# Sustainable Livelihoods, Mobility and Activity Patterns in Zimbabwe and Uganda

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ABSTRACT: The paper describes the methodology, approach and initial findings of a research project undertaken in Uganda and Zimbabwe to investigate the utility of the Sustainable Livelihoods Approach in identifying the access and mobility of the poor with specific reference to rural urban linkages.

RESUMÉ: L'article décrit la méthodologie et les premiers résultats des travaux de recherche menés en Ouganda et au Zimbabwe. L'objectif est de déterminer l'utilité de l'approche "Sustainable Livelihoods" pour l'identification des besoins en accessibilité et en mobilité des pauvres avec une référence particulière aux liaisons zones rurales - zones urbaines.

## 1 INTRODUCTION

The Sustainable Livelihoods Access and Mobility (SLAM) research project sponsored by the UK's Department for International Development (DFID), has been implemented in Uganda and Zimbabwe since October 2000. In Uganda, a team comprising members drawn from the Makerere Institute of Social Research (MISR) (Makerere University), TRL Ltd (United Kingdom) and independent consultants based in the Netherlands have been engaged on the study and in Zimbabwe. Members of the Department of Rural and Urban Planning, University of Zimbabwe, worked alongside TRL and the consultants.

One of the main purposes of the project is to investigate the utility of the Sustainable Livelihoods Approach (SLA) for identifying the mobility and accessibility needs of the poor, with specific reference to rural-urban linkages. The SLA has been developed in the context of growing poverty and the need for income diversification. Developmental agencies and governments are increasingly using the approach in the design of policies, projects and programmes. However, the application of livelihoods approaches to transport studies is largely unexplored. The study endeavours to apply the approach to the field of transport by focusing on and analysing the transport patterns and livelihood portfolios of an economically stratified sample of households with emphasis on contrasting conditions pertaining to the poor as opposed to higher-income groups.

There are four main objectives of the research programme:

- The establishment of mobility and accessibility concepts compatible with the sustainable livelihoods framework;
- Documentation of the relative importance and nature of mobility patterns in relation to livelihood pursuits of stratified economic strata;
- Exploration of the influence of rural-urban linkages on mobility livelihood options, and
- Identification of measures to ensure mobility and accessibility policies to enhance the poor's livelihood prospects (essentially an outcome of workshop discussions).

## 2 STUDY METHODOLOGY AND APPROACH

The research was undertaken in Uganda at four sites along the 80 km Kampala-Jinja corridor comprising the primate city Kampala, a peri-urban area (Seeta), Wakiso village and a secondary town (Jinja). In Zimbabwe, the Harare-Bindura corridor was studied and the four sites comprised Harare, Domboshawa (peri-urban), the village of Jingo, and Bindura, a secondary town. The study was divided into three

phases: Phase 1 when the study corridor was chosen and focus group discussions took place during March 2001; Phase 2 which included the household and transport surveys undertaken during June-July 2001; and Phase 3 involving the selection of 12 households whose members reported their individual transport activity in a logbook for a week during October-November 2001. Phase 1 was principally designed to obtain an understanding of the attitudes, processes, policies and institutions pertaining to transport and livelihoods. To this end, information was obtained primarily through local focus group discussions (FGD), and key informant interviews. Twelve FGD were conducted at the four sites in both countries. Participants were disaggregated and FGD sessions were carried out with individual groups of married men and women, unmarried men and women, as well as having discussions with local secondary school teaching staff and pupils.

Phase 2 surveys involved the collection of comprehensive household data on household composition, livelihood and travel activities using a questionnaire. Within each of the four sites, households were disaggregated into low, medium and high-income groups. While the determination of the three income levels was easy with respect to the primate city and secondary town, it was difficult in the peri-urban and village areas. In Kampala, Jinja, Harare and Bindura, the low, medium and high-income areas were distinct. In each income area, households that were interviewed were selected at random but in such a way that the whole area was covered. In the village and peri-urban areas of Zimbabwe and Uganda, housing and local leaders' assessments criteria were used to determine income levels and data collection teams were deployed in such a way that the whole area was covered. A total of 360 households were interviewed (90 per site and 30 per income group).

Phase 3 involved in-depth interviews with 12 households (one from each income group in each location). The principal aim of this phase was to obtain a detailed understanding of the relationship between occupation and mobility patterns. Data were obtained through the completion of a daily travel logbook. All members of the selected household (no matter how young, old or incapacitated) had their travel activities recorded for 7 days.

## 3 TRANSPORT PROVISION

### *3.1 Zimbabwe*

There has been a steady increase in the total number of registered motor vehicles in Zimbabwe over the last 3 decades. The average annual growth rate between 1994 and 1999 was approximately 10%, with a total of 739,543 registered vehicles in 1999. 1998 had the highest average growth rate of about 14%, stimulated by trade liberalisation, and 1999 had the lowest at 2.5%.

Between 1994 and 1998, many vehicles entered the country mainly from South Africa and Japan. The majority of these vehicles were the 18 seater minibuses which increased in number from 10,741 to 28,418 over the period. Many owners/operators took advantage of the exemption on customs duty granted on relatively new public passenger vehicles during this time. The vehicles being imported in the country decreased dramatically after 1998 as a result of an adverse exchange rate as well as higher customs duties that were levied on all categories of vehicles.

Public transport in Zimbabwe is provided by conventional buses, mini and midibuses and metered taxis. The liberalisation of the transport sector has in general increased the number of public transport vehicles operating in the country. By 1997, there ware an estimated 4,700 public transport vehicles operating in Harare (Mbara, 1997). These are known as 'commuter omnibuses' and mainly comprise 18 seat minibuses. However, increasing competition has forced the Zimbabwe United Passenger Company (ZUPCO), which was the sole provider of public transport until 1993, to deploy its fleet on long distant routes and drastically reduce the number of buses operating in Harare. At the time of deregulation (1993), ZUPCO operated a fleet of about 800 buses in Harare. Currently, the fleet has been reduced to less than 200.

The increasing cost of living has over the years changed modal split trends in Harare. The trends since 1988 show a steady increase in public transport modal share to 1994 (47%), followed by a gradual decline to 38% by 2000. Of significance is the rapid increase in bicycle use from 3% in 1996 to 12% in 2000. The use of non-motorised transport (walking and cycling) constituted 47% in 2000, up from about 41% in 1996. Increases in bus fares principally caused by steep fuel price rises and rampant inflation (Bryceson & Mbara, 2002) have compelled many commuters to either walk or cycle when previously they would have travelled by public transport.

### *3.2 Uganda*

In Uganda, road transport is the dominant mode for all passenger traffic. The vehicle fleet (around 123,000 vehicles in 1999, excluding motorcycles) is essentially made up of passenger vehicles (90%) of

which more than two thirds are cars and utility vehicles. Mini-buses and conventional buses represent respectively 14% and less than 1% of the total vehicle fleet.

Following the transport deregulation policy in the 1990s and with the current improvement in the road network, road transport has increased significantly in Uganda. The number of new vehicle registrations increased two-fold between 1993 and 1994 and the growth in vehicle ownership was 22% per annum during the 1995-1998 period. The average vehicle ownership is about 8 vehicles per 1,000 of the population but half of the traffic in vehicle kilometres is concentrated within Kampala and the Central region (Benmaamar et al, 2001).

Matatu services now dominate the bus industry in all market segments except for long-distance inter urban passenger movement where conventional buses dominate. There are around 4,000 matatus, which account for 70% of road usage in Kampala. In addition, boda boda motorcycle and bicycle based passenger and small goods carrying vehicles primarily provide three types of short-distance services:

1 Within the main urban areas, where they compete with conventional sole hire taxis and matatus;
2 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;
3 As feeders to the main roads in which role they tend to complement matatu and large capacity bus services.

There are an estimated 70,000 motorcycle and 200,000 bicycle boda boda operators in Uganda, collectively providing a livelihood for 1.6 million people (based on an average of 6 dependants per boda boda in operation), which accounts for 7% of the population (Howe, 2002). The poorest stratum of the population only occasionally use boda boda services, low incomes and the high unit cost of fares being the principal constraints to usage.

## 4 KEY STUDY FINDINGS

### *4.1 Socio-economic data of households*

In Uganda the average household size in all localities was 6.9 compared to 6.1 in Zimbabwe. Male female split was roughly 50% each in Zimbabwe whereas in Uganda females represented 52% and males 48%. Higher income groups in Uganda tended to have higher sized households (8.1 persons) than lower income groups at 5.8 whereas in Zimbabwe only in the peri-urban and village levels were high income households larger. In both countries over 80% of household heads in the sample were male yet in the village locations nearly 40% were female.

Within Kampala, professional/administrative activities generated 45% of employment for the sample interviewed and this reduced to 27% in Jinja, and 10% in the peri-urban and rural locations whereas farming/crop production represented 34% in the village and as low as 7% in Bindura. Surprisingly, it represented 15% in Kampala. In Zimbabwe professional service employment represented 34% in Harare and was only 1% in Jingo village. However, in the latter farming/agricultural production was up to 50% and represented 20% in Domboshawa the peri-urban locality. Self-employment activities in both countries was also considerable, comprising at least 20% of employment.

Food, schooling, transport and rent were the major expenditure items in Zimbabwe for all income groups whereas in Uganda education was the major expenditure item followed by food health, utilities and transport. In Uganda, households spend up to 25% of the household budget on schooling and even in Zimbabwe it represents a significant percentage of the household budget. Expenditure patterns in both countries illustrate a lot of recurrent expenditure and little in the form of investment assets other than in education. Clearly, families are simply generating enough to meet basic daily survival needs. Table 1 illustrates the average transport expenditure as a percentage of household expenditure by income group. Generally expenditures increase with rising income. In terms of locality, it is the secondary city where expenditures are minimised and peri-urban and capitals where they are highest.

Table 1: Average Transport Expenditure as % of Total Household Expenditure

| | UGANDA | | | | ZIMBABWE | | | |
|---|---|---|---|---|---|---|---|---|
| | Income Group | | | | Income Group | | | |
| Locality | Low | Medium | High | Average | Low | Medium | High | Average |
| Primate City | 6.5 | 10.6 | 13.5 | 10.2 | 9.9 | 14.1 | 16.0 | 13.3 |
| Secondary City | 5.5 | 5.9 | 7.5 | 6.3 | 8.1 | 8.4 | 10.5 | 9.0 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Peri-Urban | 8.4 | 10.3 | 10.8 | 9.8 | 12.1 | 11.6 | 17.4 | 13.7 |
| Village | 5.7 | 8.0 | 9.5 | 7.7 | 8.8 | 14.5 | 13.0 | 12.1 |
| Average | 6.5 | 8.7 | 10.3 | 8.5 | 9.7 | 12.2 | 14.2 | 12.0 |

Source: SLAM data 2001

*4.2 Mobility Patterns*

From the results of all three survey phases it is evident that the majority of daily trips in both countries are undertaken for employment purposes:

"*wake up, board commuter omnibus to Mbare Musika where I am a timber vendor,return home"* (married man, Mbare)

"*I go to the fields in the morning and return for lunch. After lunch I go back to the fields and work until late in the evening"*(married woman, Jingo)

In Zimbabwe such trips accounted for more than 48% of all daily trips made and for 38% in Uganda. Other important trips included education 16% and 9 % respectively, social/ceremonial 13% and 8% and shopping 11% and 14%.

Tables 2 and 3 highlight the average trip rate per capita and the average distance travelled for such trips by income category.

Table 2: Mean Daily Trip Rate per Capita

| | UGANDA Income Group | | | | ZIMBABWE Income Group | | | |
|---|---|---|---|---|---|---|---|---|
| Settlement | Low | Medium | High | Total | Low | Medium | High | Total |
| City | 2.7 | 2.3 | 2.9 | 2.6 | 2.0 | 2.1 | 3.0 | 2.4 |
| Secondary | 3.0 | 3.0 | 2.7 | 2.9 | 2.7 | 1.2 | 2.0 | 2.0 |
| Peri-Urban | 2.3 | 2.2 | 2.2 | 2.2 | 1.6 | 1.9 | 2.0 | 1.8 |
| Village | 2.7 | 3.5 | 3.3 | 3.2 | 1.8 | 1.8 | 1.9 | 1.8 |
| Average | 2.6 | 2.7 | 2.8 | 2.7 | 2.0 | 1.8 | 2.2 | 2.0 |

Source: SLAM data 2001

Table 3: Average Daily Short-Distance Trip Distance (kms)

| | UGANDA Income Group | | | | ZIMBABWE Income Group | | | |
|---|---|---|---|---|---|---|---|---|
| Settlement | Low | Medium | High | Total | Low | Medium | High | Total |
| City | 7.1 | 14.3 | 7.6 | 9.7 | 4.4 | 10.3 | 11.4 | 8.7 |
| Secondary | 1.3 | 5.3 | 5.4 | 4.0 | 8.6 | 6.4 | 7.3 | 7.4 |
| Peri-Urban | 5.5 | 19.9 | 3.8 | 9.7 | 9.1 | 8.1 | 12.7 | 10.0 |
| Village | 1.8 | 3.2 | 6.2 | 3.7 | 2.8 | 7.5 | 10.7 | 7.0 |
| Average | 3.9 | 10.7 | 5.7 | 6.8 | 6.2 | 8.1 | 10.5 | 8.3 |

Source: SLAM data 2001

Table 4: Mode of travel for daily trip making by Income (% of total)

| | UGANDA | | | | ZIMBABWE | | | |
|---|---|---|---|---|---|---|---|---|
| Mode of Transport | Low | Medium | High | Total | Low | Medium | High | Total |
| Walking | 75 | 69 | 53 | 64 | 80 | 62 | 45 | 63 |
| Bicycle | 9 | 11 | 8 | 9 | 1 | 1 | 1 | 1 |
| Motorcycle | 1 | 2 | 3 | 2 | | | | |
| Private Car | 2 | 4 | 22 | 10 | 3 | 16 | 40 | 20 |
| Kombi (share taxi)/ Mini-bus | 12 | 14 | 11 | 13 | 14 | 19 | 12 | 14 |
| Bus | | | | | | | | |
| Staff Bus | | | 2 | 1 | 1 | 1 | 1 | 1 |
| Other Comm'l Vehicle | | | | | | | | |
| Other | 1 | | 1 | 1 | 1 | 1 | 1 | 1 |

Source: SLAM data 2001

Clearly, trip rates are higher in Uganda than in Zimbabwe across the income spectrum but especially in the village location, which reflects the adverse political and economic climate in Zimbabwe at present. In Zimbabwe trip rates generally increase with income whereas this is not so noticeable in Uganda, and as might be expected, males make more trips than their female counterparts.

In terms of distance travelled, trips are relatively short even in the capital cities. At the village level distances in Zimbabwe are twice those observed in Uganda. Table 4 illustrates modal split for daily trip making.

Table 5 illustrates the mean number of long distance trips per annum per capita by locality and income. Overall the trip rate is highest in Zimbabwe and the rate increases with rising income and generally diminishes with increasing distance from urban centres.

Table 5: Mean Number of Long-Distance Journeys per Annum per Capita by Locality/Income

| | UGANDA | | | | ZIMBABWE | | | |
|---|---|---|---|---|---|---|---|---|
| | Income group | | | | Income group | | | |
| Locality | Low | Medium | High | Total | Low | Medium | High | Total |
| Primate City | 0.9 | 1.2 | 1.8 | 1.3 | 1.2 | 2.2 | 2.9 | 2.1 |
| Secondary City | 0.8 | 1.1 | 1.3 | 1.1 | 1.4 | 2.0 | 2.6 | 2.0 |
| Peri-urban | 0.5 | 0.9 | 0.8 | 0.7 | 1.0 | 1.3 | 1.7 | 1.3 |
| Village | 0.5 | 0.5 | 0.6 | 0.6 | 1.2 | 1.5 | 1.6 | 1.4 |
| Average | 0.7 | 0.9 | 1.1 | 0.9 | 1.2 | 1.8 | 2.2 | 1.7 |

Source: SLAM data 2001

The main purposes for long distance travel (which has diminished in Zimbabwe due to political turmoil, rampant inflation, nuclear rather than extended family units etc) are: visiting relations, attending funerals, weddings and rituals, and visiting children at boarding schools. With the onset of HIV/AIDS in both countries attendance at funerals has diminished because relatives/friends can no longer bear the costs/time of attending so many funerals. However there is an attachment both emotional and cultural to the "rural home" even though the younger generations living in urban centres tend to minimise such links.

*" Naturally we wish to maintain our social links with relatives and friends at our rural homes. They rely on us for the supply of agricultural inputs and support in times of drought*" (old man, Mbare)

It is a 2 way process however:

*"We are actually sustaining the urban households and at times I even carry a small grocery, which is greatly appreciated".*(Jingo resident)

*"My children now expect me to bring a bucket or two of maize every time I visit*"(old lady, Jingo)

Due to the high costs of travel residents both in urban and rural localities are increasingly relying on mobile telephones to keep in touch with family rather than physically visit. This has the advantage of frequent contact at minimum cost.

## 5 SUMMARY AND CONCLUSIONS

In summary, many rural-urban mobility trends are mirrored between the two countries under survey, especially with respect to long distance journeys beyond the transport corridor, which are often forgone during periods of economic hardship in both countries. Interestingly though, for short distance trip-making, the wealthiest and poorest in the secondary and peri-urban survey sites, were found to regularly travel the longest distances in Zimbabwe, demonstrating a U-shaped curve. Urban car owners commute to work, whilst peri-urban dwellers now walk long distances to their work. Conversely, in Uganda middle income groups are found to travel longer distances and this may be due to the prevalence of both cycle and motorcycle boda boda which provide an affordable and convenient mode of transport to middle income groups, in the absence of a private vehicle.

The Sustainable Livelihoods Approach adopted in this study has proved to be a useful analytical tool. Livelihood analysis has helped to reveal the importance of access and mobility to the generation of economic and non-economic activities, and highlighted the significance of people's capital assets. Financial capital possessed by the higher

income has placed them in an advantageous position to own means of transport and buy transport services giving them greater mobility relative to others.

In Uganda, while physical capital in the form of transport services like boda boda have expanded, human capital has suffered setbacks over the past decade given extensive retrenchments in the civil service as well as in factories and other places of formal employment in and around Kampala and Jinja. In view of the hardships and regardless of residential location, people value access to natural capital in the form of possessing land to grow their own food. Social capital is especially significant for the poor whose trip purposes reflected the importance of visiting social relations more than was the case for the other income groups.

In Zimbabwe, the participatory focus groups and travel diaries revealed that historically embedded cultural preferences are an essential component of mobility patterns in the country. This is evidenced by Zimbabweans' rural-urban circular migration patterns, complex notions of 'home' and the rural home as a frequent travel destination.

## 6 ACKNOWLEDGEMENTS

The work described has been prepared as part of the Sustainable Livelihoods, Access and Mobility project, funded under the Knowledge and Research Programme of the UK Department for International Development (DFID). The views expressed are not necessarily those of DFID.

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