



June 2018

Report on the workshop

Transport and Mobilities: Pathways to transformation



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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 fourth report from the INTALInC project focuses on the workshop that was held in Kampala, Uganda in January 2018.

As this was the last of our case study workshops, we wanted to focus on how we might use the evidence that we have gathered through our experiences so far to make a real difference to the transport, mobility and accessibility experiences of low income populations in the countries we have visited. The main emphasis of the Kampala workshop was on talking to policymakers and transport project funders about how that might happen through their governance processes. This was a particularly apt topic as we were

hosted by Dr Shuaib Lwasa and his team at the Urban Action Lab at Makerere University in collaboration Professor James Evans and his team at Manchester University from Manchester University, both specialising in this important issue of urban governance in the transport realm.

We have also discovered a mutual interest in focusing on the extreme paucity of the walking environments in developing cities through our fieldwork studies. In every city that we have visited and regardless of the accessibility issues we have considered, walking has repeatedly been identified as the most important mode of transport for low income populations, and also the most overlooked through transport policy and governance. As such, it is grossly under-provided for within the urban fabric of developing cities, Kampala being no exception, making walking a life-threatening activity for the people with no travel alternatives at their disposal.

And yet, walking is surely the *most sustainable* mode of transport available to us. The irony is that whilst in the Global North policymakers and planners are desperately trying to seek ways persuade people to walk and cycle more, in developing cities the majority of the population are already doing this – but at the risk of losing their lives in doing so! Meanwhile, these cities are building the infrastructures that undermine walking to prioritise the demands of a rapidly motorising elite and middle-class minority of their populations. This is not to say that Global South cities should not also be seeking to harness the benefits of new transport technologies and innovations,

but that they need to ensure they do that in ways which benefit rather than further disadvantage the people who are already demonstrating the sustainable mobility practices of the global sustainable policy rhetoric that now abounds within across the 'world transport' circuit.

It is not possible to leave a discussion of Kampala without reference to the ubiquitous *boda-bodas*. They are an important mode of transport for many people in Ugandan cities, but they are also responsible for the degradation of the pedestrian environment and walking rights within the city. Their drivers appear oblivious to the rules of the roads, driving on the sidewalks in their droves, and rarely stopping at the few pedestrian crossing lights that have been installed within the city. City planners recognise the problem but appear disempowered to do anything to address it. Herein, I believe, lies the problem for many developing cities when it comes to addressing their transport inequalities. Everyone appears to know what is wrong with the current situation, but no one can seem to offer any solutions for putting it right.

The same challenge faces INTALInC as we look to the development and expansion of our network activities in the future. How can we draw together the evidence which is already there about what works to address the extreme transport needs of low income populations that we have identified all over the world? How can we provide the evidence-base to not only identify the mobility and accessibility problems of the poorest and most overlooked residents of these cities, but

also co-develop appropriate, bottom-up solutions which better suit their mobility and accessibility needs? Finally, how can we better communicate and raise the value of addressing this important agenda with the people who make the decisions that shape the transport systems of developing cities, many of whom operate outside the control of the cities themselves?

Our thanks go to all the Kampala workshop participants and the Bwaise community we visited and who helped us to explore these important questions with them and to deliver the workshop and this report.

Karen Lucas
May 2018

1. Introduction and overview of the report

The Pathways to Transformation workshop, held from the 23-24 January in Kampala, was the fourth INTALInC workshop in a series of five, and aimed to advance discussions towards understanding how mobility systems can be transformed to meet the needs of disadvantaged groups. This focus on transformation emerged from previous workshops that had highlighted the range of challenges faced by many of the world's poorest communities, as a way to move the network towards a more explicit consideration of what might be done to help address some of these challenges. The workshop was organised jointly by the Urban Action Lab at Makerere University (Uganda), and the Manchester Urban Institute at the University of Manchester (UK), both of which have a substantive and intellectual focus on urban governance and transformation.

The workshop was structured into three parts: governance, experience and transformation (see Table 1). The first morning set the scene in terms of the context in Kampala, covering governance, poverty and mobility. Tony Oyana gave a welcome address that introduced some of the framing challenges surrounding transport and planning in Kampala. Karen Lucas (Leeds) gave an introduction to INTALInC and recap of findings so far, followed by an overview of the workshop structure and activities from James Evans (Manchester). Shuaib Lwasa (Makerere) then gave an introduction to Kampala focusing on poverty challenges and relations to transport system and mobility. This was followed by a panel discussion on urban planning and governance in Kampala. The panel included Michael Wilkerson, CEO of Tugende a company who offer hire purchase loans to boda drivers, Samuel Mabala, Commissioner for the Department of Human Settlements, Enos Baluku, Transport Planner at the Ministry of Works and Transport, and Shuaib Lwasa, Associate Professor at Makerere University.

After lunch the group split into two parts to experience mobility challenges in Kampala. Group 1 conducted a walkability audit in the Wandagaya area of the city, while Group 2 travelled to Bwaise, an informal settlement, where they had the chance to talk to locals about mobility constraints on their lives. The outcome of these field trips was used in the breakout groups on day two to illustrate potential pathways to transformation and new collaborative governance arrangements.

Day two focused in on the challenge of transformation and how it might be possible to intervene in a city. Michael Hodson and James Evans (Manchester) gave a presentation on conceptualising urban transformation that was intended to provoke participants and give them some conceptual tools to think through some of their experiences on the previous day. This was followed by a panel discussion focusing on pathways to transformation with Martha Mugurura, Principal Urban Planner with the Ministry for Land, Housing and Urban Development, Frances Birungi, Director of Programme for UCOBAC and NGO that promotes the rights of women and children in cities, and Ekino Gerald, from the Ministry of Works and Transport.

After lunch the event moved into small group breakouts to consider a series of pre-specified topics. These included: i) taking ideas forward locally; ii) developing a future research agenda for INTALInC, iii) developing appropriate methodologies for coproduced research with communities; iv) mechanisms for involving policy stakeholders. These sessions gave participants the chance for an in-depth exchange of experiences and ideas, especially between researchers and practitioners, and were generally felt to be the highlight of the event.

2. Aims of the Workshop

Specifically, this workshop aimed to explore:

- Relationships between poverty, mobility and access to services in Kampala
- How transport is currently organised and governed within the City?
- How could transport planning and policies be improved to meet the needs of disadvantaged groups?
- What new collaborations, governance and capability are needed to enhance access to sustainable mobility in Kampala?
- What are the evidence and research gaps for promoting pro-poor transport strategies at the local and national level?
- What are the key lessons and new understandings to take forward informal/formal governance arrangements for pro-poor transport in Kampala and other Ugandan cities?

3. Summary of key findings and recommendations

Challenges

- Land - Planning is key to delivering better transport, but the City does not own or control most of the land. Land prices are also rising rapidly.
- Politics - Interference from elected leaders of the five districts of Kampala can derail integrated transport or housing planning.
- Data and evidence - Lack of data to assist planning. The Ugandan Government seeks to replicate successful experiences such as the one in Cape Town. Plans are to use the taxis as feeders for public transit.
- Pace of growth - Difficulty of coping with the pace of growth of the city, especially in peripheral areas and a lack of long-term vision.
- Non-motorised transport - Many distances are actually walkable but barriers for walkability affect particularly women and children. Micro-level mobility needs to be understood better for different groups, e.g. walking jams at rush hour, school children walking to school, people who are disabled. The balance of street use between pedestrians and hawkers needs consideration.
- Informal transport - Plays a large role in providing mobility and livelihoods. People are dissatisfied because of transport problems, economic losses. In particular congestion and safety are big mobilisers of public opinion.
- Funding imbalances. Bus Rapid Transport (BRT) receives \$670m for only three routes in Kampala, whereas the whole national budget for the Slum Upgrading Programme is only \$2.3m. There is lots of planning from communities to higher levels but there are barriers to implementation, at local level especially, and low income communities are not able to secure resources.
- Joined-up thinking - Although there is horizontal integration between sectors at national level, there is a tension between national and local governments. There is a problem of ownership and jurisdiction in the infrastructure.

Lessons learned

- There is a need to address the actual lived needs of people *where they live and work* rather than at arm's length. The current situation seems manageable but this will change with the predicted explosion in population.

- The Kampalan transport system is changing, largely driven by private sector interventions, for example where businesses promote increased safety and the adoption of digital ride-hailing technologies. External Development Bank and international AID funding is also highly influential in determining what new projects are brought forward. However there are some smaller national and local government and NGO initiatives.
- Lots of global best practice is available but the challenge is enabling its successful implementation. The introduction of Western-style infrastructures is not necessarily the solution (e.g. the evidence during the field trip of pedestrian crossings that no-one uses).
- There is lots of great public participation and engagement with communities – many services are managed at municipal scale. Ministries consult widely with communities.
- There are already national strategies for non-motorised transport (NMT) in place and KCCA has strategies on gender and NMT for Kampala, so there is a good fit between INTALInC's aims and Kampala's and Uganda's policy ambitions for transport. There are planned NMT interventions happening on the ground that would be ideal for some structured evaluation and learning to drive broader change.
- The UK Department for International Development (DfID) has an East African Cities Programme, and the UN Capital Development Fund is focusing on land management and public space. This could be a funding source for inclusive transport initiatives such as walkways.

Recommendations

- Produce and communicate the evidence concerning the importance of NMT in the Kampalan context (and for other Uganda cities) targeted at policy-makers and funding bodies.
- Improve our understanding of specific local contexts to produce bespoke solutions that will actually work.
- Guidance is needed on what types of data are available / required and new ways to collect relevant data.

- Develop proposals with workshop participants to access funding opportunities and develop NMT actions to deliver national and local government stated policy aims and objectives.
- Consider the appetite for action research projects, methods and ‘know-how’ about to link policy makers and communities more effectively. This requires capacity building projects and partnerships of the kind managed by the Makerere Urban Action Lab and the INTALInC workshop and network.
- Include a wider range of stakeholders in transport governance – e.g. SMEs, communities etc. and the deployment of methods to empower them to build their local capacity to drive change.

4. Local context

Kampala is the administrative capital and economic hub of Uganda. As the country’s main economic nucleus, it is undergoing extensive physical, political, economic and environmental transformation. It attracts the largest share of capital inflows into the country’s economy, and also has the highest per capita output. Recent official estimates placed its resident population at about 1.5 million (UBOS, 2014), with the highest growth rate of about 5.2 per cent per annum. Kampala is the engine and fulcrum of Uganda’s economic growth, with its wide range of manufacturing, industry, service and construction industries. The city, therefore, continues to attract large numbers of rural-urban migrants from across the country in search of opportunities and access to services.

Recent research suggests that the demographic dynamics of Kampala are also influenced by inflows of refugees and internally displaced persons (IDPs) escaping violent and armed conflict (Montieth and Lwasa, 2017). The city’s population continues to grow, surpassing its capacity to respond to existential and emerging local needs. As such, it has become a site of sharply contrasting socio-spatial realms, where small archipelagos of affluent neighbourhoods exist side-by-side with large swathes of informal settlements. According to the Slum Profiling Report (2014) presented by NSDFU/ACTogether, Kampala City has about 62 recognised slum settlements, accommodating close to 560,000 families. With an average family size of five, this translates into a total slum population of close to about 2.5 million people. Most notably, this is twice the figure used as a baseline in the Kampala Physical

Development Plan¹ [KPDP]. Poor households earn about USD 50-100 per month and therefore struggle to meet their most basic needs.

More than 1.5 million people live and work in Kampala, while a comparable number commute daily from metropolitan areas, as far as 30km from the city, to earn a living. Various estimates project that if the city's demographic growth trajectory continues at the current rate, it will become a mega-city with a population reaching 10 million² by 2040. Among other factors, this demographic explosion will only exacerbate urban mobility, overall functionality and productivity due to the associated diseconomies of congestion. The city's current transport system is characterised by traffic jams with about 24,000³ productive man-hours being lost daily. The most affected groups are the urban poor, including vulnerable groups like women, children and the elderly. A sizeable proportion of the city's urban poor walk to make daily intra-urban trips. Others use *boda-boda* bicycles and *boda-boda* motorcycle taxis and the ubiquitous *matatu* 14-seater mini-buses. These different modes of mobility, though not without advantages, have their drawbacks.

Walking is the preferred mode of transport employed by a large number of the Kampala's urban poor to make work or other related trips since no direct costs are incurred. However, aside from a few streets within the CBD, facilities such as walkways, road crossing aids, and signage or walk bridges are non-existent. Pedestrian safety is far from guaranteed, given the high level of recklessness by motorists. Open manholes and poorly levelled streets also pose serious hazards to pedestrians. They are also exposed to high-levels of air pollution, extremes of weather such as floods, storms, and heat, and, especially in the case of women and girls, abuse and harassment.

Data from Kampala City Council Authority (KCCA) suggests that more than 120,000 *boda-boda* motorcycle taxis operate in the city, on more than 10,000 stages providing transport services, especially to school-going children from poor families, pregnant women and market vendors who cannot easily transport their produce to markets using *matatus*. A smaller proportion use the bicycle taxis. However, users of these mobility options are

¹ Kampala Physical Development Plan (2012).

² <http://www.worldbank.org/en/country/uganda/publication/uganda-economic-update-growth-challenge-can-ugandan-cities-get-to-work>

³ <http://theconversation.com/why-kampala-holds-single-biggest-growth-opportunity-for-uganda-52230>

significantly exposed to inherent risks like accidents, harassment and physical abuse due to indiscipline and recklessness by the operators. Nevertheless, the *boda-boda* motorcycle taxis have become an almost indispensable part of the city's transport infrastructure given their ability to navigate through the daily traffic gridlock, saving poor commuters valuable time. Many of the Kampala's urban poor also rely on the *matatu* minibuses for mobility. As with the other options, the minibuses have their drawbacks. Poor commuters, along with other users, lose a lot of time stuck in the city's endless traffic jams, which increases travel times and affects productivity (Kampala loses USD 28 trillion per year due to traffic congestion⁴). The minibuses are notorious for their unpredictably variable fares, lack of fixed timetables and stops from which they operate, making them very unreliable.

Until recently, the city's infrastructure network had degenerated significantly, partly stemming from inadequate resourcing and compounded by deep administrative and management dysfunction (Goodfellow, 2010). The absence of an efficient public transport system, underpinned by an ever shifting, highly contested and fragmented political landscape characterised by intense hegemonic contestations between the central government, elite, the opposition, the city's successive administrations and various groups with entrenched interests in the transport sector (for example the *matatu*-taxi and the *boda-boda* operators and their respective umbrella organisations) at different scales and levels typify the complexities that underpin mobility in a city like Kampala. These groups, and others, are locked in intense power contestations, where the ultimate objective of each is to circumvent or resist development regulations to ring-fence their interests (Goodfellow, 2013). Unfortunately, the resulting power gridlock has only contrived to limit the implementation of much needed interventions meant to improve urban functionality, of which accessible, affordable, safe and efficient transport and mobility is vital.

In 2010, the Kampala's administration was recentralised, and KCCA replaced KCC (refer to KCCA Act, 2010). Offered greater fiscal autonomy and financial support, KCCA has made extensive investment to improve key road infrastructure, much of which had fallen into a state of neglect and decay. Several feasibility studies have been undertaken for introducing bus rapid transit (BRT), a light rail system (LRT), cable cars, fly-overs, road widening and

⁴ https://www.newvision.co.ug/new_vision/news/1455739/traffic-jam-eats-sh28-trillion

upgrading, cognizant of the need for a more efficient transport system (KCCA Strategic Plan, 2015-2016). However, many of these initiatives are supply-driven, technologically-focussed and long term. If implemented, they will respond to the needs of those using motorised transport modes, rather than the collective needs of a largely poor, urban population. To improve the city's overall mobility levels, a more balanced approach prioritising user needs and preferences is required. In the continued absence of an accessible, affordable and safe public transport system, the urban poor's inability to access opportunities and improve productivity has ensnared them further in a vicious cycle of chronic poverty and precarious livelihoods.

The myriad of challenges, such as inadequate sanitation infrastructure, unemployment, extreme poverty, inadequate access to services (for example solid waste management, healthcare and education etc.), poor drainage, poor accessibility and inadequate housing that the urban poor living in Kampala's informal settlements are confronted with have been highlighted and analyzed extensively before (NSDFU/ACTogether, 2014; Ssendendo, 1992; Mukiibi, 2012). However, although transport and mobility clearly stand out as topical issues that require similarly urgent attention, very little research has been undertaken so far in this area. More research needs to be undertaken to better understand the scale, magnitude and extent of mobility deprivation and transport poverty in Kampala.

Summary of day 1 activities

5. Welcome

Professor Tony Oyana, University of Makerere

Over the last 25 years, *boda-boda* have replaced bus services as the main means of transport for commuters. Motorcycles are also the preferred means for people who live in villages and are engaged in poorly paid work. For journeys of five miles or more, citizens of Kampala and its environs use the *boda-boda*.



We are concerned with the dimensions of space and time: how space is organised and structured, and its dynamics. A key issue is land. If you look at long term planning, Kampala has a city plan but, in reality, is this being followed? Away from the city centre there is no strategy for either housing or commerce. In Kampala, KCC owns land and so can control planning, but outside the city centre this is not the case. Kampala's development is driven by the commercial sector.

Transport has implications for mobility and the environment; governance and planning is critical. Some travel demand models have been developed: it is estimated that in Kampala approximately one million people travel to the city for work each day. Their commutes are impeded by low operational speeds, overcrowding, and congestion caused by livestock, wheelbarrows and carts, cars, buses and *boda-bodas*.

6. Introduction to Kampala

Professor Shuaib Lwasa, University of Makerere

Cities such as Kampala are missing reliable and unbiased baseline information for the planning and evaluation of transport policy, and despite the existence of long term urban development plans, there is a lack of overall vision for the future. While there has been an improvement in transport supply in quantitative terms, a comparable qualitative transformation is largely absent.

A key factor in Kampala's development is increasing land prices. Groups with significant purchasing power are acquiring land in the peripheries and peri-urban areas which will contribute to the development and expansion of the city.

Mainstream tools for travel demand estimation do not consider the larger metropolitan scale of the city, skewing information that is informing infrastructure and public transport service planning and development.

7. Panel discussion: Urban governance in Kampala

Panellists: Michael Wilkerson, CEO at Tugende (MW); Samuel Mabala, Commissioner for Department of Human Settlements (SM); Enos Baluku, Transport Planner at Ministry of Works and Transport (EB); Shuaib Lwasa, Associate Professor at University of Makerere (SL)

Opening remarks:

SL: Low income communities in Kampala and other Ugandan cities experience significant deficiencies in terms of access to mobility and essential public services and utilities. Although travelling distances for low income populations are generally relatively short and could be covered on foot, the infrastructure support is missing making walking unsafe and insecure. Studies have identified specific barriers to walkability (which have a particularly profound effect on women and children).



Slums are badly affected by land-use planning constraints meaning that they cannot be integrated and lack basic connectivity and accessibility. Low income communities are generally within a 1.6 kilometre distance from services and there is a need to develop neighbourhood and regional land planning to enable access to services by slum-dwellers.

MW: Tugwende is a company which works to help *boda-boda* drivers organise their businesses. The drivers can earn well, but are not able to access credit in order to purchase motorcycles. Tugwende leases 5,400 motorcycles, providing loans to drivers allowing them to build ownership, as well as access training and support to build sustainable livelihoods. Tugwende has enabled around 3,600 drivers to buy motorcycles; they often go on to sell them, using the profit to purchase land in their home villages.

The livelihoods of *boda-boda* drivers are threatened by plans to modernise public transport.

SM: The Ministry of Housing has developed programmes which enable slum-dwellers to

accumulate assets and housing. Students join organised groups to develop proposals on how settlements should develop. There are also micro-financing and small business development schemes for these communities.

There is a clear link between affordable housing and accessibility, and new support programmes for urban infrastructure consider investment for pedestrian spaces. There is a programme in place to include dedicated pedestrian lanes on roads. Responsibility for urban transport infrastructure and urban development have been devolved to municipal level. Key issues include the lack of planning in the slums; the need to economically empower the urban poor, enabling them to save and invest in affordable housing; and the need to educate planners allowing them to include the slums in their work.

EB: The national motorised and non-motorised transport policy is concerned with mobility as it relates to pedestrians and low-income citizens, providing guidelines for the development of safe infrastructure. Municipal and local governments have responsibility for implementing national policy while the traffic police are responsible for traffic management.

Government policy attempts to improve accessibility in the first and last miles of journeys, linking future and existing trunk-line mobility to local infrastructure.

In Kampala, there is 3.75 km of non-motorised infrastructure in the city centre. The city's strategic plan and the national transport plan, covering the next 15 years, include a non-motorised transport policy supporting the mobility of low income populations. The plans aim to recognise the role of walking and cycling and support their development; to improve safety measures and enforcement; to integrate different planning bodies; to maintain the rail network as a whole; and to recognise the importance of creating first and last mile accessibility and safety between roads and housing.

Question and Answer session:

Q: What forms of integration are there between housing and transport ministry?

A: At a national level there is inter-departmental coordination. Most planning initiatives are funded as projects and ministers work in teams on different projects. There are institutional structures reaching down to communities that also cross sectors. Most planning initiatives are funded through specific credits which are cross-sectoral in terms of both planning and implementation. We have to recognise the tension between national and local governments

where there are problems around ownership and jurisdiction of infrastructure.

Q: What happens with vertical integration within government bodies?

A: There is a shift from implementation to evaluation. Different roads are managed by different bodies so micro-level interventions are very hard to implement, plus there is a lack of human resources and enforcement strategy.

Q: Programmes such as the BRT are conceived and implemented at national level. How can coverage and accessibility be maximised in the BRT? How are the BRT going to be planned in order to give the best possible access to low income communities?

A: The BRT system is being developed in partnership with the private sector and operated through a government franchise.

Q: What plans are there to address congestion problems without challenging accessibility?

A: Different plans are in place, and all are at different stages of implementation. There are plans to liberalise and formalise the governance of taxi operations while limiting entirely profit-focussed services. Additional bus services are being introduced outside of the main network to reduce congestion.

Q: There are plans for a park and ride system – how will this work?

A: It will connect with the BRT and light rail systems.

Q: How do new boda-boda drivers access Tugwende credit?

A: The system relies on mouth-to-mouth promotion. Drivers find out about the programme through their own networks and there is a 'membership' system in place.

Q: Is there anybody in government looking at micro-level mobility? What forms of consultation are there with local communities?

A: At national level there are consultations with organisations that represent local communities and social groups. Detailed neighbourhood plans are the responsibility of municipal governments, who organise consultation groups with slum dwellers. There is emphasis on capacity building at local level to facilitate the implementation of urban development plans.

Universities and national agencies are consulting with local communities and it is clear

that there is still significant work to be done in terms of capacity building in low income populations. Low income communities struggle to access the resources necessary for the implementation of plans. There is a need to develop strategies in contexts where resources are unavailable. *Boda-boda* associations have contributed to strategic planning and there is some collaboration across sectors, for example in the implementation of the Express Way.

Q: How do local projects access government financing?

A: Local groups need to identify priorities and present these for assessment and possible financing. One hundred and thirty community projects in five different municipalities are currently supported.

Q: How can Tugende help drivers contribute to safer pedestrian mobility?

A: All road users behave badly, including those using government number plates. There is no incentive to behave well. This could be improved by better training to address people's attitudes on the roads. There is also a need for improved enforcement.

Q: How can roads be decongested without reducing access by vulnerable populations?

A: There are plans in place to improve public transport through the modernisation of services and technologies. The government is seeking to duplicate the successes of other cities such as Cape Town.

Q: What is the public view of transport in Kampala?

A: People are dissatisfied because transport problems lead economic losses. There is also public concern around congestion and safety.

Q: To what extent does the availability of external funding influence planning?

A: The Ugandan economy functions because of external funders. Local funding for research is extremely limited and depends on consultancy work and external interests meaning the agenda is driven by a very small group of people.

Q: What are the links between transport plans and livelihoods?

A: Plans are evaluated economically and it is anticipated that the improved infrastructure will have a positive economic effect.

Q: Which demographic groups use boda-boda?

A: This differs from urban to rural populations and depends on the area of the city where the *boda-bodas* are operating.

Q: is skills capacity a problem or not?

A: There are not enough transport planners. We are doing badly in terms of human and financial capacities.

8. Fieldwork study 1: Bwaise Trip

Bwaise is a slum settlement with a population of around 2,000 people. Residents pay rent to private landowners. Community groups are well established and engage residents in initiatives such as saving schemes, work with NGOs and the University.

Workshop participants met with members of the Bwaise community team who identified the following key issues in terms of accessibility and mobility:

Access to healthcare is restricted by financial resources and distance. It takes at least one hour to walk from Bwaise to the nearest health centre, and there are reports of women giving birth *en route*. Health centres are under-resourced and do not always have medicines available. The only vehicular access to health centres is by *boda-boda* because of the poor conditions on the surrounding roads.

Access to education is poor: children travel around three kilometres to get to school, making the journey either completely on foot, or travelling by *boda-boda* in the morning and walking home. Poor road conditions make vehicular access to school impossible, though even if these were improved, families would not be able to afford taxi fares.

Access to work is also difficult. Community residents tend to either travel away from the settlement to their place of business, or work selling goods locally. Those working away from Bwaise experience significant congestion walking to work and there are often 'walking jams'. Women who sell goods in the settlement travel long distances to markets early in the morning to purchase their stock.

Weather conditions also impede mobility. During the rainy season, transport fares increase dramatically and without warning. Most traders struggle to meet these increased costs which are passed on in the prices of goods.

Mobility and access for disabled people is impeded due to congestion in the settlement, and unpaved routes. Some residents are able to buy wheelchairs for their disabled relatives.

The local **road upgrade** has generally had a positive effect on livelihoods, however there are significant safety concerns. Although contractors put facilities in place to allow pedestrians to cross the road, people have not been shown how to use the zebra crossings and electronic pedestrian boxes. Pavements have been increased in height in an attempt to tackle safety concerns; however, they are occupied by street traders, forcing pedestrians to walk among the traffic. Efforts have been made to prevent traders from using the pavement to set out their stalls, and community leaders and the government agreed to prevent access until after 6.00 pm, however this is unregulated. This, combined by an increase in traffic speed and careless driving (particularly by *boda-bodas*), has increased pedestrian vulnerability.



Road safety awareness is often promoted by community members and generally parents walk their children to school, although accidents have been reported where children have been left to travel to school unaccompanied.

The **community relationship with government** has improved as a result of the introduction Settlement, City and Municipal forums which serve to give voice to the community. The forums have succeeded in making improvements to the lives of settlement dwellers, for example by reducing the planned size of a drainage channel passing through the community. Had the channel been built according to the original plans, many houses would have been demolished. The forums also played a key part in negotiating the trading times for street sellers.

Access to leisure and religious space is partially available within the settlement where there are religious buildings run by several different denominations, and local bars where people can relax in their free time. However, there are few recreational spaces available to children who are often forced to play on disused and derelict land.

Use of bicycles within the community is limited, particularly among women who find the terrain difficult to negotiate, and for cultural and religious reasons prefer to walk. There is no space to park bicycles. The Bwaise community has identified the following future development needs:

- Designated market within the settlement;
- Provision of an ambulance station nearby;
- Improved advocacy promoting child safety;
- Provision of health centres within the settlement;
- Deployment of unused government vehicles as school transport;
- Better pedestrian crossing facilities;
- Better regulation of fares;
- Permission to establish and own corner shops;
- Improved security in the settlement.

9. Fieldwork study 2: Walkability audit

Workshop participants conducted a walkability audit of the Wandegeya area which surrounds the University campus. They reached the following conclusions:

- a) There was evidence of good pedestrian infrastructure including raised pavements, footbridges, and crossings both within the university campus and on newly constructed roads around the market.
- b) The new market development is unpopular with local residents as it is seen as separating markets from 'street-life' by housing stalls in a multi-storey, concrete building.
- c) The most common hazards for pedestrians were uneven surfaces (often caused by flooding), and overcrowding and poor conditions on pavements, forcing people to walk in the road.



d) Much of the pedestrian infrastructure, such as pavements or barriers to separate pedestrians from traffic, was supplied by private businesses. Some businesses work together to provide better pedestrian facilities.

e) Despite difficult conditions for pedestrians, the streets are busy with traders and people 'hanging out'. Dwell time is high by western standards and any walkability interventions need to accommodate the existing life of the streets.



f) The

streets are poorly lit which makes walking after dark very difficult. Many people would rather travel by *boda-boda* than walk along dark, uneven back streets. Like other infrastructure, most street lighting is provided privately, either by individuals or businesses.

Summary of Day 2 activities

10. Keynote presentation: Conceptualising urban transformations – provocations and discussion

Professor James Evans and Dr Michael Hodson

The presentation highlighted four thematic sets of pressures, at a general level, on urban mobility and other services that have implications for how they are organised now and in the future.

First, there has been much critical discussion about whether we now live in an Urban Age and what the implications of this are. What is clear is that we are seeing *rapid global urbanisation and population growth*. Frequently cited is that from around 2010, c.50 per cent of the global population were living in urban centres. Estimates have claimed that this is likely to rise to 70%+ by 2050. This is in a context of overall global population growth. Yet, this general trend ignores the unevenness of such growth where, for example, in Africa alone 350 million more people will live in cities by 2030.

Second, cities and urban centres are also increasingly promoted by policymakers and business as *the locus for economic growth*. They are seen in policy as sites for the concentrated organisation of economic activities, drawing on their strengths as sites of business, universities, and creative concentrations of people. Indeed, one estimate suggests that by 2025, 2000+ metropolitan areas expected to 'contribute' 75 per cent of global growth.

Third, within these pressures for economic and population growth cities and urban centres are significant *sites of consumption* (e.g. energy, water, food) and contributors to wastes, emissions and *environmental degradation*. So, for example, many cities globally suffer from air pollution which, where they are in place, often breach legal limits. Cities are also claimed to be responsible for 75 per cent of global energy consumption and for over 70 per cent of global CO² emissions. There are significant *resource implications* from urban growth and associated transformations in mobility services; whether that is resources required to produce vehicles to move urban dwellers around, to build the roads and infrastructure on which to move about, or the resources necessary to power vehicles.

Fourth, beyond the environmental consequences, growth also creates pressure on *access to services*. Variable access to mobility and other services is apparent both within and between urban areas both in the Global North and the Global South. This is more pronounced in the Global South where formal and informal provision may co-exist and where informal transport is commonly used to describe unregulated and unconventional transport modes with flexible fares, schedules and routes. The challenge from growth is how formal and informal are transformed and with what implications.

These figures and trends, above, are largely aggregates. They show large-scale trends. Yet, cities, countries and their populations have 'choices' about their urban futures. These may be constrained, but cities and urban centres, with their historical legacies and the variability in (financial, infrastructural, knowledge and human) resources available to them suggest that there are many different ways to organise urban mobility.

As a response to rapid population growth, much of the urban infrastructure that will be built in rapidly urbanising areas of the Global South will be built in the next 20 to 30 years. Once this is built, it will mean that urban form and land use patterns are locked in for generations. The critical challenge, therefore, is how to organise movement into, through,

around, and out of urban areas. To do that, it is important to move from thinking about pressures facing cities and urban centres to how we might understand responses.

i. Urban change (system, territory, transition) - how can transformations in systems/ infrastructures address these challenges?

To think about this conceptually, we briefly summarise two approaches to understanding urban transformations to sustainability that have been prevalent in academic debates over the last decade. These are not intended to be comprehensive but to offer some tools to help think through how we might effectively understand urban transformation in Kampala and other cities of the global south.

The Multi-level Perspective (MLP) has become a widely used way of understanding long-term transitions to sustainability. The MLP understands transitions as multi-decade (c 30 years) shifts from one system to another system. Focusing usually at the national level, this approach rests on three interrelated concepts (niche, regime and landscape) and which conventionally, sees niche-innovations as the seeds of transitions that require alignments between developments at multiple levels. There has been a productive dialogue over the last decade or so between advocates of the MLP and geographers. This is important as it shifts the focus of transition from temporalities of technological and policy innovation to a focus on spatial difference and the potential multiplicity of transition pathways and potentials. As Gavin Bridge and colleagues put it:

Recasting transition as geographical process changes the questions that become important for researchers to ask. Viewed through the lens of time, key questions about transition include the different temporalities of technological and policy innovation, the rates at which particular...technologies may be mainstreamed, or the evolution of consumption behaviour. By contrast, a geographical perspective on transition foregrounds questions about spatial difference (and the co-existence of multiple transition pathways and possibilities)...⁵.

Secondly, recent academic work has addressed experimentally-focused approaches to urban transitions. In the context of multiple potential pathways to urban transition, urban experimentation inherently recognises that knowing how to accomplish urban transitions in

⁵ Bridge et al, 2013, p.339

conditions of deep uncertainty, including sustainability challenges facing cities, cannot be known a priori. Urban experimentation is prone to interpretative flexibility and can be understood in many ways. What is common across approaches is that urban transitions are a fluid process of making the future through doing and learning rather than being knowable a priori. To address this, calls have been made to conceive of experimentation as structured 'laboratory' spaces with a focus on learning about new technologies, schemes, initiatives and their governance in a real-world context through instruments, control and measurement. This has led to efforts to create purposive and circumscribed spaces for experimentation, often characterised as Urban Living Laboratories. These bounded sites of experimentation in the city still leave a significant question unanswered: how are multiple experiments combined to transform the city and how we can understand this?

ii. Who governs change in cities and how?

The question of how urban transition takes place shouldn't be divorced from the issue of who governs transition and how. Important to understanding this is the shift from urban government to urban governance that began to emerge from the 1980s. The shift, at a general level, has been from a relatively horizontally integrated form of urban government to the involvement of various business, political and community interests in processes of urban governing through forms of 'partnership' working. Specific configurations of urban governance differ not only between urban context but also see top-down, bottom-up and middle-out forms of governance co-exist in the same urban context. Linking it this to what we saw in Kampala; the under-construction expressway from Entebbe airport is arguably a top-down development reliant on Chinese capital; very localised ways of navigating infrastructures that we discussed with members of the Bwaise neighbourhood group illustrate bottom-up attempts to reshape urban infrastructure; the talk that we heard from Chris ?? of boda?? illustrates a middle-out approach to the urban governance of transition where the organisation sought to intervene in Kampala's system of *boda-boda* motorbikes through developing a new business model that changed conditions for those providing the service and also for those riding the *boda-bodas*.

How social interests and forms of urban governance combine in undertaking urban mobility transitions involves not only top-down, bottom-up and middle out forms of urban

governance but also forms of business, political, civic and scientific forms of knowledge and expertise that are configured in place-specific ways.

iii. What forms of knowledge and intelligence can be mobilised?

Practically, how these different forms of knowledge and intelligence can be mobilised in urban settings is likely to vary. It is important to note that there remain significant latent resources within a given urban context. Taking one part of the Quadruple Helix, Research: At the University of Manchester there are 40,000 students and thinking about urban transitions and experiments might focus on whether and how students are able to contribute to knowledge capacity through engaging via dissertations and projects that have a 'real world' focus and practical applicability. This mobilises a significant latent capacity. In many urban contexts there is also a variety of grassroots/civil society organisations who may work on projects with an urban transition focus. When business and political capacity in an urban context is added to this, it is possible to see that there is often significant latent capacity in urban contexts. The critical challenges are to develop better understanding of this latent capacity (who it is, what they are doing), and to develop appropriate experimental contexts within which different combinations can work together to develop effective capacity to act.

iv. Different conceptual understandings of change

Developing experimental responses is an important way of developing urban transformation in contexts of significant pressures and great uncertainties about how to respond to them. Yet, understanding responses through the lens of experimentation is usually through a context-specific response. What is novel in one context may be well established in another (we gave the context of the 'novel' segregated cycle lane in Manchester that is unlikely to be seen as novel in some Dutch, Danish or Swedish urban contexts). The question remains, how does the learning and insight from such experimentation travel and how can we think about such processes? In our presentation we summarised numerous different concepts and forms of language for thinking about this, from mainstreaming and replication to propagation. Each of these suggests different pathways to urban transition.

v. Points for discussion...

These issues were set out as provocations rather than prescriptions. They drew on selective understandings of urban transformations designed to provoke and stimulate

discussion. To that end, the presentation stimulated a wider discussion among workshop participants about how the issues raised in the presentation related to their own urban contexts and experiences. More specifically, participants were asked to reflect on three questions:

1. What are the most significant pressures facing your city (population, economic, social, and ecological)?
2. Are mobility experiments being developed? What kinds? By who?
3. What impacts are experiments having? What impacts could they ideally have?

These provocations were designed to stimulate discussion and also to build a 'dialogue' between conceptualising urban transformation and practical experiences in Kampala and beyond.

11. Panel Discussion: Conceptualising urban transformation

Panellists: Martha Muguruna, Principal Urban Planner at Ministry for Land, Housing and Urban Development (MM); Frances Birungi, Director of Programmes at UCOBAC (FB); Ekino Gerald, Ministry of Works and Transport (EG)

Introductory remarks

MM: Communities are continuing to develop in spaces where there is no access to services. People who inhabit these communities have a right to mobility, but can only make choices based on the options that are available to them, and can only extend the radius of their mobility



in cases of emergency. Walking is often the only option - policy makers are not prioritising mobility, although a new housing policy was put in place last year which improves on previous strategies and does link to mobility.

FB: UCOBAC was established in 1990, initially working on gender issues before refocussing on the New Urban Agenda. The Agenda is taken seriously in Uganda but although there is goodwill at national level, local capacity and knowledge is limited. UCOBAC assists communities in generating data to inform policy and generates partnerships between civil society groups, universities and government. Kampala is a diverse city but as the city grows, this diversity is not being taken into account and not everyone is empowered to contribute to Kampala's development. UCOBAC develops platforms to bring people together to discuss

different issues, and mobility is included. These platforms engage with government ministries at a national level and have led to partnerships growing between organised groups and government authorities.

G: Walking is central to people's mobility, mostly as a result of economic constraints in a population with a high rate of unemployment. There is a need for safe, efficient and cheap transport and better infrastructure for pedestrians. The Ministry is promoting policies to support non-motorised vehicles and streets are designed to include pedestrians and users of non-motorised transport. There is a need to change travel behaviours, for example there is a huge stigma around cycling. However, because of differing priorities in higher level government, budget is primarily channelled into developing infrastructure for cars.

Question and answer session

Q. In terms of behavioural change interventions, how would you address the challenge of motorbikes on pavements?

A. Enforcement by the city council is poor; there is a need to be more proactive and 'keep eyes on streets' to make sure that services work as they are supposed to do. The media could help. Better regulation of *boda-bodas* and a way of restricting them to specific areas would really help. The Ministry develops guidelines and regulations, such as making them use two number plates, but cannot enforce them.

Civil society plays a critical role in mobilising opinion and supporting government initiatives but it is not engaged with issues like behavioural change around transport. The lack of enforcement is not supported by a political will for change at senior levels of government. Although the government has developed a National Transport Masterplan (in place since 2008, and currently under review), enforcement is not a permanent solution. *Boda-boda* drivers revert to doing what they want, or end up in prison where they take up resources. A plan for space is no use without a similar plan for systems, and land and transport planning are not integrated. This goes back to the question of who should undertake the planning process – we need integrated planning and at national level they are working to identify which institutions should be responsible for coordinating this.

Q. What financial mechanisms are in place to support the mobilities of vulnerable groups?

A. None. They are not there, this isn't discussed, even at community level.

Q. How do you integrate slum transformation with land laws?

A. Regulations must be added to land law that maintains property rights, but also adapts them. We

are trying to incorporate the densification principle and create guidelines for future development.

It is time to make a policy shift, moving to the idea that slums can be contained and slum growth issue managed. The government cannot leave the provision of housing entirely to the private sector, as this results in slums which develop as a result of the lack of resources. The government needs to plan for social housing.

Q. Which cities around the world do you look to for inspiration and ideas?

A. Yokohama City, and the way it has recovered and become a good smart city. Kigali has good policies and strategies for their implementation.

Q. What recommendations have women made to communities?

Women have recommended a greater level of community engagement and improvements to health and education services, and livelihoods. Women wish to access transport as employment and work as drivers.

Q. Why don't civil society organisations prioritise mobility?

There needs to be a shift from transport to mobility. There is a gap in understanding the role government plays in transport and communication between civil society and government bodies responsible for transport needs to improve.

12. Breakout session (1) Taking ideas forward locally

There is a need to:

1. Identify mobility needs and produce baseline data;
2. Re-define benchmarks for multi-modal mobility and examine ways in which walking is linked with other forms of transport;
3. Integrate future visions with existing forms of (formal and informal) transport;
4. Address the need for affordable mobility;
5. Leverage the resourcefulness of local actors in the mobility system;
6. Challenge paradigms and expectations of transport planning and development, and notions of modernity/ development;
7. Build local capacity for planning and delivery of transport, and develop systems for advocacy;
8. Integrate ideas and expectations of smart mobility in transport planning agendas;
9. Make vulnerable populations and their needs more visible;
10. Empower and enable local communities demanding appropriate infrastructure.

How can this be achieved?

1. Take advantage of mobile phones and new media for data collection and monitoring;

2. Strengthen and empower locally produced data for planning and monitoring;
3. Set up a desirable framework for multimodal planning;
4. Implement deliberative participatory processes:
 - a. Consultations at neighbourhood level; understanding community needs and preferences, and seeking solutions from residents;
 - b. Consultations at municipality level: engaging in dialogues with different interest groups, such as *boda-boda* drivers and taxi associations;
 - c. Creation of spaces for the co-production of a definition of modernity and expectations of planning;
5. Stronger involvement of the government in fare policies;
6. Create partnerships between public and private actors to find solutions at micro and meso levels;
7. Develop participatory planning instances to define and negotiate solutions with the community;
8. Give wider visibility to examples of successful bottom-up experiences;
9. Stimulate quadruple helix partnerships for capacity building and training of current and future transport professionals and advocacy groups;
 - a. Strengthening the role of universities in promoting planning education grounded in local knowledge and experience
10. Plan for enabling safe and inclusive mobility practices by developing tools that can be progressively adopted by local communities;
11. Develop a planning, auditing and monitoring system that considers and protects the needs of vulnerable actors;
12. Co-produce education programmes and materials with local communities and actors for building capacities for the use and appropriation of transport infrastructure;
13. Work with donor agencies as helpful partners, not the dictating agencies, encourage demand based financing.

13. Breakout session (2): Developing a research agenda for INTALInC

Potential future research topics by country include:

Ghana

Children's mobilities: safety issues; informal transport; access to school; participatory research methodologies. There are opportunities to research these issues in different areas where there is no existing work, and to develop guidance for education services. However, this is seen as being too expensive by local government.

Lagos

Evictions/ resettlements and mobility: travel from suburbs for low income communities. Use of ICT and livelihoods, linking to the transport system for low income communities to help

them meet their mobility needs.

Uganda

Urban issues for pregnant women: access to health facilities; drop out rates in education as a result of poor mobilities. Governance and policy delivery in transport, and land use and transport planning in Ugandan cities.

Bangladesh

Women's cultural issues around walkability, religious and cultural pressure and forms of resistance (a right to the city, a right to mobility, a right to walk). There is a lack of qualitative research. What type of education is needed to address mobility issues for low income communities? Best practices and exchanges with cities with good transport interventions.

14. Breakout session (3): Developing methodologies of coproduced research with communities.

Citizens need to be able to run or contribute to research projects using wide-spread or low-cost tech devices. Options include apps that can be freely downloaded to measure noise pollution in different places and at different times of the day; apps that could be used to track distances and routes commonly walked by citizens; low-cost devices to measure the level of different pollutants in the air.

15. Breakout session (4) Working with policy-makers

The discussion outlined the needs of policy makers from the research community, and the needs of the research community in terms of working with policy makers.

Researchers' policy needs:

Principle	Policy is a vehicle to put ideas into practice	Important stakeholders	Understanding realities better
Access	Access to decision making and decision makers	Access to live projects	Gate keepers – open doors to opportunities for research to be conducted
Actions	Co-produce research topics and funding apps	Implement research findings	Knowledge exchange; visits, reports, placements
Outputs	Generate practical knowledge	Publish findings; disseminate information	Help secure funding

Research needs of policy makers

Principle	Present up-to-date issues	Ability to co-define 'problems'	Necessary to deal with 'how to' issues
Access	Access to data, networks, research participants	Open doors to other groups Assist in learning about and navigating policy landscape/culture	Access to Recent knowledge
Actions	Accommodate student placements and applied projects	Help understand research for transport problems	Demonstrate local context of issues ie trend, presence and impact
Outputs	Provide local solutions	Policy development	Help secure funding