passengers	Vehicle owners	Freight owners	
Kinshasa	36	30	10	15	0	0	0	0	6
Lubunga	34	30	10	15	0	0	0	0	10
Wanyerukula	35	30	10	15	0	0	0	0	10
Total number of Respondents	105	90	30	45	0	0	0	0	26

In general, the survey team was easily able to identify riders, passengers, owners and freight owners of motorcycles. Non-users were significantly harder to identify. Whilst a few three-wheeled motorcycles were observed on the routes into Lubunga and Muluku, there was a minimal number of these vehicles in comparison to the number of motorcycles, which explains the lack of respondents in this category. This was especially so in rural areas, which is comparable to the other four project countries. Whilst this leaves the analysis of motorised three-wheelers impossible, the lack of uptake of motorised three-wheelers in rural areas in comparison to motorcycles is an interesting finding in itself. Higher capital costs coupled with physical access challenges on rural tracks are likely to be the reasons behind this.

3.5.4 Preliminary findings

Experiences from the survey team and difficulties encountered

Overall, the survey team had a very positive experience conducting the survey with the target groups. The research team received comprehensive training and were able to address any areas that were not clear to them. The interviewers were also selected based on their experience with managing large scale surveys, including household surveys.

The main difficulties faced by the research teams in the field were:

- The poor condition of the roads meant that motorcycle taxis were required to reach survey sites;
- The absence and insufficient coverage of mobile phone networks in villages;
- Difficulty in finding non-users of motorcycles and three-wheelers;
- Weather conditions (in Kisangani there were periods of continuous rain);
- The length of the questionnaire;
- Locating riders on-site in the villages - most were found at motorcycle taxi-stands.

General opinion on three-wheelers and motorcycles

Regarding the general opinion on the use of motorcycles, the majority of feedback from riders was favourable and focused on the importance and relevance of motorcycle taxis for the transport of passengers in rural areas, the transport of the goods, road safety and personal safety. For riders, these aspects were considered “good”, if not “very good”. However, for passengers, non-users and owners of merchandise, opinions were divided. Favourable aspects included the transportation of passengers and goods, while negative aspects were largely focused on the risk of crashes. Overall, however, motorcycles were viewed positively by users, non-users and owners.

Economy and finance

For riders and owners, motorcycle taxis were considered an important source of income. Riders and motorcycle taxi owners appeared to have a relatively better standard of living compared to the rest of the population. Motorcycles were also thought to facilitate trade growth.

For passengers, motorcycles were generally noted to be more expensive at night and when it rains.

Access and mobility

In the villages surveyed, the motorcycle was cited as the most frequently used means of public transport. Motorcycles are considered very accessible and easily located by the population. In addition, the motorcycle was the only cited means of transport in case of an emergency and considered to improve the management of emergency health problems.

Injuries and health problems related to the use of motorcycles

Concerning injuries and health problems associated with motorcycle use, riders cited more cases of incidents requiring medical attention or out of pocket costs than users. Approximately one third of riders

claimed to have experienced an incident or health problem, while the minority of users had experienced such problems.

Crime and personal security (experienced and feared)

The majority of riders claimed to have experienced verbal abuse. However, other forms of crime, such as physical abuse, were mentioned only by a minority of riders. Of the other groups of respondents, only a minority responded as having been a victim of crime or other forms of personal security.

Access to and use of protective equipment

The majority of riders claimed that they do not have personal protective equipment. Almost all users reported that they had never used helmets or other protective equipment. Shockingly, 98 percent of respondents at one site responded that they did not have access to, nor have the need for protective equipment.

The likelihood of having a driving licence, vehicle registration, and insurance

The general trend showed that the majority of riders do not have driving licences, insurance or business licences. This was partly attributed to the need to pay bribes or '*pot de vin*' regardless of having the legally required documents. Passengers reported that they never ask riders if they have these documents. Respondents also claimed that there was almost no control of these documents by the authorities.

4 Next steps

In August 2019 the survey data will be cleaned and fully analysed. The findings of the survey, as well as the findings related to the review of legislation training, will be developed into a draft discussion paper on the situation relating to motorcycle taxis and three-wheelers in DRC. This paper will also show (at a high level) how the situation in DRC compares with the previous four country studies. A number of key questions will also be presented in this discussion paper.

This draft discussion paper will be shared with Cardno and then translated into French. The French discussion paper will be shared with key stakeholders in DRC in advance of a dissemination workshop. These stakeholders will be invited to the dissemination workshop which will be held on the 17th October 2019⁴. They will be asked to read the discussion paper in advance to ensure meaningful exchange and debate at the workshop.

The workshop will be an opportunity to disseminate and validate the findings of the research. It will also be a chance to discuss the implications of the findings and determine priority activities relating to motorcycle taxis and three-wheelers in DRC. The questions in the discussion paper will be designed in such a way to provoke discussion and lead to recommendations and a high-level road map.

The Final Report will be submitted to Cardno by the end of November 2019 and will include a section on the dissemination workshop outputs. A technical/policy brief will be developed by the end of November 2019.

A capacity building intervention was also originally planned in the period July to November 2019. This will be funded by Transaid. Initial discussions about this activity have started, with the majority of stakeholders advising such an activity should focus on prevention of road crashes. This activity will be discussed further with key stakeholders and will now likely take place in the period November 2018 – March 2019. This will also allow time for considered planning and also takes into account the fact that the WHO declared Ebola a global emergency in DRC in July 2019.

⁴ Provisional date

5 Conclusions

Strong progress has been made in the first five months of this project and all deliverables are on track. The review of legislation and training is complete and work on the recommendations and policy implications is underway. A quantitative and qualitative survey has been given ethical clearance and in partnership with the University of Kinshasa this survey has been completed in two Provinces in DRC, with a total of 296 respondents. Stakeholder engagement has continued to ensure a deeper understanding of the issues relating to two and three-wheelers. The research to date has yielded some very interesting findings.

Finally, it should be noted that this research project is generating interest from third parties. For example JICA has expressed an interest in this research and the findings as they are planning a number of road safety interventions from 2020. This is important as it helps demonstrate the wider interest in motorcycle and three-wheeler use in DRC. Such engagement with the donor community and implementing partners may also help with policy change, uptake and embedment, especially if resources can be mobilised to support the recommendations of research and priorities of local partners.

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Annex 1 Stakeholder Engagement Meeting Notes

Ministry of Transport and Communication – Kisangani Province

The Ministry of Transport and Communication at the Provincial level in Kisangani advised that there used to be public transport services, which included buses and four-wheeled taxis. However, the routes are now in such a poor condition that they are “too hard” on these vehicles and it has “pushed people” into using motorcycle taxis. The motorcycles came in from Goma in the east of DRC. The motorcycle taxis can also travel from point to point.

The Ministry would like to see a limit of one passenger per motorcycle taxi but acknowledge this is challenging as passengers think that “these motorcycle-taxis are theirs”. The sector is very informal and the riders do what they want. It is difficult to manage and even identify the riders. Most riders have had no training and many operate without driver licences and do not wear helmets. The Ministry advised that wearing helmets is more common in Goma. In Kisangani road crashes are common with motorcycles running into each other and into other vehicles. Insurance is mandatory but most people do not have it. Riders do not go for training as they do not feel it is necessary.

However, until the economy picks up the Ministry advised “we are with them”. The motorcycle taxis are also seen to bring some employment into the area. The majority of motorcycles are not owned by riders, rather they are rented from the owner. There are some cases where high ranking military personnel own the motorcycles but these cases are said to be rare.

The process of getting a riding licence and business licence is reportedly quite easy. However, a rider must pay at a bank, and in the rural areas there are no banks. The Ministry is interested in harmonising training standards, but the local context must be taken into account.

There are three-wheelers that are used for the carriage of people or the carriage of goods.

The Traffic Police have a role to play in enforcement but they must work collaboratively with other stakeholders not just with an ‘esprit de guerre’. The Traffic Police do stop vehicles without a registration plate and can seize the vehicle until the rider has the required paperwork. The CNPR also have a presence in the Province.

Associations can also play a role as they have a structure and hierarchy for coordination. They can help with self-regulation.

Currently the Ministry is reviewing the regulations that are in place for all vehicle classes. They have commissioned a study to help establish the current position and then intend to make the required changes. The Ministry is keen to “organise the sector” and advised that there are least 2,500 motorcycles in the town.

Ministry of Transport and Communication - Technical Services Department – Kisangani Province

The Technical Services department advised that previously in Kisangani bicycles were very common and were used as taxis. Then motorcycle taxis came along and more recently, three-wheelers.

The Technical Services department feel that the ‘code de la route’ is not respected in the Province. The Ministry is planning to conduct some refresher training/seminars for motorcycle taxi riders but there is not a clear timeframe for this activity. They also feel that wearing a helmet and providing one for passengers is important, and advise that in future they will be insisting on this as well as the wearing of a high visibility jacket and having a number on motorcycles. The Technical Services department would like to “control” the motorcycles more effectively. They will liaise with the motorcycle taxi association called MotoKis but it was reported that the management committee is currently suspended due to irregularities.

The Technical Services department advised that the '*Institute National de Preparation Professionnelle*' is the body that can conduct training and that they have the expertise and materials to do this.

There is currently a problem with issuing driving licences (biometric) as the issuing of all licences has been put on hold at a national level until the end of the year.

Institut National de Préparation Professionnelle (INPP)

The INPP provides professional training across DRC – offering both long-term vocational training as well as refresher training for industry. It has a central headquarters in Kinshasa and branches in some of the Provinces. It was primarily created to develop capacity in the private sector. The training is standardised across the Provinces, although it can be adapted for application at provincial level. Prices for training are also fixed at the Provincial level.

The INPP in Kisangani offers training to motorcycle riders in the Province but they advised that the demand for this type of training is extremely low. The INPP think that sensitisation is required by a range of actors so people can see and appreciate the value. The INPP advised that they could even provide some sensitisation for free.

The INPP in Kisangani has a dedicated building and two motorcycles which were donated by JICA specifically for training. The INPP has three trainers, who specialise in driver training and mechanical training. Other trainers can also be brought in if required. The training is currently two months long (2hrs per day). The INPP also offers the same training as an accelerated course that takes one month, with four hours of training per day. Theory is covered first, then practical. They have provided training to approximately 80 trainees per quarter over the last year. INPP also sends trainers to client's sites to offer 'in plant' training.

According to INPP in Kisangani, all actors (riders, Ministry of Transport and Communication, INPP) have different needs that need to be addressed and more coordination is required. For example, consideration of the cost of organising quality training, as well as creating demand for the training. There is also a need to focus on licences, registration of motorcycle taxis, and enforcement to ensure that riders have these documents. This will allow for the proper identification and safe operation of motorcycles. The INPP also recommends regulating the circulation of motorcycles and where they can operate. For example, limiting the circulation to outside large urban centres. There is also a problem with alcohol abuse amongst riders which needs to be addressed. More efforts are required to ensure riders wear helmets.

A monthly licence is available in Tshopo for those who cannot afford a 5 year licence. There is also a licence specifically for category of motorcycles.

The INPP has adequate facilities and appears to be well organised. It receives support from the French and Japanese governments and is even planning to build a new building in 2020.

University Teaching Hospital - Kisangani

Dr Roger Amisi Kitoko

Dr Kitoko advised that the innovation of motorcycle taxis came after bicycle taxis. Motorcycle taxis are seen as practical for people, as the routes are often not accessible by other means of transport. They are the most common means of transport that people use. They bring advantages as well as challenges.

Dr Kitoko advised that the dangers are real and that there is no protection for riders and their passengers. However, they are valued by people as they go where other vehicles cannot. He advised that motorcycles have "no seasons", they will simply find another way through and create new tracks. They also bring economic benefits for the drivers and owners.

The hospital serves people across the whole Province, some people even come from Rwanda. Within town the distances are usually 15-18 km. However, people also travel from 350 km away and that can take five days if the route is bad. Vehicles breaking down is very common. Sometimes people travel for two days on a motorised canoe and then link with a motorcycle taxi to get to the hospital.

The hospital treats a lot of motorcycle crash victims. They see head injuries, injuries to limbs, concussion and paralysis. Some of the patients die from their injuries. There are some riders that approach the speed bump near the hospital at high speed and then have a crash, so really careful reflection is required on what to do about these high injury rates. The Doctor advised; “The riders don’t respect the rules, police or even their customers”. The hospital regularly receives cases where there have been multiple casualties. This is not surprising as many of the motorcycle taxis are carrying multiple passengers. Children and babies are often placed at the front of the motorcycle taxi. Doctor Kitoko took the project team for a tour of the hospital, including the trauma ward. Every patient in the trauma ward (except for one) had been involved in an incident with a motorcycle taxi, this included a young girl.

The Doctor advised that one of the main challenges is the time it takes from the actual crash to receiving medical care. Another challenge is that people often can’t afford to pay for their treatment. Treatment is not free at the hospitals and road crash victims must pay for their care. A lack of some medicines, lack of some equipment (such as a scanner or defibrillator) and prosthetics also hinders the treatment/care that the hospital can provide.

Dr Kitoko advised that three-wheelers are more appropriate than two wheelers for pregnant women, or a motorcycle with a trailer.

Improved coordination by all actors is required.

Hôpital du Cinquantenaire de Kisangani

Dr Bambale – Médecin Directeur Adjoint

‘Hopital du Cinquantenaire’ was built 16 years ago. It offers public and private services and until recently has received considerable support and funding from the Gertler Foundation.

Dr Bambale advised that riders do not know the ‘code de la route’. They are not informed about what they should be doing so there is an issue of rider mentality. There is also a lack of protective equipment, riders should have two helmets and helmet wearing should be mandatory. The regulations are weak and are not enforced by the police. When a rider transports multiple passengers and has a crash it becomes a “gros catastrophe”.

Dr Bambale advised that the condition and design of the roads has contributed to the number of road crashes. The roads in the town are too narrow for the numbers of motorcycle taxis using them, “every day there are accidents”. Many crashes on the main route out to the airport. The hospital also receives patients who have been referred from other health facilities in the Province. The most common injuries are head trauma, broken bones and amputations. As there is no scanner in Kisangani the hospital sometimes has to refer patients on to Kinshasa. The Doctor also advised that motorcycle riders are at risk from other health issues such as respiratory infections, visual problems (due to lack of eye protection) and back problems caused by sitting on a motorcycle all day and operating in challenging conditions. Some riders are also fatigued as they operate from morning until late into the evening, others operate at night as they have another day job. Working at night is more lucrative as a rider can increase the price two or three-fold but the risks are much higher. There are ‘bandit clients’ who can attack the riders.

The riders have no insurance and the hospital has to take them, even when the riders cannot pay for treatment. Sometimes, if a private company has been involved in a crash they will pay and a couple of local business’ were cited as having done this.

However, motorcycle taxis are used by the majority of the population. The women on the other side of the Congo River are said to rely on the motorcycle taxis, “the women have no choice”. They come for ANC and also for delivery. Some will walk, some will use a vehicle but many will use the motorcycle taxi. The hospital has an ambulance and it can service people within the town for 10 USD. However, for the people in the rural area they would be more likely to use a motorcycle taxi and a sick person would be held onto the motorcycle taxi by another passenger. The hospital even has approximately 10 motorcycle ‘taxi-men’ stationed in its car park as the riders use the hospital as an unofficial rank. Such is the demand from patients, family and even hospital staff to use motorcycle-taxis to travel to and from the hospital.

Centre Santé de Base (Primary health Facility) – Babingi – 90 km from Kisangani

Interview with a nurse

The ‘*Centre de Sante de Base (CSB)*’ is able to manage patients in non-urgent cases such as births, minor interventions, consultations, ANC, family planning and distributing medicine to manage HIV. In more urgent cases, the CSB refers patients to the nearest referral hospital in Wanie Rukula. The ‘*Centre Sante*’ covers a population of 5,900 people and nine villages, with people travelling up to 11 km.

According to the nurse, the use of motorcycles benefits the community because it helps transport the sick and provides economic opportunities for those wanting to transport their merchandise to Wanie Rukula. However, motorcyclists are also known for their lack of knowledge concerning the ‘Code de la Route’ and for crashes. The nurse has also seen an increased number of hernias in male patients who work as motorcycle ‘taxi-men’, as well as back pain and problems with their vision.

Generally patients visit the CSB either on foot or by motorcycle. When referred to Wanie Rukula, patients will generally take a motorcycle taxi, which costs between 5,000 and 10,000 CDF. There are no three-wheeled motorcycle taxis available for passenger transport in this area, nor any other forms of transport or ambulance, besides from a bicycle.

According to the nurse, there are some motorcycle related accidents in this area. In the last year, there have been three incidents, including one death. Incidents that have occurred have been related to traffic and most commonly lead to fractures and trauma. The referral centre at Wanie Rukula cannot always manage urgent cases caused by motorcycle accidents, in which case they must be referred to Kisangani, the nearest tertiary hospital.

Overall the nurse advised that there are more advantages than disadvantages concerning motorcycle use.

Centre Sante de Reference – Zone de Sante Lubonga

Interview with doctor

People travel to the ‘*Centre Sante de Reference*’ or Referral Health Facility from distances of up to 52 km and is approximately 9 km from Kisangani. To reach the hospitals in Kisangani a ‘*pirogue*’ (canoe) is required to cross the Congo River. While the number of patients varies, the ‘*Centre Sante de Reference*’ sees up to 30 cases per week, especially in the rainy season. For those travelling from the outskirts of the ‘*Zone de Sante*’, a motorcycle ride to the ‘*Centre Sante de Reference*’ costs approximately 10,000 CDF. Access is reduced at night due to insecurity.

According to the doctor, motorcycles enable people to reach the ‘*Centre Sante de Reference*’. Three-wheelers are not able to access this area, leaving bicycles and walking as the only other mode of available transport. All types of patients arrive at the ‘*Centre Sante de Reference*’ by motorcycle, including those coming for births, pregnancy complications, ANC, severe malaria, and motorcycle crashes. Those that have been involved in a crash most commonly suffer from dislocations and fractures.

According to the doctor, clients (passengers) are the most common victims of motorcycle crashes, as they are not wearing protection and are riding the motorcycle with up to four or five other passengers. The doctor advised that he believes there are more crashes when there is more than one passenger on a motorcycle. Women that use motorcycles during pregnancy are at a greater risk of falling as they often ride the motorcycles in a side-saddle style rather than sitting astride the motorcycle. Health complications for taxi riders most commonly included hernias and the inflammation of the testicles, or '*orchide*', due to the impact from the motorcycle and the heat. The doctor also noted that neither riders nor passengers use helmets. Riders tend not to use helmets because of the heat and because they complain of headaches if worn all day. The number of crashes was unknown, however no known deaths had been observed. It seems that while crashes are an issue for the Centre de Reference, the severity of the crashes is lower than in Kisangani town.

When the doctor must refer a case to Kisangani, the only mode of transport available is generally the motorcycle taxi, due to the poor conditions and inaccessibility of the route. According the doctor, there are always taxi motorcycles available in the villages during the day.

Police Routiere – Kisangani

The Police division related to traffic has approximately 200 staff (agents). The police generally rely on the use of personal motorcycles for transport related to their work. They have just one police motorcycle.

According to the police, there are many advantages of motorcycles in the Kisangani area, these include offering a means of employment and increasing access to Kisangani from areas that have poor infrastructure. Disadvantages include a high number of crashes, a lack of knowledge of the '*Code de la Route*', and a high level of alcohol consumption amongst riders. The number of motorcycles in Kisangani is increasing per day.

Regarding the number of crashes in Kisangani, the police have a limited amount of data because riders often avoid involving the police. The police is generally only summoned when there is a death or serious injury caused by the accident. The lack of involvement of the police at crash sites was attributed, according to the police, to the lack of legally required documents by riders. Involving the police would likely lead to them having to obtain the necessary documents/being fined.

The Kisangani police explained that motorcycles are currently not being controlled by traffic police in terms of rider behaviour as well as their ownership of the legally required documents and equipment. They have been advised to focus on minimising traffic jams rather than stopping and fining riders. This directive has come from the central government and is linked to the '*grace period*' that happens most years for two-three months and often during the holiday season. Furthermore, when the police were carrying out their road traffic role regarding motorcycles (outside of the grace period), the police cited a poor ability to control riders. Riders often refused to stop for police and showed poor behaviour towards the police, including menacing the police by coming to the station '*en masse*' to threaten the police.

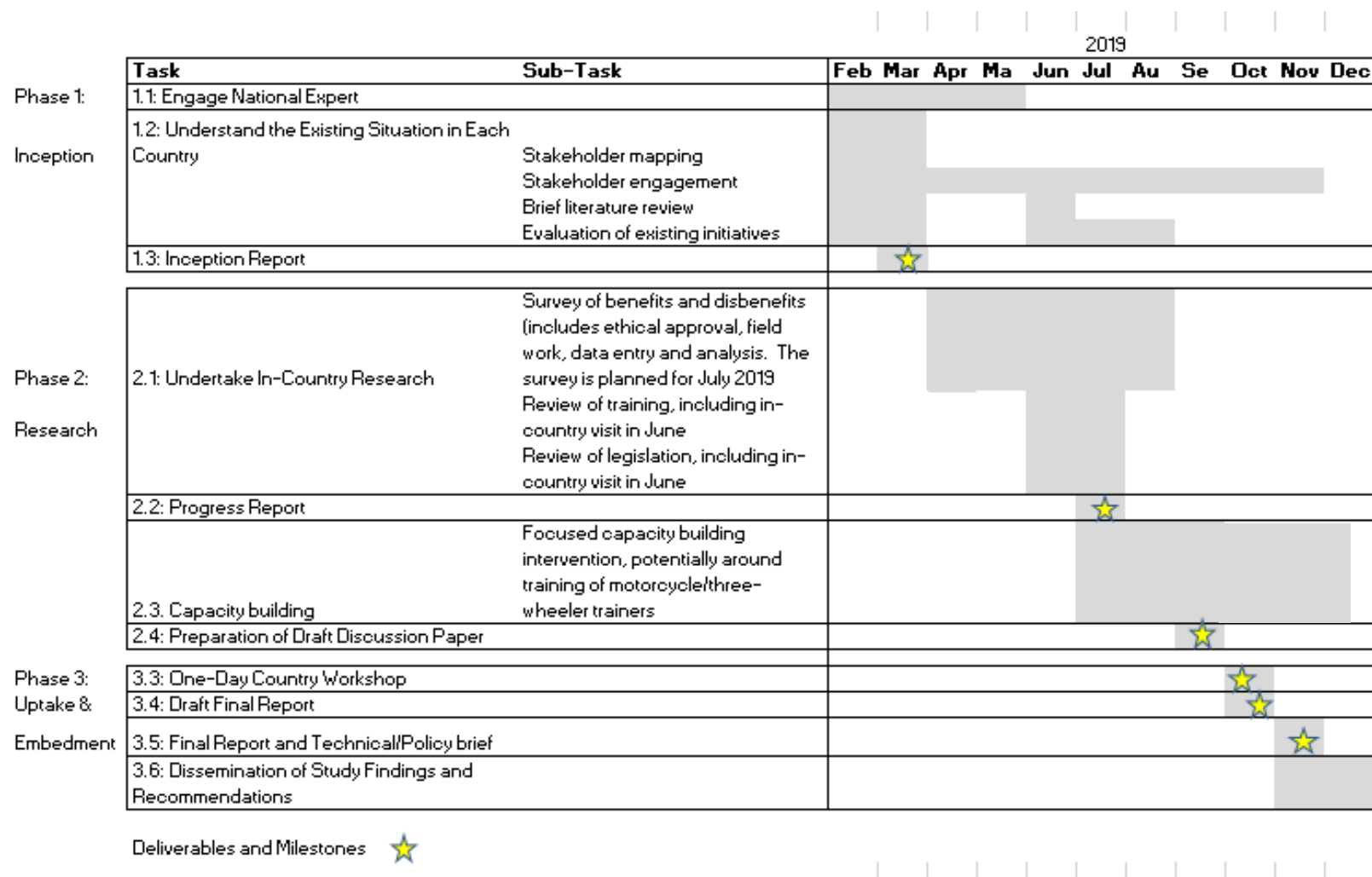
There is also a delay in the review/implementation of some provincial regulation that can be attributed to the new government, following the elections at the start of 2019.

The police have also been involved with the Ministry of Transport and Communication and Division of Transport regarding the introduction of training and sensitisation activities. For example, together with MONESCO, a 2 day sensitisation was given for approximately 200 riders. Riders were made aware of this by radio. The police is also involved in the upcoming sensitisation seminar that is planned by the Ministry of Transport and Communication that will cover the '*Code de la Route*'. The traffic police is responsible for teaching at these events. When the motorcycle association was '*active*', there was also contact with this organisation.

Overall, the priority of the police to improve the situation around motorcycles is prevention through regulating traffic, preventing crashes, improving road safety and increasing knowledge of the '*Code de la Route*'.

Annex 2 Updated Workplan

The updated work plan is presented here.



Annex 3 Contribution to the ReCAP Log Frame

The project’s contribution to the ReCAP Log Frame is shown in the following table.

It should be noted that as key outputs will be delivered towards the end of the project, changes to policy, regulation and practice, citations, presentations at conferences are expected beyond the end of the project contract. To demonstrate this, targets for achievements with one year and within two years of the end of the project have been added.

Intervention Logic	Indicator	Source of Verification	Baseline: Start of Project, Sep 2017	Target: End of Project, Jan 2019	Target: Within One Year of End of Project, Jan 2020	Target: Within Two Years of End of Project, Jan 2021	Assumptions
Outcome: Sustained increase in evidence base for more cost effective and reliable low volume rural road and transport services, promoted and influencing policy and practice in Africa and Asia	1. SUSTAINABILITY: Partner Government and other financiers co-funding research with ReCAP. Contributions in kind (K) and Core Contributions (C)	In kind support will be fully documented in line with the AFCAP guidelines					It is anticipated that in kind (K) contributions will be leveraged during the life of the project. This may take the form of additional Amend/Transaid staff time (beyond the contractual days) or securing funding in-country from government or private sector to support certain activities such as training, workshops or piloting an initiative. UK private sector support will also be investigated through Transaid’s corporate partners.
	2. Concrete examples of change (applied or formally adopted), influenced by ReCAP research that will be applied to #km of road in focus countries.	N/A	N/A	N/A	N/A	N/A	N/A

	3. Number of citations in academic articles of ReCAP peer reviewed articles and/or working papers, conference papers, etc.	Conference proceedings Google Scholar and similar sources	0		3	5	Within one year of the end of the project, it is expected that this research will be cited in conference papers. Within two years, it is expected that this research will be cited in other research papers.
Output 1: RESEARCH and UPTAKE: Generation, validation and updating of evidence for effective policies and practices to achieve safe, all-season, climate-resilient, equitable and affordable LVRR and transport services in African and Asian countries. (Low Volume Rural Roads : LVRR / TS – Transport Services)	1.1 LVRR: Number of peer reviewed papers generated from ReCAP supported or related LVRR research projects made available in open access format.	N/A	N/A	N/A	N/A	N/A	N/A
	1.2. TS: Number of peer reviewed papers generated from ReCAP supported or related TS research projects made available in open access format.	Two academically – orientated research papers produced	0	A minimum of two academically-orientated research papers submitted for consideration.	A minimum of two academically-orientated research papers published.		These will be submitted for consideration before the end of the project. They are expected to be published within one year of the end of the project.
	1.3 Engineering Research: National policies, manuals, guidelines and/or research outputs that have been fully incorporated into Government/Ministerial requirements, specifications and recommended good practice as a result of ReCAP engineering	N/A	N/A	N/A	N/A	N/A	N/A

	<p>research (including climate change adaptation and AfCAP and SEACAP adaptations).</p> <p>To include introduction of new policies and modification to existing policies.</p>						
	<p>1.4 TRANSPORT SERVICES Research: National policies, regulations and/or practices for rural transport services modified or introduced as a result of ReCAP research (including road safety and gender and AFCAP and SEACAP research)</p> <p>To include introduction of new policies and modification to existing policies.</p>	<p>New policies and practices will be fully documented in line with the AFCAP guidelines</p>	0	0	4 (updated)	4 (embedded)	<p>Within one year of the end of the project, it is expected that one concrete example of change will be adopted in each of the four project countries.</p> <p>Within two years, it is expected that those concrete examples of change will be embedded within policy or practice.</p>
	<p>1.6. LVRR and TS information generated for dissemination, and disseminated, that is not peer reviewed. Total to include research papers, final research reports, workshop reports, manuals and guidelines.</p>	<p>ReCAP PMU</p>	0	<p>Final Report and Final Country Paper accepted.</p> <p>One policy briefs published</p>			

Output 2: CAPACITY BUILDING: The building of sustainable capacity to carry out research on low volume rural roads, and rural transport services in African and Asian countries.	2.1. African / Asian experts or institutions taking lead roles in ReCAP Research Projects.	Final Report / ReCAP PMU	0	5			National Experts in DRC are expected to successfully complete the project.
	2.3. Research projects with female researcher inputs at senior technical level.	Final Report / ReCAP PMU	0	5			The Chair of QUAG, Research Coordinator and Principal Researcher are all expected to successfully complete the project.
Output 3: KNOWLEDGE: Generated evidence base of LVRR and transport services knowledge is widely disseminated and easily accessible by policy makers and practitioners (including education and training institutions).	3.2. ReCAP generated knowledge presented and discussed at high level international development debates and conferences	Proceedings of high level international development debates and conferences		2	1	2	It is expected that members of the project team will present the results of the project at least once per year during the two years following the end of the project.
	3.3. ReCAP generated knowledge disseminated through significant workshops and dedicated training, virtually or physically, that are rated by participants as effective.	Reports of Four-Day Team Workshop and One-Day Country Workshops	0	Workshop rated by a minimum of 90% of participants as 'effective'			

Annex 4 Updated Risk Log

Programme Risk Assessment and Mitigation Matrix			Very High	High	Medium	Low
Potential Risk	Risk Grading ⁵		Description of risk	Proposed Management and mitigation actions		
	Probability	Impact				
A. Risks identified in project proposal						
A1: A lack of crash data means that disaggregation of rural/urban data is not possible	H	M	From our past experience, and looking at what we have been able to obtain so far, it seems that crash data is not available, and data that is available may not be reliable. This will hinder our ability to understand in-depth the location of crashes.	We will work closely with Ministries to gather available data. Gathering of primary crash data is out of scope for this assignment, although data on crashes from the perspectives of a range of target groups will be gathered.		
A2: Challenges in gathering information from stakeholders in the short timeframe	H	M	Due to the nature of this extension, there will be a short window of opportunity to complete interviews, focus groups, and stakeholder meetings. This leaves little flexibility in changing approach in the case of unexpected events or an approach that does not yield fruitful results.	<p>By using an experienced and local research team we aim to implement research using a methodology and approach that will align well with the selected sites.</p> <p>The research team will be split into two groups following training to increase the efficiency of the data collection phase.</p> <p>Past experience of our research team working in Kinshasa and Kisangani will greatly reduce the time needed to identify and organise the target audience to be surveyed.</p> <p>Having the support from local ministries and Cellule Infrastructure will also be essential in ensuring participation in the data collection phase.</p>		
A3: Strong general opposition towards motorcycles and motorcycle taxis	M	M	Decision-makers tend to live in urban areas and so have a stronger understanding of urban issues than of rural issues. In urban areas in many African countries, motorcycles are commonly associated with crashes and injuries and crime.	<p>We will strive to obtain and present a full understanding of transport issues based on data, thereby aiming to enable decision-makers to make policy based on fact rather than on their personal perceptions.</p> <p>Furthermore, the scoping trip held in February indicated that there is a general understanding of and appreciation of the importance of motorcycles in DRC.</p>		

⁵**Probability** = the likelihood of this risk occurring despite the management and mitigation activities being in place. **Impact:** = the effect on the ability of the programme to achieve its objectives without major revision or review.

Programme Risk Assessment and Mitigation Matrix				Very High	High	Medium	Low
Potential Risk	Risk Grading ⁵		Description of risk	Proposed Management and mitigation actions			
	Probability	Impact					
A4: The visa process for DRC means results in delays to planned travel	L	M	The visa process is more comprehensive for DRC than the other four countries. It can take 3-4 weeks to process visas for DRC and requires numerous supporting documents.	As we are aware of this risk, Transaid and partners will work to ensure early submission of visa documents to minimize the risk of a time delay. Any airline reservations will also be made with the possibility to amend or cancel.			
B. Risks identified since project commencement							
B1: Delays due to in-country instability or health risks	M	H	<p>DRC has a history of political instability, especially in light of the recent presidential elections.</p> <p>We are also aware that the World Health Organization has put in place strong warnings due to the existence of both the plague and Ebola outbreaks in DRC.</p>	<p>We are continuing to monitor the political and health situation in DRC, using the UK Foreign and Commonwealth Office and WHO websites as well as our network of in-country contacts.</p> <p>We have developed a DRC specific safety and security plan to ensure that risks are minimised. Transaid has robust process for managing security and the team will be required to adhere to these.</p> <p>Additional measures were put in place for the team travelling to DRC in July.</p>			

Programme Risk Assessment and Mitigation Matrix

Very High	High	Medium	Low
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Potential Risk	Risk Grading ⁵		Description of risk	Proposed Management and mitigation actions
	Probability	Impact		
B2: Risks associated with working in rural areas	M	L	There are numerous potential risks associated with working in rural areas in Africa. These include risk of road traffic crashes, security risks, health risks and more.	<p>Transaid, Amend and TRL have significant experience of managing projects in rural areas in Africa. All of our team members have experience of working in rural areas.</p> <p>We will not ask any members of the team to travel to areas that are identified as risky. We will ensure that all team members required to work in rural areas take all reasonable precautions including, for example:</p> <ul style="list-style-type: none"> - Using only vehicles hired from reputable companies with professional drivers, and vehicles in excellent condition - Staying in accommodation with adequate security - Staying in groups of no less than two at all times - Maintain regular communication wherever possible - Only drinking bottled water <p>We will also be travelling with local experts, which will decrease the risk by avoiding solo-travel which may be regarded as suspicious.</p>