1. Introduction

1.1 Background to the Case Study

This report presents a case study on bicycles, women and rural transport in Uganda. It is the result of field work carried out in the Mbale and Tororo districts of eastern Uganda during a three-week visit in September 1991.

The case study forms part of the Rural Travel and Transport Project (RTTP) of the World Bank-financed Sub-Saharan Africa Transport Program (SSATP), a major research program covering transport in SSA. One aspect of this program is the RTTP, which is designed to focus on transport at the level where it has the most direct influence on economic (particularly agricultural) and social development in rural areas of SSA.

One of the key aims of the RTTP is to recommend approaches to the improvement of rural transport services, and to the adoption of intermediate technologies to increase personal mobility and agricultural production.

This research is being conducted through Village-Level Transport and Travel Surveys (VLTTS) and related case studies. The World Bank has commissioned the International Labor Organization, in collaboration with I.T. Transport, to execute the VLTTS and the related case studies under the RTTP.

1.2 General Objectives of the Case Study

The objective of the case study is to investigate two key aspects of rural mobility and accessibility focusing on:

- (i) The role of intermediate means of transport (IMT) in improving mobility, and the institutional and implementation policy requirements necessary for developing the use of IMT; and
- (ii) The role of transport in women's daily lives, given that a major part of the transport burden falls on women in addition to their substantial agricultural and domestic responsibilities, and the impact of improvements in mobility and accessibility upon women.

These aspects of rural mobility and accessibility are dealt with in this case study through an analysis centered on the predominant mode of intermediate transport used in the study area - bicycles. Eastern Uganda was selected as a case study area primarily as a result of the extensive use of bicycles in this area in comparison to other parts of SSA. In addition, bicycle usage in this area plays an important role in transport services, rather than being exclusively used for personal travel. Furthermore, unlike many areas in SSA, there appeared to be no social or cultural constraints to the use of bicycles by women, although actual bicycle usage was still primarily undertaken by men.

A VLTTS was carried out in Mbale district at the same time as this case study. The VLTTS was designed to measure and assess the time and effort spent on transport in the context of overall household labor allocation and the level of economic and social development, and to analyze local level transport as a factor and constraint in agricultural development and in the utilization of essential services. The case study draws upon, and aims to complement and extend, the findings from the village-level survey.

Additional work is also being done on roads and infrastructure in the same general area of eastern Uganda as part of preparation for a World Bank transport project. This case study, therefore, although always keeping the more general results of the VLTTS as a reference, focuses on the current and potential role of bicycles as the predominant and key intermediate means of transport in the area, and on its impact on women.

1.3 Scope of Work

The case study was carried out in close collaboration with the VLTTS. It was designed to examine three aspects of rural transport in eastern Uganda:

- (i) Bicycle usage
 - trip characteristics, both for personal use and to provide transport services;
 - operating cost characteristics of bicycles; and
 - influence of widespread availability and use of bicycles on transport patterns of rural households and on women.
- (ii) Bicycles and rural women
 - attitudes of women towards the use of bicycles, and the extent of ownership and use of bicycles by women; and
 - potential for the greater use of bicycles by women, and constraints upon this use.
- (iii) Women and rural transport
 - more generally, the attitudes of women towards the role of transport in their lives, and their response to different interventions to improve mobility and access.

1.4 Study Methodology

The case study is based primarily on interviews and discussions with women's groups and key informants. The initial section on bicycle usage draws mainly on data collected by the VLTTS. The information on transport services stems from interviews with bicycle operators, district officials, and general observations.

The sections on women, bicycles and rural transport are based on interviews with women's groups in villages in Mbale and Tororo districts, discussions with key informants such as teachers, health and

church staff, leaders of women's income-generating projects, and representatives of women's organizations and government at the village, parish, sub-county, county, district, regional and national levels.

A questionnaire was used as a checklist for village group discussions (see Annex 1). It was designed to serve as the basis for a structured discussion rather than as a preset interview.

1.5 Profile of Mbale and Tororo Districts

The case study was carried out in two of the nine districts in the eastern region of Uganda - Mbale and Tororo districts. This section presents a brief summary of the relevant characteristics of the two districts in order to place the case study within the context of conditions in the study area.

Mbale District (For more detailed information on Mbale district see reference 1)

Mbale district is located in the extreme east of Uganda. Mbale town is situated on the main road approximately 250 km from Kampala. The location of Mbale district is shown in Map 1. The area around Mbale town and in the direction of Tororo, Pallisa, and Kumi districts in the south and west is rather flat while the eastern and northern parts of Mbale can be categorized as hilly or mountainous.

Mbale district is ethnically rather homogeneous. The predominant ethnic group is the Bagisu who are generally perceived as mountain people. The area of Mbale district is often referred to as Bugisu or the land of the Bagisu. However, during the recent period of political instability, there has been an influx of Iteso people from Kumi and Soroti districts (Teso). Teso is characterized by flatland similar to the terrain around and west of Mbale town. As a result, the Iteso have preferred to settle in Mbale town and to the west.

Mbale district is a densely populated area, with 353 inhabitants per square kilometer (1987 estimate). In 1991, it had 706,600 inhabitants, and suffers from land shortage, particularly in the mountains which might be the reason why the incoming Iteso chiefly settled in the plain. With the flatland being less fertile than the mountains, the Iteso chose to specialize in alternative income-generating activities to farming such as beer brewing and bicycle transport services. The Iteso were known for their expertise in these areas, and as refugees, this knowledge was a comparative advantage to be exploited in making a living.

Mbale town is the third largest in Uganda with 53,600 inhabitants. Approximately 9 percent of the population in the district lives in urban areas, i.e. centers with a minimum of 3,000 inhabitants. This conforms closely to national estimates showing that only 10 percent of the Ugandan people live in urban areas.²

Mbale district is made up of six counties including the municipality, 29 sub-counties and 124 parishes. There are between 6 and 29 villages in each parish. The villages visited during the field trip are marked on Map 2.

¹ Government of Uganda. 1991. *Uganda Population and Housing Census*. Entebbe.

² Government of Uganda. 1991. Op cit.

The Village Level Transport and Travel Survey (VLTTS) was carried out in Budadiri county of Mbale district in September 1991.³ Four villages within Buwalasi and Buyobo sub-counties were selected to represent a wide range of conditions and different degrees of remoteness from Mbale town. A total of 168 households, 42 in each village, were randomly selected and interviewed within the survey villages. The four villages were Nampanga, Bumudu, Buwanyama, and Bukisimamu. The location of the survey villages is shown in detail in Map 3.

Nampanga village is situated 13 km north of Mbale town on the tarmac road to Sironko. It is characterized by rolling terrain. Bumudu village is on a good and recently improved all weather earth road 16 km from Mbale town. The first 10 km leading away from town are on tarmac, and the next 6 km are on an earth road leading into a relatively hilly area.

Buwanyama and Bukisimamu villages are located to the east of Bumudu. Buwanyama is located at about the same altitude as Bumudu village. It remains accessible by four-wheel drive vehicle throughout the year although it is on a rather poor feeder road 2.5 km from the improved earth road; it is about 21.5 km from Mbale town.

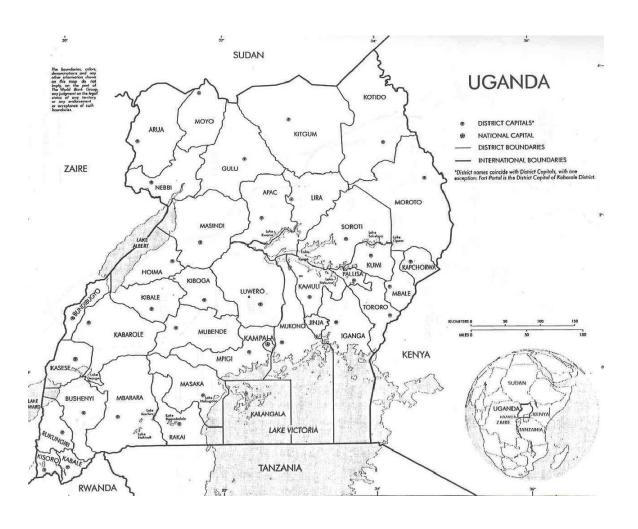
Bukisimamu is the most remote and highest village. It is located some 23 km from Mbale town, and is the most inaccessible of the survey villages. The last 4.4 km, before reaching Bukisimamu, cross very steep and difficult terrain. When it rains (April through September), this feeder road becomes impassable to both motorized vehicles and bicycles.

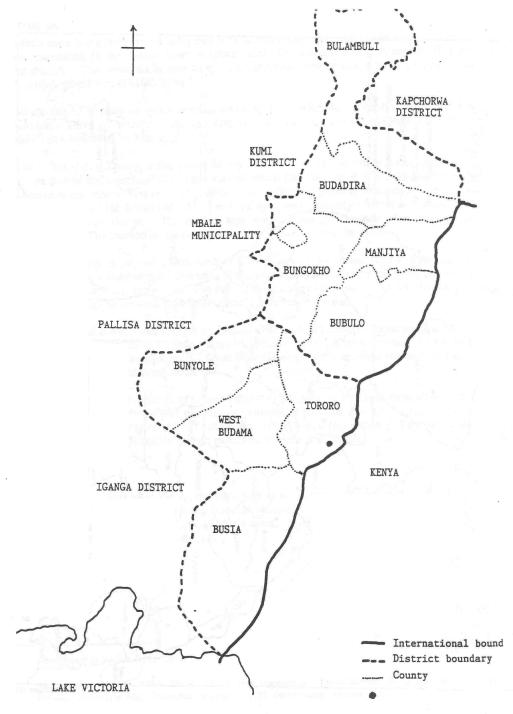
Tororo District

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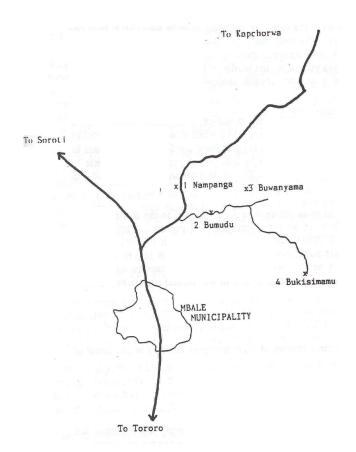
Tororo district is located in the southeastern part of the eastern region (see Map 1). It is a predominantly flat area which stretches from the shore of Lake Victoria up to Pallisa district in the north and ends only 7 km south of Mbale town. In the west, the neighboring district is Iganga and to the east, it borders Kenya.

³ Airey, Anthony. 1991. "Mbale District Village-level Transport and Travel Survey." Rural Transport and Travel Project, Sub-Saharan Africa Transport Program (SSATP). Forthcoming. Geneva: ILO.





MAP 2: Mbale and Tororo District



x Village area and number
Tarred roads
Murram roads

Approximate scale 1cm = 2km -

MAP 3: VLTTS Villages

There are a large number of ethnic groups in Tororo district - Adhola (originally Acholi from the north), Banyole, Badama, Basamia and Bagwe (who are closely related), Bagwere and Iteso. The languages of some of these groups are so different that frequently they have to communicate in Swahili or Luganda. Before each visit to the field, the team had to make sure that at least one member of the team could communicate in the local language. Discussions with larger women's groups invariably had to open with an inquiry regarding to the preferred language of communication. For example, in Malaba village, on the border of Kenya, all ethnic groups were represented during a meeting held at a women's health center-their common language was Swahili.

Tororo district currently has five counties including the municipality of Tororo town. Pallisa district was considered a subdistrict within Tororo up to 1991 when it was made a district to reduce Tororo's large size. Currently, 1991 estimates suggest there are 554,000 inhabitants in Tororo district.⁴ Population density was estimated to be 206 people per square kilometer in 1987, i.e. 40 percent lower than that of Mbale district. The villages visited during the field trip are marked on Map 2.

The proportion of people living in urban areas (more than 3,000 people) in the district is 11.5 percent, somewhat higher than in Mbale where the figure only 8.7 percent. Tororo town, however, is relatively small; with its 27,000 inhabitants, it is less than half the size of Mbale town. Given that the proportion of the population living in urban areas is higher in Tororo district, it is clear that this district has comparatively more small urban centers than Mbale district. This is significant as bicycle services tend to evolve in and around such urban areas.

1.6 Structure of Report

The report is structured to address the three aspects of rural transport outlined in the terms of reference:

- Chapter 2 deals with the characteristics of bicycle usage;
- Chapter 3 deals with bicycles and women; and
- Chapter 4 deals with women and rural transport.
- Chapter 5 gives a summary of the findings by assessing the potential for increasing bicycle usage and thus alleviating the transport burden on women.

1.7 Exchange Rate

In the report, all costs are expressed in Ugandan shillings (Ush). In Uganda there are two different exchange rates - the official rate, and the commercial rate. The official rate is applied to, among other things, imported goods which are on the priority list for the allocation of foreign exchange, for example, bicycles. The commercial rate is given by the various foreign exchange bureaux in Kampala. At the time of the visit in September 1991 the exchange rates were:

Official Rate: Ush.823 = \$1Commercial Rate: Ush.970 = \$1

Government of Uganda. 1991. Op. cit.