The bicycle sector in Uganda: An overview

Erwin Bos, Freek Koster, Frank Mulder

Contents

Introduction	3
1. Public sector	5
2. Private sector	13
3. Civil society	18
4. Users	22
5. Challenges	27
6. Conclusion	30
Persons interviewed	34
Sources	35
Annex I – Traffic questionnaire	36

January 2003

Erwin Bos

Freek Koster

Frank Mulder

In co-operation with:

First African Bicycle Information Office, Jinja, Uganda

Expertise Centre for Sustainable Development, University of Amsterdam, The Netherlands

Introduction

Uganda is a bicycle country. The roads in every town and village are filled with people walking or cycling. Vehicle traffic is growing, but with a lot of problems and predominantly on the main roads connecting the country to its neighbours and the big cities to each other. In the country statistics are hardly available, meaning there is no data on the total amount of bicycles in Uganda, so it is hard to say how different sellers share the market and whether the amount of women riding a bicycle is increasing or not, for instance.

In the summer of 2002 we finished our studies at Utrecht University, the Netherlands. Erwin Bos received a Masters degree in Human Geography, Freek Koster in International Economics, and Frank Mulder in History of International Relations, courses that concentrated partly on developmental issues, but still left us with the desire to do research in a developing country. On behalf of the Expertise Centre for Sustainable Development in Amsterdam we got the chance to carry out this research in co-operation with the First African Bicycle Information Office in Jinja, between October and January.

FABIO expressed the need for a comprehensive overview of the bicycle sector in Uganda. There is a general lack of knowledge and data in Uganda, which not only hardens policy making, but also the advocacy work of NGOs. This report is meant to provide Uganda with an overview of the actions and opinions of all the entities influencing the position of the bicycle in this East African country. Different actors in the spheres of public, private and civil society have been interviewed to clear up some of the skies above this bicycle country.

The findings of the research have lead to the conclusion that there is a lot of work to be done for all the actors involved. The government will have to stop overlooking the bicycle in its policies, budgeting, taxing and other major activities. The private sector will have to be innovative and push the government to remove taxes. The civil society at last should raise its voice and push governments, private sector actors and users to greater and more efficient use of the bicycle.

1. Public sector

NATIONAL GOVERNMENT

Structure

The main responsible for traffic and infrastructure in Uganda is the Minister of Works and his Ministry of Works, Housing and Communications, based in Entebbe. Transport falls under Communications, but is has its own Minister of State, heading the Directorate of Engineering and the Directorate of Transport & Communications. The latter directorate has two departments influencing infrastructure in the country, namely the Department of Planning and the Department of Transport Regulation.

The Traffic and Road Safety Act for example was set up by the Department of Transport Regulation. It is responsible for laws and regulations to control transport. The department of Planning provides the overall transport framework and carries out projects and programs, and it consists of a Commissioner, two assistants, three principle economists, two senior economists, two senior statisticians, and one regular statistician.

The budget consists of recurrent expenditures, like salaries, and development expenditure, to carry out projects. Roads that are main roads or roads to important places are the responsibility of the Ministry. Road rehabilitation is one of the key priorities in the government in their policy of poverty eradication.

Parliamentary Committee of Works, Ministry of Works | Housing | Communications Housing, & Communications Dir. of Transport Dir. of Engineering & Communications **Dept. of Transport Dept. of Transport** Dept. of regulation Communications planning **Commissioner of Planning** 2 assistant commissioners 3 principle economists 2 senior economists 2 senior statisticians 1 statistician

Figure 1.1 – Transport in the Central Government

Policy documents related to low-cost mobility

- Vision 2025 (long-term)
- Transport Sector Policy (medium-term), co-ordinated by the Commissioner for Planning, together with a consultant and having been open for stakeholder comments. The final version will soon be sent to cabinet for approval. The document defines a framework for improved transport, especially aimed at integrating road, water, rail and air transport.
- National Transport Masterplan, including Greater Kampala Masterplan, soon to be developed, probably in co-operation with a South-African company.

Efforts to improve low-cost mobility

- Lately, traffic counts have started measuring bicycles.
- The Ministry is recruiting young researchers to tackle the problem of safety, after the Road Safety Council appeared to lack research expertise.
- Allegedly, cycling and other forms of non-motorised transport have not been addressed elaborately in the Transport Sector Policy, although they should have been, according to the Commissioner of Planning. There is not enough data available, though. One paragraph in the policy document was inserted after a workshop FABIO organised during Summer 2002. The Ministry is aware that bicycles are an important means of transport for both goods and persons, but they also cause congestion in the centre of Kampala.
- The Transport Masterplan is still to be developed, leaving room for non-motorised transport.

PARLIAMENTARY COMMITTEE ON WORKS, TRANSPORT AND COMMUNICATIONS

Structure

The legislative body of Uganda is the Parliament, consisting of about 360 representatives, chosen by a constituency or by major stakeholders. Decisions of the government have to be approved by Parliament, after being discussed in numerous parliamentary committees. The committee on Works, Transport and Communications is responsible for low-cost mobility in the country. The body consists of five members and a clerk, meeting very regularly, up to several times a week. Among the subjects covered by this Committee are road works, feeder roads, access roads, communications, and housing.

Efforts to improve low-cost mobility

• So far, no clear decisions have been made by Parliament to improve low-cost mobility, although the committee says it regards cycling an important issue for rural areas. Besides, the importance for (semi)-urban areas is not mentioned.

ROAD SAFETY COUNCIL

The Road Safety Council has been established outside the Ministry by law, to conduct research for the government. To give the council a high status, important people have been chosen, representing the private sector, the academic world, the Parliament, and the Ministry. Civil society applied for a seat in 2002, but their request has been denied so far.

The members have no specific expertise in the field, unfortunately, the chairman being a surgeon. Therefore they are mainly involved in promotion and pr, via TV ads and seminars, inter alia, but according to critics they are only active during the Road Safety Campaign Week. Different opinions exist on the usefulness of the Road Safety Council. However, lately their budget has been reduced.

KAMPALA CITY COUNCIL

Kampala City Council is considered a district, although a special one with more responsibilities than rural districts. It is divided into five divisions, each having their own engineer, responsible for the gravel roads, some 900 kilometres. The District of Kampala is responsible for tarmac roads, approximately 300 kilometres. Transportation is not the council's responsibility, as it is covered by the Ministry.

The Technical Committee presided by the Town Clerk consists of the Chief Town Planning, the Head of the department of Health, an Advocate, a Treasurer, someone responsible for Welfare and the District Engineer. The Engineer works in the framework of the Planner. His job is to design, to repair, to maintain and to do routine maintenance on the roads. The division engineers make up his staff.

The budget is composed of three types of funding:

- Council expenditure
- Central Government Grants; KCC has got these grants only since three years, and it is insufficient according to the council
- Loans and grants from development partners

The administrative body is steered by the Executive Committee, with the Secretary of Works responsible for infrastructure in the city. Proposals have to be approved by the council, which is divided into committees, such as the Committee on Works for infrastructure.

Traffic in the city centre

The main problem of KCC is the heavy congestion of the centre. Because of the problems in the rest of the country, Ugandans tend to move to their capital city. Initially, the city has been planned for 300,000 people but a census in September 2002 showed that there are 1.2 million people residing here, rising to 2.5 million during daytime. Roads are too narrow and too few. 28% of the roads are used for parking cars, while matatus and boda bodas cause a lot of anger by their sometimes-irresponsible behaviour.

One of the possible improvements KCC thinks of is replacing (a part of) the matatus by big buses. UTODA, the taxi operators' association, does not believe in this solution, as they find it hard to imagine how several matatu owners will buy one bus together. They blame the government instead, for concentrating all the governmental and economic activities of Kampala in the centre and doing nothing about the congestion. According to UTODA, it will only take a few years for the government to realise something has to change.

Beside the Kampala Transport Master Plan that will be developed under the responsibility of the Central Government, Kampala City Council adopted a comprehensive approach to improve the traffic situation. This is the Kampala Urban Traffic Improvement Plan (KUTIP) that was written this year (2002) by Rites Ltd / New Delhi, after consultation with stakeholders. This document is very concrete and contains the proposal to remove some parking lots, for instance. It further consists of short-term as well as long-term plans. Short-term plans are made for the Central Business District and a few isolated areas to create alternative routes in the following five years.

The budget for road works in Kampala in 2002/2003 is 4 billion Ush (2.2 million USD), but even this might prove to be too ambitious. Probably the realised budget will be about 2.5 billion USh (1.3 million USD). Since this is very tight, KCC is not expecting too much of KUTIP. There is some foreign development money, though, for example 2 million USD the World Bank is likely to donate, but this is just a fraction of the 20 million USD that is needed for phase I of KUTIP. There are more donors with whom KCC has been in contact before, like EU, UNDP, and Japan, but sometimes it is difficult to find them work together as everyone wants to be recognised in the outcome. Moreover, they fund a lot of studies without follow-up.

Efforts to improve low-cost mobility

- KUTIP says hardly anything about non-motorised transport. Roads are too narrow to
 improve that, according to KCC. However, the plan proposes guardrails (to direct
 pedestrians where to cross), zebra crossings, traffic lights (although they are too
 expensive in most cases), traffic signs, and road markings. The problem with road signs
 is that they tend to be stolen.
- According to the district engineer, there should be a policy for the cyclists, ideally.
- However, the city council sees cycling mainly as a nuisance, causing dangerous situations on the streets. Their current actions are based on the desire to get rid of all bicycles in the city centre.

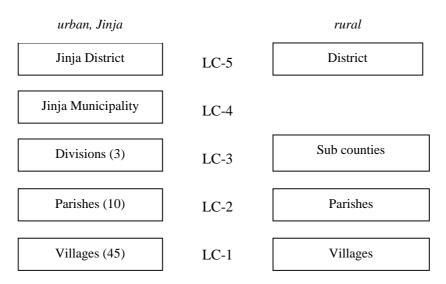
JINJA DISTRICT

Jinja is a very special town in respect of low-cost mobility. There are several thousands of bicycles in town and the roads are spacious. There is hardly any congestion yet. Therefore this research focuses more in-depth on the views of the District and the Municipality.

Structure

The different governmental levels in Jinja are organised in the normal way, unlike Kampala, though it follows the urban instead of the rural lines. That means the Municipality (LC-4) has more political responsibilities than other levels. Whereas the central government is responsible for the access or trunk roads (ca. 95% tarmac), the district carries responsibility for the rural roads, all gravel. The municipality is responsible for the urban tarmac roads (ca. 40%), while the divisions take care of the urban gravel roads (ca. 60%).

Figure 1.2 - The local council system



The district has a Department of Works, headed by an Engineer, observing roads inter alia. The department carries out routine maintenance, periodic maintenance, as well as rehabilitation. Works are either carried out by the department (30 employees) or by petty contractors (ca. 25 in total). The engineer co-operates with other departments, i.e. the Auditing, Finance and Management Department. So there are three persons responsible for

decisions on road maintenance: respectively the accountant, the administrator and the engineer.

The budget year runs from July to June, after the budget plan is approved by the Central Government. The amount of money is proportional to the amount of roads in the district, currently 300 km of roads, 80 of which in good, 130 in fair, 55 in poor and 42 in bad condition. The activities in 2002/2003 will consist of 230 km routine maintenance, 30 km periodic maintenance, and 11 km rehabilitation. The budget for 2001/2002 was 225 million USh (125,000 USD). With this budget the department planned to maintain circa 70% of the roads in the district, and that is far too little according to the District Engineer.

Efforts to improve low-cost mobility

The department contributes to safety in placing signposts and increasing sight distances.
 Unfortunately there is not budget for specific bicycle lanes, although they would be useful as people don't care for safety.

JINJA MUNICIPAL COUNCIL

Structure

The Municipal Engineer is the main responsible for infrastructure, together with the rest of the Technical Team. The social input in the design of infrastructure is the task of the Assistant Town Clerk. The Technical Team allocates the money together with the Executive Committee of the Municipal Council. However, everything has to be approved by the full council, after discussion in the appropriate committees. Transport is mainly a subject for Social Services or for Finance & General.

The different sources of income of the municipality are as follows:

- Local Government Development Fund (LGDP) Capital, i.e. roads
- School Facilities Grant (SFG) Schools, conditional grant
- Poverty Action Fund (PAF) With this fund the (gravel) feeder roads are maintained, also conditional grant
- Several unconditional grants

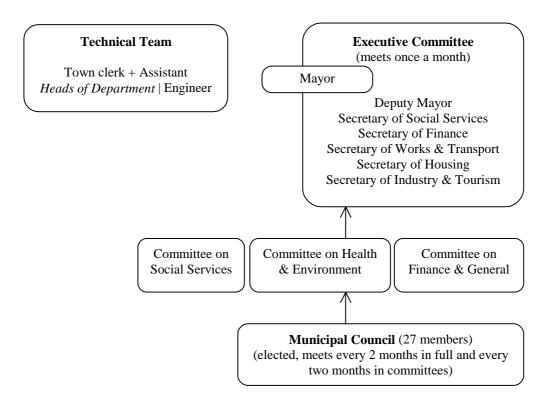
These budgets are negotiated yearly at the Budget Conference, where private parties are invited, too. There are also Civil Organisations that contribute to the municipality like the Lions Club and The Rotary Club.

In 2002/2003, the budget for infrastructure consists of approximately 500-600 mUSh (300,000 USD) for capital development projects (LGDP and PAF). This budget is higher than usual, though, because of a Central Government bonus for the good financial performances of the council. Only 6 mUSh (3300 USD) will be spent on traffic, such as street names and safety measures. Added to this, approximately 300 mUSh (revenue collected by divisions) will be recurrent expenditure by the Engineering section. The recurrent budget of 2001/2002 proved to be less than expected, because of problems with revenue collection. The bicycle tax for example, turned out to be 13 mUSh instead of 45 mUSh.

There are possibilities for public-private partnerships in Jinja. Already running in Jinja are, for instance, Stakeholder Forum (environment), Factor Street project (market), and the City Challenge Committee with DfID (poverty eradication).

The Works Department consist of 20 employees, 13 of which concentrate on roads. At the moment there is only one contractor, called 'Road Construction'. Every year a 3-year development plan is created, but only 20% of what the Municipality would like to do can be realised. In 2002/2003 Jinja is carrying out plans from 1999/2000. One major improvement is the determination of the council to make sure that property rights will have to be paid.

Figure 1.3 – Jinja Municipal Council



Policy towards boda bodas

- There are different views towards the boda bodas. They pay money and deserve it to be catered for, according to some, whereas other policy-makers are more sceptical of the contribution of boda bodas to the town. The Committee for Social Services, for example, thinks that there are too many bicycles in the city, so they considered a reduction of the amount.
- According to the Engineer, possible locations for boda boda sheds are already designated, but others are not convinced these kinds of provisions are a good idea.
- At least once every 3 months the Municipality meets the Police and the boda bodas to speak about safety. The municipality would like to organise them, for financial purposes, therefore they have been registered.

Views on improving low-cost mobility

- There is not enough money to design a traffic plan, according to Jinja politicians.
- During a workshop organised by FABIO in 2002 several policymakers claimed to be supportive of measures to improve low-cost mobility. FABIO and some people in the LC are now supportive of a pilot bicycle lane. According to FABIO the Engineer will designate spots. According to the Engineer the Council has to make proposals. Councillors see it mainly as his responsibility, however, and apparently he lacks the money to work on it. Some don't believe in the usefulness of a single bicycle lane without integration in a sensitisation program and a comprehensive bicycle network.
- The Secretary of Works and the Assistant Town Clerk are impressed by developed countries' provisions for cyclists and pedestrians, and would like to think about this matter if there were possibilities.
- The Assistant Town clerk considers popularisation of the bicycle as very important, because then demand for provisions will follow automatically. He lays the initiative

with FABIO to advocate for bicycle provisions such as lanes and parking places. According to him, the attitude of people towards the bicycle is the main constraint for a bigger use.

- Just a few people have visionary ideas about the role of the bicycle as a contribution to the image of the city.
- Nobody sees bicycle provisions as a possibility to attract tourism or to improve the image of the city.

NATIONAL POLICE

Structure

The mission statement of the police is as follows: "To secure life and property in partnership with the public in a committed and professional manner." The Inspector is the head of the national police. The Traffic Department is part of a directorate and the overall policy maker in this department is the Acting Commissioner for Traffic and Road Safety.

The Central Government decides on the budget of the Police. The police don't get a big share, but opinions differ whether this share is fair. The poor level of concern among the policymakers for safety affects the budget, though, and that is a big problem. There is not enough money to sustain Traffic Patrols, for instance. The result of the small budget is the low number of traffic officers.

The police don't have the right to fine; everything goes straight to the court. They proposed to change this, for example to be able to punish people without a permit directly on the road, but the bill hasn't approved yet. Fines go directly to the Treasury instead of the Police (in 2001 this amounted to 15.5 million USh (8600 USD)). Some people within the police complain about their status in the eyes of the politicians. In one of the districts, for example, police officers on the road have been moved away, for electoral reasons.

Safety

According to the police, safety has three components: enforcement, education, and engineering. *Enforcement* is not seen as problematic. There are enough sanctions to punish misbehaviour, so when enforcement is not working at full blast, it is a problem of funding, not intentions, in the eyes of the police.

Secondly, *education* is an important task, as inexperience (misjudging the situation) and undisciplined behaviour cause many problems in urban areas. Throughout the country, the main problem of road safety is poor education. People are illiterate, don't know the traffic rules, and fear the police. For example: a cyclist with 100 kg of posho, riding uphill, jumps off his bike, falls down, and is hit by a car. He doesn't know the traffic rules. There are very many dangerous situations like this. Moreover, reckless driving, especially by matatus, causes the biggest share of accidents. The police are actively involved in education, to address this problem.

Thirdly, a lot could be done for safety in the field of planning and *engineering*. The role of the police lies in advising the government on the placement of signposts, humps, lighting, etc.

Views on low-cost mobility

- The Commissioner for Traffic and Road Safety is aware of the role the bicycle can play in economic development and poverty reduction. A masterplan would be very helpful to promote and protect the bicycle.
- The police recognise the vulnerable position of the bicycle in traffic. There is a high rate of accidents in which pedal cyclists are involved. However, the police stress the danger often caused by cyclists.

- The police regard insufficient legislation towards cyclists a big problem. Police have advocated a cycle license, but this has not been realised yet. The implementation takes very long. Car drivers at least have had traffic lessons.
- The second main problem, according to the police, is the lack of provisions for bicycles in road engineering design.
- Traffic lessons form a part of the primary school's curriculum, but children don't learn
 anything about how to use the bicycle. The police would like to see it as a part of the
 curriculum, too.
- According to the KCC Engineer, the police should do more to control the driving schools. The teachers of those schools sometimes lack capability.
- The police have a clear view on the needy infrastructure for cyclists and pedestrians. A lot could be done for safety in the field of planning and engineering; there should be more facilities for cyclists, although the problem on the engineering side is a lack of space to expand the roads. Of course education is useful, but the competition on the road is fierce and it will be hard for an educated cyclist to gain from his or her knowledge when a car is pushing him or her off the road.

DISTRICT POLICE

The different districts of the country also have a traffic section, headed by a Regional or District Traffic Officer. They acknowledge the three aspects of safety: they enforce, they educate, and they advise in engineering.

The police organise school tours, to promote safety among primary school children. The effect can be seen in the amount of children involved in accidents, which has decreased. The police also target specific groups, such as UTODA (they have a permits agreement) but there is lack of resources to use detailed statistics in order to better target the efforts.

An example of advice to the government related to the use of the roads: 28% of the road space in Kampala is used for parking, which could better be used for the traffic flow. The regional police advised the Engineer to do something about it.

The main problem, mentioned in all the interviews, is budget. There is really a shortage of money for the traffic police in the districts. The entire police force in Jinja, for instance, owns one car, with 300 litres of fuel per month. They receive the money from the Central Government monthly. In November 2002 the total budget was 22.000 USh (12 USD). The Traffic Department consists of only 10 people; it's the smallest part of the Police. To give traffic announcements, they depend on the radio station to get airtime. To arrive at the spot of an accident, to remove the bodies, to take someone to the hospital, etc., they depend on public transport and bystanders.

Views on low-cost mobility

- The police often seem to be very committed to the safety of the poor, but they are blocked by a lack of money.
- The police see cyclists as a danger on the road, together with reckless car and taxi drivers. They regard education as the key to improvement.

2. Private sector

The bicycle sector in Uganda is dependent on imports. Raw materials, spares and bicycles ready for assembly are imported from India, China and Japan. The latter's share is minor and all these bicycles are mountain bikes. China supplies the Ugandan market with Phoenix, the fourth brand in size, with an estimated market share of 8-12 percent. Market leader is Roadmaster (ca. 50-60%), with an assembly/manufacturing plant in Kampala, followed by Hero (ca. 20%) and Jupiter (12-16%). Smaller brands are Eastman, Avon, Raleigh and others.

The estimated number of bicycles manufactured and assembled a year is 120,000 – 140,000. The number of bicycles sold in the early nineties was much higher, peaking in 1994 with 274,000 pieces. The drastic decline in number is attributable to a decline in coffee income.

Table 2.1 presents an overview of last year's market prices. The prices are influenced by different factors, most important is the taxation of around thirty percent and Roadmaster's exemption. Other factors are the significant transport costs of importation and the lack of transparency in the market. The latter can be illustrated by the fact that prices remained stable after an excise tax release.

Brand	Price (UShs)	Price (USD)
Roadmaster	85,000	47
Eastman	85,000	47
Hero	90,000	50
Jupiter	90,000	50
Raleigh	90,000	50
Avon	90,000	50
Phoenix	130,000	72
Mountain Bike (Roadmaster)	160,000	89
Mountain Bike (Japanese brands 2 nd hand)	260,000	144

Table 2.1 – Market prices (2002)

According to most of the people interviewed, Phoenix bicycles are stronger than most of the Indian brands. Hero, the most expensive of these Indian brands is assumed to be the strongest in that group.

The loading capacity of a man's bicycle is bigger than that of a woman's. Spares can be acquired in all the main trading centres or villages. Most spares are interchangeable some are brand specific. The spares for Japanese mountain bikes and European (in some cases donated) bicycles are hardly available.

ROADMASTER CYCLES LTD.

Roadmaster Manufacturing Industries (RMI) was founded in 1995, initial investments being 6 million USD, as a branch plant of Roadmaster Ltd based in India. The Ugandan government protected the company in its start-up phase. RMI now claims it can be considered to be a very mature company. They are employing 100 people and say to produce 80-90 percent of the bike. It is not clear if they are talking about weight, value, or volume, though.

Importers say government favours Roadmaster. RMI got a three-year exemption on import duty, according to the government, this was a necessary step to promote Uganda's investment climate. Importers were sceptic, because they considered RMI to be an importer

as well. RMI produced 3 out of 200 parts and was regarded as an assembly plant (*Business Vision* 15-02-1996).

The firestarter in this battle was a 30 percent hike of import duty, leading total import taxes up to 65 percent. Importers arguments: local manufacturing has to be promoted more gradually, so other comps will have the chance to start their own manufacture activities. Besides that, RMI was importing raw materials and packaging as well, so their main activities were still in importing. And finally, being monopolistic, RMI would have no trouble making profits, because they could bring in and sell all the trash they wanted from India.

Production

RMI produces 6000 bicycles a month (sport bikes 300-400 a month), they claim to have a 65 percent market share, and estimate a possible total market of 200,000. RMI's aim is to get an 80 percent share.

RMI produces all the steel parts (frame, fork, carrier, stand, saddle, mudguard and spokes) of the bicycle except for the fork guard. Bicycles are sold in boxes, UShs 318,000 for four (79,500 for 1 - that is USD 44.17).

Besides bicycles for personal use, RMI produces bicycles for professional use (e.g. ambulances, 1000 so far), mountain bikes and bicycles for children. They also produce Raleigh bicycles for which they have a franchising agreement. According to Mr. Walekwa, their marketing manager, Roadmaster Kampala is specialised in producing for the African (Ugandan) market. He mentioned a balloon type for specifically rough terrain.

The strongest competitors are Hero, Phoenix and Avon. The latter is leader in Kenya and Tanzania.

Exports

RMI started export activities during the last 2 to 3 years. Exports to Congo, Tanzania, Rwanda, Kenya and soon Sudan, form 15-20 percent of their turnover. Constraints and opportunities are mainly dependent on tax rates. Kenya levies no import duty, COMESA members agreed on an import tax incentive. VAT is between 18 and 20 percent, varying slightly throughout the region. Ugandan taxes are high; therefore competing in countries like Kenya is difficult. In Uganda, duty is divided in spares / raw materials (5%) and bicycles (15%). RMI only works with agents in the foreign markets, to avoid investment risks.

According to Walekwa, Roadmasters export strategy can be called aggressive. This aggressiveness means travelling through the region (East Africa) to open new markets in remote areas.

Market

RMI focuses on the rural family, but they acknowledge the potential of selling the bicycle to the rich, mainly because rich people buy bicycles for their poor relatives on the countryside. Until now, they have not started producing mountain bikes for the Ugandan market. To promote the use of the bicycle, they have been sponsoring a mountain bike contest.

IMPORTERS

Besides Roadmaster the Ugandan bicycle market is dominated by 5-10 importers. They are located in either Jinja or Kampala. Although their main activity seems to be import and wholesale, they act as retailers in times of slow and unsatisfying demand. All importers are Indian Ugandans. They import from India and for a small (20%) part China. Part of the explanation lies in the fact that most people in the business are Indian, another explanation is

the competitiveness of the Indian bicycle. Different brands are imported, but they possess different shares of the market, with Hero being the biggest.

Importers

Welltech, headquartered in Jinja is the largest importer, selling Jupiter and Phoenix. Singo Merchandise is in second place, only importing Hero bicycles and spares. Importers are of course very dependent on the Indian partners, who 'own' the brand, which means they control the quality of the small scale manufacturers.

The businesses are results from Indian FDI, and largely owned by Indian people. Tipson (sold by Jupiter Impex), for example is based in New Delhi. The importers are not co-operating, they have to compete in a stagnated market where Roadmaster is favoured, so every competitors' customer is welcome. The businesses are supported by their Indian counterparts, but don't team up with fellow importers in other (East) African countries.

The market share of Hero lies somewhere around 20 percent, being smaller than Roadmaster, but still reasonable. Welltechs share is supposed to be approximately the same, as Jupiter and Phoenix are combined. The absolute marketshare has gone down in the last few years because the peasants are making less money. Singo is not very optimistic about his share.

Besides the Indian importers, small amounts of bicycles (mountain bikes) enter the market when they are brought along from a foreign visit. A part time importer of Japanese mountain bikes in Jinja for example sells about 60-100 bikes a year at prices between 230,000 and 260,000 UShs (127-144 USD).

Activities

Brand is not the sole difference between them. For example Singo does not sell spare parts, but has recently introduced the lady's bicycle and is also selling children's bicycles. Jupiter Impex only imports spare parts. Business in spare parts is doing quite well, according to Jupiter Impex, who has been running his business for four years, as a spin off from Welltech.

Hero is in this country since 20 years, hence it is the oldest brand and very well known. Hero bicycles are relatively expensive (but with a better quality), so Singo sometimes imports cheaper bicycles when people request that.

Importers have just started to introduce the mountain bike, but according to Singo it may take over 15 years for this innovation to become a success. They are sold to customers who are rich and have time for cycling as a means of leisure. Importers also started selling children bicycles, but demand is minor.

Business climate

An import tax reduction has improved the Ugandan business environment, but Roadmasters favoured position, in having a tax holiday, still creates difficulties. There are more factors, eroding the importers profit. The dollar is rising compared with the Ugandan shilling so the margins are getting smaller.

The image of the bicycle is that it is a necessity, unlike the image in, for example, India and the Netherlands. This may change some day, is the general opinion, but not in the near future. It will be difficult for newcomers to enter the market as competition is fierce and demand is stable and stagnated.

One of the reasons for the stagnation in demand is the growth of imports of mopeds from Japan. They come in as junk and are reconditioned from within. The bicycle market could grow when people start using the bicycle for purposes different from carrying crops to the market.

Costs

The costs of the bicycles and spares are estimated to be 94-95% of the retail price. Indian bicycles are sold at 84,000 USh (47 USD, retail price) at an average, Chinese Phoenix bicycles go for 125,000 USh, 69 USD. There are some 200 parts on a bike, some are brand specific, most can be interchanged. They are transported overseas, to Mombassa and then over land directly to Jinja or Kampala.

Transport from Mombassa is very expensive. 2100 to 2500 USD per container that contains 460 bicycles, while it costs 1500 USD by rails. The difference with Kenya and Tanzania is that in those countries there are lower tariffs, they are not landlocked, have less distances, different conditions and a lower fuel price.

Delivery usually takes place after 1-2 months, but sometimes importers speculate on changing import taxes.

Employees are usually hired per month, but labour is also hired for one day only. Welltech employs ten people full time.

Taxes

The municipality is not stimulating activities in their centres, but are not restricting business, as they are looking for tax revenue. All importers face the same tax. The tax exemption for Roadmaster began in 1999 and is promised to end by January 2003. Direct import tax used to be 7% and should be 5% by now (2002). But importers say it has not been cut down yet because of deficit in revenue of the central government. Importers assume Roadmaster doesn't pay import tax and/or withholding tax of 4%. It is questioned whether lowering taxes from 7 to 5 will help making profit and doubts if the government is going to lower them at all. The total of taxes on a standard bicycle is 30 percent, but has been 40 and even 60 percent in the past.

Tax	Standard bicycle	Mountain bike
Import tax	7	15
Withholding tax	4	4
Import commission	2	2
Value Added Tax (VAT)	17	18-20

Table 2.2 – Taxes on bicycles in %

Market

The customers are semi-wholesalers and retailers, and in most cases importers sell directly to the final consumers. The customers' preferences are easily defined: Only the strength of the bicycle counts, the heaviest is the best. Something that has been put on the mind of the customers will always stay. But they are no long-term thinkers. People want higher quality for the same (lower) price. Jupiter Impex: people ask for heavy tricycle (riksja) parts, but for normal bikes and the normal price.

Some times new market opportunities emerge. Singo is providing bicycles to the Dutch embassy, which is buying bicycles to assist the Ugandan government with a gender related development project. Welltech is supplying BSPW. But besides those minor boosts, demand is quite stable and depends on the amount of produce of the farmers.

Bicycle promotion

The market is small and it does not respond to lower prices (price inelastic). Of the importers, only Hero is active in marketing, as it advertises in newspapers, on the radio, on billboards and hands out t-shirts and caps.

The aim of promotion is the rural population, they are the most important users of the bicycle. The mountain bike, which might attract the richer Ugandans is not affordable for many people. Co-operation with companies is slow, as saving schemes from (Indian) companies didn't work out in the past. Employees disappeared when they got the bike. The customer seems to be very unfamiliar with saving in advance.

To influence the market, new brands are introduced, but this is just a marketing technique. According to some, this works good, mainly because of the good sounding names like Titanic, Rumble and so forth.

RETAILERS

Uganda has many bicycle retailers, in a town like Jinja there are about 25, in Kampala there are more, but twelve are said to be reasonably big. All are considered to be SME. A retailer at Jinja Main Street sells 40-50 boxes per year, containing 4-6 bicycles and less (that means 160 to 300 bikes a year).

Sales

The number of bicycles sold has been affected by competition, high taxes, disappointing agricultural circumstances for rural customer, and are blocked by unsafe traffic and infrastructure which is not adapted to bicycle transport. Other reasons are an uncommitted government and an in-transparent import infrastructure. Retailers wonder if prices are being kept high. The establishment of retail shops in villages has also contributed to a drop in demand.

Competition

Co-operation between retailers is minimal, partly because the government discouraged co-operation for a certain period of time. Retailers don't perform import activities. Indian prices are too good and besides that, Indian producers and exporters work with their own people. Furthermore taxes are too high to engage in import activities. Competition is fierce as wholesalers act as retailers, businesses are established on a local, suburban level of which other retailers and wholesalers experience the negative effects. Finally, FABIO's credit scheme attracts would-be customers.

Market

The customers are from the rural areas. There are also rich people from Kampala who buy bikes, sometimes for their friends or relatives on the countryside. In political campaigns bikes are sometimes given away for free. The market for mountain bikes is very small and consists mainly of young boys between 15 and 25.

Activities

Besides assembling bicycles, dealers sell every possible brand, Jupiter, Roadmaster (via wholesalers, the factory is only interested in retailers who can buy 100-200 boxes), Raleigh, Phoenix, Eastman, Hero, Miran and Avon and more. Beside the standard bicycle they sell mountain bikes from India, Japan and other western countries. These numbers are very small. The relationship with the Indians is all right, retailers are usually allowed to pay on credit.

3. Civil society

The civil society in Uganda involved in cycling is very small. Few Ugandan NGOs are working in the field. Most important are FABIO and IFRTD, smaller (at least in cycling activities) are the Road Accidents Reduction Network and the Uganda Private Users Associations. Besides bicycles, different actors are engaged in transport and can influence transport and traffic. The most important organisations are UTODA, USHOA en UBOA. Their impact on transport can be major, but their goals are not essentially in line with the institutes mentioned before.

Different Uganda-based foreign organisations are active in the field of transport, but both DFID and GTZ express little interest in traffic and transport from a bicycle point of view. As donors they assist both FABIO and the IFRTD. The American ITDP is represented in Uganda, but works very closely with the IFRTD and is not working as a very developed NGO.

FABIO, THE FIRST AFRICAN BICYCLE INFORMATION OFFICE

The team, headed by Patrick Kayemba and Richard Kisamaddu, tries to stimulate bicycle use in different ways. Their programs are:

- Bicycle credit scheme and sponsorship
- Sharing of information, research, advocacy and lobby
- Capacity building
- Specific projects like the bicycle for peace and bicycle ambulance
- · Raising awareness

FABIO's strategy is to work through other organisations as ORUDE, but also cooperate with international partners, Jugendhilfe, ADFC, BMZ/GTZ, Bread for The World, Supply and Demand and others.

Bicycle Credit scheme and Sponsorship

The sponsorship project started in 1991. Bicycles were given out for free, but the BSPW-team discovered that it was better to ask for a contribution, fluctuating between 20-40,000 USh, being 45-50% of the actual bicycle price (in USD 11-22).

The credit scheme is relatively new and started in 2001 with 700 (of the total 900) assembled bicycles. In 2002, so far 300 bikes have been assembled. Payments in the credit scheme are an initial amount of 40,000 (22 USD) and ten monthly terms of 7,300 (4 USD), altogether 113,000 UShs (62 USD). The scheme is working, though some people have to leave the credit scheme, because they can't manage to pay every month. This also depends on the season. The bicycles are distributed via categorized groups, like farmers, boda bodas, and teachers, to make sure there is social control. People have to apply for a credit scheme with a form. Farmers and women groups can apply for the credit scheme through ORUDE, a partner organisation in Jinja.

Sharing information, research, advocacy and lobby activities

Together with Jurgen Heyen-Perschon, FABIO carried out a research on the effects of a bicycle in rural Uganda. Their research activities have been constrained by their financial capacity, so they focus on advocacy, lobby and the sharing of information. Actual promotion of the bicycle is done through bicycle activities, like rallies and occasionally a bicycle wedding.

Their lobby activities in Jinja resulted in a local council that appreciates the idea of bicycle lanes, though they don't agree on the way this should be implemented. The Jinja technical team had talks together with FABIO. One of the results is that FABIO is now hosting a boda-boda association.

The biggest task is sensitising the local leaders. The local council is very important, their views may change society. FABIO is busy to sensitise the current council. On a national level, FABIO is making some progression, they expect a parliamentary discussion on cycling in the near future, will have talks with the committee on works and have different MP's on their side.

Other activities

FABIO is working on different new programs, to assist and to promote cycling as the most important means of transport for the poor. Unfortunately their activities in the North have to be redirected to the east, as rebels are too active.

INTERNATIONAL FORUM FOR RURAL TRANSPORT AND DEVELOPMENT

The IFRTD is advocating for rural transport. Goals of the organisation are:

- sharing information with other actors in the rural transport world
- research into different areas of transport
- advocacy and lobby
- promoting best practices

Sharing information

IFRTD shares information with the Ugandan bicycle organisations and works closely with different foreign organisations. After a research project on used vehicles, IFRTD came into contact with Alter project. *Alter project*, a British project to stimulate green government, assists IFRTD in doing the same in Uganda.

Research

IFRTD thinks that with increased motorization negative publicity for NMT increases as well. The Forum points at the *Poverty Eradication Action Plan*, the *Plan for Modernization of Agriculture*, the *Poverty Assessment Report* and mentions there is nothing about bicycles in the *Transport Sector Policy Strategy* or *Vision 2025*. IFRTD wants to share its findings with the government to improve the position of the bicycle in policy making.

Advocacy

IFRTD is fighting the negative perception of the bicycle and promoting safety. The organisation tries to lobby the World Bank, for example, to integrate the subject of transport for the poor into the world development report. To illustrate the lack of understanding within the government: the minister of transport went to visit the Velomondial conference, but came to IFTRD first to ask for some documents about cycling. He knew nothing about bicycles, but was responsible for them.

Lobbying in developing countries is difficult, as

- people tend to think you are just looking for a better job
- policy makers have arrived and don't bother any more
- government often has different priorities

So one person could block a road safety program sponsored by the Swedish SIDA. However, other road safety actions in co-operation with BB distributions are going on.

Best practice

IFTRD is not sure about the effects of a masterplan, as a lot of research is needed. What is the problem of a bicycle? Is it affordability, or affordability of the spares? There is a huge lack of valuable data from this kind. "Unless the gaps are filled (in a baseline study) we are likely not to come up with a Masterplan." Studies are needed first.

Universities

The relationship between the universities and the bicycle is not a tight one. Universities are engaged in traffic within different departments. Engineering is most important, with research into transport and traffic. But this has not yet resulted in students equipped with bicycle knowledge. An integrated approach seems to be lacking, which should consist of urban planning, rural planning and engineering.

Makerere University, Urban Planning

There are 4000 in the Geography Department, 600 of which study Urban Planning,. Traffic and transport is mainly in technology, but the students have one transport semester and 56 hours of lecturing. When they are finished, they often end up in regional planning departments. There has not been much research into transport, because most students look at transport merely as an engineering subject. Besides that, students tend to look at the surface, so research is not always sustainable.

There are a few contacts with foreign universities, of which a few are based on planning, but this is minor. Of the (under) graduate thesis's something like 10 percent focuses on transport, a smaller percentage (2%) deals with NMT. There are hardly any links with the government on policies and the sharing of ideas and knowledge. But the government is just waking up and noticing the importance of transport management. There is a lot of work that has to be done, predominantly research.

Makerere University, Agriculture and Rural planning

People in this faculty feel the university should be a very important player in policy making, until now this has been too distinct. An example: most scientists think the roads should be one way, but policy wise there is no ear for us. This faculty has been researching rural transport, but mostly into the motor or oxen driven carts and the usage of the motor bicycle. In co-operation with another institute, research has been carried out to analyse the possibilities of assembling motor bicycles within Uganda, to assist the rural farmer.

UTODA, UGANDAN TAXI OPERATORS' AND DRIVERS' ASSOCIATION

The aim of the Ugandan Taxi Operators' and Drivers' Association (UTODA) is to bring the drivers together and to have a code of conduct. The special hire taxis have their own organisation called USHOA. The taxis hire space in contract with UTODA. There are almost 15,000 taxis in the whole country.

UTODA has some policies that affect bicycle safety. A drivers license is compulsory for every matatu driver. Every matatu-stage (minibusstop) has a management. Through this management, UTODA discourages reckless driving. To make sure people can report indisciplined driving, every matatu is numbered.

UTODA is also represented at the Road Safety Council and contributes to society as they deploy voluntaries at hospitals and zebra crossings everyday. In the case of traffic jams UTODA deputies can assist the police.

According to UTODA cyclists in the city form an unnecessary risk. They are not necessary in the centre, they can work in the outskirts.

BODA BODA ASSOCIATIONS

Boda bodas are sometimes organised in an association. These platforms organise the taxi operators so they have a stronger legal and political position. To get some insight in the possible structures of these organisations are the main aims of two Jinja based Boda Boda association summarised below:

Jinja Boda Boda Operators Development Association

The aims of the organisation are:

- 1 co-operation in different areas; management and support of all operators;
- 2 promotion of development, discipline and educational level of the services
- 3 form a contact for all operators with government and civil society
- 4 raise funding on behalf of operators

Boda-Boda Savings & Credit Organisation

The aims of the organisation are:

- 1- to organise the boda-bodas;
- 2- helping boda bodas in learning how to save, 15,000 a month, in a co-operative society
- 3- helping boda bodas to learn traffic laws (according to their patron, the former mayor of Jinja, they are the most unorganised society in Uganda),
- 4- teach boda bodas different aspects of society, so they can encourage each other to go to school

4. Users

The users of bicycles can be divided in rural and urban, that means farmers versus boda bodas, school youth, and other urban users. According to IHE cycling is the most cost efficient mode of transport, resulting from its speed compared to walking and its affordability compared with other, faster means. A bicycle is appropriate for narrow paths and trails and suitable to carry small and medium loads. Therefore, the bicycle is a very important mode of transport for the rural and urban population. Much research has been done on the place of the bicycle in economic and social development; therefore this overview restricts itself to presenting their main conclusions.

FARMERS

The bicycle is largely present in the Ugandan society. A traffic survey in southwestern Uganda counted 75% pedestrians, 22% bicycles, and 2% motorised vehicles (Thon 2001).

The bicycle gives the peasant several advantages. Firstly, the main transport tasks for rural households are collection of water and firewood, journeys to the fields and grinding mills (Thon 2001). In Sub-Saharan Africa, 90 percent of all journeys (80% of the distance travelled) take place within the village. In addition, journeys to trading centres, health facilities and markets are necessary. Therefore the first and direct advantage of the bicycle in rural areas is time efficiency (Heyen-Perschon 1997).

The bicycle can also directly contribute to income generation as it gives independence from expensive public transport (Howe 1997), and makes it possible for people to bypass the middleman in taking the crops to the market.

Thirdly, not only can the bicycle increase the standard of living in financial terms, but also benefit in other ways. Increased mobility enhances communication, access to health facilities and education, access to clean water etc. Cycling has positive social and cultural effects.

There are some disadvantages attached to the bicycle. The design and technology are not perfectly adapted to needs of the rural users, and the landscape is often unfavourable to the use of the bicycle. Moreover, the negative perception among policy makers towards non-motorised transport results in a lack of infrastructural means for the poor.

WOMEN

Women in Africa are the number one productive resource. Women have a disproportional share in preparing meals, organising firewood and water and transporting the harvest from the fields to their homes or a storage location. Men in rural Africa often have only one major task, which is marketing (Heyen-Perschon 2001). Despite their heavy transport responsibility, women rarely have access to draught animals, handcarts, trailers or bicycles. When the family owns one of these modes of transportation, women are often denied its use. This is caused by traditional family structures and the particular gender-specific division of responsibilities in the household under male supremacy. In addition to the idea that women riding bicycles are socially unacceptable, because the dominance of men could diminish, men simply claim the responsibility for all financial affairs, rendering women unable to purchase their own things (Thon 2001).

Heyen-Perschon mentions that although it is true that in some cases women benefit from their male partners carrying out transport tasks, greater salvation is to be expected from non-motorised transport like the bicycle. NMT could contribute to a change in gender relations. Vice versa, gradual changes in the patriarchal structures of households will also contribute to better access to NMT.

Gender relations vary widely between different tribes and more or less developed (urban) areas. In Northern Uganda more women ride a bicycle than in Southern Uganda. Both scholars and NGOs suggest that gender aspects should be addressed in transport planning as well as in capacity building seminars.

BODA BODAS

In the more developed urban and semi-urban areas the most important cyclists are taxi operators, the boda boda's. Most local transport in Ugandan towns is by boda boda: bikes that function as taxi's, using an upholstered rear carrier. The term boda boda is referring to the English border-border. Boda boda users may either operate a pedal cycle or a motor bicycle.

Service features

Although boda bodas usually provide passenger taxi services, they can also be hired to move goods.

Moving goods is costlier than passenger traffic. For example, moving a 100 kgs load of maize to the market will cost about 500 Ushs (0.28 USD), a passenger will be charged 300 (0.17 USD). Prices are not fixed, but depend on the customer, the mood of the boda boda, the weather, the time and more. Boda boda's operate from stands in town, in trading centres and at bus stops along main roads, where they offer taxi services on the feeder routes. Their operating stands are called stages. A stage is governed by a chairman and can involve different stands on for example one street.

Operators' features

Operation of the services is an exclusively male preserve. The laborious nature of the occupation is a reason, another explanation are long working hours away from home. Operators face harassment by customers and fear of being robbed when operating. Part of the boda bodas have no education at all, most are in the possession of a primary degree and few have secondary level education. Boda bodas, according to Howe (2001) have a distorted view of the economics of operation and are very loyal to their brand.

In Jinja, only fifty percent of the operators own a bicycle, but throughout the country, this may be lower, even twenty percent. All are considered to be members of the low-income class, making an average of 3000 UShs a day (1.67 USD). They are unprivileged in comparison with other road users, especially matatus. There is an urgent need for greater road safety and the elimination of unnecessary taxes.

Organisation

Boda bodas are organised in different associations, but they lack a national platform. According to Howe, this is due to chronic instability, illustrated by an associations 'war' in Jinja in the end of 2002.

Boda Boda users

Boda bodas are occasionally used by the poor households, because of low income combined with high unit costs. However, it is not clear to what percentage of the population this applies. Howe:

Those engaged in formal or informal sector wage employment seem likely to have received benefits from the enhancement of their income earning activities through the greater mobility afforded by boda boda usage.

Men are more numerous users (61%) of boda boda services than women (39%). Research indicates boda bodas are hardly used by people over the age of 50, older women are even

less presented than men are. The average age of female users is 28 years, for males this is 31. A significant proportion of the Ugandans (25%) does not ever use bicycle boda boda services, for a variety of reasons like speed, image and comfort, and fears over safety, being prominent. Twenty-eight percent of the men ignore the bicycle boda boda against twenty-one percent of the women (Howe 2001).

Effects of boda bodas

There are two mechanisms by which the operation of boda boda_can benefit the poor: from the employment created, and through using the services provided. Boda bodas create both direct and indirect employment (association, bicycle repairers and retail businesses).

It has been shown that the majority of the operators are drawn from the least educated classes that are likely to be the poorest. It has also been shown that 6 people depend for a proportion of their livelihoods on the earnings of a typical boda boda operator. Nation-wide the total dependency is estimated at 1.6 million, or about 7% of the population. This excludes those with backward linkages to the industry as mechanics or suppliers of food and drink, etc.

According to Howe, boda bodas have been instrumental in the provision of trade, the access to services and the usage of feeder routes.

Boda bodas have also been very important in improving the mobility of women, who are disproportionately represented among the poor. Boda bodas can assist women in engaging in economic activities outside of the village, then they have the means to travel and offer a cheap option for the transport of themselves and a child to health facilities (Howe 2001).

PRIVATE USERS

Tourists

The bicycle use among tourists is small and could be bigger. There are not many facilities to hire a bicycle, some resorts or tourist info centres offer bicycle renting, but the condition of these arrangements is poor. An example is the Mabira forest centre, which advertises to rent bicycles, but offers only five mountain bikes in unhealthy conditions. Politicians mention the problem of theft, but with proper arrangements, this should be easy to overcome.

Mountain Bikers

Importers of mountain bikes sell these Japanese and Indian bikes to the young and urban population. A major part of this group is (secondary) student. The students survey (see below) pointed out two in one hundred students possessed a mountain bike and were actually riding it. This may be promising, but the use of these bikes is still very small. The Jinja deputy mayor was unaware of the fact these bicycles were already available in his town.

URBAN RESIDENTS - THE STUDENT SURVEY

A full research on use of the bicycle by private users in urban areas would be too extensive, therefore in this research one sub-group is analysed. Students can be considered as the future policy and opinion makers of Uganda. Therefore, it is very interesting to know specifics about their bicycle usage and their opinion on the bicycle.

A questionnaire was carried out on the Makerere University Campus in Kampala. 101 students were asked what their (daily) travelling pattern to the university looks like, whether and how they use the bicycle and what their opinions are on traffic issues, especially concerning the role of the bicycle. Almost all students were aged between 19 and 24, equally divided between male and female. Their courses range from Agriculture to English and Urban Planning.

Travel pattern

Almost half of the students travel between thirty and sixty minutes to the campus. 38% travel for less than 30 minutes and for 15% it takes more than an hour. Students don't seem to have to spend a lot of time per day travelling to university, which is clarified by their answers on questions about distance. These indicate that half of the students live within 2 kilometres of the university. Another 30% live 3 to 5 kilometres away. The rest of the students (19%) live more than 6 kilometres away from the campus. From these figures the conclusion can be drawn that more than three-quarters of the students live in Kampala.

The main means of transport used by the students is walking (over 50%), the combination of walking and a taxi (27%) and driving as a car-passenger (17%). There is only one student using a bike and another 2 use the combination bike and taxi. When the figures are combined, it is clear that almost every student that lives close to the campus (2 km) walks every day. Still, some of them take a matatu or special university transport. The amount of students that travel by taxi increases with the distance and is 40% in the groups that travel 3 to 5 and 6 to 10 kilometres. 30% of the persons within these groups is car passenger. Nobody uses special university transport or a motorcycle, very few use a bicycle.

To find out if the students could get to the university in a different way, they were asked to answer questions about alternative modes of transport. It appears that 56% of the students also could use a bus or matatu to the university. The reason why so many students still do not use it can be that they live very close to the university or that they cannot afford it to travel by these means.

A third of the students live too far away to walk the entire distance. Striking is the fact that only for four percent of the interviewed a bicycle is available. A mere 65% of the students is able to ride a bike, meaning one third of the students has never been riding a bike. The availability of the motorcycle is also very low. The car however is an option to more students, namely 13%. The same percentage of the students has a driving license, this means only one sixth of them is legally able to drive.

Obviously, the bicycle is not popular among students. A car, although far more expensive seems to be easier to access. A big number of students have no idea what it is like to ride a bicycle, because they never did.

Opinion on the bicycle

To know more about the actual background of these students concerning the bicycle, they were asked to answer questions about their bicycle usage and the availability of the bicycle for them in general. Three quarters of the questioned answered that they didn't use a bicycle. The other 25% use a bicycle occasionally and only two percent makes use of it daily.

Ninety percent of the students don't own a bicycle, only 9 people possess one (two of these are mountain bikes). For 60% of the people not owning a bike there is no bicycle available for them. 14% said there was one available in the family, 3% could use one belonging to neighbours or friends and 16% said that they could use a boda boda.

The next logical question is: why don't these students have a bicycle. Their most important reasons were that they couldn't afford one and that the risks of riding a bicycle are too high. 'I find cycling unpleasant' and 'the trips I make are too long', are major reasons as well.

The students were asked to name the advantages and disadvantages of the bicycle. The four main advantages mentioned were that the bicycle is *cheap*, can be good for ones *health*, cycling is *useful and convenient* and it *saves time*. The four main disadvantages were *risks of traffic*, that it is *not useful in bad weather*, nor for *long distances and hilly terrain* and that cycling is *tiresome*. These reasons are comparable with the reasons for students not to have a bicycle.

Views on transport in Kampala

Finally the students were asked to share their views on transport. Do you have a suggestion on something very concrete that should be done to make transport in the city much better for you? They responded by addressing the university to improve the traffic situation around the campus by introducing university transportation and creating better and more roads to the campus. In their opinion the Kampala City Council will have to reduce the numbers of vehicles in the centre (even bicycles), cater for the parking situation, sensitise the road users and promote the bicycle. The national government in their eyes has to provide the city with buses instead of matatus, provide bicycles for the poor and improve the condition of the roads. The students also suggested that the government should introduce free public transport or otherwise stimulate the investment by the private sector in it. The police has to enforce the traffic rules, especially on the highway. Finally the boda boda association has to make sure connections to the university improve and users have to follow the traffic rules better.

5. Challenges

In discussions with the different players in the bicycle sector, three main constraints for cyclists have come up, hindering a sufficient access to mobility among the poor.

1. SAFETY

One of the key priorities for the Central Government in eradicating poverty is roads, roads, and roads. However, there is hardly any money available for safety measures. Poor road users, pedestrians as well as cyclists, are the group most vulnerable to accidents. The numbers in Table 5.1 show the disproportionate share of pedestrians and cyclists in casualties of the last few years.

Table 5.1 – Reported accidents in Uganda (1998-2001)

	Total persons	Bicyclists	Total persons	Bicyclists
	killed	killed	injured	injured
1998	1579	262	6702	725
1999	1527	238	8086	1232
2000	1678	275	10213	1540
2001 Jan-June	931	135	5834	781

(Source: Papers submitted to PABIN, 2001)

Figures 5.1 and 5.2 show even clearer that the number of bicyclists killed remains stable, whereas the number of bicyclists injured grows each year.

2000

1500

1500

1500

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

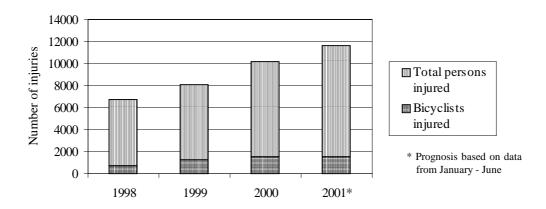
1000

1000

1000

Figure 5.1 – Reported fatalities Uganda (1998-2001)

Figure 5.2 – Reported injuries Uganda (1998-2001)



In Jinja District the situation is even more alarming. Statistics from 2001 show that cyclists and pedestrians are the two most vulnerable groups on the road. A disproportionate share of pedestrians and cyclists is killed in accidents, as is clearly shown in figure 5.3 and 5.4.

Table 5.2 – Reported accidents in Jinja District (2001)

	Persons killed	Persons injured
Total	64	547
Bicycles	18	145
Pedestrians	29	115

(Source: District Police, Jinja)

Figure 5.3 – Reported casualties in Jinja (2001)

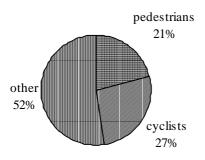
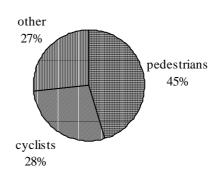


Figure 5.4 – Reported fatalities in Jinja (2001)



- Statistics show that reckless driving is the main cause for accidents in Jinja. In 2001 approximately 75% of the identified causes of accidents were reckless driving. (Records District Police, Jinja)
- In 2001, there were more than 9000 accidents in Kampala, in about 750 of which pedal cyclists were involved. (Records District Police, Kampala)
- 28% of the beds in Mulago hospital, Kampala, are occupied by victims of traffic accidents. (Kwamusi, 2001)

2. AFFORDABILITY

For the poor, the main constraint is simply the price. The cheapest bicycle costs around 80,000 Ush. When during the nineties the coffee income declined, the number of bicycles sold dropped from over 250,000 to about 120,000 - 140,000 a year. Study pointed out that bicycles in Kenya were highly price elastic: a small reduction in the price caused a big increase in the demand (Howe, 2001). That shows that for example import taxes may have a big impact on the possibilities of the users. Taxes have dropped since 1996, but at a total of 30 percent in 2002, prices remain high.

Indian sports bicycles cost about 160,000 Ugandan shillings. A Japanese second hand one can be obtained for 260,000. This new market is attracting mostly young urban customers, a small elite that can afford it.

3. Perception

The way in which Ugandans perceive the bicycle is problematic in several ways. First and foremost, women suffer from the way the bicycle is seen. In many parts of Uganda, the bicycle is seen as a provision for men only, and for women this idea is a major constraint in achieving economic freedom.

A major problem in promoting the use of the bicycle and defending the position of the cyclists is the negative perception among the affluent population towards the bicycle. The bicycle is mainly seen as a means of transport for the poor, and not as a possible means for real development. The contribution of the bicycle to economic development is not widely recognised. This negative perception is reflected in governmental policies, and this lies at the basis of the challenges mentioned before, perpetuating unsafe traffic situations as well as unaffordable prices (inasmuch the government is in the role of doing anything about it). Illustrative to this is how the Minister of Education and Sports (!) responded to the question why the rich don't ride bicycles: "If you want to be rich in Africa, you have to work hard. And if you work hard, you don't have time to cycle."

6. Conclusion

Throughout this overview, the focus has been on the way people, organisations and governments regard cyclists and the bicycle. In this final chapter everything will be wrapped up to see if different actors are aware of the importance of the bicycle in the Ugandan society and economy. Are they considering the bicycle in their actions or their policies? And finally, what are the problems for the bicycle and its use related to specific actors?

USERS

In Uganda, farmers are the main users of the bicycle, and increasingly the boda boda operators. They and other (urban) users face three major problems. For the poor, the main constraint is obviously the price of the bicycle. Everything should be done to lower the price, for example by cutting the import tax, currently 7%.

The second challenge is the lack of road safety. Pedestrians and cyclists have the biggest share in the number of people wounded and killed, not only because of their own recklessness, due to the low level of their (traffic) education, but also because of the habits of the motorised road users.

An overarching constraint to a better mobility is the perception towards the bicycle. For women, this is especially pressing, as they are not expected to cycle in many parts of the country, leaving them without freedom of movement. For poor users as a whole it is a constraint because policy makers regard the bicycle as something backwards, which results in a lack of concern for their situation in transport and other policies.

For the users and owners of bicycles it should also be possible to influence the quality of the bicycles. If they are not satisfied or are mistreated by the retailer there should be a way to do something about this. This could be done via a consumer organisation or a cyclist federation. It can be a way to ensure that bicycles can be adjusted to the environment they are used in.

PUBLIC SECTOR

Awareness

The government is made up by many different individuals, and structured in a way, which leads to regional and personal views on the bicycle and its usage. When politicians are asked whether or not they are aware of the importance of the bicycle, answers are often promising. People in the Jinja and Kampala Municipality, in the Central Government, in the police and in the districts know the bicycle makes a difference for the poor and serves the country's economy. However, it remains questionable if they are really convinced, as this knowledge is not translated into different policies and budgets, apparently.

Policies

Both on local and national levels, the government has failed to address the bicycle. Transport planning reports, national visions, municipal and district transport programs, in all these the bicycle has been left out, as well as the idea of low-cost mobility as a whole. As the government is trying to eradicate poverty in Uganda, it seems to overlook the importance of its local agricultural producers, who would benefit hugely from improved bicycle situations. Bicycles are taxed heavily, but road safety for cyclists is not catered for.

The Central Government has set up a Road Safety Council, but this hasn't delivered the results as expected. The council hasn't been suitable to carry out the necessary research.

Challenges and opportunities

- The problem is easy to identify: the government lacks awareness and this results in wanting policies. Of course there is the problem of money, but according to several people, simple traffic changes don't have to cost a lot of money, if only they are taken up in the planning process.
- In order to tackle the traffic situation in Kampala and in the country as a whole, the
 Ministry just entered the process of creating a Transport Masterplan. This new plan
 could offer an opportunity to bring the Masterplan for Cycling under the attention and to
 get the Central Government involved.
- In Jinja, several people are willing to take steps towards a better bicycle situation. However, the different players are waiting for the other to move. Actually, the engineer is the crucial person without whom there is no progress possible. Unfortunately, he hasn't been very active, yet, in the field of non-motorised transport. It's up to FABIO now to raise its voice in favour of concrete bicycle provisions.
- In order to solve traffic problems like there are in Kampala and to improve the transport situation of the poor, the central government can also directly promote the use of other means of transport like the bicycle in public campaigns. Another suggestion is that the government can enhance the traffic situation in making lessons on traffic and safety on the schools compulsory.
- Among the traffic police, several people are sincerely motivated to fight for safety.
 However, the budget is simply too low. If the police were to become an effective law enforcer, the central government should increase the budget for traffic police.
- The bicycle is not acknowledged as a tool to attract tourists. Jinja, for example, has plenty of opportunities to design bicycle tracks and to rent mountainbikes, without much investment costs. To attract foreign companies and investments it could be very useful to present the city as a place with good travelling opportunities created by a bicycle friendly infrastructure.

PRIVATE SECTOR

Interests

The private actors are only concerned about their own survival. They don't have a broad vision on mobility, and don't seem to expect much from expanding the market. Importers and retailers are interested in tax cuts by the government, but don't really expect to gain profit from it, while Roadmaster has even favoured a tax increase on bicycles because of competition reasons.

Challenges and opportunities

- Roadmaster has been important for national economic development. The factory created
 jobs and made the country less dependent from 'foreign' industries. Roadmaster
 contributes to a lower price, but not enough. Prices are still far above East African levels
 and for prices to drop substantially the government will have to cut taxes.
- The road for Roadmaster is leading outside of Uganda, through exports to neighbouring countries, as the company sees few expansion opportunities in the local market. Tax cuts (as in COMESA) are favourable for Roadmaster.
- Other ways to expand the market are in the field of innovating. A good innovation for
 the farmers would be light but strong bicycles, and perhaps there is a market for user
 friendly but nice looking citybikes for people in the city. These and other (market)
 innovations may also be important for the wholesalers and retailers.
- Possibilities in either tourism or city marketing could be explored, as they are expected to create new business opportunities for cities like Jinja.

CIVIL SOCIETY

Awareness

The actors in civil society which are active in the field of cycling are relatively small. The academic world doesn't pay much attention to low-cost mobility, nor do the foreign (donor) organisations working in the field of transport. There are two NGOs, however, being FABIO and IFRTD, who share a warm concern for the position of the cyclist and are involved in lobbying, capacity building and several other bicycle promoting activities.

FABIO and IFRTD try to inform the people of Uganda about the importance of bicycle safety and affordability and try to influence perceptions. Besides these activities, they conduct or co-operate in research and build useful networks with (inter) national partners.

Programs

The programs of Uganda's traffic NGOs focus on poverty and safety. The results of FABIO's credit scheme are very positive, with greater opportunities for less privileged groups to obtain a bicycle. They have also been successful in raising awareness of the local (Jinja) people and politicians on a local and national level, though it requires ongoing lobbying to convince the engineers and other policymakers. IFRTD has been instrumental in the field of research and has been able to build fruitful links with different organisations.

Challenges and opportunities

- Donor organisations contribute a lot to infrastructural projects, so it is crucial for them
 to acknowledge the importance of low-cost mobility. Moreover, when they have good
 ideas about low-cost mobility, they shouldn't forget to live up to it.
- Makerere University is the breeding place for future planners and engineers. It is very
 important to include new insights on low-cost mobility in Urban Planning courses.
 Besides, it would contribute a lot to the inadequate knowledge about the bicycle sector
 if the university encouraged research in this field.
- Of course the road for NGOs is not always clear, caused by the problems, constraints
 and challenges met underway. Therefore it may be important for them to go 'back to
 basics'. They are the only players to defend the interests of poor cyclists, so they should
 try to influence transport policies directly and fiercely. Not only should they promote
 long-term visions, like a Masterplan, but also small ideas towards a bicycle friendly city.
- Lobby activities should not only be aimed at politicians, as they can usually only
 approve or disapprove of complete plans, but at civil servants (in the Engineering
 sections for example), because they are the ones to write the plans and the budgets in an
 early stage.

SUGGESTIONS FOR FURTHER RESEARCH

There is a general lack of statistics in developing countries. Studies that result in new data and empirical facts can contribute to a better policymaking process, or at least to better possibilities for civil society to improve their work. This is also the case in Uganda in the field of low-cost mobility.

In our research we encountered different issues which are worth focusing on indepth. Some examples:

- In what regions of the country is it accepted for women to cycle? How many women ride a bicycle and is it dependent on tribe, income, time, urbanisation, or something else?
- Simple traffic counts can provide useful data. How many bicycles are there? What is the modal split in different municipalities? Does it change over time?

- What does the demand side of the bicycle market look like? What types of bicycles are needed and does this match with the supply?
- What does the demand side of mountainbikes look like? What is the level of utilisation, i.e. are they used to show wealth or are they used extensively? Are the spare parts of second-hand Japanese and European bicycles available?
- What possibilities are there in terms of demand, capital and infrastructure to design cycle paths and offer mountainbikes for rent to attract tourists, for example in Jinja?
- What programs in the field of transport are carried out by donor organisations like DFID, GTZ, and others, and which are the views underlying these programs? What link do they make between poverty reduction and (low-cost) mobility?
- It could be useful to compare Uganda with Kenya, Tanzania or other African countries, and this could focus on different aspects. What are the differences between the respective bicycle markets, in prices, taxes, and competition? What are differences between the respective attitudes towards the bicycle? What are the differences between the policies of the respective governments?

EPILOGUE

In the investigations we sometimes encountered persons or organisations that showed no interest in the subject of transport for the poor nor for bicycles. But this was not the case with everyone. Some officials were very concerned about the safety of the road users, others suddenly realised the advantages of the bicycle or showed interest in traffic lesson books for students. This showed us that the people in Uganda are slowly becoming to realise the advantages of cycling and non-motorised transport.

This is a promising sign, it will only be a matter of time before a change in the transport approaches in Uganda will take place. Hopefully it is not too late for a city like Jinja. Now it is a nice and active city (where we had a nice stay) thanks to the many bicycles. We hope FABIO and others can keep it that way!

Persons interviewed

Private sector

Roadmaster Cycles Ltd. Marketing manager; Michael Walekwa Hero importer P.H. Morjaria; Singo Merchandise

Jupiter / Phoenix importer Welltech Ltd.
Tipson importer Jupiter Impex

Retailer Jinja

Retailer Kampala Isaac Nakasero; Nakasero Bicycle Dealers

Public sector

Jinja District Buyinza; District Engineer

Jinja Municipal Council

Jinja Municipal Council

Jinja Municipal Council

Jinja Municipal Council

Ben Kulaba; Assistant Town Clark

Bagoole Kirimwita; Deputy Mayor

Jinja Municipal Council Waludyo Dyime Jimmy; Vice chairman Committee on Social

Services

Jinja Municipal Council Fred; Chairman Youth in JMC

Jinja Municipal Council Ashraf Mohamed, Secretary of Works JMC

Police Jinja Daniel Zeeba; Traffic Officer

Kampala Municipal Municipal Engineer

Council

Kampala Police Traffic Officer

Ministry of Works Wandera; Commissioner of Planning Ministry of Education and Minister for Education and Sports

Sports

National police Wilson, APC Traffic & Road safety

Parliament Byanyima Nathan; Committee on Works, Housing and

Communications

Civil Society

FABIO Richard Kisamaddu; Co-ordinator

Patrick Kayemba; Programme Manager Pauline Kisambira; Development Officer

BSPW Robert Kalubale; Accountant/Workshop Manager

Jinja Boda boda Operators Njuba Moses; Management

Development Association

Rotary, Red Cross Bewayo Nsuguba; former Mayor Jinja

IFRTD Paul Kwamusi UTODA Ferdinand Ibabaza

Makerere University Derek Amboyo & Paul Mukwaya; Urban Planning Makerere University Sewanyana Collins Paul; Agriculture; Rural Planning

International

GTZ, Germany Jürgen Heyen-Perschon, consultant

Velo Mondial, the Pascal van de Noort

Netherlands

Sources

- Heyen-Perschon, J. (2001), Non-motorised transport and its socio-economic impact on poor households in Africa. Cost benefit analysis of bicycle ownership in rural Uganda. Hamburg: University of Hamburg, Institute of Geography.
- Howe, J., e.a. (2001), *Boda boda. Uganda's low-capacity transport services*. Paper for the Pan African Bicycle Information Conference, 21-25 November 2001, Jinja, Uganda.
- Thon, N. (2001), Uganda on two wheels. Bicycles, their perception by Non-Governmental Organisations, and strategies for joint action from the perspective of a bicycle sponsorship project. Hamburg: University of Hamburg, Institute of Geography.
- Results of the questionnaire among students of the Makerere University Kampala. See annex 1 for details.
- Papers submitted to the Pan African Bicycle Information Conference, 21-25 November 200, Jinja, Uganda.
- Accident statistics kept by the District Police in Jinja and Kampala.
- Business Vision, 15-02-1996, Bicycle Wars, Importers say government favours Roadmaster.