

October 2017

Report on the workshop

# Transport and Mobilities: Meeting the needs of informal settlements and slum dwellers in Nigeria



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**Foreword by Professor Karen Lucas,  
INTALINC Director**



INTALInC is designed to bring together researchers and other key stakeholders to discuss and expose the links between people's mobilities and

the opportunity to participate in important life-chance opportunities such as employment, education, and healthcare and welfare services.

Our mission is to provide the evidence to ensure that *every human being has a basic right to affordable, safe, clean & reliable mobility resources, with a particular focus on meeting the accessibility needs of low income populations and excluded communities.*

This third report from the INTALInC project focuses on the workshop that was held in Lagos, Nigeria in October 2017.

At the workshop in Lagos, we focused particularly on understanding the needs of slum dwellers and informal settlements, many of which remain forgotten within local government service planning, including transport. We visited the Makoko floating slum community, which has received considerable attention from the international press recently. We were taken into the community on the locally made gondolas to witness first-hand how the residents of these communities live, work and play. We all left feeling that many features of their lives were extremely resilient and self-sufficient. I was personally impressed with the floating pontoons and self-constructed wooden footbridges that connected neighbours to each other.

The local chief told us that there is no trouble with transport *inside* the floating settlements because they use their boats to meet all their mobility and delivery needs. The problems only start once they are on land, and then they are the same as for all low income Nigerians: inadequate walking facilities, overcrowded buses and congested roads. The two big accessibility issues for the Makoko community are that they have no health clinic, and their floating primary school is not big enough to take all the children who need to attend – it is also collapsing into the water and badly in need of repair.

The bigger question for the Makoko community, which houses approximately 70,000 people, is whether it can be allowed to remain within the rapidly developing and modernising City of Lagos. Can it be refurbished and sanitised as most residents want, or should it be relocated 110km upriver to another site? This question would seem to be outside the scope of our INTALInC project to consider, but on closer inspection provided us with a rich focus for our workshop discussions. In fact, moving the Makoko residents upriver would have huge repercussions for people's access to markets, jobs, schools and other services that are all currently in close proximity to the floating community. However, as far as we could tell no one has considered these issues in the discussions about the slums clearance.

Another big issue that was discussed in the Lagos workshop, is the City's proposal to scrap the ubiquitous yellow Danfos buses and to replace them with new regulated services. Like most informal transport services, the Danfos are the primary mode of motorised transport for low income people (seventy per cent of passengers in the City), but they are associated with disorganisation, poor labour conditions, low quality service, aggressive drivers and unsafe travelling conditions. The

big worry though, is that without them the City will become paralysed, because the new services will not have the same coverage and scale as these bottom-up services. The people that will suffer the most are the poorest. The workshop particularly discussed the potential plight of female market workers who will not be allowed to take their goods onto the new, regulated bus services.

I would like to send big thanks to the workshop organisers, staff and students from Lagos State University, and all the participants that made it such an enjoyable and fruitful experience. I want to send special thanks to our health sector colleagues who helped us to understand just how hard it is to communicate the important role of transport in the delivery of other aspects of public services. I would also like to thank the transport operators LAGBus and LAGFerry for taking time out of their busy schedules to join us, and as the Transport360 collective for helping us to understand 'real world' community transport needs in Lagos.

**Karen Lucas**

January 2017

## Context of the Workshop

The city of Lagos is the sixth largest city in the world, and one of the most rapidly urbanizing agglomerations in Africa. It has a population between 12.5 and 15 million and an annual growth rate of nearly six per cent. According to the United Nations report on the world's cities (UN, 2016), the metropolitan region of Lagos has 14.9 million inhabitants and is the eighth fastest growing urban agglomeration globally. Lagos' status as Nigeria's main economic, commercial and industrial hub makes it an attractive destination for economic in-migrants from elsewhere in Nigeria and its neighbouring countries.

The city dominates the nation's commercial sector, concentrating most of Nigeria's manufacturing outfits and 45 per cent of the nation's skilled manpower. The 1970s-oil boom transformed Lagos creating explosive population and economic growth and unparalleled rural migration,



concentrated in adjacent towns and settlements. Metropolitan Lagos encompasses both the islands of the former Municipality of Lagos and adjacent mainland suburbs. The city remains Nigeria's gateway, housing the nation's principal commercial sea and air ports. This rapid demographic increase inevitably led to accelerated physical urban expansion and the City of Lagos and its metropolitan area are fast spreading, now extending beyond the borders of Lagos State into neighbouring Ogun State to the North.

Conditions of acute poverty and rising urbanisation in Nigeria have a direct effect on the increase in demand for transport services and infrastructure and impose challenges for the country's under-developing urban transport systems. Lagos is also marked by a complex governance and administration structure: there is no single administrative unit covering the entire metropolitan area. Lagos State Government is responsible for the provision of utilities, roads and transport, power, health, and education. However, urban settlements in the mainland expand beyond the area originally comprising the territory of Lagos and include several separate towns such as Mushin, Ikeja and Agege.

In a country where 65.8 per cent of the urban population was dwelling in slums by 2005 (UN-HABITAT, 2009), this translates into problems of accessibility, affordability and insufficiency of



mobility options for the most vulnerable populations. Dynamics of economic and urban growth resulted in increasing travel distances for accessing income-generating and other fundamental opportunities, as well as larger dependency from motorised transport throughout the country. Between 1970 and 1995 commuting distances in Lagos went from 20 km to 35 km (Ogunbodede, 2008). Larger commuting distances affect individual and collective mobility particularly for low-income communities in a context marked by lack of road infrastructure and disorganised provision of public transport services (Ogunbodede, 2008; Pirie, 2013).

As identified by Ogunbodede (2008), the rapid increase in motorisation was partly due to rising demand for used vehicles and national regulations that allowed their import from overseas. Used buses and cars were purchased in large numbers by the private sector and through the annual subventions of Federal Urban Mass Transport and Government parastatals (Ogunbodede, 2008). In addition, low-cost bicycles and motorised two-wheelers were imported from China and India in an attempt to improve access in remote off-road areas and avoid congestion. These rapidly became the main source for informal public transport in low-income neighbourhoods (Guyer 1997, Yunusa 1999, Fasakin 2001, Porter 2002). The use of obsolete vehicles for the provision of both formal and informal public transport services, in combination with infrastructure deficits, has worsened conditions of noise and air pollution, service quality, and traffic casualties especially in poor neighbourhoods (Krzyzanowski et al., 2005; Adegbulugbe et al., 2008, Gujba et al., 2013). In addition, informal motorcycle and tricycle auto-rickshaw operations are now the largest passenger transport providers in low-income areas of large urban agglomerations such as Lagos (Oyesiku and Odufuwa, 2002).

Data from LAMATA (2015) for the metropolitan area of Lagos evidenced that current demand for transport – including walking trips - is above 22 million trips per day, of which 40 per cent are made on foot. In addition, nearly 97 per cent of all public transport is supplied by road. Figure 2 shows the mode split for motorised trips, evidencing the relevance of the traditional yellow minibuses (Danfos), which supply 72 per cent of the public transport demand, while private motoring accounts for 19 per cent of daily travel demand. Data from the same source indicates that in contrast with the number of passengers each mode mobilises, the use of road space that they demand is unevenly distributed, which generates congestion and social and environmental externalities as those described earlier in this section.



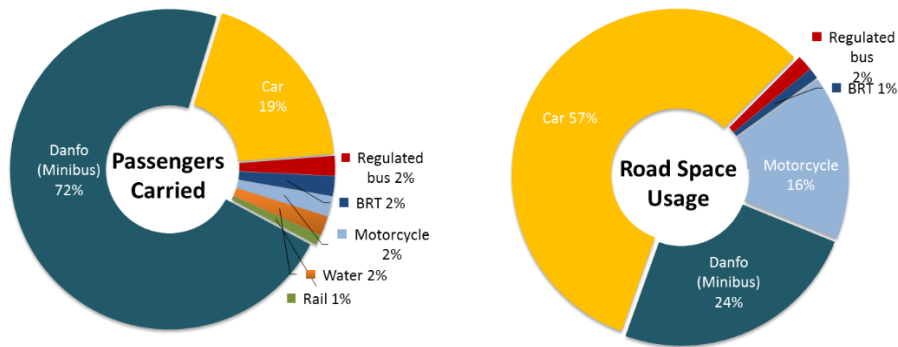


Figure 1 Mode choice in Lagos Metropolitan Area

Source: LAMATA (2015)

## Aims of the Workshop

The workshop focused on access to mobility by dwellers of informal slum communities, and the various challenges these people face on a daily basis in their quest for livelihood. The workshop also highlighted issues of health and wellbeing in this group of people, looking at how poor access to transportation impacts negatively on their ability to access proper healthcare.

Currently, the population of metropolitan Lagos is estimated at between 17-18 million people, making it the most densely populated area in Africa. The daily influx of people from the hinterland has resulted in a population density six times higher than that across the rest of the country. The majority of economic immigrants are unskilled and do not have any means of supporting themselves or finding adequate accommodation; their only option is to join the nondescript informal communities, considered by the State government to be a 'blight'. They live with a constant threat of forced eviction and an absence of urban support facilities such as portable pipe borne water, electricity, sanitation, schools, and health centres.

Poverty and deprivation is prevalent in these communities. Journeys in and out are usually made on public transport, which is uncomfortable, unstructured, and insecure, without any recourse to safety. In Makoko, where the INTALInC fieldwork was conducted, the only means of moving around the area is by canoe, along septic water-streets where collisions are a common problem.

The workshop aimed to examine the current challenges that impinge on meeting the mobilities and transport needs of people living in informal settlements and slum dwellings in Nigeria. The specific objectives of the workshop included:

1. Examining current challenges for inclusive multi-modal mobility in Lagos;

2. Evaluating links between transport, health and livelihoods in urban Nigeria, with a view to determining strategies for promoting health and wellbeing for low income communities;
3. Examining extant policies and procedures for evicting residents of low income and informal communities.

## **Summary of key findings and recommendations**

The workshop touched upon several topics relevant to local and African-centred research in transport and mobilities of low-income populations. Discussions and group work carried out throughout the workshop revealed relevant insights and recommendations with regard to general transport and mobility, sector- and group-specific considerations according to the local priorities.

### **Key findings and lessons learnt on General Transport Issues**

Spatial segregation and centralisation of opportunities that translate into high travel costs and long commuting distances from peripheral informal settlements to access opportunities for work, education, health, and leisure were flagged as a relevant source of inequality and social exclusion of informal settlers in Lagos and other Nigerian cities. The rapid expansion of the city and development of self-built informal housing on the peripheries of the city have led to increases in demand for public transport for 'long-distance' commuting. This is compounded by limited supply of affordable and good-quality public transport, which is served mostly through small-capacity, old and obsolete vehicles that contribute to environmental vulnerability both in and around informal settlements and throughout the city. The operation and lack of control over the supply of Danfos and collective transport services in general have resulted in a generalised increase in noise and air pollution and traffic accidents and a reduction in the quality of public transport services. There is also an increase in the vulnerability and impact of the externalities associated with yellow buses as they lack sufficient support structures to mitigate risks and be accountable for accidents. Current discussions in relation to the yellow buses suggest scrapping the fleet and the modernisation of public transport services with new buses and better operational schemes. Although this is welcome from an environment and safety perspectives, exclusionary consequences for low-income populations need to be taken into consideration as larger buses will be constrained by availability of infrastructure, which restricts coverage in slums, have restrictions for transporting packages and other goods, such as informal traders and market workers, and can become a relevant accessibility barrier for informal and low-income communities that currently depend solely on Danfos as their available source of motorised transport.



Institutional support for renovating the public transport fleet and reconfiguring services is limited and there are no resources available to develop a renewal programme for the old fleet of yellow buses. Institutional weaknesses are also reflected in a limited capacity for planning and delivering public transport services and infrastructure. Sectorial planning has been the default trend, which has limited the authorities' integrated and strategic planning, despite recent advances in strengthening local institutional capacity for urban transport planning in Lagos via the creation of LAMATA. However, urban transport plans have not been integrated with regional and national agendas and priorities, making it difficult to coordinate the development of a more integrated network that supports inter-urban economic and social integration. In particular, there is limited coordination with land-use planning and law enforcement, which inhibits the ability of authorities to exert their influence over road and public space, leading to encroachment, congestion and poor behaviour control. Social norms and corruption constrains the effectiveness of enforcement. There is also limited representation of different social groups in transport decision-making and government agencies, flagging the lack of female representation in transport planning agencies, managing of transport services and political institutions with influence on transport policy decisions.

Public space is also contested and unevenly distributed, and the road as public space does not accommodate the diversity of mobility needs and preferences. Informal traders and street vendors make indiscriminate use of pavements and other pedestrian spaces, sometimes forcing pedestrians to share the road with motorised vehicles. The informal economy is an important source of livelihoods for low-income communities. However, in some areas of the city, the space occupied by informal traders becomes insufficient to accommodate safely and inclusively pedestrians and socially vulnerable groups such as people with physical disabilities and the elderly. This is compounded by a general lack of infrastructure for these particular social groups, who have no safe and seamless access to pedestrian bridges, intersections and crossings, and are not accommodated in the design of public transport and overall configuration of open spaces in relation to adequate texture, lighting and signalling for accessible mobility.

Finally, in relation to multi-modal mobility, the use of waterways for water-based transport is constrained by limited considerations in infrastructure design, such as low bridges that do not accommodate vessels of appropriate sizes for passenger transport, and the high level of pollution in the waterways that reduces the connectivity and accessibility of inland waterways that could be used for passenger and goods mobility. This is critical for informal settlements in proximity to the waterways which cannot be used to connect their residents to opportunities in the rest of the city.

## **Key findings about informal settlements and slum dwellers**

Various workshop activities focused on low-income informal neighbourhoods in Lagos. The configuration of the city, both spatially and socially, has pushed informal dwellers to areas where the availability of land is limited, with poor connectivity to the city's infrastructure network and restricted space for addressing essential needs. Incremental housing increases overcrowding and exerts pressure on the limited, and often informal, supply of utilities and other networked infrastructures. These groups also have limited political representation and recognition, and their rights are often bypassed, giving priority to urban development concerns that lead to displacement and evictions. Evidence and discussions also suggested that power relations and social roles within the household lead to the disproportionate transport deprivation of low-income women. The transference of household responsibilities and the distribution of economic resources for mobility that give priority to men and other household members at work often lead women to manage the household and family economy on foot while male heads of households tend to monopolise access to motorised transport.

The activities of research and debate with various stakeholders during the workshop also put into evidence the limited levels of representation and legitimacy slum dwellers have in both the Nigerian urban policy agendas and decision-making environments. A frequent argument to support this attitude from the public and private sectors is that informal settlers, as a result of not contributing to the tax base, have limited or no rights to take advantage of the city's economic and urban structures. Such lack of legitimacy in mainstream planning circles and political discourses has permeated Nigerian urban research agendas, which overlook informal settlers and slum residents. Citizenship and participation of slum dwellers have been largely absent from recent research undertakings in development, transport and urban studies disciplines in recent years, opening a gap in local and international literature and limiting the availability of rigorous evidence that can support decision-making and policy. Transport professionals and planners do not interface with low income communities, leading to non-inclusive implementation of policy. The disconnection of research and practice with the mobility and accessibility needs of low-income and vulnerable populations in Nigeria has led to policy decisions, such as banning tricycles in the city, which have serious exclusionary consequences like depriving rural workers from bringing their goods to markets, effectively depriving them from a central source of livelihoods.

## **Key findings for access to health**

A central issue revealed during workshop activities is that access to health and information about the health of slum dwellers is not streamlined in low-income communities and informal

developments. Urban health surveys are not carried out within slums and informal settlements, which creates a gap in available evidence of health conditions and needs in low-income, informal communities. This tendency to bypass entire communities in the processes of data collection has direct negative consequences on the delivery of health services and facilities. Anecdotal and observational evidence suggests that the coverage of clinics and availability of medical professionals within reasonable distance or within informal settlements is limited or non-existent. This is underpinned by lack of awareness of the relevance of accessibility in urban health programmes and increasingly unequal health outcomes related to poor access and connectivity to urban health facilities in low-income groups. The integration between health policies and infrastructure and transport policies has the potential to redress some of these access and health inequalities by facilitating physical accessibility to health services.

## **Recommendations**

The workshop provided insights and informed recommendations that will be explored in detail by local partners and seek to spark collaborations that may respond to the challenges identified in the previous section.

### **For research**

Gaps in evidence regarding mobility conditions in low-income communities and informal settlements pose a considerable challenge for understanding and addressing mobility needs of vulnerable populations. Therefore, creating a rigorous baseline of information that can help characterise local populations and their current mobility patterns is essential. This information could be collected using existing available technologies such as smartphones and web-based surveys. Questionnaires can be designed to incorporate information about immobile populations and mobility desires/expectations in low income and slum communities.

### **For capacity-building**

Both research and decision-making focusing on the needs of slum dwelling populations were identified as almost entirely ignored in academic or government circles. Co-production of knowledge and development of collaborative schemes for decision making, monitoring and evaluation, and accountability of transport policies could help improving transparency and participation and reflect better the needs of a wider group of stakeholders. Particularly, the involvement of civil society organisations and NGOs will contribute to strengthen capacity for transport planning and decision-making.

The creation of such partnerships will strengthen various critical agendas for the improvement of transport policy and decision-making such as road safety. The development of road

safety education programmes targeting private road users, children and pedestrians will contribute to the improvement of road behaviour and interactions with the public space.

### **For policy**

Transport policy would greatly benefit from higher participation by different stakeholder groups to better reflect the mobility needs of vulnerable populations. Representation and participation need to be strengthened through the involvement of third sector agencies and supporting civil society groups which can contribute to advocacy and monitoring.

Multi-modal transport also requires higher focus from public and private sectors. In particular, it was found that water-based passenger transport can make a viable contribution to mobility of low-income and socially vulnerable populations. This goes beyond supply and logistical considerations. Implementing better safety and security measures on water transport and dredging to enable better water access to inland communities such as Makoko would open opportunities in the city and its markets to populations with limited livelihoods and access. Consultations with local communities and involving citizens in informal settlements to co-produce programmes and strategies to progressively clearing local waterways would decongest the network of inland water transport and improve both participation and accessibility.

Another reality that needs to be confronted in relation to transport decision-making and planning is the scale and temporal scale of slums. Currently the approach by default has been eviction and demolition of slums with dire social consequences and increasing vulnerability of already disadvantaged populations. Approaching the slums as a long-term issue and strengthening citizenship and recognition of slum dwellers through alternatives such as slum improvements and upgrades would allow policy makers and the public sector to improve living conditions in low-income communities. This can be done in coordination with national and international development agencies and involving advocacy groups and local leaders to create a more collaborative model for the upgrading of slums and their incorporation to the urban and social fabric of Lagos and other Nigerian cities.

The example of the Makoko settlement in Lagos served as a relevant case study and source of valuable insights for the research agenda on informal settlements and intermodal mobility. The development of a detailed accessibility analysis involving participatory methods for collecting data would allow researchers and policy makers to assess the implications of moving the Makoko community upriver in terms of livelihoods, access to education, health care, and social opportunities. The scale of the settlement and resilience of the local populations will contribute to showcase the adaptability of low-income communities to limited accessibility conditions and can inform

development of innovative policy approaches to the supply of mobility alternatives to low-income and informal communities.

**Day 1, Thursday 26 October 2017**

## **1. Welcome and introductions**

**Professor S.G. Odewumi, Lagos State University (LASU)**

SG welcomed participants to the meeting. He emphasised the importance of INTALInC to Nigeria, given the significant role of transport in country's economy. However, by drawing attention to low income communities, INTALInC puts previously forgotten groups at the heart of the academic agenda. As an institution, LASU is eager to play a role in highlighting the mobility needs of low income groups but, acknowledging the depth and breadth of the problem and the requirement for long term solutions, relies on the support of the network in order to do so.



## **2. Introduction to INTALInC**

**Professor Karen Lucas, University of Leeds**

KL thanked colleagues at University College, London (UCL) and LASU for collaborating to organise the workshop.

INTALInC has matched UK Universities with partners in developing countries to facilitate exchanges of knowledge and expertise. Network activity focuses on mobility rather than transport; INTALInC's key activities focus on looking at where vulnerable populations need to travel, and how they get there. Over the last few days KL and JD had drafted an INTALInC mission statement:

**'A basic human right to affordable, safe, clean and reliable mobility resources to enable every woman, child and man to realise and contribute to their full potential'.**

While the statement may be amended over time, it is a true reflection of the Network's aims, and focus on socially sustainable mobility.

Slum dwellers have frequently appeared in the Nigerian news. They have come together as a group in the face of mass evictions. However, the slums will never disappear and so they must be improved and integrated into the city. Later in the workshop, colleagues would discuss the concept of mobility as freedom. Workshop participants should not make assumptions about this, rather it is vital that we meet and talk to people, and fieldwork had been incorporated into the workshop programme. It was important to consider accessibility in the broadest possible terms – and to realise



that transport poverty impacts on other areas of life, making people time poor and influencing, among other things, their diet and health.

INTALInC is a developing network and had recently received some further funding from the Volvo Research Foundation. Three new partners had joined the Network and two additional workshops would be held in 2018.

### **3. Keynote 1: Current challenges for multi-modal mobility in Lagos** **Dr Charles Asenime, Lagos State University**

Lagos State is a megacity with a landmass of 3,577 km<sup>2</sup> with a population of around 18 million. Twenty two percent of the city is made up of lagoons and creeks. Lagos is the fastest growing city in the world; it is central to the Nigerian economy, making it attractive to incoming populations. However, space in the city is severely restricted and there is little room available to develop new, formal neighbourhoods. This forces people to live in slums from where they must travel to work.

Infrastructure development in Lagos cannot keep up with population growth. There is a lack of access to transportation in the slums and the slum dwellers' needs are ignored in transport planning; this reduction in mobility further increases poverty.

While the federal government has a transport policy, and a transport masterplan has been developed by Lagos State institutions, these have not been translated into regional policy. There is a lack of strategic planning and implementation guidelines are limited. Transport research is also limited and so there is no data on which to develop appropriate, regional planning. The institutions responsible for overseeing transport are weak and their size is disproportionate to that of the population they serve. Consequently, there is little or no enforcement of regulations, for example, motorbikes which had been banned for safety and security reasons, had now reappeared on the streets.



Slum dwellers in particular face a number of serious inhibitors to mobility. Access routes leading into slum areas are in poor condition. Affordability and accessibility issues mean that walking accounts for 40 per cent of journeys, however pavements are congested with street traders which makes travelling on foot extremely difficult. Pedestrian crossings are unfit for purpose; there are no pelican crossings and the pedestrian bridges built over roads are inaccessible for people with physical disabilities.

There are also serious accessibility issues on public transport – buses do not have access ramps or space to accommodate wheelchairs and railway platforms and waiting areas are not suitable for vulnerable passengers. Movement on inland waterways is impeded by low bridges, and rubbish limits the areas accessible to ferries. Lagos has a BRT system but market traders carrying stock are not allowed to use it.

#### **4. Making the links between transport, health and planning**

**Professor Julio Davila, University College London**

DFID had funded research at UCL which formed part of a large project focused on urban infrastructure in Nigeria. UCL work looked specifically at the impact of transport on wellbeing.

The research sought to take a different approach to how transport is perceived, concentrating on social governance and political aspects. These issues are generally overlooked by engineers – and there is a need for civil engineers to become ‘civilised engineers’ and work beyond the narrow aim of creating transport systems capable of moving people from one point to another as quickly as possible. This links into 11.2 of the United Nations’ Goals for Sustainable Development, which is concerned with providing access to safe, accessible and sustainable transport systems.

In Australia, wellbeing is a measure of the benefits transport systems bring. Wellbeing itself can be measured subjectively, relationally and materially. It is estimated that between 50 million and 80 million people live below the poverty line in Nigeria, meaning that the country accounts for six per cent of the world’s poor. These people make a significant contribution to Nigerian society, which could not operate without them, so it is important to consider ways by which economic growth can be reconciled with their needs. Economic growth rooted in globalisation has led to a greater inequality rather than a concurrent reduction in poverty.

The UCL case study was completed in Abuja, a new, post-colonial city created in 1976 with a resident population of three million and a large commuting population. The research was undertaken at bus stops where participants were approached and interviewed. Researchers used mobile phones to record data and the results were sent directly to a data cloud so there was no paper handling. The research looked at the demographic and social characteristics of participants and their travel needs. While Abuja was planned to accommodate workers in the informal sector, the actual size of this population far exceeds the existing infrastructure. The survey results showed that while transport is essential to these people, using it is very difficult and their expectations are low.

Full reports of the project would be made available in due course.

## 5. Keynote 2: Promoting health and wellbeing for low income communities

Dr Benjamin Eze, Kiladejo Hospital, Lagos

Low income communities are unplanned and operate without a formal infrastructure. The residents face a range of social issues and there are high incidences of alcohol and drug abuse, and often, domestic violence. Some of these areas are very unsafe. There is also a high incidence of disease.

The Millennium development goals put together by the UN seek to eradicate these problems. All UN member states have committed to achieving the goals.

There are several solutions to the problems faced by populations in low income communities. Advocacy is key to improvement, as is the introduction of health centres and mobile clinics. Measures should be taken to provide clean water and improve the physical environment.



Health promotion focuses on achieving equity in health, and demands coordinated action in low income communities. There are demands for policy makers to prioritise health promotion by making changes to taxation and creating legislation to support healthy urbanisation.

Workshop participants noted that there was no mention of transport in the health promotion programme for low income communities. However, earlier presentations clarify the importance of transport to these groups, and their mobility concerns. The aim of the workshop is finding a place for transport in agendas for health and wellbeing.

## 6. Session 1: Panel discussion of challenges and opportunities for socially inclusive transport services

Chair: Professor Karen Lucas

**Dr SeyiOsetemi (SO), LAGBUS:** LAGBUS is a limited company which runs a fleet of 500 buses and works with 16 franchised operators, transporting 64 million passengers each year. The company operates across 15 routes in Lagos.

While LAGBUS does not have a specific policy relating to social economy, it does transport many market traders who carry their wares across the company's network. A policy focused on passengers with disabilities has not yet been developed but there are plans to carry out reforms in the future in response to proposed state initiatives to regulate bus systems, and replace old buses with newer models with disabled access and seats.

LAGBUS has operated for 10 years and for most of that time fares have remained static, providing an affordable transport service. A proposed accrued ticketing system will be introduced to support low income user groups. New buses will be introduced and buses upgraded in 2018.

**Paul AdeboyeKalejaiye (AK), LAGFERRY:** LAGFERRY is a limited company registered to carryout water transportation. It was set up five years ago to replace the old, state-operated service which had run for 30 years.

LAGFERRY is currently in the process of replacing the old ferries it acquired when it commenced operating with new, modern models manufactured in South Africa, and routes on the ferry network are being dredged to accommodate the new ferries. Ultimately, the vast majority of people in Lagos could be transported using water, relieving congestion on the roads.

AdebowaleYusuff, **Traffic Radio:** Traffic Radio provides road users with up to date information on congestion and other issues which might have an impact on their journey. It was established by the state government and is accessible by residents of low income communities who listen via their mobile phones. Listeners can also call in to ask how best to make a journey. Representatives of Traffic Radio also participate in Transport 360, an NGO set up to educate and advocate for low income road users.

**IbraheemFoson (IF), Tricycles as critical means of transportation for low income persons in metropolitan Lagos:** The majority of road users in Lagos have used a motorised tricycle at some point. There is significant immigration to Lagos from rural areas – incoming populations tend to live in settlements on the outskirts of the city and need to travel to reach the city centre transport network. Because of the condition of many roads, they are impassable to minibuses and so tricycles are the easiest mode of travel to the transport-connected centre. Tricycles are an essential component in accessing city centre infrastructure by low income populations in Lagos State.

**Olajumoke Akiode (OA),Ethics and sustainability issues in transport, Centre for Ethics in Lagos:** There is a lack of cooperation on the roads, particularly between tricycle riders and pedestrians or other road users. There are also ethical issues around affordability, and transport modes need to adapt to the needs of the users both in terms of price and amenities, for example by providing space for passengers carrying their goods or children. Environmental factors also come into play: while new buses have been purchased to service public transport routes, they run on diesel.

## Question and answer session

*Q. How do prices compare across different modes of transport?*

PK: While it depends on the length of the journey, generally passengers using the ferries pay more than those on the buses.

*Q. Are women represented on the board of LAGBUS?*

SO: There are no female board members though there are three women in senior management positions within the company. There are also female bus drivers. An increased involvement of women in company management would be a political, rather than an operational, decision.

OA: It is vital that human reality is represented in the management of public services. This is not only a question of equality, but about communicating the needs of different transport users. It is impossible to understand the needs of underrepresented groups if they are never heard.

*Q. What is being done about the high volume of waste we see in the waterways in Lagos?*

PK: Much of the waste originates in the slum. Lagos State contracts private waste management companies but the best solution to the problem is prevention. It is likely that refuse changes will be introduced and thus people will be encouraged to dispose of waste by different means.

*Q. Is there any collaboration between the agencies responsible for transport in Lagos?*

PK: There is some collaboration and different providers take part in meetings helping to ensure synergy between providers.

*Q. How does the Traffic Radio system operate, could it be duplicated in Ghana?*

AW: Traffic Radio's main objective is to inform people of the most convenient route to their destinations and advise people how best to use the roads. The station broadcasts live traffic updates. There is a need to continue educating the public and representatives of Transport 360 visit and talk directly to road users.

*Q. Tricycle drivers are vulnerable, they do not have seatbelts and there are significant safety issues if we are going to keep them on the road.*

IF: Tricycles move at average 25 miles per hour and accident rates are low. It is the behaviour of tricycle drivers, not the speed at which they travel, that leads to their vulnerability.

*Q. How is transport education being integrated into the education system?*

AW: Transport 360 undertakes outreach work in public schools, speaking to children about their road behaviours.

*Q. Is there any first aid provision on the buses?*

SO: Buses carry a first aid box and staff are first aid trained. Although it is impossible to communicate with drivers while a bus is in motion, if there is an emergency, drivers will park and use their company phone to call into HQ for assistance.

*Q. How can we move to the next level, changing our view of transportation as a means of moving people, to thinking about welfare?*

OA: Transportation needs to take into account the needs of all of society. In order for this to happen there needs to be wider participation in transport planning by different groups.

IF: Two out of three people in Lagos live in a slum and do not have adequate access to transport; therefore informal modes should be supported and encouraged.

PK: We need to think about care, and developing the water ambulance. Until the deficit in transport infrastructure and planning is plugged, it is difficult to consider moving to the next level. There is a significant lack of infrastructure and services.

SO: Ultimately, we need to move from a system where transport is seen as a utility. There needs to be a framework where subsidiaries are paid for transport services. Buses are expensive and so replacing old stock is unaffordable. There needs to be a proper framework for subsidisation in place – transport services cannot be run as profit making businesses and need to be treated as a public service.

In conclusion, KL stated that while there are opportunities to train users in the formal transport sector, it is important to think about how private road users are educated. They are a small proportion of society but their behaviour has a massive impact on traffic safety.



## **Session 2: Practical challenges for research in informal urban settings**

**Chair: Professor Julio Davila, University College London**

### **6.1 Eviction procedure of the poor in in the slum area of Lagos State**

**Kusejo Adebayo (KO), Lagos State Land Use and Physical Planning Unit, Lagos State University**

KO is an urban planner working with Lagos State government. He presented an overview of the six stages of the eviction process and the areas of Lagos affected by it. Once squatter settlements are evicted, the areas they occupy are incorporated into the city plan. Markets which operate on a public right of way or railway line are also targeted for eviction. There are attempts to involve squatters in planning for resettlement and new stores are built where shops can operate.



Before a demolition commences, a stakeholders' meeting is convened and, where ownership of a property is proved via title deeds, compensation is paid. The State Governor has an absolute right over land matters, and individual interests cannot override the collective interest. Lagos State is working to develop a clean and aesthetic commercial environment.

### **6.2 Pedestrian safety and mobility implications for vulnerable groups**

**Joel Asaju, Department of Geography, University of Ilorin**

Pedestrians, who are generally people who cannot afford to pay to use other modes of transport, are extremely vulnerable to issues of safety and security. However, there is a lack of attention to these groups, and the issues which affect them, in transport infrastructure planning.

Questionnaires were distributed in order to ascertain the number and demographic makeup of pedestrians, particularly those in vulnerable groups. The study's findings show which types of road crossings different groups are aware of and the challenges they face when making use of them. These challenges include a lack of enforcement of regulations, speeding traffic and the distances between crossings. The study's recommendations included developing guidelines for better crossing facilities, improved education for road users and the broadening of footpaths.

### **6.3 Mobility challenges of market women**

**Dr.OgochukwuUgboma, Lagos State University**

Women in developing countries tend to take a greater share of domestic and commercial activity and perform multiple roles. Their journeys are generally short and dispersed and, because

they load carry, women are prone to health problems such as hunched backs. Women often experience more transport deprivation than men: where there is only one car in the household it is often for the man's use while the woman is forced to seek alternative modes.

The study sought to estimate the number of women who are breadwinners, their access to transport infrastructure, and to examine their mobility patterns. A research questionnaire was distributed to 200 market women, most of whom were aged between 19 and 40 years. The highest qualification held in the surveyed group was a high school certificate and the majority of women were married with more than 5 children. Many of the women received allowances from their husbands, however they were also responsible for paying rent, school fees, food, and clothing. The women tended to travel on the old yellow buses which will soon be banned.



Because of inadequate transportation, by the time the perishable food traded by the women reaches market it is often mouldy. As no proper checks are in place, this has serious health implications.

The study recommended that there needs to be better collection of data relating to this group, and that this data should be considered in designing transport systems which meet their needs.

#### **6.4 Urban Health Surveys**

**Dr IbukanOlatuboson, Community Health Office, Ojo Local Government**

A health survey is undertaken in Nigeria every five years. The surveys are a complex with many indicators which cities report against to show where progress is being made.

More than half the world's population inhabits urban areas and the proportion will continue to rise. To accommodate this, urban health surveys need to have an explicit strategic plan. The Global Report on Urban Health (2016) sets a baseline for the new global health and development agenda laid out in the UN Sustainable Development Goals. It shows that progress in health is not



only dependent on the strength of health systems, but also on shaping healthier urban environments.

To compile the most recent Nigerian health survey (2013), questionnaires had been distributed to households, women and men. The survey collected data on sanitation and water, and reproductive health. A lack of resources is a major challenge in conducting the survey and it is recommended that each city should have access to appropriate expertise and provide interventions such as education and community mobilisation.

Transport specialists can help researchers access hard to reach areas. On a local level, there are problems with transport and local transport unions could assist with moving patients from slum areas. Access to healthcare is a massive problem for the very poor.

### **6.5 Participants literacy and awareness levels: Implications for successful research in informal urban settings**

**Professor CallistusIbe, Department of Transport, Federal University of Technology**

The informal economy constitutes nearly 58 percent of Nigerian GDP and transportation is essential for distributing resources and providing access to markets. Transport needs to be recognised as a source of productivity improvement and poverty eradication, not just for slum dwellers but the wider community.

Research in informal urban settings will unlock the potential of informal communities. Slum dwellers generally undertake casual work, many have multiple jobs and live hand to mouth. Payment of taxes is not an ethical priority for these people who struggle for survival in an individualistic economy where businesses are not legalised and operate through informal procedures in unsafe working environments and often exposed to criminal activity. There is no diversity in transport choices and transport systems are poor. By researching these environments, we can encourage people to be more positive, and encourage inclusion. Research also encourages creativity and provides information and know how.

Critical factors for research include expertise, funding, teamwork, infrastructure and environment, and if any of these are lacking, it becomes ineffective. Generally, education and awareness are minimal in informal communities where literacy levels are low and access to information is limited.

There are a number of measures that can be used to overcome the challenges of conducting research in these communities. They generally relate to widening participation and increasing advocacy, as well as increasing exposure to the benefits of improved transport. Engaging with

research participants and community stakeholders makes research a powerful tool for poverty eradication.

## **7. Session 3: Group exercise and discussions on the study of mobility and accessibility issues faced by slum dwellers**

Workshop participants were divided into small groups and asked to consider:

- Key issues;
- Potential approaches and methods; and
- Questions to explore in the field

### **Group A: Impact of Transport on goods movement**

The group observed that although boat transport within the community is manually operated (hand pulling) it meets the needs of the community in the movement of was an effective method of transporting goods from place to place. Residents were seen moving items for sale in canoes and also heavier freight such as sand, bottled mineral water and building materials. The group observed that navigating the narrow channels between shanties is challenging when wide objects have to be moved and that this could mean limitations to the size of the freight or the need to use alternative routes which are usually longer. The group identified the following questions:

1. How do we move the physical assets of a neighbourhood from one community to another?
2. How do we involve residents in decision making?
3. What role does transport play in moving goods from one place to another?
4. How can infrastructures be maintained?
5. How can policy makers and communities work together?

It was agreed that researchers need to work closely with community leaders to train community members in making good use of transport systems, and involve political leaders ensuring that they visited areas affected by the transport policies they impose.

### **Group B: Floating Interventions**

One of the biggest challenges faced by the government is the decision whether to relocate or regenerate slum communities such as Makoko. Observations from past exercises have shown that evicted residents simply move to the nearest low income community, further compounding issues of overcrowding and accessibility of infrastructure, and thereby increasing the difficulty of an upgrade. Examples cited by the group were the eviction of Maroko residents around Victoria Island in the

early 90s which swelled the population of Amukoko, Bariga, Ijora and Badia. Before any eviction is carried out, there should be evidence from previous upgrades on its workability, ethnographic analyses, and economic and social audits examining gender, age, disability and so on.

The following key points were highlighted by the group:

1. There needs to be a system of participatory planning;
2. Professionals should interface with communities;
3. Communities should have access to all transport sectors.

There is a clear need for training in slum dwelling communities and provision should be made for vulnerable populations through the legislative process.

#### **Group C: Access to Services by slum dwellers**

The group examined slum dwellers' access to health services, education, livelihood and employment, leisure and recreation, financial services and transport facilities. It was agreed that almost all of these support facilities were absent in Makoko. For instance, Makoko only has one floating school which was damaged by a storm in August 2017, It has an adult open air school supported by residents and NGOs. There are no formal health centres; residents patronise unregistered pharmaceutical shops to purchase drugs without prescriptions. There are no banks, no recreational areas, especially for children; adults usually patronise the various quasi bars dangerously located in many nooks of the community.

The following points of concern were identified:

1. Implementation of programmes and policies is non-inclusive;
2. There is a lack of comprehensive research into the needs of these communities;
3. Enforcement of policies is limited.

Potential solutions include genderising the transport system and increasing women's involvement in the planning and decision making process. Convening more workshops involving policy makers and academics would encourage a more informed approach to policy and planning. There is also a need for better regulation and training of law enforcers.

#### **Group D: Mobility as Freedom**

Mobility is the one challenge every resident of an informal community seeks to overcome. The group examined the varying mobility needs of different social groups within informal communities and identified several methodologies that would be useful in conducting a study on designing an targeting interventions in the community. In order to complete a study of this nature, a log-frame would be developed for ease of analysis

The group stated that:

1. On a general level, transport professionals need to be encouraged to work in collaboration with other interested agencies;
2. Public participation in transport policy needs to improve, and stakeholders should be involved in decision making;
3. In terms of water transport, issues of safety and security need to be addressed – water route markings and patrols should be introduced. Emergency response teams should be centralised or based at strategic points along the waterways;
4. The language used by policy makers and transport planners should be simplified to increase participation.

#### **Group E: Water as Mobility barrier/enabler**

The group observed the difficulties in moving within the community, which was sometimes locked in what is generally referred to as a 'ferry Jam'. This scenario is common during morning peak periods (6am-8am) when school children are leaving the community for the upland areas to attend school. Boats ram into each other and the battle for space could become dangerous. This is why motorised boats are not allowed to operate within the community, reducing many accidents to 'scratches and cracks'. When the tide is low, it is difficult to move around the channels; many boats find it difficult to moor due to the absence of jetties.

The group identified the following areas of concern and suggested improvements:

1. There should be more commuter access to the ferry services and waterways should be dredged to enable access to inland areas;
2. Government subsidies should be paid to transport providers;
3. Collaboration between LAGFERRY and the police needs to increase to reduce the threat of piracy;
4. Infrastructure projects need speeding up;
5. Individual road users need to be educated and enforcement and monitoring systems improved.



## 8. Preparation for fieldwork

Professor Julio Davila and Dr Charles Asenime

### 8.1 Participatory research with residents of informal settlements

In India, 45 per cent of urban trips are less than two kilometres in distance, and the majority of daily travel by the poor is taken on foot, however pavements are non-existent. Sixty-one percent of transport infrastructure investment is in flyovers, while only 2.2 per cent of transport investment is in pedestrian infrastructure. These facts serve as a reminder that transport investment policy priorities are wrong.

JD showed an extract from a film on participatory methods research. The film was an output of a project undertaken by researchers at UCL designed to look at security of tenure for slum dwellers. While there are different methodologies for developing knowledge, discussion with 'inperfs' who are inside a situation (as opposed to experts who are trained in a field) leads to improved analyses of people's daily activities. Participatory research is a way by which researchers can ensure they are involving 'inperfs' participants. It is vital to approach fieldwork with respect and an understanding that researchers are there to learn rather than teach.

### 8.2 Characterisation of the fieldwork area

Makoko is a fishing village founded by immigrants in the late 19<sup>th</sup> century. Over time, the local population grew and inhabitants moved to live on the water. There are a number of riverine communities in Makoko, which comprises several villages. Boundaries between these villages are distinct, even where they are not visible.



The true population of Makoko is unknown because the area is unrecognised and not included in local censuses, however it is estimated at approximately 71,000. The main economic activities in the area include sand dredging, saw milling and fishing undertaken by the men; smoking fish and selling food are activities performed by women.

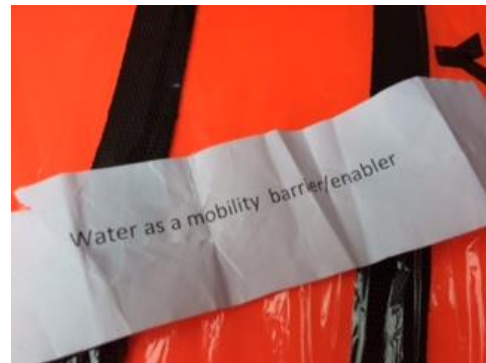
There is little formal infrastructure in Makoko, although there is a network of unregistered health clinics. Traditional midwives also work in the area and some children are educated at a floating school.

**Day 2, Friday 27<sup>th</sup> October 2017**

## **9. Session 1: Feedback and discussion of fieldwork activities**

### **Key observations:**

- Water appears more as an enabler to a culture that has evolved to support a rich vignette of livelihoods, social interactions/networks, local economies, lifestyles, value systems, architecture etc., though it is a barrier to social mobility;
- Water mobility is culturally embedded, the community depends on it. Makoko is not merely an isolated eyesore, but seems to have strong social, economic and political connections to the surrounding communities. There are innovations like footbridges to enable mobility, where water constrains movement;
- The water does not inhibit elements of social infrastructure: school, church, traders, a clinic were in evidence, though the waterways experience problems with congestion.



### **Research gaps/project ideas:**

- There is a serious data gap, how is the complex political economy of this community structured, and how does this play out before sweeping interventions and decisions are made?
- How do we disentangle the multiple layers that underpin the political economy of the community? What methods do we adopt towards understanding the complexities that underpin this community?
- Should we see Makoko as a threat to the development of areas in close proximity, or otherwise? How do we balance the decision between eviction, relocation or regeneration? What are the costs? Is this valued as a sub-culture within the city or it should simply be expunged?

### **Data needs/methods:**

- How do we understand this 'community enclave'? Do we need an inside-out perspective and understanding of the community's values, floating ethnographies?
- How can we gain clarity on the motivations behind government action?

## 10. Session 2: Research needs, opportunities for collaboration and steps forward

Workshop participants were divided into small groups and asked to discuss and present thoughts on:

- Research gaps;
- Data needs;
- Funding opportunities; and
- Local policy priorities

### Group A:



The group suggested that there was a need for an intervention addressing questions around the relocation of Makoko, and whether the existing settlement could be improved and upgraded. The study would be framed in the context of the Goals for Sustainable Development, looking at ‘enclaves’ and fractured urbanism. Methodologically, it was suggested, that a project could involve research participants and government agencies. The research would be undertaken through a longitudinal study over five or six years and combine evidence from previous upgrade and relocation programmes with case studies of floating communities elsewhere; daily practices; ethnographies; GIS mapping; and an economic and social audit.

### Group B:

The group suggested that there was potential to undertake research looking at slum dwellers’ access to services (health, education, transport, livelihood, finance). Data variables would include health, the type and level of access to each service, and who provides these. There would be a need to look at current policies and previous and existing interventions locally and internationally. The study would undertake a review of secondary data, as well as taking primary data from slum dwellers, government agencies, service providers and a control group. Data collection methods would combine a desk-based review with observations, participatory video, questionnaires, social mapping and accompanied walks. The work would provide opportunities for collaborations with NGOs, government officials, media channels, academic staff, and funders and would ultimately inform policy and practice, serving as a guide for similar situations in other locations.

### Group C:

The group proposed several research questions looking at law enforcement in low income communities and the determination of physical and social security for resident populations; behavioural changes in upgraded low income communities, and developed versus traditional living. Studies could use qualitative techniques, descriptive statistics, comparative analysis, GIS and social mapping, and discourse analysis and would provide opportunities for collaboration with funders, NGOs, government and media.



### Group D:

The group proposed a study which would look at 'mobility as freedom'. Research questions would be based around the mobility needs of different social groups in low income communities, (including children, youths, market women, pregnant women, men and physically disabled people), and the transport infrastructure required to support the needs of these groups. The study would also examine the impact of transport on mobility freedom of slum dwellers.

Research methods would include observations, structured interviews, focus group discussions, mobile ethnography, community transport infrastructural inventory and traffic counts of canoes and boat operations.

Collaborators could include planners, LAGFERRY, community leaders, NGOs, research institutes, and international organisations.

## 11. Plenary feedback and round-up

KL noted that INTALInC was now forming a common identity and understanding, and while the group would not necessarily follow up on the particular suggestions for research proposed by the breakout groups, it was clear that workshop participants were thinking about, and discussing,



similar themes and topics. The network's interest in, and potential for, longer term capacity building in our case study cities was also becoming increasingly apparent.

Network members were encouraged to use the time before the next workshop

(Uganda, January 2018) to consider ideas for developing a collaborative project. The field of informal settlements is particularly interesting, and offers significant potential for future work, because there is a lack of existing data.

Thanks were offered to everyone who had attended the workshop, and participants were encouraged to sign up to INTALInC. The participation of external contributors was particularly valuable and it is hoped that these collaborations could continue to grow over time.

The workshop was brought to a close.

## List of participants

Name	Institution
Olajumoke Akiode	Center for Ethics and Sustainable Development
Paul KalejaiyeAdeboye	Lagos State Ferry Services (LAGFERRY)
Adewuyi Abayomi	
Ojugbele Adebawale	Transport 360 (NGO)
Adeneye Adewale	JIGSAW ADVOCATE
Jubril Adeyemo	School of Transport, LASU
Ibraheem Forson	School of Transport, LASU
Oni Folashade	MTP, LASU
Babafemi Aluko	Cardbury
Seyi Osiyemi	LAGBUS
Jimba Ganiyu	Transsafe 360 (NGO)
Onyekachi	MTP, LASU
Princess U D	MTP, LASU
Stephen Onwuzuligbo	MTP, LASU
Yusuff Adebawale	Traffic Radio
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Benjamin Adighibe	Kiladejo Hospital (private)
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Ebenezer Odunewu	Lagos State University
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