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Possibilities and limits of urban transport services in developing countries

The case study of motorcycle taxis and minibuses in N'Djamena, the capital of Chad

N'Djamena (Chad), public transport system, mini-buses and taxi motorbikes

The supply of public transportation in N'djamena is dominated by innumerable private enterprises operating minibuses. The stations, routes and schedules are not fixed. In addition, there is no fixed price, in other words, the fare is bargained. Consequently, these minibuses cannot meet overall transport demand, particularly to the zones of the outskirt quarters. That is why public transportation in N'Djamena is not reliable. Even though taxi motorbikes offer their services to cater for public transportation, some problems such as lack of safety and comfort, derisory price, the absence of reliability, or poor accessibility of some quarters are on the increase. In the light of this, the question is: How can we help the current agents to improve the quality of public transportation services in N'Djamena?

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Several agents are currently implicated in the organization of public transportation in Chad's capital N'Djamena. They have direct or indirect contact with one another. There is a more or less strong network that enables them to negotiate and share ideas so as to

make important decisions that would enable them to resolve certain problems that are obstacles to their organization. The interviews conducted and the studies carried out in the field among the agents were used as the basis for a typology of the agents and an inventory of the conflicts between them.

Motivation

Background

Sub-Saharan Africa is increasingly characterized by high population growth rates. Before 1960 no city had a population of one million, but in the mid-1990s, there were

already about 100 cities with a population of 100,000 or more. The last decade saw the birth of a number of million-inhabitant cities such as Lagos, Abidjan, Dakar, Nairobi and Douala. In some countries, this growth has affected the outskirts of the cities, with the birth of several neighborhoods where accessibility is a major challenge for the inhabitants. For them, access to work, education and healthcare is difficult or, given the large distances and the lack of public

transport services, limited to the bare minimum (United Nations Organization, The Economic Commission for Africa). The management of urban mobility begins with the management of the occupation of urban space (Aderamo 2012).

Like other African cities, N'Djamena – the capital of Chad close to the Cameroun border (figure 1) – does not offer a legal framework of land use for its population, who is constantly in search of new residen-

tial areas (Todes 2012). Urban policy is characterized by weak development in spatial and urban transport planning (see Huneke 2007). There were no planning documents for spatial planning until 1996, when a study by the Groupe Huit consultant office set up an Urban Reference Plan (URP). This document, however, lost its reference character because it has not been fully implemented. The objectives attached to it no longer correspond to the current context of the city. It is this concern that in 2008 led to the design and development of a planning framework document for the city of N'Djamena. Over time, the city of N'Djamena began to spread to the west and to the east in concentric waves, with the neighborhoods of Djambagato, Bololo, Klémat and Djamba as starting points (see Jemba, 2012). It covers an area of 20,000 hectares (RGPH2 2009), shown in figure 2.

Urban transportation is definitely an important factor for the smooth operation of cities. It answers to the mobility needs of the people and contributes to spatial integration as well as to quality of life. This is in accordance with a proverb that says: "If a man has found what to eat, it's because his feet made a move". Human activities and movements are inseparable and indispensable. For instance going to work, seeking new employment, going to school or to the university, shopping, participating in a wedding or mourning ceremony etc. However, it is important to integrate the surrounding towns and their inhabitants in the urban lifestyle by providing them with the means to travel in order to create social and geographic links. In N'Djamena, the public transport system is dominated by small private enterprises. The service is however a farce: There are no fixed stopping points, no routes and no schedules, the price is not set and the drivers have little or no training. Using motorcycle taxis has become an alternative means of transportation since 1990. Despite this alternative, the mobility problems mentioned above still remain in place. The following research question comes to mind: How can we improve the quality of public transportation service in N'Djamena in cooperation with the different players?

The objective of this research is to identify the players, to know their roles, their professions as well as their area of interest in the system, and to analyze different points of frictions that they may have.

Interviews

We conducted 46 interviews with motorcycle taxi drivers on the various selected sites. The average length of an interview was

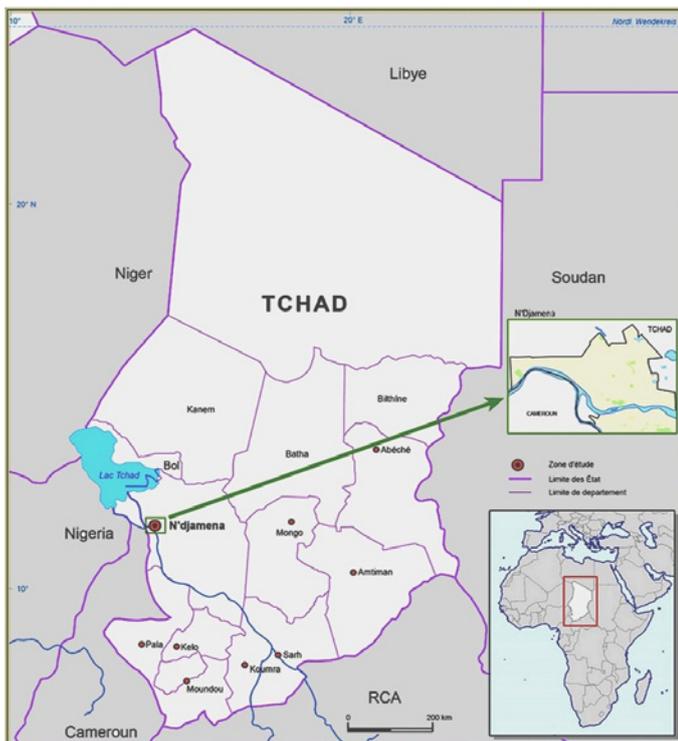


Figure 1: Geographical situation of the study area
Source: FAO 2005, modified by N. Ndadoum

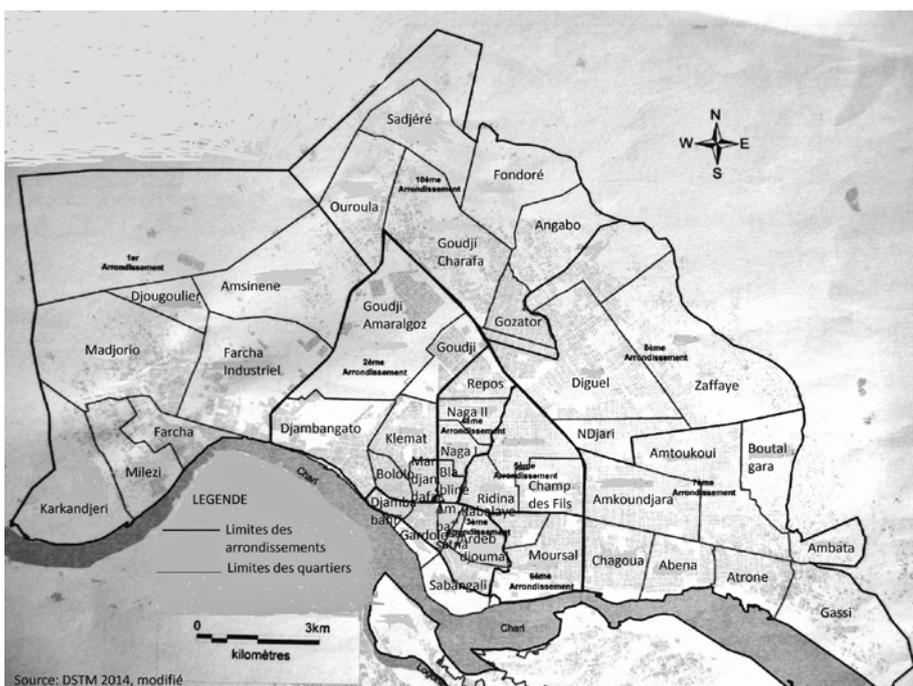


Figure 2: N'Djamena map showing recent quarters

Source: DSTM 2009, modified in 2015 by N. Ndadoum

approximately 25 minutes. In order to interview the motorcycle drivers, we went to the sites several times on different days of the week and at different times of the day to better understand the reasons for their choice to work in the morning or in the evening. The field interviews with the drivers were conducted after we had visited the offices of the associations or unions to which they belong. The approval of association or union leaders helps create confidence in the field before the interviews with the drivers. In order to interview the drivers of minibuses we chose 6 routes out of the 16 existing routes. Then we went to the bus stations where we interviewed 4 minibus conductors per station, which makes a total of 24 drivers interviewed.

Obtained results

Typology of drivers of motorbike taxis

Motorcycle taxis drivers have very different work patterns, which vary based on their own schedule.

Drivers operating in the morning and in the afternoon: Depending on other tasks and concerns they may have, the driver choose their work hours in the morning and in the afternoon. They chose the period between 5:00 and 8:00 a.m. and between 12:00 and 14:00 p.m. to operate their service. These hours fall within the morning and afternoon rush hours. Their clients consist of pupils and students, traders and certain civil servants. Indeed, given the unscheduled stoppages of the minibuses and due to the heavy traffic jams in the morning, these customers opt for motorcycle taxis to quickly reach their work places. Many live in the new neighborhoods in the peripherals, which are not easily accessible to the minibuses. These areas are beyond the 1st to the 10th district. For pupils and students, it is the only means of quickly reaching their schools to participate in the early hour courses that start at 7:00 a.m. Similarly it is an easy means for some traders living in the suburbs to quickly get their goods (vegetables, meat, fish) to certain shopping malls and markets, taking advantage in particular of the coolness of the morning (see figure 3). The motorcycle taxis allow people living far from the central districts of the city to take an active part in city life and enjoy some advantages offered by the city, namely training, health care and economic activities. Thus through their service, border effects between the suburbs and neighborhoods of the city are erased. Their favorite areas are the neighborhoods of Ambata, or Boutalbagar, Gassi in the 7th district and Madjorio, Milezi in the 1st district.

Figure 3: Dembé market - a trader unloading his goods after using the services of a motorbike taxi
Photo: N. Ndadoum



The areas served by the moto-taxi drivers extend beyond certain localities like Toukra in the 9th district, Goudji Zaffaye in the 8th district, Angabo, Goudji Charafa and Sadjéré, Ouroula in the 10th district to enable some vegetable farmers to transport their products directly to the various markets of the city.

Drivers operating in the evening: Our evening visits to some parking sites enabled us to distinguish another category of motorcycle taxis drivers. These are indeed those who have chosen to work from 4:00 to 6:00 p.m. and sometimes continue up to 8:00 p.m. Unlike those working in the morning and afternoon, for household workers, even those living in the suburbs, there are very few options for transportation. And that despite the important need for mobility between neighborhoods. These movements take place from one suburb to another or from a suburb to an area downtown. Some colleges and vocational training schools created in some of these areas in the last ten years offer courses at night only. The movement of students attending these schools has led to a high demand for motorbike taxi services. It is also in the evening starting at 6:00 p.m. that some traders go back home from the market. At the same time, minibuses start to become rarer after 6:00 p.m. Thus, for traders living in the outskirts of N'Djamena, the only alternative they have is to use the services of a motorbike taxi.

Drivers operating alone: These are the motorcycle taxi drivers who are not registered with any trade union. We approached a few of them to learn about the reasons for their choice to work alone. While for some the existing regulation is not compatible with their interests, for others there is no other reason than the constant search for money. Indeed these drivers are working

only occasionally and part-time so it is difficult for them to comply with the rules and principles of the associations. They only work when they need money. The discipline in the stations does not suit their interests. Indeed, in each station, it is the customers who look for drivers, and given the size of the station (with an average of 20 people), it is not always easy to find a customer in need of service. Therefore the probability of making enough money is small. This group of drivers chose to be mobile, i.e. constantly in search of customers. Therefore, they have no fixed territory. They wear a fake vest only to reassure customers willing to seek their service. The regulatory body put in place to control motorcycle taxis five years ago has made wearing a vest compulsory for all motorcycle taxis drivers. This is in accordance with section 16 of the law. In article 13, wearing a fake vest is deemed a serious offence; anyone caught wearing one will pay a fine of 50,000 CFA Francs (FCFA), which corresponds to about 77 EUR. According to the testimony of some conductors belonging to non-official groups, they are very discrete about their activities because they are in constant fear of being identified and denounced by a controller in the field, especially when crossing unknown territory. This group operates in anonymity; however, the unofficial drivers play an important role in the system. Indeed, they are available everywhere, and some customers are lucky enough to have them at their doorstep so as to enjoy their services. They are very flexible with regard to the price.

Typology of minibus drivers

There are three main groups of minibus drivers: The vehicle owners driving their own vehicles; the drivers also recommended by the union; and those who for reasons comparable to those mentioned above for



Figure 4: Motorcycle taxi drivers await customers getting off minibuses as seen in this picture taken at the Globe roundabout in Farcha

Photo: Nadmian Ndadoum

the motorcycle taxi drivers have decided to operate illegally.

Owner-drivers: The owners are those drivers who have chosen to drive their own vehicles. We met at least 7 of them on 6 selected lines to conduct the interviews. They are usually former apprentices or drivers who used to work for others and have now become owners. According to some testimonies, the remuneration received does not allow them to buy a new vehicle after a few years. However thanks to the established savings system through monthly contributions, after 5 to 6 years some were able to afford to buy a used car that cost from 1 to 1,500,000 FCFA (about 2,000 EUR). Owner-drivers take care of some daily routine activities such as small repairs. It is only on board that they are assisted by an apprentice, who collects money from customers having boarded along the way or who gives change to those whose destination comes before the end of the line.

Permanent drivers: The permanent drivers are professional drivers who work all day. They work for minibus owners to earn wages of 4,000 FCFA / day (about 7 EUR) (see Paper II FNSTUIT 2011). The daily turnover to be paid to the operator apart from daily charges such as fuel or fines, amounts to 6,730 FCFA (10 EUR). The income depends in fact on the number of vehicles operating on a specific route. The route records more buses when it is a busy one. This also lessens the chances of a driver

to make a lot of money as they have to wait their turn to invite passengers. Some drivers are impatient to wait for their turn; however, they operate in secret by picking-up passengers along the way. This strategy is much applied by some occasional drivers, that is to say those who are not registered to any station. Even though this practice is forbidden, many go in for it to maximize the daily revenue.

Illegal minibus drivers: Illegal drivers are those who do not belong to any union. Several reasons explain the existence of this group in the system. The first reason is the system of loading passengers by turn, which many drivers apparently do not support. It is a system of organizing the loading of vehicles according to their order of entry into the station and their destinations. Given the size of stations, some drivers must wait for several hours to load. In some cases, it is only during rush hours that the buses depart in rapid succession. These times fall within the following hours: 6:00 to 8:00 a.m. and 12:00 to 2:00 p.m. This system has many advantages on the organizational level, but does not allow drivers to attain the daily income they expect and need. This group plays an important role in the system. In the suburbs, some drivers may even go far along the main road to find customers.

Types of conflicts

The main types of recorded conflicts are those between the public authorities and

the drivers of minibuses and motorcycle taxis regarding compliance to the legislation; conflicts of competition over passengers between motorcycle taxi drivers and minibus drivers; and finally conflicts between the drivers of motorcycle taxi or minibuses and customers.

Disputes between the government and the drivers of minibuses and motorbikes

In Chad, the government created a Road Traffic Brigade (BCR) within the police, which controls the traffic at crossroads, potential areas of conflict. The difficulty to apply priority at different junctions where there are poor or no traffic signs has led the government to mobilize the BCR to control the traffic. However, the minibus drivers and motorcycle taxis do not often comply with these rules. The desire to achieve a maximum daily revenue especially during rush hours causes them to be impatient and refuse to comply with the guidelines and instructions of BCR officials in some junctions and roundabouts of the city. These offenses are punishable by fines or even confiscation of vehicle documents, especially given that they are the cause of frequent accidents in these locations. For motorbikes, the BCR checks shall be confined to the compulsory use of a helmet, which is governed by the decree No. 26/MTPT/DG/DTS/2002 of the Ministry of Transport. Article 22 on the use of motorcycle taxis sets the fine for failing to helmet at 3,000 CFA francs, or about 5 EUR. The behavior of some motorbike taxi drivers sometimes makes the conflict complicated. They often have clashes with BCR agents when it comes to handing over their bikes. Disputes between the government and the drivers of motorbike taxis and minibuses are due to information breakdown or lack of consultation before drafting any law. Among many examples to illustrate these are the cases of minibus drivers who have raised the price for their service after the decision of the government to reduce the number of seats in the vehicles. This puts them in conflict not only with governments but also with passengers. "The minibus drivers have increased the price without any explanation." (Abdoulaye Niankounian, the General Adviser of the intra urban union of transport). "The conflict between the government and the minibus drivers and motorcycle taxis finds a solution by improving the living conditions of some drivers. Indeed for some of them, the contract binding them to vehicle owners does not entitle them to a monthly salary. They are generally paid in relation to the revenues of the day. Thus, to overcome these problems, some drivers

engage in behaviors that are often in conflict with current regulations” (Noitora, deputy director general of transport surfaces, oral source, March 14, 2013).

Disputes between drivers of minibuses and motorcycle taxi drivers

The search for the most profitable routes often leads to competition between the drivers of minibus taxis and motorbike taxis. The motorcycle has become an alternative to taxi services in particular because it saves time. It enables its customers regardless of traffic to arrive at their destination at the desired time. In the early 1990s the rivalry between the two means of transport became visible. Especially when some motorbike taxis were roaming on certain minibus routes and offering their services to customers anxious to save time. This is what happens often around the markets and at some places where drivers have to wait their turn. The minibus drivers see the existence of motorcycle taxis drivers as an obstacle to them in terms of revenues. Customers indeed prefer motorcycle taxi service because of better accessibility and availability. Outside of the rush hours between 7:00 a.m. and 4:00 p.m., time to wait for your turn to load at the stations is too long for minibuses. The views of the operators of these two means of transport are increasingly divergent regarding road safety in the city of N'Djamena. Considering the rate of road accidents in N'Djamena, it is often the behavior of one or the other person that is mentioned. Motorcycle taxi drivers are often pointed at by the government as responsible for many road accidents in N'Djamena, especially due to their behavior. Motorcycle taxi drivers rather denounce a lack of responsibility on the part of minibus drivers and the behavior of some officers of BCR as being the source of accidents. The creation of motorcycle taxi drivers' trade unions in various districts in early 2010 coincided with declining tensions between the operators of both means of transport. This is the beginning of a mutual understanding between the motorcycle taxi drivers and minibus drivers. This cooperation is visible in several junctions in the city of N'Djamena (figure 4). The complementarity of these places is obvious through its organization. This is what occurs daily in Farcha.

Disputes between the drivers of motorbike taxi and minibuses and their customers

Misunderstandings typically arise because of the transport fare and the destination; this is often a source of conflict between motorcycle taxi drivers and some minibus drivers with customers. Tensions arise

between the motorbike taxi driver and his client when the latter has agreed to the price but later changes his mind and wants to pay less than what was originally agreed. It seems to be often the case when drivers are dealing with some crooked or bad customers. After a little dispute and under the threats of the driver in the presence of some passer-by, the customer ends up paying what was originally agreed. Indeed streets and houses in N'Djamena do not have a fixed address. This is what makes it difficult not only for tourists but also for drivers to find their way, but it also renders the situation difficult when the motorcycle taxis are asked to drop their clients at the door. As a motorcycle taxi driver in the 8th district said: “The motorcycle taxi drivers are sometimes aggressive vis-à-vis their clients when the destination is not well understood and they must travel an extra distance to convey the client to the desired place”. The clients try to describe the location of house in relation to a known place such as a market, school; hotel, hospital, pub or restaurant. For the minibus customers, conditions are more complicated. They have to inform the driver or his apprentice a few moments before they want to get off so that the driver can start to slow down several meters before the desired location. The passenger simply says stop and at the same time gives a knock on the side wall of the vehicle in such a way that it is loud enough for the driver and the apprentice to hear. In either case (motorcycle taxis and minibuses), “tensions become even more intensive between customers and drivers when it is time to pay the fare, which usually costs 250 or 300 FCFA (0.50 EUR). Sometimes customers take out a bill of 5,000 or 10,000 FCFA (10 or 15 EUR)” (Abdoulaye Adoum, oral source 2013). Still according to the testimony of Abdoulaye Adoum, the Secretary General of the inter- and intra-urban transport union of Chad, some customers take the precaution of informing the driver when they have only a big bill. Then the driver can agree or refuse to take the customer on, depending on the availability of the necessary change.

Conclusion

This work contributes to an understanding of how the agents of public transport in N'Djamena work and allows the authorities to plan and foster a lasting development in this sector. There are so many challenges still facing this sector in the area of informal activities, which are more or less illegal, and the agents form a network that is complex and difficult to operate, which is at the same time the only guarantee to improving the quality of the offer. However, without the

knowledge of who these agents are and how they operate, it would be very difficult for the authorities and the agents to communicate, negotiate and share ideas with one another so as to take important decisions and resolve the problems that arise from the operation of this sector. This study does not only open doors to knowing the agents of public transport in N'Djamena, but it also helps us to know how they are organized. This helps the decision makers, policy makers, budget planners, town planners, and investors to take efficient decisions in the scope of public transport in N'Djamena. ■

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