

Formalizing Bus Operations in Maputo, Mozambique

Case Study Leaders in Urban Transport Planning (LUTP) Program

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Formalizing Bus Operations in Maputo, Mozambique

In 2016, the Ministry of Transport in Mozambique was facing a big challenge. Financial difficulties for the public sector and the elimination of fuel subsidies had adversely impacted the public transport sector. Because of increased operating costs, state-owned public transport operators reduced service and the number of annual trips on the system declined from 60-million-person trips in 1975 to 10 million in 2015. At the same time, plans for investments in a Bus Rapid Transit system had to be shelved because of the financial crisis. To serve growing demand not met by the state-owned public transport sector, private operators of paratransit services emerged in high numbers, congesting streets and presenting an environmental challenge. The Ministry of Transport, with support from an international team of experts, proposed multiple solutions to build institutional capacity and reform public transport. However, while formalization of public transport brought about some improvements, travelers in the metropolitan region continued to suffer from inefficient transport services and informal transport continued to grow. The provided financing to renew the bus fleet also did not bring about the intended benefits and could not be sustained. The Minister of Transport was wondering what had gone wrong and what could have been done differently.

Please read the case and come to the workshop prepared to explain what lessons you draw from Maputo's public transport reform experience. In preparing for discussion, please consider:

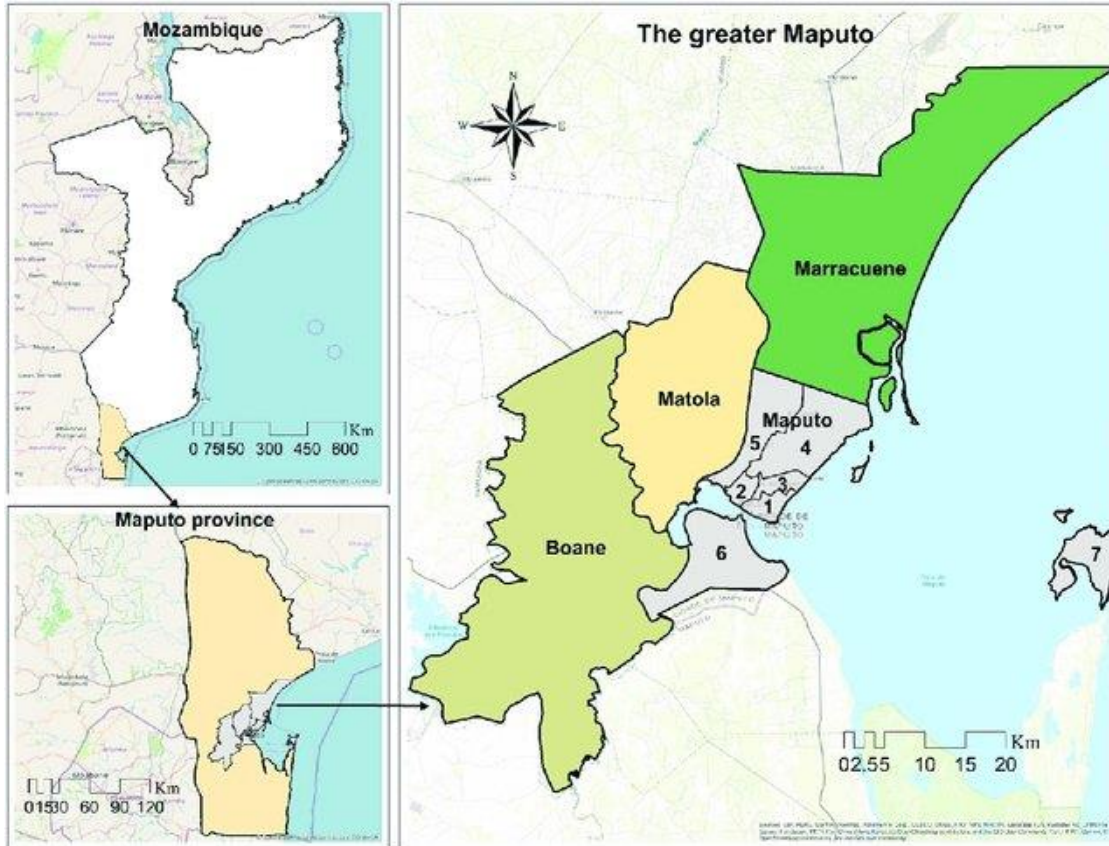
1. What do you see as the main public transport problems in the growing Maputo Metropolitan Area?
2. What are the defining characteristics of the paratransit industry in Maputo? How is it different from the state-owned public transport sector?
3. How would you characterize the Government's approach to improving/reforming public transport?
 - a. What worked and what didn't?
 - b. What could the Government have done differently?

MAPUTO METROPOLITAN AREA

Maputo, the capital of Mozambique, is the country's main financial, business, and commercial center. With a population of 1.2 million (2019) and land area of 347 sq. km, it is the smallest and most densely populated province in Mozambique. It has been administered as a self-contained, independent entity since 1998. With approximately 8.5 percent of the country's total population, the Maputo Metropolitan Area (MMA, or in Portuguese, *AMM – Area Metropolitana de Maputo*) contributes 17 percent to the national GDP, which stood at USD 15.29 billion in 2019. The population of MMA increased from 1.9 million in 2007 to 3.1 million in 2017 and is expected to increase to almost 4.0 million by 2035.

In recent years, residential and industrial development has spread to the surrounding cities and districts of Matola, Boane, and Marracuene, creating the Maputo Metropolitan Area also called "Greater Maputo" (see Map 1). Jobs are mainly concentrated in the city of Maputo, while housing growth has occurred in the peripheral districts. This outward urban and economic development has brought about more movement of passengers and goods, worsening traffic conditions and congestion.

Map 1. Map of the Maputo Metropolitan Area or "Greater Maputo" Region, Mozambique



Source: Figure 7 in Langa, Chelsea, Junko Hara, Jiajie Wang, Kengo Nakamura, Noriaki Watanabe, and Takeshi Komai. 2021. "Dynamic evaluation method for planning sustainable landfills using GIS and multi-criteria in areas of urban sprawl with land-use conflicts" *PLoS ONE*, 16(8): e0254441. Available under CC-BY 4.0 license. <https://doi.org/10.1371/journal.pone.0254441.g001>

Local Government in MMA consists of a number of contiguous Municipalities and Districts. These entities are independent of each other, with limited mechanisms or legal obligations to work

together at planning, implementation, and development levels. There is not any “Greater Maputo” entity, neither as a mandated super-authority nor as a functional mechanism developed by the Municipalities and Districts. While the MMA has grown organically across boundaries, it has not become integrated at in terms of governance, or administrative functions.

Passenger transport in MMA consists primarily of bus and minibus (“Chapa”) services, organized by route, legal modes including taxis and 3-wheelers, and illegal modes including open-backed trucks (“Myloves”) and motorcycle taxis. There is also a modest level of commuter rail service.

THE DECLINE OF PUBLICLY OPERATED TRANSIT AND THE RISE OF CHAPAS

At the time of national independence in 1975, Mozambique nationalized public transportation services in the MMA under the state-owned bus company *Transportes Urbanos de Maputo* (TPM). Fares were regulated with a goal of easy affordability. Low fares, declining government subsidies, over-staffing, and overall cost inflation led to poor cost recovery, making it increasingly difficult for the public bus company to provide service. Bus operators faced enormous financial difficulties maintaining and operating their fleets let alone financing the replacement of aging buses. Bus service quality declined even as demand for travel grew in the MMA from high immigration of people from rural areas to the capital city. Passenger volumes on the state-owned system gradually declined from 60-million-person trips in 1975 to 10 million in 2015 even while the population was growing rapidly.

Between 1962 and 1992, Mozambique was immersed in war, the aftermath of which still affects the transport sector. Throughout this period, there was destruction of social and economic infrastructure, and as a consequence, absolute poverty levels increased from 15 percent in 1980 to 60 percent in 1995. This period marked a fall in industrial productivity and efficiency, with high unemployment. The implementation of the Economic Rehabilitation Program (PRE) resulted in liberalization of the economy and abandonment of the centralized economic model contributing to reduction in the formal labor market. With massive layoffs in companies and the high rising cost of living, the informal sector became the predominant source of livelihood for an increasing share of the population.

The informal sector expanded, taking over the space of traditional activities, since the economy was not able to generate jobs in the same proportion as those it eliminated. The informal public transport, with its ease of entry, low capital requirements and ability to generate income without any gestation period, became a major source of employment, especially for newcomers to Maputo from the rural hinterland.

As in other cities in Africa, the growth of informal public transport was spontaneous, without government intervention and planning. In response to a growing but unmet need for mobility, individuals-initiated paratransit services and gradually their number increased. Paratransit operators were formally acknowledged at the end of the 1980s when the government gave them permission to operate urban transportation services. This resulted in the development of the Chapa industry. By early 1990s, paratransit operators had a significant share of the market. As of 2013, Chapas transported 71 percent of all motorized trips, followed by private cars (18%), regular bus services (9%), rail (1%) and other (3%). In the past few years, the “other” category, which includes illegal services operated with open trucks (Myloves) and unauthorized motorcycle taxis, and regulated for-hire taxis, 3-wheelers and 2-wheelers has increased its share, though empirical data is not available.

CHAPAS

Business and Service Characteristics

Chapas are minibus services operated on fixed routes by Associations of private operators. Their number is uncertain, believed to be about 2,000, of which about 1,100 operate entirely within Maputo Municipal area; the balance operates both internally within the other municipal areas and from there to Maputo. The Chapa vehicles are minibuses of 15 seat capacity or midibuses/"Coasters" with a higher 29 seat capacity. Vehicles can be purchased at around 500,000-600,000 meticaís (\$7,500-\$9,000) or potentially cheaper for older vehicles.

The vehicles are typically purchased using the operator's own equity/savings, with credit/loans not mentioned as a source of finance amongst those interviewed. Most vehicles are almost 10 years old, imported from Japan after reaching the end of their economic life there. Many of the vehicles are vans, which require a body conversion for passenger transport use. The Matola Municipality inspects the vehicles on first registration, to ensure that the necessary modifications have been done and the vehicle is in fit condition. However, there are no subsequent quality or roadworthiness inspections. An owner would typically get 4 to 5 years from such a vehicle and then replace it. There is no local body-building industry which, for example, could recondition vehicles and their interiors either on arrival to Mozambique or after a few years of use.

Minibuses operate on defined routes, from terminal to terminal via specified intermediate points. They operate under licenses issued by the relevant Municipality in which they operate. In this sense, they are formal, regulated public transport. The municipalities issue permits only for Chapa routes that circulate entirely within their Municipality area. Inter-municipal services receive their permits from the Provincial Department. Vehicles are individually owned. It is up to the individual owner to obtain a license and renew it as required. Licenses are specific to the vehicle, so when an operator replaces its vehicle, a new license is required.

Legally, issuing a license is a matter between the respective municipality and the applicant, without any role of other parties such as an association of owners. On paper, the Association is merely an "interlocutor" on behalf of applicants, acceptable to the Municipality as the applicant's representative. An interested person makes an application to the Municipality with the required documentation, among other things specifying the route on which the applicant wishes to operate. The Municipality carries out an analysis of the application, and then decides whether to accept the application and issue a license. The Municipality could also propose an alternative route to the applicant. A license is specific to the vehicle and is granted to the owner. The annual fee is 3,500 MT (USD 50). The license is renewable annually on application, subject to production of roadworthiness certification. Technically the Municipality could refuse to renew a license, but this does not happen in practice.

In practice, the applicant is expected to have a letter from the Association associated with the route for which (s)he is applying, and Associations can "propose" routes. This means that the Associations have a significant role in route development and as 'gatekeeper' for applicants. Since the fuel subsidy reforms (reductions) of 2016-7, there are few new people seeking to join the industry. Thus, currently the process may mostly relate to operators who are replacing their vehicle on their existing route. The Association assesses them, makes a recommendation about them and if accepted, identifies which route they will work on. The interested person then makes an application to the Municipality for a license. Given the recommendation/referral of the Association, the Municipality will grant a 12-month license, subject to production of roadworthiness certification.

To date, the Municipality will issue the licenses on application. There is a need for more transport capacity and coverage and the municipalities do not have any upper limit on the number of licenses.

The Municipal police monitor the daily services provided by Chapas. This is mainly to ensure that vehicles are driving only on the routes for which they have been licensed. If there is an infringement, the operator will be fined, with the penalties going to the Municipality. Technically, for serious or sustained infringements, the license could be cancelled, but this does not happen in practice. The Municipality is technically responsible for the infrastructure of the Chapa services, such as terminals and stops. In practice, the Municipality identifies, or at least approves, the locations of terminals. It is then up to the Associations to organize the operations and provide any facilities at their discretion. To date, there are 5 designated terminals. Likewise, the Municipality identifies or approves the locations of stopping places, but again it does not currently provide any infrastructure or otherwise get involved at the operational level, leaving it to the Association to manage these matters as it sees fit.

Industry Structure

The industry structure is highly fragmented, with the majority of Chapa operators small in scale, owning just a single vehicle. There are some slightly larger scale Chapa operators who may own a larger vehicle fleet of perhaps 5 Chapa vehicles, whilst some Chapa operators are also participating in the government bus scheme and potentially 'managing' the operation of 1-5 buses in addition to their Chapa operations. There are two prevalent models of Chapa operation:

Vehicle owners employ a driver to operate the vehicle and pay them a salary. Owners mostly rent their vehicles to drivers; owner-drivers are not common. Under either scenario, the arrangements are typically informal, lacking any contractual relationship between the owner and driver. In addition to the driver, a fee collector is taken on to collect fares. The collector will typically be employed by the vehicle operator (i.e., owner) or in some cases selected by the driver. A vehicle is typically operated by one driver, covering the full day which may be 15 hours long. Either the driver or the operator (owner) may appoint a "conductor" who will be responsible for collecting the fares alongside the driver.

The nature of this arrangement may differ according to the model of operation (whether the daily rental or salaried crew model outlined above) with the salaried model of operation increasing the need for the vehicle owner to ensure trustworthy reporting of vehicle revenues collected. Drivers may also create partnerships with other drivers to take their place when they are not available to drive the vehicle. The driver (with a fare collector) takes all the revenue, pays the daily vehicle charge, pays for fuel and other operations and routine maintenance expenses, and then keeps whatever is left over as the day's wage.

Operator associations are prevalent within the operating sector, functioning as a collective of individual Chapa operators. These associations are numerous (four within Municipality of Maputo and two in Matola) and tend to be route-level entities established for the purpose of co-ordinating and managing operations on one or more Chapa routes. Associations operate without legal status, and without a common or prescribed structure and are purely a way for owners to band together to gain political and economic strength. Whilst there is no formal requirement to belong to an association to apply for an operating license from the municipality and to ply a particular route, in practice, non-associated operators may find it challenging to operate alongside associated operators on routes which are seen as being 'under the control' of a particular

association. The majority (est. >70%) of Chapa operators opt to join and to ply the chosen route and pay the fee for membership of the respective association.

Associations are independent of each other. Apart from their participation in the Federation, they are not part of national, regional or city structures that binds them together or places common rules on themselves. The function of the associations is to:

- Act as a collective for operators plying specific routes (albeit without any formal status, or regulated license to undertake this function)
- Manage operations along these routes and their terminals, assisting with and coordinating the dispatch of vehicles, protecting association members from 'illegal' competition, and policing driving behavior.

Associations charge fees to members which may include a one-off joining fee, regular periodic membership fees (e.g., a monthly contribution to cover association overhead) and/or daily fees for operation on the route. Daily fees may be levied per vehicle or per member (irrespective of number of vehicles owned by member).

Whilst the majority of Chapa operators form part of associations and pay their dues as outlined above, Chapa operations are conducted wholly on an individual basis, with vehicles purchased and managed by individual owners rather than by the associations or cooperatives.

The associations are represented by a nationwide umbrella organization, FEMATRO. Established in 2003, FEMATRO represents a single point of liaison between the Government and the many Chapa associations, acting as a representative and advocate for operator interests and in some cases mediating in disputes between individual Chapa associations. Associations and co-operatives have no formal requirement to become members of FEMATRO, but most opt to become members.

In addition, Maputo, Matola and Boane municipalities each have their own municipal bus enterprise.

- The Municipal Public Transport Company of Maputo (EMTPE) had been a substantial urban bus company of more than 200 buses and corresponding facilities, but it now only operates about 40 buses from a large fleet that is mostly not in service
- The Matola Transport Company (EMT) is a small company with about 20 buses.
- The Municipal Transport Company of Boane (EMTB) owns just a few buses

INTRODUCTION OF REFORMS

The financial crisis in 2016 led to the elimination of fuel and bread subsidies. The public transport sector, a significant beneficiary of fuel subsidies (with fuel accounting for 50% of total costs), was hit hard and faced a serious crisis. The official tariffs for Chapas and buses were increased by 28% and 33% respectively, but that it was not enough to offset the increase in fuel costs and the withdrawal of Government subsidies for it. As a result, there was a "shock effect" from the significant real increases in both the tariff for the user and in the cost base for producers. Chapa operators, who were already constrained by low, politically constrained tariffs, found it even more difficult to remain financially viable.

As a result, multiple things happened. One, in the face of rising costs and declining revenues, private operators compromised on service quality and began competing aggressively on the street for customers. This led to overcrowding, poorer maintenance and increases in accidents. Second, "illegal" transport gained ground among people struggling to access their jobs and other activities. This resulted in increased, unregulated supply, contributing to congestion, accidents, and

worsening pollution. On the other hand, low, politically constrained fares have made it difficult for Chapas to remain financially viable as costs are not constrained. When the fuel subsidies were discontinued in 2016, there was a large drop in the number of people interested in the business. Although the tariff has been increased in recent years, it is still not enough to offset the increase in fuel price and the withdrawal of the subsidies.

In the face of declining urban mobility, the Government undertook multiple actions.

Establishing the Maputo Metropolitan Transport Authority

Maputo Metropolitan Transport Agency (AMT) was established by Decree on 29th December 2017 as a “regional institution with jurisdiction over the municipalities and districts of Maputo Metropolitan area”, specifically, Maputo, Matola, Boane, Marracuene and neighboring districts. The purpose is to coordinate and implement the Maputo Metropolitan Area Transport and Mobility Master Plan across the MMA. It was established “In view of the need to establish a body for the coordination and implementation of the Maputo Metropolitan Area Transport and Mobility Master Plan, and to ensure the day-to-day and strategic management of the institution’s resources, infrastructures and related equipment, for the operation of passengers’ collective public transport in this region”. As of early-2020, AMT had only a few core staff and remains understaffed for the roles it is expected to play. It is unable to develop its needed organizational or technical capacity.

While the functions of AMT are comprehensive and well-defined, the established Decree does not provide any role for the Municipalities and Districts in the governance structure, nor any structures for how AMT would work with them. It is also not able to design, manage and sustain the new bus concession or contract model, to mobilize the required finances, and to gain industry-sector acceptance for the approach. In addition, the Municipalities have their own bus enterprises following devolution from the Ministry of Transport in 2016. The municipalities are also and general traffic management and enforcement.

Formation of TPM (Transportes Publicos De Maputo) as a Municipal Enterprise. As a response, TPM was reconstituted as a Municipal Enterprise. As TPM, the organization was a State-Owned Enterprise under the control of the National Ministry of Transport. It has been in continuous existence for more than 80 years. This makes TPM older than even Anbessa in Addis Ababa, thus being one of the longest-established urban bus companies in all of Africa. As a result of the financial crisis in 2016, National Government devolved many entities to municipal level, a combination of taking them off the National Government books and passing them to the municipalities that have revenue-generating mechanisms and could potentially provide necessary financial support. This devolving of entities covered multiple sectors, including education, schools, health centers, transport entities such as TPM, etc. TPM was reconstituted as a Municipal Enterprise.

As a state-owned entity, TPM formerly received substantial subsidy support from the Ministry of Finance. Since TPM was transferred to the Municipality and became the municipal enterprise, the level of subsidy has been greatly reduced. It is presumed that the intention of Ministry of Finance had been to completely phase it out. The amount was reduced from 16 million MT per month to 6 million MT per month by 2018. However, during 2019 this has been increased again to 9 million MT per month. EMTPM has a high level of dependency on the subsidy both for cashflow and for overall financial sustainability. The subsidy is provided as a block allocation, without any clarity of the basis of calculation, the purpose for which it is intended or conditions for the subsidy. For the moment at least, it is simply financial support to the difference between revenues and costs.

EMTPM continues to operate the legacy network. However, EMTPM is now fielding no more than 25% of the buses that they had put into service in the past. It is clear that large segments of the former network have been either entirely vacated or receive little more than token service. TPM has continued to open new routes during 2017 and 2018. However, it is not clear that there is any underlying strategic or analytic basis beyond a basic survival strategy to source income wherever it can be found.

Forming Cooperatives

In another attempt to reinvigorate the public transport sector, the President announced in 2016 that 1,000 buses would be purchased and allocated to operators throughout the country. It was intended to replace an operating subsidy with a capital one. The Ministry of Finance provided funds for the bus purchases, channeled through the National Transport and Communications Fund (FTC).

However, the buses were to be made available only to Associations of minibuses that were willing to form Cooperatives and develop the ability to operate large bus services. There was no corresponding scheme for minibus or midibus vehicles, nor was there any form of financial support or support available for minibus operators and owners. Willing associations of minibuses (Chapas) formed Cooperatives that would develop the capacity to operate large-bus services. The Cooperatives were allocated Corridors on which they would operate large-bus services. These corridors are the primary arteries of the MMA, connecting the suburban areas of Maputo (including Katembe across the river), Matola, Boane and Marracuene to Baixa and Museu in Maputo's core. It was expected that the Cooperatives would withdraw their minibus (Chapa) operations from these routes. FTC organized the purchase of buses, which were made available to the Cooperatives to operate the designated corridor routes under contract.

FTC established maintenance contracts with the agents of the bus suppliers or with other capable vehicle maintenance firms. The maintenance firms provide scheduled service and repair, while the Cooperatives deal with daily service (fuel, wash) and routine, light maintenance. The buses are advanced to the Cooperatives as an "operating lease", in which they make periodic payments for the use of serviced buses, while the ownership remains with the leasing entity (State). At the end of the agreed period (5 years—60 payments), there is an option to transfer vehicle ownership to the Cooperatives if they have fulfilled their payment schedule.

Operating Arrangements

Around 10 cooperatives were formed nationwide. Operating arrangements vary by cooperative, but typically, buses are operated by individual members or 'Bus Managers'. Bus managers generally have up to about 5 vehicles to manage. The bus manager is usually responsible for employing the driver and collector, for fueling and maintaining the vehicle and collecting revenue from operations. From this, a proportion of revenue is paid to the cooperative to cover the vehicle financing and cooperative administration functions. The bus manager has a contractual arrangement with the cooperative, to operate the vehicle, make the required regular contribution to the cooperative to support the vehicle repayments and cooperative functions.

The standard operating practice is that every day, managers deliver their vehicles with full tanks to drivers, who must return them in the same condition, based on the "revenue of the day" (this methodology is part of the operation of all cooperatives). In fact, in almost all cooperatives, driver's daily net incomes are calculated after fuel and other expenses (e.g., collector/conductor's salaries, meals and small repairs) from fare revenue. Therefore, each bus manager is responsible for his or her own vehicles, and it is their responsibility to hire their own employees, namely,

collectors and drivers, four for each of the vehicles, as well as maintain the buses. In most cases, members income and expenses is not managed "centrally", but by each respective driver. That is, the management of a particular cooperative is not really aware of the financial affairs of its individual members. The practice of the crew diverting fare revenue daily continues to be a common practice, just as in the case of unorganized informal operators.

Operating hours varies by route, but 18-20 hours operating days (pre-COVID) were typical, with operations sometimes commencing at 4-5am and sometimes operating until midnight. These hours have been shortened due to COVID, with operations ceasing at 8pm or 8.30pm to meet the 9pm curfew. The daily operated kms also varies by route, with estimates ranging from 180-360 revenue km per day. The COVID-induced shortened operating period has reduced operator kms (and revenue), with one co-operative reporting that a typical 6-8 round trips in pre-covid times has reduced to 5-6 round trips in COVID times.

In all cooperatives, each manager has a separate bank account. Only fees for common, cooperative-related expenses and monthly bills for the amortization of the vehicles are forwarded to a communal account held by the cooperative.

The Cooperatives received an indirect government subsidy by having access to government-financed buses. Monthly payments for the buses are estimated to be about 30% of the true cost of vehicle financing (the rest is a government subsidy). Vehicle maintenance is also covered by the monthly payments.

Contractual and Tendering Arrangements

Practically all cooperatives assign buses to a specific route. The routes, in turn, are determined by AMT in close engagement with FEMATRO and the respective cooperatives. Successful tenders to operate on a route are closely linked to the previous presence of particular Chapa associations on the respective routes; i.e., incumbent Chapa operator associations turned into new bus operating cooperatives tendered to operate buses along the existing Chapa route and were ultimately successful in maintaining their "ownership" of the route. Some cooperatives tendered for routes outside their usual area of operation and there were cases where these bids were successful. However, these successful 'out-of-area' bids were later disqualified due to subsequent appeals made by the cooperatives with prevailing operations in the area who lost the tender. The government ruled in their favor and overturned the tender decision.

Upon winning the tender for operations on a route, the cooperative receives the vehicles allocated to the route. The contractual arrangements between the government (either through FCT or AMT) and the private operator have evolved since the first fleet of 50 vehicles were allocated in 2016. In the most recent arrangement, contracts were signed between AMT and the President of the Cooperative, while a separate sub-contract was set up between co-operative and bus managers (and drivers in some cases). The daily net bus income is channeled to AMT, which is required to regulate and supervise services provided by the cooperative.

Business Model

The provision of the bus and the associated responsibilities of the Cooperative (monthly payment for 60 months, care of the vehicle) and transfer of ownership of the vehicles if payments for the entire 60-month period are made. Unlike the case of Chapa operations, where drivers collect fares and manage them individually, in the Cooperative model, the driver receives a fixed monthly salary. The fare is collected by the Cooperative representatives who pays salaries, fuel and all the other expenses out of fare revenue. At the end of the month, the Cooperative pays vehicle financing fee plus any other periodic obligations. Each Cooperative establishes its own

management and supervisory structure. The main control is at the terminals, there is also some on-route supervision to ensure drivers do not engage in trip-cutting, off-route running, etc.

All route contracts are net-cost contracts with no subsidy for operations beyond the preferential repayment terms of the vehicle financing agreement (with the full repayment of the 60 instalments covering as little as 30% of the vehicle value).

PERFORMANCE OF THE REFORMS

The formation of Cooperatives is a step in the right direction but the structure, operating and service performance and financial arrangements do not contribute to establishment of a sustainable arrangement.

Fundamentally, the affiliation to a certain cooperative was a mechanism for operators in Chapa associations to access large bus financing. While the Cooperatives are set up as legal entities, they share some characteristics with the Chapa associations. The informal way of acting is identical to the informal sector, such as the absence of labor contracts, or failure to follow strict schedules. The operating culture continues to be individualistic and the potential benefits from a collective ownership of assets and sharing of responsibilities has not been realized. The continued operation of buses as individual units, with bus managers/beneficiaries seeking returns on individual units, rather than the cooperative and its members seeking a shared return from the collective fleet of vehicles. The cooperative buses continue to compete with Chapas on the street,

There is no common methodology or action for all the operators who are part of the cooperatives. It was a way the different operators found to face a demand placed by the Government, in its continuous efforts to reorganize the transportation activity, and their action doesn't show great differences in relation to the action of the informal ones.

Cooperatives have a Board of Directors elected by the respective member-owners, with board officers appointed to be in charge of specific areas. That having been said, the boards do not have sufficient executive power to go against the wishes and interests of individual vehicle owner/operators even though cooperative members as a whole might benefit. For example, although the coops have a traffic officer, it is the managers/owners who hire the operations supervisors/inspectors, not the cooperative.

The Cooperatives currently lack professional management, viability is marginal, they are dependent on subsidized buses, and they have not yet developed the capability to access finance for independent bus purchases. The current contracts do not have defined KPIs or associated target values/thresholds that establish required service/quality levels and/or that clearly define trigger points for penalties. There appears to be some vagueness about the specific value of the monetary penalties that can be applied. Cooperatives have not yet transitioned to integrated corporate entities with methods and scale that can achieve good quality at optimized cost. They also lack experience and capacity to manage large bus operations in a corporate environment. While the Contract asserts that AMT has the competence to regulate and manage the services, they also lack the capacity for effective and regular monitoring. They are unable to apply sanctions and penalties as set out in the contract, including the potential withdrawal of the buses from non-performing co-operatives.

Bus owners are unable to make regular monthly payments even at the subsidized monthly rate of less than 30 percent of the original value and as a result, and therefore FCT is facing high

levels of delinquency in terms of the vehicle financing. Bus operators are not meeting the operational requirements as set out within the contract, without penalty. The FCT is also not always meeting their responsibilities in ensuring vehicle maintenance is conducted according to contract.

Failure to reserve sufficient net operating revenues for the payment of vehicle instalments is due to a lack of transparency in vehicle revenues and operating costs from on the part of the cooperative and of FCT/AMT. This leads to a lack of understanding as to whether default in repayment is reflective of financial performance or lack of will by the beneficiary. Shortfalls in instalment payments also compromises FCT abilities to fund necessary maintenance.

Controlled tariffs are set below the financially viable, economic tariff level, leading to an inability to generate reserves for or repay investment funds. The cooperatives depend on a subsidy that is not underpinned by a committed long-term policy for the basic cashflow needed to remain in operation. This leaves them vulnerable to any change in law or policy. Discussions with the operators suggest that they were not consulted in the choice of vehicles. The vehicles were acquired without there being a representative of the brand in the country to guarantee the supply of spare parts. The vehicles were mandated to be maintained at Government specified facilities without competition for the work, which often increased maintenance costs.

At the same time, municipalities were looking at ways to strengthen their own enterprises.

DISCUSSION QUESTIONS

The Minister of Transport was at a loss to understand why the public transport system was deteriorating and not able to meet growing demand. Despite the Government's best efforts, the informal transport in all its forms, with all its issues continued to grow.

Please read the case and come to the workshop prepared to explain what lessons you draw from Maputo public transport reform experience. In preparing your answer, please consider:

1. What do you see as the main public transport problems in the growing Maputo Metropolitan Area?
2. What are the defining characteristics of the paratransit industry in Maputo? How is it different from the formal sector?
3. How would you characterize the Government's approach to improving/reforming public transport
 - a. What worked and what didn't?
 - b. What could the Government have done differently?

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