UGANDA'S URBAN DEVELOPMENT; A SCRUTINY OF TRANSPORT PLANNING AND MOBILITY IN TOWNS AND CITIES

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Abstract

Roads are an integral part of the transport system. A country's road network should be efficient in order to maximize economic and social benefits. They play a significant role in achieving national development and contributing to the overall performance and social functioning of the community. It is acknowledged that roads enhance mobility, taking people out of isolation and therefore poverty. This paper looks at development trends Uganda's cities and towns are taking in recent times. It forecasts on the likely futuristic tendencies and explores the possibilities that need to be harnessed and embraced to turn urban areas into modern cosmopolitan areas. It looks at the historical perspective but also borrows experiences from relevant literature from published works about urban mobility and transport planning. It enumerates the challenges faced by Uganda's towns and cities which are closely linked to lack of urban mobility planning and draws learning experiences from well known examples of cities both in developed countries and in Africa that have been transformed to embrace modern urban transport planning strategies.

Keywords: Roads, Urban, Transport, Towns, Planning, City

1. Introduction & Background

All communities require accessibility to supplies, services, facilities and work opportunities. The accessibility of such things can be measured in different ways [Jones 1981]. Accessibility depends on infrastructure and available and affordable modes of transport[1] for the movement of people and their loads. Accessibility therefore depends on physical proximity and mobility. It may be improved by greater mobility and/or improved proximity.

[1] *In the broadest sense, transport infrastructure includes: paths, roads, bridges, tram and train tracks and stations, waterways, airports and air lanes. A variety of transport modes are used to carry passengers and/or freight, namely: trucks, pickups, buses, mini-buses, cars, motorcycles, boats, trains, trams, animal transport, bicycles, handcarts and self-propelled walking. These modes are utilized for private or commercial use. Commercial transport services involve the users paying fares or hire charges.*

Uganda like most African countries is experiencing exponential urban growth and expansion at a very alarming rate. According to the Uganda Bureau of Statistics (UBOS), rural-urban migration has more than tripled in the last decade. The capital city Kampala receives the highest number of people who migrate from rural areas to the city in search of jobs and better social and economic services. Whereas cities and towns are expanding, transport and urban mobility within these metropolitans have not been expanded to match the population increase. Roads are narrow which leads to congestion and traffic jams. Urban planning is not yet up to the required standard with poor coordination among government agencies responsible for the same and other stakeholders. Cities and towns are not zoned to allow organized human settlement, economic centers and industrial areas to grow in an orderly fashion. The size of Kampala has for instance grown from the original scope covering the historical "seven hills" with a radius of less than 5Kms to now over 20Kms.[2] Most of the new areas are not planned. An inefficient public transport system using 14-seater mini buses exists in all towns. Although there have been efforts by government to introduce larger buses for public transport, this is yet to be achieved due to various reasons including political interference.

Road transport remains the most commonly used not to mention cheapest and convenient means of transporting goods and services from one place to another. In addition well, designed and planned roads especially in cities and towns add splendor, beauty and orderliness of the metropolis. Uganda's urban development and expansion has consistently been growing at a steadfast rate but without a corresponding rate of growth of roads. As a result, the sprawling urbanization is not easily discernable because of incoherent road infrastructure development. The poor urban road infrastructure[3] in Uganda has been endemic because of lack of consistent and harmonized urban planning and transportation policy. The continuous urban expansion of Kampala city into surrounding areas without regard to road infrastructure enhancement has led to a poor road network characterized by, congestion, narrowness, poor maintenance and road reserve encroachment. The unrelenting rural-urban migration has also put a strain on the already limited road network in Kampala. The commitment in terms of resource allocation and policy support for our roads has not been forthcoming. The public has always come out to talk about the poor state of roads but this discussion has for a long time failed to generate the required momentum for policy makers to act.

Uganda's population stands at 32 million people with an annual growth rate of 3.4%. Urban population is about 3.5 million people growing at an annual rate of 5.1%. At this rate Uganda will have 68 million people by 2035 of which 30% will be in urban areas. Uganda's urban population is accommodated in one city, 13 municipalities, 95 towns,[4] and 76 town boards which make up the gazetted urban centres (Ministry of Lands, UN Habitat). Decentralization has enhanced the process of haphazard growth of urban areas as local governments barely have the capacity required to effect orderly urban development and rapid urbanization.

[2] *Increasing human settlement has created new residential estates despite the delay of a Metropolitan Authority (MA) plan to expand the boundaries of Kampala city to include Mukono, Wakiso and Mpigi districts.*

[3] *Accessibility depends on infrastructure and available and affordable modes of transport for the movement of people and their loads. Accessibility therefore depends on physical proximity and mobility. It may be improved by greater mobility and/or improved proximity.*

[4] *Some towns are mere trading centres which have been upgraded with administrative structures of a town boards.*

Conflict of interest between politicians and bureaucrats in urban local governments also make running of urban affairs difficult.

Figure 1. Map of Uganda showing major Towns & Cities

Source: Maps of the world

2. Urbanization in Uganda

According to Uganda Bureau of Statistics, the urban population in Uganda has almost doubled from 2002 which was reported to be over 2.9 million people and now is reported to be around 4.8 million. UBOS further reports that the level of urbanization has increased from 12.2% in 2002 to 14.8 in 2011. These urbanization trends come with a lot of prerequisites including transport, human movement, and urban mobility. While Kampala is the dominant city with a population of 1.8 million, there has been a clear growth of secondary towns; 50 percent of the urban population now lives in the 13 designated municipalities.

Table 1: Urbanization in Uganda 1969 – 2002

. Index	1969	1980	1991	2002
Number of towns	58	96	150	74
Urban population	634,952	938,287	1,889,622	2,921,981
Proportion urban %	6.6	7.4	11.3	12.2
Urban growth rate %	8.17	3.93	6.35	3.73
% in capital city	53.9	47.9	41.0	40.7
% in 20 largest towns	87.4	80.4	74.4	76.6

Source: Uganda Bureau of Statistics (UBOS)

Uganda is one of Africa's most rapidly urbanizing countries, with a population base of 32 million, a high population growth rate of 3.4 percent and a high rate of urban growth estimated at 5.1 percent per annum. This rapid urbanization is taking place not only in the context of a history of conflict, widespread poverty and a modernizing shrinking agricultural economy, but also one of limited and unreliable energy supply and an acute scarcity of resources for local authorities. It is projected that by the year 2035 Uganda's population will have grown to 68.4 million, of which 30 percent will be in urban areas. In addition, the country's economic growth patterns, which have averaged 6.7 percent over the last decade, support the view that urbanization and agglomeration of people and higher order economic activity will occur. Urbanization should be regarded as a condition for, and the result of development (MLWE, 2002). The processes of globalization are producing far more integrated and interdependent world economies into the 21st century. A review of urban growth and development in the developing countries over the last two centuries suggests accelerated urbanization, which is accompanied by economic development and social change (Mukwaya 2004).

3. Kampala the Capital City of Uganda

Kampala like most African cities suffers from congestion. With narrow streets and a small Central Business District (CBD),[5] people converge in a small area each day. Getting into and out of the city becomes quite hectic since all major routes that feed into the city are jammed with heavy human and motor vehicle traffic. Although the city is expanding outwardly in all directions at a fast pace, the expansion is mainly limited to residential rather than commercial structures which would relieve the current pressure on the CDB . Although office commercial and office buildings are being constructed, they cannot match the demand and as such, many companies and institutions have of recent relocated to the nearby suburbs to get cheap office spaces. These are mainly occupying houses which were hitherto used for residential purposes.

[5] *The CBD has largely remained the same for the last 30 years although human settlement has expanded into neigbouring areas of the city*

Down Town Kampala characterized by congestion & Traffic Jams

Source: Uganda Road Sector Support Initiative (URSSI) Archives

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3.1 Transport in Kampala

Public transport has largely been neglected by government and has thus not been well managed. After the privatization of the government owned Uganda Transport Company (UTC)[6] in early 1990s, government encouraged the private sector to provide the vital services to the public. Large buses were

[6] *UTC was liquidated by government in early 1990's after the economy was fully liberalized. Private bus companies were introduced at this particular time*

introduced to ply long routes into and out of the city to major towns in all the regions especially those with motorable roads. On the other hand, 14-seater commuter taxis were introduced mainly to serve Kampala and its environs. Although these commuter taxis were largely efficient in mid 1990's, they later became inefficient leading to increase in transport costs and poor management systems. Operating under an association of mainly semi-illiterate persons, the taxi operators started an association called Uganda Taxi drivers and Operators Association (UTODA)[7] which was the dominant organization responsible for collecting and managing commuter transport services.

Passengers struggling to get on to newly Launched Pioneer Easy Bus in Kampala

Source: The New Vision Newspaper, Kampala

UTODA originally limited its operation in Kampala but later expanded to include other major towns across the country. It was accused of poor service delivery and extortion. Transport under UTODA was not client oriented but because the association operated as a monopoly in public transport, most Ugandans endured the poor services because of lack of alternatives. Besides, UTODA was later to become a very powerful institution because the leaders of the organization collected a lot of revenues which they misused. UTODA developed a good working relationship with the sitting government (National Resistance Movement) which accorded the association political patronage. The association was a major financier of NRM campaigns where they would offer free transport for people to and from political rallies. In March 2012, Pioneer Easy Bus started its operations in the city which excited many residents because of the reduction of transport fares compared to those charged by commuter taxis. The Bus company had been licensed by Kampala Capital City Authority in an effort to decongest the city by reducing the number of mini buses which carry few passengers compared to buses.

[7] *A local association of local drivers and conductors. It was formed in late 1980's and has survived on state patronage. Its management structure is vague and it has been accused of its members as being extortionist rather than serving their interests. It was given mandate to manage urban transport using 14-seater mini buses. Although the public has complained about its poor services, the association is yet to improve*

Kampala like many other African cities is increasingly facing problems caused by transport and traffic. The question of how to enhance mobility[8] while at the same time reducing congestion, accidents and pollution is a common challenge to all major towns in Uganda . Congestion in Uganda is often located in and around urban areas and along highways and trunk roads. Towns in Uganda normally develop along major national and other roads. It has become a trend that all major towns apart from those that developed immediately before or after independence have tended to sprout along the roads because of several reasons. One of the reasons is to tap into ready market of passengers that move along such roads.

4. Transport issues in towns of Uganda

One of the most important challenges for urban development in developing countries such as Uganda is transportation planning. During the 1970s and early 1980s, the economic crisis and civil strife that affected the country greatly hindered the development and maintenance of urban transport infrastructure. Today there are other problems of urban transport that have arisen out of relative peace and stability in the country. The age of automobiles has led to ineffective land-use patterns, traffic accidents, greater disparities in mobility and economic opportunities. There are approximately 600,000 vehicles in the country, with a potential of additional 10,000 vehicles per year. Over 70% of these vehicles are registered in Kampala City and ply the city roads daily. (The Kampala Traffic Improvement Project, 2002) Although *BodaBodas*[9] are quite common in most towns and trading centres they are costly and to a great extent risky. According to Police statistics, the National referral hospital causality ward at Mulago receives an average of 5 people per day with injuries caused by *Boda boda*.

[8] *Transport infrastructure is largely devoid of mobility enhancement in the absence of efficient modes of transport.*

[9] *Two wheel Motor bike that is used as fast means of transport especially in urban but also in rural areas where public transport is not readily available. Bodaboda primarily provide three types of – (predominantly) - short-distance services: (i) within the main urban areas, where they compete with conventional sole hire taxis and matatus(Taxis); (ii) as feeders to urban areas on routes that - due either to the low density of demand or the roughness of the route - are unattractive to matatus; and (iii) as feeders to the main roads in which role they tend to complement matatu and large capacity bus services.*

Kampala's Congested Old Taxi Park with "Matatus"

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Source: URSSI Picture

There are no finances and adequate capacity to build public transportation systems or to expand roads to handle the new traffic. The challenge is how to plan for an increasing importation of second hand vehicles in the city of Kampala which in essence has created high levels of traffic congestion, parking difficulties, difficulties for pedestrians, massive air pollutants and an increase in greenhouse gas emissions. The immediate and obvious effect to the economy is the loss of labour hours as most people report to work late. Isolo (1997) found that a total of 23813 man-hours are lost daily on trips to and from the central business district by Kampala's working population due to traffic congestion, which represents 270 jobs that remain undone daily.

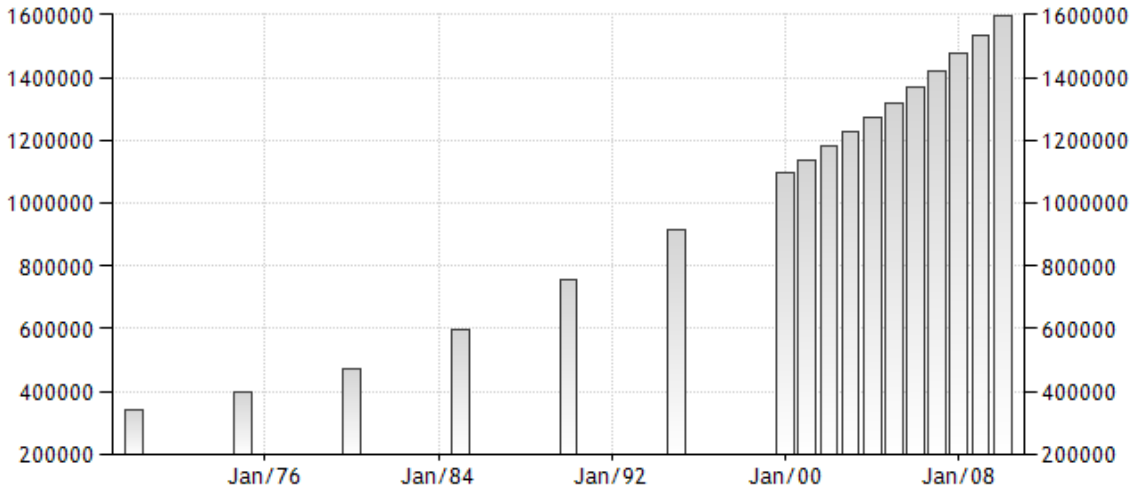
5. Towns and Trading centres in Uganda

Towns and trading centres in Uganda start as weekly or monthly congregation markets which may later transform into daily markets depending on demand for commodities being traded. The creation of new districts has also contributed to sprout of new urban and trading centres. In mid 1990s, Uganda had only 45 districts. Currently Uganda has 112 districts[10] most of which were created recently. More are yet to be created. The rapid urbanization rate of towns without proper plans has turned into a menace and are the main generators of pollution loads entering Lake Victoria. For example in 2008 UN–HABITAT under United Nations Human Settlements Programme declared a town in Uganda as a dangerous urban area for human settlement due to lack of use of untreated water from polluted

[10] *At the time of writing this paper government had just announced the creation 25 new districts bringing the total number of districts in the country to 137*

sources and lack of sewerage management system. The United Nations Human Settlements agency also said that Kyotera Town in Rakai District lacked a dumping site and a master physical plan. Kyotera town was thus listed among the 30 secondary towns experiencing rapid urbanization at a rate of 3-7%[11] per annum in East Africa according the UN Habitant.

Figure 2. Population in the largest city (% of urban population) in Uganda



Source: The World Bank

Responsible and innovative development strategies at the national and local levels are needed to guide private development as urban growth continues within and beyond developed areas into open lands. Development should be guided by a comprehensive planning and management vision for interconnected green space, a multi-modal transportation system, and mixed-use development. Development patterns that result in sprawl are not in the long-term interest of cities, small towns, rural communities, and agricultural lands. As communities plan for growth and change, there is need to encourage in-fill and redevelopment utilizing existing infrastructure. Public agencies should promote and facilitate processes for remediation of urban sites to relieve pressure to develop at the urban fringe.

5.1 Challenges of Planning Urban areas in Uganda

For a long time, urban areas in Uganda have grappled with problems of service provision with limited success. The level and quality of services does not match the needs of the population in many urban areas in the country. Environmental conditions in many urban areas in Uganda are appalling. Accessibility to environmental services ranges from total inadequacy to non-existence in most urban areas. Inadequate planning or lack of it in some areas and the resultant development in inappropriate areas such as open spaces, swamps, and steep slopes is causing serious environmental problems such as water pollution, disease outbreaks, etc. The housing stock in Uganda stands at 2,690,900 units while the household distribution of people averages 5.7 persons. The occupancy density is estimated at 1.05 giving a backlog of 235,906 units. Kampala has a housing stock of about 138000 units with a backlog of 44,228 units. All the other urban areas have approximately 176,310 housing units and a backlog of 63,473 units (Department of Housing, UHL & UD 1992). Environmental components in around

[11] *Recent studies indicate that urbanization rates are currently even higher than this rate*

Kampala City are very much at risk due to a variety of activities associated with uncontrolled urbanization process

6. Africa's Urban Road transport

According the Africa Development Bank (ADB) Africa's urban road density[12] is low by developing-country standards, limiting the areas that are readily accessible to urban transport services and thereby restricting the mobility of inhabitants. (ADB 2006) Few countries capture adequate financial resources to develop and maintain their urban road network. Urban transport services are dominated largely by informal minibus operators, following the demise of large-bus services in many cities. Services are costly, and availability inadequate. In most African cities, the number of available vehicle seats per 1,000 residents is far below the average in other parts of the world. Overlapping national, metropolitan, and municipal jurisdictions threaten the development of urban transport systems and leave unexploited the cross-sectoral links between urban transport and land-use planning. Low fleet capacity is exacerbated by poor use of the available vehicles, which cover less than 200 kilometers a day. The quality of public transport is consequently poor, with long walk and wait times typically doubling the in-vehicle time. Extreme overcrowding is also common, particularly on large buses. The average cost of a trip, at around $0.30, is high in relation to household budgets.

Road conditions have improved in most African countries in recent years, as governments have strived to increase the density of their road networks and carry out institutional reforms. Tremendous progress has been made in establishing institutions to manage and maintain Africa's roads, for example, but still only one in three rural Africans has access to an all-season road. Unable to reach urban markets, millions are trapped in subsistence agriculture. In cities, road construction has not kept pace with urbanization. In many countries, road maintenance remains inadequate. Even the Trans-African Highway, the symbol of modern Africa, has long gaps.

Africa's rapidly growing cities face major mobility problems. Urban road density is low by developing-country standards. Moreover, following the demise of large buses in many cities, myriad informal minibus operators largely dominate urban transport services. Services are costly, and availability is inadequate. Few countries capture sufficient financial resources to develop and maintain the urban road network. Overlapping national, metropolitan, and municipal jurisdictions present serious institutional challenges. Furthermore, the cross-sectoral links between urban transport and land use planning are unexploited. Africa's national road density is substantially lower than that in other developing regions: only 204 kilometers of road per 1,000 square kilometers of land area, with only one-quarter paved, compared with a world average of 944 kilometers per 1,000 square kilometers, with more than half paved (Kumar and Barrett 2007). That density is less than 30 percent of the next-lowest region, South Asia. However, Sub-Saharan African road density in relation to population is slightly higher than South Asia's and only slightly lower than the Middle East's and North Africa's. With accelerating urbanization, Africa needs to develop intra-urban roads, and networks within countries and regions.

[12] *With a* road density*, or road coverage, of about 7 kilometers per 100 square kilometers,* Africa's *road infrastructure is far less well developed.*

6.1 Density & Capacity of Roads in Africa

In a study carried out by World Bank, 14 African cities were found to be substandard Road density (paved-road density in particular) lags far behind that in other developing cities. Capacity is generally limited. The majority of roads have one lane in each direction, and where roads are wider, pedestrians and parked vehicles often take up one lane. Intersections are close together and are ill designed for turning. Service lanes are absent, pavement is deteriorating, and street lighting is minimal. Because traffic management is limited, accidents are frequent, with pedestrians accounting for two-thirds of fatalities. For rural roads, beyond the classified tertiary network, which is typically the responsibility of local government, a vast unclassified network of tracks providing service to rural areas is usually the responsibility of local communities. Nevertheless, African rural communities have by far the lowest accessibility to an all-season road in the developing world. Evidence indicates that physical isolation prevents large areas of the continent from reaching their agricultural potential. With low population density, achieving good overall rural accessibility would imply at least doubling the length of the classified network for most countries (Starkey and others 2002).

7. Conclusion

The challenge of urban mobility in Uganda is closely linked to lack of proper planning by both the central government and local authorities. Uganda is currently facing the challenge of increased urbanization without corresponding increase in road infrastructure development and planning. In Many countries in the West, governments have popularized the belief by emphasizing that for any economy to develop, transport must start off first which will later stimulate other sectors to develop in an orderly fashion. Apart from health and education, the next important sector any country should invest the largest chunk of her resources is that of transport. Although the challenge of poor transport planning in urban areas evident in most African countries, some countries are all the same doing better than others. Kampala, the capital city is busting with congestion. The recent introduction of buses has not yet solved the problem. Transport fares are quite erratic and costly not to mention that on a daily basis many man hours are lost in endemic traffic jams. City and town leaders should manage expected future growth by linking financing initiatives, such as the city's capital investment plan, to broader urban planning and community visioning exercises. Given the projected rate of urban growth in the African continent, it is essential that city leaders be forward-thinking in planning their service and infrastructure improvements. Inviting participation from citizens, particularly the urban poor, can include engagement in city planning through referenda, public comments on zoning and land use decisions, and public hearings on the budget or the city's strategic plan.

References

Amis, P (1992): Urban Management in Uganda – Survival under stress.

Elliot Jennifer (2001): An introduction to sustainable development Routledge – Taylor and Francis Group 2nd Edition London

Isolo Paul Mukwaya (2001): Urban sprawl and the challenges of public transport services delivery/provision in Kampala City Uganda,Trondheim Norway

Karaos Anna Marie (1997): Existing and Alternative Models of Urban Governance. Urban Management Programme Regional Office for Asia and the Pacific World Bank

MFPED (1987): Background to the budget Ministry of Finance and Economic Development Kampala Uganda

MLWE (2002): Ministry of Lands, Water and the Environment; The rapid urbanization process and consequences for sustainable development. A paper presented at the International Conference on Planning Legislation, Housing and the Environment Jinja Nile Resort Jinja Uganda.

Sengendo Hannington (1997): Urbanization, Urban Governance and the Environment: Critical Conditions for the Formulation of an Environmental Management Strategy for Kampala – Uganda.

United Nations (1997): "Urban Governance in the 21st century". International Conference on Governance for Sustainable Growth and Equity, International Colloquium of Mayors United Nations, New York

Van Nostrand Associates (1994): "Kampala Urban Study Report" Van Nostrand Associates Kampala Uganda

Isolo Paul Mukwaya (2004): Urban change in Uganda: "The challenge of managing urban areas in a global environment," Kampala

Mutabazi Sam Stewart (2011): "Enabling Sustainable Mobility in East Africa; Building Successful PPP for the Road Sub-Sector in Developing Countries". Paper presented at International Road Federation Congress in Moscow

United Nations Habitat for Humanity, Ministry of lands, Housing and Urban Development (2011): "The national slum upgrading strategy fact sheet", Kampala, Uganda

Harral, Clell, & Asif Faiz (1988): "Road Deterioration in Developing Countries" Washington, DC: World Bank.

Kumar, Ajay, and Fanny Barrett (2007): "Stuck in Traffic: Urban Transport in Africa." Background Paper 1, Africa Infrastructure Country Diagnostic, World Bank, Washington, DC

Raballand, Gaël, Somik Lall, Arnaud Desmarchelier, and Patricia Macchi. 2009. "Economic Geography and Aid Effectiveness in Transport in Sub-Saharan Africa." Report, Transport Department, Africa Region, World Bank, Washington, DC.

Starkey, Paul, John Hine, Simon Ellis, and Anna Terrell. 2002. "Improving Rural Mobility: Options for Developing Motorized and Non- Motorized Transport in Rural Areas." Technical Paper 525, World Bank, Washington, DC.

Teravaninthorn, Supee, and Gael Raballand (2008): "Transport Prices and Costs in Africa: A Review of the Main International Corridors." Working Paper 14, Africa Infrastructure Country Diagnostic, World Bank, Washington, DC.