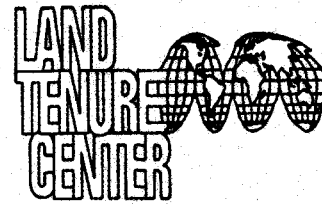




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## **REPORT ON THE RAPID RURAL APPRAISAL UNDERTAKEN IN AND AROUND THE TORO GAME RESERVE**

by

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**ACCESS TO LAND AND OTHER NATURAL RESOURCES IN UGANDA:  
RESEARCH AND POLICY DEVELOPMENT PROJECT**

**Research Paper 10**

**Prepared for Makerere Institute of Social Research and the Land Tenure Center**

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**All views, interpretations, recommendations, and conclusions expressed in this paper are those of the authors and not necessarily those of the supporting or cooperating organizations.**

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## I. INTRODUCTION

The Access to Land and Other Natural Resources Research and Policy Development Project has undertaken a series of research activities to address issues related to land tenure and natural resources that are critical to the development of sound land use policies in Uganda. One component of this project deals with tenure and resource issues in the buffer zones around Uganda's national parks, forest reserves, and game reserves. To enable the project to draw rational conclusions concerning the above issues, studies have been carried out which identify the characteristics of communities in and around these protected areas, factors leading to settlement in these areas, tenure rights to land and other resources, community attitudes toward the protected area, and general development issues.

The Project has used a two-phased approach to the buffer zone research activity: a Rapid Rural Appraisal (RRA) exercise followed by a detailed socioeconomic survey. The purpose of the RRA was to gain a general understanding of the lives of the people living around the protected area and to identify key issues concerning the reserve. The RRA was carried out as a preliminary activity prior to the administration of a detailed socioeconomic survey which would target key issues and important questions raised by the RRA.

Where possible, existing development projects have been involved as coparticipants in the exercise. The information gathered permits the Land Access Project to present general conclusions to policymakers. It has also permitted each specific project to have a clearer understanding of the resource tenure issues that concern the community it studied.

This report describes the results of that exercise focused on the Toro Game Reserve. The report provides a general overview of the area, a description of the representative communities visited, and a summary of the findings.

### A. STUDY AREA

Toro Game Reserve is one of the oldest gazetted game reserves in Uganda, having been demarcated in 1932. The reserve is located in the western arm of the Great East African Rift Valley south of Lake Albert and north of the Rwenzori Mountains. A large part of reserve lies in the Albertine Rift while a small section rises on the escarpment which forms its boundaries on its eastern side. In the west, the reserve is bordered by a small fault line that drops into the Semliki River basin. The fault line follows a northwesterly direction to the southern end of Lake Albert. In the north, it is demarcated by Lake Albert and the Muzizi River estuary.

The reserve is characterised by numerous riverine acacia forests and open grassland. While numerous small rivers and streams empty into the reserve's swampy areas, the Wasa/Dora River traverses the reserve to Lake Albert.

At the time it was gazetted, there were no people residing in the area that was demarcated as a reserve. Three major types of communities presently live around the reserve: the purely pastoralists in the west, the agriculturalists practising mixed farming in the south and east, and the purely fishing communities located at various fish landings in the north on Lake Albert.

## **B. THE RRA TEAM**

The RRA team was selected to draw **people with varied** experiences which were considered to be relevant to the study. The team comprised **the following**:

- ♦ socioeconomist (team leader);
- ♦ wildlife specialist; and,
- ♦ socioscientist (research assistant).

## **C. OBJECTIVES OF THE RRA**

The RRA had a number of objectives. These were to:

- a) identify trends in human settlement in **and** around Toro Game Reserve and the effects of settlement on the conservation area;
- b) investigate the socioeconomic activities of **communities** living around Toro Game Reserve;
- c) identify the problems and needs of these **communities**;  
investigate the patterns of resource use **and** control in and around the reserve;
- d) examine attitudes of local people towards **natural** resources in general, Toro Game Reserve in particular, to discover factors influencing **attitude** formation, and to assess people's knowledge regarding resource conservation; and,
- e) identify key issues and problems that **would** enable the research team to plan for the detailed survey.

## II. METHODOLOGY

A preliminary visit was made by the team leader and research assistant to examine the area. The area was discussed at length with the former regional game warden who was well versed with the area and was the wildlife specialist for the team. Further information was sought from the present warden. The discussions enabled the RRA team to select communities to be visited which were thought to be representative of the varied lifestyles of the area. The initial stage of the RRA exercise was to visit the District Administrator's office to discuss the objectives of the RRA and seek official permission to carry out the study.

Five communities were visited: one pastoralist community (Makondo, Rwebisengo Subcounty), two cultivator communities (Kyakabaseke-Kasesenge and Karugutu), one fishing community (Ntoroko), and one special group of cultivators (Kyabandara), who have settled inside the game reserve as squatters and some as encroachers. Members of each community were gathered by Resistance Council (RC) representatives of the areas where the discussions took place. In all cases, meetings were unannounced, as the RRA team preferred spontaneous responses to the questions and issues raised in the discussions. Between 15-30 people attended these meetings.

Fairly structured group discussions were held utilising an interview schedule which guided the process. One team member engaged the group by asking questions while team members took notes and asked supplementary questions. Notes taken by members were later compared. Any contradictions or variations in the recorded meetings were discussed, and a final set of notes was written which served as the basis of this report.

### A. PROBLEMS OF METHODOLOGY

The methodology that was used had its shortcomings. Since there was no formal selection of groups to be interviewed and all interviews were unannounced, those present in most cases may have not been representative. All groups were dominated by men. In only 2 locations were there more than 4 women present, and, where they were present, their responses were very peripheral. In the case of the pastoral people (Makondo), no woman was present. Consequently, very little or no information was presented by the women of the communities.

The speakers for the groups were generally village leaders, especially RC representatives, who helped mobilise members of the communities. For example, in Makondo the group consisted mainly of RCs and village elders. Because of the sparse nature of the settlement and a cattle keeper lifestyle it was difficult to mobilise village members at short notice. Information gathered in this group was likely to be biased. The presence of such village leaders may have prevented an open discussion of some of the issues and thus an inability of getting conflicting opinions from the groups. The responses given by such people could not be questioned. Consequently, without being able to interview other group members, the information given by the group was taken at face value.



### III. GENERAL OUTLINE OF THE COMMUNITIES

The five communities visited comprised **people of diverse ethnic backgrounds**. People in the Karugutu and Kyabandara areas were **mainly composed** of the Bakonjo who are traditionally cultivators. People of Makondo (Rwebisengo) were members of the Batoro people known as Batuku-Bahuma, who are traditionally **pastoralists**, and a few Batoro-Bairu, who are traditionally cultivators. There are also some Banyarwanda, who came as herders, and a few Banyankole. The community in Kyakabaseke-Kasesenge area was made up of Bakiga migrants from former Kigezi District or Kabale District, who came initially as tea plantation workers as early as the 1950s, but later acquired land and settled to practice cultivation. The fifth community of fishers (Ntoroko) consisted of members from varied ethnic groups including Batoro, Bamba, Baganda, Banyoro, and Zairois, all migrants from neighbouring districts and Zaire. While these people were attracted by the fishing industry and subsidiary activities, the majority of these migrants do not settle permanently and are in most cases still in contact with their home areas.

While they have different economic activities, between some ethnic groups there has been some recent mixing of economic activities. The Batoro-Bahuma are incorporating some cultivation with cattle keeping; and the Bairu are mainly migrant workers employed by the wealthy Bahuma as labourers on their small gardens and in other activities.

However, there has been little mixing of the socioeconomic activities of the Bakonjo and Batoro. These two ethnic groups historically have been enemies: socially, economically, and politically. The Batoro have always seen the Bakonjo as their inferior; this has led to a series of tribal wars between the two groups, resulting in Bakonjo emigration. The conflict today has heightened into a political and administrative issue at the national level.

#### A. KARUGUTU AREA/TRADING CENTRE

The Karugutu area is situated south of the game reserve, 18 miles from Fort Portal on the Bwamba Road, at the foot of Mount Rwenzori. The area has a radius of 2-4 miles and is situated between the game reserve in the north and the Rwenzori Forest National Park in the south.

The area is settled by the Bakonjo of Bundibugyo District. It was first settled in the 1950s and 1960s by migrants from Bundibugyo, Fort Portal, and others coming from the mountains. Most of these migrants were fleeing tribal wars between the Bakonjo and Batoro. Later emigrants fled from clashes with the Rwenzururu Movement, a sect of the Bakonjo, who wanted an independent state known as the Rwenzururu Kingdom to be established.

The early settlers apportioned land to themselves. Those who came later bought land from those already settled. Recent arrivals had settled in the North Rwenzori Forest Reserve before it was declared a national park. There were people who had moved into the forest reserve during the time of anarchy and lawlessness. Others moved into the forest reserve when the Land Reform Decree declared all land as public land, and the administrative machinery allowed people to settle in gazetted areas. Some people from Karugutu have recently tried to look for land elsewhere in Kichwamba, Kabarole, Hoima, and Mubende.

The major economic activity is cultivation. **The most important crops are maize, cassava, beans, a little soya, rice, and bananas.** Those **homesteads having cattle** have an average of 10 cows per household. Business and trade is another **important activity** for the area. Karugutu residents carry out business and trade in Ntoroko, **Rwebisengo, Fort Portal, and Bundibugyo.** Produce and consumer commodities are sold in **Rwebisengo and Ntoroko,** while cattle and fish are purchased from Rwebisengo and Ntoroko respectively **and later sold in Bundibugyo and Fort Portal.** The majority of the businesspeople are local.

## **B. MAKONDO VILLAGE-RWEBISENGO SUBCOUNTY**

The Nyabushozi-Makondo community is **located on the western edge of the game reserve along the fault line that drops into the Semliki Basin.** Makondo village is situated in Rwebisengo Subcounty.

The area is settled by Batoro-Bahuma (**Batuku**), who are predominantly pastoralist. The origin of the Batuku is not clear. They claim to be **descendants of the Abalusula, who were a royal army of King Kabalega of the former Bunyoro Kitara Kingdom.** Other claims are that the Batuku came from Mwenge County in the former Toro Kingdom **in search of pastures for their animals.**

The first settlements in the Makondo area **were between 1950-1952,** mainly from the Rwebisengo area near the Zaire border. Recent emigration **has occurred** as the Uganda Batuku counterparts in Zaire have fled tribal wars between Zairois **Batuku and the mountainous Balega ethnic groups.** At the time of the RRA, the refugees from Zaire had a total of 1,400 head of cattle. They were given areas to graze. Many of them had stayed while **a few returned to Zaire.**

Whatever the origin of the Batuku, they are **predominantly pastoralist and depend on their cattle (which are a mixture of the Ankole long-horned and other short-horned varieties) for subsistence and source of income.** Cattle are also sold in order to **buy food to supplement milk products.** Sheep and goats are also kept in moderate numbers **and are sold to supplement income from cattle.**

Land is treated as grazing commons available **to all cattle herders.** The fencing off of grazing land, whether by individuals within the community or from without, is not accepted by community members.

Although the Batuku appear to be purely **pastoralists,** they are slowly taking on some crop growing near their homes. Crops grown are cassava, **maize, and potatoes.** However, crops do not do well here due to long droughts and reportedly **due to saline soils.** Gardens are limited to patches near homes, where fencing is done to avoid **crop damage by cattle.** It is mainly the wealthy individuals who can afford to fence off their gardens. **Others use plots on the peripheral, raised area bordering the game reserve.** However, crops there **suffer heavy, wild animal damage.** The poorer members of the community are mainly involved in **manual labour on gardens, sale of firewood, and palm wine tapping and selling.**

Food is scarce and therefore expensive. Food comes into the area from Fort Portal, Karugutu, Bundibugyo, and the western rift escarpment **in Zaire.** A kilogram of maize was quoted at 300-400 shillings and a bunch of matooke 3,000-4,000 shillings. Prices reach their peak in the rainy season due to transport difficulties.

### C. NTOROKO FISH LANDING

Ntoroko Fish Landing is situated at the **southeast tip of Lake Albert** between the estuaries of the Wasa and Muzizi Rivers. A public works **road connects** Ntoroko to Karugutu and subsequent areas of Fort Portal and Bundibugyo. The **population is approximately 2,000-2,500 people** with an average of 5-7 people per household, which **comprises a man, his wife/wives and children**, though there are households consisting of single **adult males, females**, or single parent families.

Lake Albert was opened for fishing on **27 December 1953** according to one old man present at the interview. The first landing site near Rwangara **further west** was marshy and inaccessible and people requested a landing site at Ntoroko Bay which was **then** in the game reserve. A road was then constructed in 1956 leading to the bay **through the game** reserve, and this marked the beginning of full-time fishing activities. Fishing was first **organised by TUFMAC**, a defunct fishing company then owned by Asians. But more people applied from Bunyoro, Buganda, Bundibugyo, and Toro, and thus the community expanded to its present size.

The Ntoroko Fish Landing is very different **from the other sites**. The community depends solely on the fishing industry and other related activities. Some families keep goats and chickens to supplement their predominantly fish diet. **Everything is on a cash basis**. Community members come from varied ethnic groups originating from **different districts** in and outside Uganda. Other residents have come from within the district but come **from some distance** away.

The community has all the administrative **machinery operating** in the area. The RC system is there, a district security office, and other government **departments**—that is, a fisheries department, tax and revenue collection, and a posts and telecommunications radio. The area is well established with facilities of a health unit, school, and places of **worship**, although these are poorly furnished.

Various NGOs are active in the area providing **some social facilities**. PAPSCA is assisting in the construction of a school. GTZ is involved in a **bilharzia** health monitoring research programme which provides drugs and monitors patients. World Vision has a project assisting vulnerable children, especially orphans.

### D. KASESENGE ZONE-KYAKABESEKE

Kasesenge community is located on the **eastern escarpment** of the Rift Valley. The highest points on the escarpment form the eastern boundary of **the game** reserve. The community is typical of other agricultural communities located along the **escarpment**. It is largely a farming community, the majority of members being Bakiga migrants.

The important crops grown are groundnuts, **beans, maize**, and bananas. The first three crops are important for cash income. Bananas (*musa species*) are important in distilling crude *waragi* (potent gin) and for food.

The area was first settled in 1960s by **Bakiga migrant** tea plantation workers. During the 1950s, there was a recruitment for cheap, unskilled **labour in labour-surplus** areas to work on sugar plantations in Buganda and Toro tea estates. The former Kigezi District was one such area which had high population and increasing land **pressure**. Many Bakiga and Bafumbira enrolled as tea

plantation workers in Toro. Other Bakiga migrated voluntarily in hope of being introduced to tea estates' employers by their friends, or they moved in search of land. However, as conditions in tea workers' camps deteriorated and as people were earning some income, these Bakiga migrant workers started acquiring land outside the tea estates in order to supplement their meagre incomes with crop farming. Others, on acquiring land, completely abandoned their jobs as estates employees and settled as ordinary farmers. Those who first settled in Kasesenge zone were allocated land by chiefs. The later arrivals bought land from the first settlers. More Bakiga are still migrating into the area either from the estates or from Kabale District directly.

The community is part of the larger Bafumbira/Banyarwanda and Bakiga community that lives along the eastern game reserve boundary on the escarpment. When land was being allocated to the Bakiga, the Toro chiefs thought it best to give them land near the game reserve which was forested, had steep hillsides, and was inaccessible. Firstly, it was thought that the new Bakiga would act as buffer for the "civilised" Batoro against wild animals. Secondly, the Batoro, who shunned laborious work, thought that the strong Bakiga were the ones fit for the difficult terrain.

#### **E. KYABANDARA**

The Kyabandara community consists purely of encroachers and squatter cultivators located in the southeastern part of the game reserve near the Wasa River. The majority of the people are squatters who were evicted from the neighbouring Rwenzori Forest National Park by the government during the repossession period. Others are those who settled on the game reserve but possess land outside the game reserve.

It is claimed that the first settlers arrived as early as 1986. They first came as a group of twenty families and by the time of the RRA, 800 families had been recorded as resident in Kyabandara. The community is in two administrative divisions: Kyabandara 1 and Kyabandara 2.

## IV. SUMMARY OF FINDINGS

### A. INFRASTRUCTURE

There is a general lack of basic infrastructure such as schools, health facilities, roads, and telecommunications in the area. There are semi-permanent and permanent buildings in the trading centres of Karugutu and Ntoroko. These are mainly comprised of shops, health units, and offices.

Both primary and secondary schools are inadequate or completely lacking in all the communities visited. There are only two primary schools in Rwebisengo Subcounty, and the nearest secondary schools are in Bundibugyo 30 km away or in Fort Portal, a distance of 60 km. While there are about two or three primary schools in the Karugutu area, there is no school in the Kyabandara area. Areas bordering the reserve in the escarpment region have limited schools and these are sparsely distributed. This could be attributed to the relatively recent settlement of the area. Children in the three communities of Makondo, Kasesenge, and Kyabandara have to walk long distances to the nearest school. Ntoroko fishing community has one primary school which PAPSCA is assisting to rehabilitate. PAPSCA is also rehabilitating schools in the other communities, although it is doing little to establish new schools.

There is also lack of well-distributed health centres or units in all the communities visited. Health centres are scattered and for the most part are poorly equipped. In Kasesenge and Makondo, respondents expressed concern about women dying during childbirth and from pregnancy complications due to lack of ante-natal facilities. In both places, the problem of expectant mothers is aggravated by the lack of a good road infrastructure making it difficult to take an individual to the nearest hospital in Fort Portal or Bundibugyo in case of an emergency. During the rainy season, the track through the reserve from Rwebisengo Subcounty headquarters through Makondo village to Karugutu is impassable. There is no road connecting Kasesenge and neighbouring escarpment villages to the Kijura Tea Estates road which goes to Fort Portal. Respondents in Kasesenge have to meet high transport charges in order to reach hospitals in Fort Portal. The transport charges, coupled with high hospital bills, have led some individuals to sell pieces of their land, thus forcing them to go back to tea picking as their only source of livelihood.

Aid agencies such as GTZ, have come in to rehabilitate some of the health units and furnish them with equipment and drugs. Other NGOs, such as World Vision, engage in public health education and assisting vulnerable children, especially orphans. Both GTZ and World Vision are engaged in a health programme on river blindness that provides drugs and monitors patients' response. GTZ is also undertaking another programme on bilharzia among the fishing villages.

On the whole, the communications infrastructure in the area is poor. Road access is poor in all cases though there is a public works road through the game reserve to Ntoroko Fish Landing which joins Bwamba road at Karugutu. Other game reserve areas are accessible only by tracks. Telecommunication is poor with only one post office radio call station at Ntoroko. Other radio call stations operating in the area are privately operated by NGOs.

## B. SETTLEMENT

Most of the areas around the game reserve **have been recently settled**, the earliest settlements being in the 1940s and 1950s according to the **community** respondents. Residents in Karugutu and Kasesenge said that the settlers in the 1950s and 1960s **mainly** were attracted by free fertile land and pasture. The majority of the information **obtained during** the RRA was about recent movements. Little information was acquired concerning **early settlements** of the game reserve area.

People moved into the area mostly from **Fort Portal**, Kabarole District, Bundibugyo, Rwenzori Mountains, and Kabale District. The **most recent arrivals** were the squatters evicted from the Rwenzori Forest National Park. Some of the people **evicted** from the park settled southeast of Nyaburogo River in the Itojo area. **Most of them bought** land while others were given land by friends. The confusing state of squatters **has its roots** in the confusing state of land tenure in Uganda. During Amin's time, when people **were allowed** to settle on gazetted areas, many Bakonjo settled on the northern part of what is now **the Rwenzori Forest National Park** (formerly a forest reserve). When the forest reserve was declared a national park in 1992, some of these people had nowhere to go as they had sold their **original lands**. They sought refuge on another gazetted area, the Toro Game Reserve.

The respondents in Kasesenge gave similar **information**. The majority of the Bakiga migrants who have settled in that area along the eastern **escarpment** did so in response to the declarations that were being made by Amin's administrations **at that time**. For example, in 1978, the District Commissioner permitted people to claim as **much land as** they could and use it freely. These people claimed land which was vacant, only they **did not settle** on the gazetted area. However, some of these people settled on private company land (**tea estates**) bordering with the reserve and are being evicted by the tea company. There are also a **few recent** encroachers on the escarpment area of the reserve.

The fishing villages differ from the other villages in that these areas were settled when that part of the lake was opened for fishing activities in 1953. The fishing communities have steadily grown in number: Ntoroko, Kanara, Rwangara, Katanga, and Kamuga. Ntoroko and Kanara villages are the centre of the fishing activities. However, it **is not clear** whether these two villages were degazetted from the reserve as fishing villages or **remain within the** boundaries of the game reserve. On the game reserve map they do not appear to be **degazetted areas**.

Little information was gained about the **early movements** of the pastoral group in the Makondo area, other than the members claiming to be **descendants** of the Abalusula, as discussed earlier. They said they arrived in the area during the **nineteenth century**, settling as they conquered territories for their kingdom. Many of the responses were **about the present** movements of the cattle keepers just within Rwebisengo Subcounty. It was **mentioned that** people are still moving in search of pastures to Rwenyana, Mujuni, and Kajuna Parishes **from the crowded** areas of Rwebisengo Subcounty.

The encroachers in Kyabandara joined the **squatters from** Rwenzori Forest National Park in order to raise the numbers of people resident on **the game reserve** in the hope of justifying its being degazetted.

### C. LAND TENURE

Most of the land around Toro Game Reserve is public land. The majority of people hold this land through customary tenure rights. There are a few exceptions of titled land, including leasehold and private company land (tea estates), and a few private title holders. Most individuals with titled land have fenced off their farms to raise cattle.

Land was largely acquired through self-allocation, purchase, and inheritance. The purchase of land was formerly done through government administrative chiefs, where 10% of the sales would go to the government through the subcounty office. Other land acquisitions were through allocation by chiefs, but still a small fee would be paid to the subcounty office. Today, the selling of land is supervised by the RCs. A land transfer agreement is written by the RCs in the presence of elders and village Bataka, and 10% of the sale goes to government.

The people in Karugutu and Kasesenge area seemed to be satisfied with the way their customary tenure rights operate. People buy and sell land as they wish to do so. People in Kasesenge said they are justified to sell land because land is one of the indices used in assessing what individuals should pay as tax.

Individual landholdings vary within the area. The average piece of land owned by a household in Karugutu was 5 acres and 2 acres in Kasesenge. People who do not have land borrow or rent land from neighbours and relatives. According to them there is land pressure in the Karugutu area which has resulted from two conservation areas on either side of the area, leaving people to settle on a strip of land about 2-4 miles wide in the centre. Pressure on this land has increased as more people moved into the area as a result of the Rwenzori Forest National Park evictions.

Although the residents in the study area were somewhat comfortable with their tenure rights, they were suspicious of government policies considering the subsequent evictions of people from various conservation areas. In their responses to land tenure questions they expressed their fears that since they are near the game reserve, one day the government would probably evict them.

The pastoral community was an exception. They explained that their land remains as communal grazing land even though, with an exception of two leased ranches, it is all under public land. One of these (the Semliki Controlled Hunting Area, which belongs to Semliki Company), is about 200 acres, and the other, which belongs to an individual, is about 50 acres. Land is available for everyone who wishes to graze. Animals move freely, sometimes unaccompanied. However, some people have pieces of land of approximately 2 acres as result of inheriting homes over a long period of time. In such cases, land rights are recognised customarily by the RCs and some naturally-growing palm trees act as demarcations. The sale of land in this area, however, does not exist and is not sanctioned by the community. Those who wish to migrate either abandon the home and the piece of land around the household claimed to have been his/hers or sell the house and any other developments on the land. Those who move do so within their area of Rwebisengo County. Those moving out of an area inform the RCs, and those moving into an area are allocated a place to put up a house and are allowed to graze freely.

Respondents in Makondo area expressed **concern about** the demarcation on their side of the game reserve. In the 1960s, the reserve boundary **was altered** on the western and southwestern sides. In the west, a stretch of land 4 miles wide **was added to the** reserve, while in the southwest some land was excluded. People then felt that the **government** took away what was rightly theirs: an area where the raised fault line drops into Semliki Basin **where** the pastoralists are and where they used to drive their cattle during the floods and drought periods. Semliki Basin is in a rain shadow and receives relatively lower rainfall than the **area of the game** reserve.

The issue was hotly argued and the people **have lost confidence** in the Game Department. It was reported that during one of his tours of that **area**, the former Minister of Tourism promised to give back the section of land in question. Since the **promise** was made by one of the highly placed government officials, the people involved **feel** the government should be committed enough to return the area. Unfortunately, that minister **is no longer** the Tourism Minister, and his promise was never communicated to the Game Department for discussion.

The squatters in Kyabandara are very **uncertain of their** land rights. Although there is a government administrative recognition of their presence **in the reserve**, there is no legal commitment on part of the government or the Game Department **for them to stay**. Since the former Tourism Minister promised to come to their aid, the people are **still hopeful** that government will allow them to stay.

## D. ECONOMIC ACTIVITIES

### 1. CULTIVATION

Subsistence cultivation is the main economic activity undertaken in three of the communities interviewed: Karugutu, Kasesenge, and Kyabandara. The main crops grown are maize, beans, matooke, cassava, groundnuts, and sweet potatoes. Rice is sometimes grown in Karugutu and Kyabandara.

Cassava, groundnuts, matooke, and beans are **important** sources of cash income. Surplus produce is largely sold to Ntoroko, Fort Portal, and Rwebisengo. Cassava tubers and flour and matooke are important foodstuffs sold in Ntoroko and Rwebisengo. Other produce such as beans, groundnuts, and maize are also important merchandise in **all three areas** of outlet.

There is extensive damage to crops by **wildlife**, particularly bush pigs and baboons, but also monkeys and warthogs; this has led to **considerable crop** losses to farmers in Karugutu, Kasesenge, and sometimes Makondo. Residents in **Kyabandara** said they did not have a problem of crop damage by wildlife, probably because they **did not want** to appear antagonistic towards the reserve as they are squatting on the reserve land.

Agricultural land was said to be getting scarce **in all three** cultivator communities visited. Communal or free land was no longer available in **the two** agricultural communities of Karugutu and Kasesenge, but land for borrowing or renting **was available**. People in Karugutu attributed scarcity of land to being squeezed in by the Rwenzori Forest National Park on one side and the game reserve on the other, in addition to the **influx of those** who were evicted from the national park. Those in Kasesenge indicated that the **availability of agricultural** land was being limited by more

people coming in search of land resulting in no more agricultural land being available for purchase. Most community members in Kasesenge and Karugutu locations cultivate on their own piece of land; some, however, borrow from friends or relatives.

Farmers mentioned a number of problems affecting their agricultural activities. In Karugutu, the major constraints to agriculture were the banana weevil, which had reduced considerably the production of crude *waragi*, and poor roads, which hindered the transportation of produce to areas of demand during the rainy season. In Kasesenge, the lack of a road and the inaccessibility of the area limited the market alternatives. Only local markets could be reached, and prices for goods there are very low. Unscrupulous traders who could reach other markets cheated the farmers by offering low prices and dictating measuring units. Respondents in Karugutu indicated that soil fertility was a problem due to overcultivation. However, Kasesenge and Kyabandara residents indicated that soil fertility was still adequate.

## 2. LIVESTOCK

Livestock kept in the communities interviewed included cattle, goats, and sheep. Chickens are less important, though these are kept for meals at important occasions and for small income generation. Cattle are important for subsistence in Makondo, where people are traditionally pastoralists and solely depend on their animals. Goats and sheep are also important in the Makondo area and are kept in moderate numbers by the pastoralists. Goats are also kept in Karugutu and Kasesenge, but in small numbers. There is some livestock, especially goats kept by people in the fishing community visited, but these are harassed by leopards.

The number of cattle kept varies greatly among individuals and from village to village. In Makondo area, the figures given were an average of 50 cows per household but individual ownership ranged from 5-200 cattle. Karugutu respondents reported an average of 10 animals per household. Cattle keeping is less important in Kasesenge among the Bakiga migrants where only 1 cow per household was kept. Cattle keeping is nonexistent in Kyabandara among the squatters who only engage in goat and chicken rearing.

The cows provide milk for the pastoralists as a staple of their diet, while it is used as a supplementary source of protein for the mixed farmers. The sale of milk is generally low in the pastoral area simply because the local market is limited as the majority of the people have cows. Milk in Makondo is primarily churned into ghee which is sold to traders from Fort Portal and Bundibugyo. However, community members who are in close proximity to the fishing villages and mining area of Kibuku sell their milk. In Karugutu milk production is low due to poor pastures and therefore selling of milk is low.

The sale of cattle is the important source of income for the people in Makondo. There is a local market which operates twice a month and is organised and managed by a local cattle keeper's cooperative society. Dues from the market are the major source of funds for the cooperative operations. The cooperative is specifically responsible for assisting herdsmen in the sale of their animals, building and maintaining dip-tanks, and procuring acaricides. Indigenous bulls are sold to be able to stock cross breed bulls. Among the Makondo pastoralists, cattle are sold to meet all family expenses, including cash to buy food for supplementing livestock products. In Karugutu,

cattle are sold when there is a cash need **such as school fees** or important family expenses, such as hospital bills.

Cattle prices differ from area to area. In the **Makondo** area, where cattle sales are important, the prices range from 20,000 shillings for a **young calf to 250,000 or 300,000** for a bull. In Karugutu, prices are much lower, 150,000 shillings for a bull, while in Kasesenge a bull is 100,000 shillings.

Grazing among the pastoralists is communal with little control over the animals in an area or in the allocation of grazing land. Some control over grazing land by the cooperative society was mentioned, though it was not clear how this was accomplished. In Makondo and neighbouring communities in Rwebisengo Subcounty, **fencing off** the grazing area is not allowed among community members. Grazing land is available for everyone as long as you belong to the community. The only control over grazing land is restricting outsiders to come in with their animals. This restriction is also intended to deter the spread of diseases. There was also mention of decreasing availability of grazing land as a result of increasing human and animal population, a problem which had been aggravated by the influx of Zairois pastoral refugees.

Grazing in the game reserve offers some alternatives. The decreasing availability of grazing in their area was part of the reason why the people of Makondo area had requested the return of the 4-mile stretch of the game reserve. Although grazing in the game reserve is prohibited, grazing in the reserve is an important activity, particularly in dry seasons and floods. An understanding is reached between individuals and game rangers to graze their animals in the reserve during these crises. In Karugutu, grazing is on fallow lands, but animals are driven into the game reserve and forest national park during the dry seasons.

Respondents in Makondo expressed concern over range deterioration. Long ago the land had been plentiful; there were few people, and traditional chiefs controlled grazing areas. Today, however, the increase in human and animal populations has led to overgrazing and subsequent range degradation. (However, because of saline soils found in Rwebisengo Subcounty, the pastures here have high natural salt content, avoiding the need to supplement their diets with cattle salt.)

As there is little crop cultivation in Makondo, grazing and crop damage disputes are few. In any case, those who wish to grow crops have to have their gardens fenced off. In the agricultural areas, crop damage disputes are a problem but apparently easy to resolve through the RCs or between the disputants.

### 3. FISHING

Fishing is confined to the fishing villages on Lake Albert. Ntoroko Fish Landing is the biggest and most important of these fishing villages. The fish that are caught are mainly for sale, with some kept for consumption. Fishing activities are controlled by the Fisheries Department through an Assistant Fisheries Officer stationed at Ntoroko. The number of boats allowed to operate on the lake is limited to 120, but there are a large number of illegal fishermen from both Uganda and Zaire. There is a government revenue office to collect all dues from fishing activities.

Fishermen own the boats, nets, and licenses. Those employed to do the actual fishing and landing the fish are called *barias*. The *barias* are usually paid a percentage of the catch per day, which they may sell or dispose of as they wish. The fishermen organise the sale of the fish themselves. The main catch is comprised of tilapia, sardines, Nile perch, and mud fish. Lung fish and numerous other minor species are also caught.

The majority of the catch is salted and sold to traders, who take it across the lake to Zaire or to Zairian border areas such as Bwera and Nyahuka. The rest of the salted fish is sold in the Bundibugyo and Bwamba areas. As the primary method of preservation, salting fish is preferred over smoking it for three reasons. First, salted fish is believed to remain preserved longer and so can be transported safely over long distances and on poor roads. Secondly, salted fish is highly marketable in Zaire and among the Bakonjo and Bamba tribes. Thirdly, firewood for smoking fish is scarce given the restrictions over firewood collection from the game reserve, while table salt is brought in by business people from Fort Portal and Kasese.

Some fish is sold in smoked or fresh states. Smoked fish is sold in considerable amounts to more local consumers and to traders who transport it to Fort Portal, Kijura, and Bunyoro. Firewood for smoking fish is collected from the reserve or bought from traders who bring it on boats and canoes from Muzizi Forest in Kibale District. Little or no fresh fish is sold outside the fishing villages because of the long distance (and a poor road that is impassable during the rainy season) to reach the nearest effective customers in Fort Portal.

A number of developmental problems were identified by the fishing community. Poor transport was perceived to be the biggest problem, limiting the fishing industry in the area. Other problems mentioned concerning fishing are harassment by hippos, which break nets and capsize boats. Illegal fishermen, principally from Zaire, are also a problem. The Fisheries Department used to have boats to patrol the lake for any irregularities, but those are no longer operational. The residents in Ntoroko complained about decreasing numbers of fish. They could not exactly explain the reasons for the fish decline. The presence of water hyacinth on the lake waters was mentioned, but it was not expressed as a major problem. There was little open discussion about it. However, they did mention that the local community was trying to remove it, but this does not help because there is little effort to control the weed on the Zaire side where winds blow it back to the Ugandan side of the lake.

#### 4. BUSINESS AND TRADE

Trade is particularly important in Ntoroko and Rwebisengo. The fishing communities depend on traders to purchase their fish and to supply them with the commodities they need. Food is brought in by traders who in turn buy fish to sell to the outside. There are those who solely trade in fish.

Cattle trading is also important among the pastoralists in Makondo. Cattle traders are mainly outsiders who come from Fort Portal and Bundibugyo. The cattle which are bought are taken to abattoirs in Fort Portal, Kasese, Bundibugyo, and some to Kampala. Other people buy cattle for stocking their herds.

Other commodities traded are consumer goods and essentials like salt, sugar, soap, utensils, and clothes. Salt is an important commodity in Ntoroko and other fishing villages as it is in high demand for fish salting. Some of the firewood for domestic use and fish smoking comes from Muzizi Forest in Kibale District on boats and canoes, as does timber for boat building. Other sources of timber are Bundibugyo, Bwamba, and Bunyoro. However, the timber business has slackened due to a national ban against pitsawing in natural forests. Agricultural produce is also an important commodity brought into Ntoroko by outsiders for trade.

Petrol and other oil fuels form an important base for business activities, particularly in Ntoroko and Rwebisengo. While fuel is much needed for running the boat engines, there is no licensed fuel pump station in Ntoroko, so fuel has to be supplied through *magendo* (the black market).

Shopkeeping is also another significant business activity. Various consumer commodities are stocked in small shops in the three communities of Ntoroko, Karugutu Trading Centre, and Rwebisengo Trading Centre (Makondo). In Kasesenge, there was no shopkeeping and no significant business activity to attract shopkeeping other than traders coming into the area to buy produce to transport to neighbouring towns, particularly Fort Portal, and Kampala. Secondly, the buying power in the community is so low that it is difficult to establish any meaningful business. However, the lack of big business enterprises and development projects was attributed to the poor and insufficient road network existing in all five communities visited.

## E. OTHER ECONOMIC ACTIVITIES

The other major economic activity in the Toro Game Reserve is gypsum mining. Wealthy outside businesspeople own the mining and marketing licenses. Local people are free to dig for the mineral which they can only sell to the licensed owners who sell the gypsum to the Hima Cement Industry in Kasese at higher prices. There are middlemen who also buy gypsum from local miners and sell to the wealthy licensed owners. The mining business booms during the dry season and almost completely stops in the rainy seasons because trucks get bogged down in the marshy Semliki Basin.

Income from wage labour is low compared to agriculture, cattle keeping, and trade. However, all communities have some people engaged in paid labour, which is limited locally to working on gardens, house building, and other manual jobs. Few people go to work outside their communities for occupational income or paid labour.

## E. NATURAL RESOURCES

### 1. WATER

Much of the area of Toro Game Reserve lies on the periphery of the high rainfall belt of 1,000-1,500mm of the Rwenzori Mountains and Fort Portal area. The eastern side of the game reserve lies in the less than 1,000-1,500mm belt, while the western side of the reserve is in the rain shadow. The main sources of water are streams, springs, hand dug wells, and sometimes swamps.

The Rwenzori Mountains and the eastern escarpment form an important catchment area feeding all the streams and rivers in the reserve area. The streams and rivers concentrated in the south flow

north, and those from the escarpment flow westward cutting into the escarpment, forming high waterfalls into the rift valley. Some of these streams form the headwaters of the Wasa and Muzizi Rivers which then flow into Lake Albert.

In the Semliki Basin where the Makondo pastoralists reside, the main sources of water are hand-dug wells. The water table in this region is so high that water can be reached at a depth of 7-10 feet. While swamps and streams are seasonal due to a high evaporation rate during the dry season, there is no water shortage in the dry season because of the high water table. The hand dug wells provide water for both domestic use and the watering of livestock. Each family or individual is responsible for digging and maintaining his or her own well. Two families may share a well but the majority of individuals have their own wells. Water is drawn from the wells by hand and given to cattle in mud troughs. Some wealthy people use hand pumps on their wells. Those in close proximity to the Semliki River water their cattle there. The water in this area is naturally salty, thus having an added advantage for the cattle.

While the availability of water was not of major concern to any of the communities visited, the quality of the water was. People expressed concern about the water being contaminated with diseases and unhealthy for drinking. Members of the fishing community were aware that boiling water would improve the cleanliness of domestic water, but complained that boiling was expensive, as firewood is scarce due to the restrictive measures against collecting wood from the reserve. Members in other communities said domestic water was collected from streams. However, the majority complained that the stream water was dirty and unfit for human consumption because it was used to water livestock either directly or from troughs. They felt that the protection of existing springs and borehole drilling would improve their situation greatly. Members of the Ntoroko community mentioned a borehole drilling project which was abandoned, but no one could recall who undertook the project.

The lake water is heavily infested with bilharzia, and the fishing community complained that bilharzia cases were rampant. An international NGO was actively providing drugs for bilharzia treatment as part of their health research programme. Members of the communities interviewed were not confident of this approach. They reasoned that without systematic spraying or eradication of the bilharzia-carrying snails, the disease was there to stay. Respondents suggested, however, that if boreholes were constructed that would be a big step in providing disease-free water.

## 2. TREES

Trees are important for building materials and fuelwood in the communities interviewed. Most of the tree cover was of regenerated forest patches and thickets. A general observation indicated that there was little tree planting by the communities, although a few woodlots of planted eucalyptus could be seen. However, in all communities there was mention of tree planting.

In Karugutu, for example, they reported eucalyptus, *markhamia*, and *mutumba* as the main species being planted, primarily for timber and building materials. Fuelwood was not an important reason for planting trees. Fruit trees are also planted for children's food. Firewood is collected from fallow land or and individual forest patches.

There is little tree cover among the Bakiga migrants in Kasesenge community. The main vegetation cover is elephant grass which is used as a source of fuel. Old tea plantations are used for cutting poles and firewood. Other sources of building material include neighbouring parishes or carpenters who bring in timber for sale. A few people in Kasesenge have planted trees, mostly eucalyptus.

Community members in Kyabandara get firewood from old trees in the reserve area upon which they have encroached. Timber is bought from Fort Portal and Bundibugyo. They mentioned planting trees on the encroached area, claiming that the climate of the area was getting warmer and therefore they were planting trees to modify the climate. The species planted include fruit trees, fig trees, *lila*, *markhamia*, and eucalyptus. Trees are planted around homes and along the boundaries of their plots. Women plant fruit trees: jack fruit, pawpaws, avocados, mangoes, and oranges for children. They admitted having planted long-growing trees like *markamia* on the encroached area and believe that those who plant trees have a right to harvest them. This was probably a means of legitimising their stay in the area.

The Ntoroko fishing community also mentioned planting trees for shade and windbreaks against strong lake winds. They expressed the desire to plant trees extensively but are limited by the availability of land, since the fish landing is surrounded by the game reserve. Fuelwood for smoking fish and domestic use is from the game reserve and Muzizi Forest in Kibale District. The poles and grass thatch used as building materials are also collected from the game reserve, and dry euphorbia trees are also cut for fuelwood.

The Semliki Basin area where the Makondo pastoralists stay is virtually free of tree cover. The main vegetation cover is short grass punctuated with numerous anthills covered with shrubs. There are also three acacia woodland patches in the area and the balrus palm trees which are concentrated in a small section of the basin where the Makondo community is located.

The palm tree is a multipurpose tree for the community in Makondo. Its fibrous stem forms an important source of poles for building, its leaves are used for thatching, the roots of the young shoots store food as root tubers and are eaten, fruits of the mature trees are eaten by children, and its stem is tapped for palm wine. The dry leaf stocks are an important source of fuelwood for cooking.

Firewood is an acute problem in Makondo. Since the dry palm leaf stocks are used, they are supplemented by collecting dry sticks from the anthill shrubs. Those near the woodlands collect fuelwood from there, while those adjacent to the reserve gather firewood from within the reserve. The palm trees are also used for constructing kraals and crushes.

Despite the several uses of the palm tree by the community in Makondo there is no effort to plant palm trees nor an awareness of the danger of exhausting the supply. It was mentioned that the palm trees being used were immature while the mature ones are abundant in the game reserve. They wanted to be allowed to use the palm trees in the reserve. The long maturation period of the balrus palm tree was the major limitation against planting it. Yet in spite of such tree resource shortage little effort is put into planting trees. Those who attempt it only do so around homes to act as shade, windbreaks, and for fencing materials.

In all of the communities interviewed, **women only plant** fruit trees. The major reason, given by men, was that women do not own land, **so therefore cannot plant trees**. Secondly, it is a man's responsibility to build a house and therefore, **only men should plant trees**. Thirdly, if a woman plants trees, then she would in effect be claiming **ownership over** the land. In addition, women in Karugutu and Kasesenge communities said that they **were always** discouraged from planting trees because of divorce, polygamous marriages, and discriminatory property inheritance rights.

Charcoal burning was not mentioned as a **lucrative activity** in any of the communities visited. The fish landing community does not burn charcoal **because** the trees in the game reserve are not good for this. Respondents at other locations **did not give reasons** for not burning charcoal.

### 3. SWAMPS

Swamps are generally few in this area **because of the** deep narrow valleys containing the streams and rivers falling into the Rift Valley. There **were no swamps** mentioned to exist in Kyabandara, while there were small swamps in Karugutu, **but of little** economic value. In Makondo, there are seasonal swamps along dry river beds and **depressions** that are seasonally flooded by the Semliki River. Other swamps are permanent. The **dominant grass** in both types of swamps is reeds. In all the communities there was no general awareness **of the value** of swamps though there was no indication or desire to drain them either.

Swamps in Makondo are important for craft **materials**, reeds for home fencing and building, ropes, fibres, and clay for bricks and milk vessels. **In the dry season** they are important for grazing. These swamps are seen as open access resources. **While traditionally** swamps were controlled by chiefs according to clans and the rituals that the **clans were** responsible for, this apparently has failed as there was expressed concern about the **reduction in** swamps due to overgrazing and reduced rainfall.

There are many small swamps in open valleys **in the escarpment** area where Kasesenge community is located. Some of these swamps are seasonal. **Swamps** are owned privately by those whose land is in proximity to them, and the streams in the **swamp act** as boundary demarcations. Although the swamps are owned privately, access is communal. **There is** no restriction against use of the swamp. The swamps in this area are used to supply **thatching** grass (supplemented by spear grass from hillsides), craft materials for women, and **reeds for building**.

### G. SOIL EROSION AND SOIL CONSERVATION

There was no obvious evidence of soil erosion **in the areas** visited by RRA team. Although they were aware of soil erosion in their area, **none of the communities** seemed to be concerned about erosion being a problem, claiming that it **only existed** on a small scale and did not need serious attention. None of the communities reported **any traditional** mechanism for controlling soil erosion other than digging ditches or trenches to **direct rain water** away from the fields.

Members in Karugutu said they had been **advised by the** Forest and Agriculture Departments to plant trees. They also practice some "bunding and contour planting" on the lower slopes of Mount Rwenzori. They claimed to control wind **erosion by** adhering to a ban by the RCs against bush

burning, the RCs continually informed people about the dangers of bush burning. However effective this measure was reported to be, there was widespread evidence of bush burning on hillsides in all the game reserve area.

The other communities cited other mechanisms to control soil erosion. Some claimed that digging trenches to stop runoff was being used to control soil erosion. In Kasesenge fallowing and avoiding the higher slopes is practised. Bunds like those in Kabale, however, are not used. In the Makondo area community members complained that there were no field assistants to advise them on what to do, yet erosion is active on Nyabushozi hills along the fault line dropping into the Semliki Basin. The Makondo pastoralists were aware that soil erosion and surface wasting was due to overgrazing.

Declining soil fertility due to overcultivation was expressed as a major concern in the Karugutu community. They reported conserving soil fertility by crop rotation and intercropping. In the other two agricultural communities (Kasesenge and Kyabandara) land fertility was mentioned as still high, though the availability of agricultural land was expressed as a threatening problem.

The pastoralist community which has taken on small-time agricultural activities, also claimed that soil fertility in their area is still high. However, they gave contradicting information when they later said that soils in their area are saline and therefore of poor quality.

#### **H. CONSERVATION AREA AND ATTITUDES TOWARDS THE GAME RESERVE**

All of the communities interviewed mentioned the game reserve as a place for keeping wild animals which belong to the government. Although some respondents in Ntoroko fishing area indicated an understanding that the game reserve was created for protecting animals and nature, in general only negative views are held about wild animals and the conservation area. There is little understanding of why the government creates conservation areas. The following statements from Karugutu community are representative of the negative views held about the reserve:

The game reserve is big but few animals are protected and yet people do not have enough land.

Problems came about because earlier governments demarcated the good area, which God created for people, as a place for animals; the bad area [around Nyaburogo River], which God had reserved for animals, was left for people.

The government should look after animals so that they increase in number and people can enjoy bush meat. But the animals have not increased, instead the game reserve is an area for monkeys which are destructive.

People in Kasesenge zone perceive the game reserve as government property. Although they would wish to use resources from the reserve, they can do nothing because the reserve keeps animals which government must protect. People would want the game reserve to remain not because they are interested in conserving natural resources, but because government created it. Only one respondent in Karugutu made a positive statement about the reserve:

The game reserve protects wild animals for future generations and tourist revenue.

The main complaints against the reserve are on three issues. The first is wildlife. As indicated in the earlier statements, wildlife is viewed as unproductive and destructive, principally due to crop damage. Monkeys, bush pigs, and baboons were singled out as the biggest problem and as the most destructive. Bush pigs are nocturnal and destroy at night when people are unable to guard against them, and baboons are highly organised in their ways of destroying crops. The community in Ntoroko expressed concern over animals, especially hippos, harassing fishermen and capsizing boats. Leopards harass livestock, mainly goats. It is generally felt that the government should protect people against wild animals by instructing game guards to work seriously to contain the animals.

Secondly, all the communities indicated a distrust of the game guards. They complained that instead of guarding against animals, guards harass ordinary people collecting materials from the reserve or grazing their livestock. Sometimes game guards kill animals and put the blame on ordinary people. The communities complained bitterly against the insecurity caused by the reserve and the lack of responsibility by the Game Department which has resulted in conflict between their authority and the people.

Game guards should also provide security against thieves and murderers who hide in the reserve.

Why should game guards harass people and leave thieves to stay in the game reserve? Game guards should deter thieves.

The third complaint concerned the lack of access to resources inside the game reserve. One respondent in Karugutu said:

We cannot collect firewood from the reserve and yet we do not have a buffer zone between us and the reserve where we can collect such things.

Different communities had different requests concerning access to reserve resources. Probably the most contested resource in the pastoral community is grazing. The cattle keepers want to be allowed to move freely and to have access to the grazing resources of the reserve. They also want the part that was added to the reserve to be returned to them. In the agricultural community, the concern is about cultivable land. For example, in the Karugutu area where people are surrounded by the national park and the reserve, there are fears of the declining availability of agricultural land. They feel that the government should give them a portion of the reserve and leave the rest of the land for animals. The Makondo community wants to get access to mature palm trees, firewood, mushrooms, ropes, and strings; these were exhausted in their area but remain abundant in the reserve. Other complaints against the game reserve are: tsetse flies, which are a danger both to livestock and people; mosquitoes causing malaria; and robbers harbouring in the reserve. (Tsetse flies are common only in the southern and eastern side of the reserve.)

A number of suggestions were offered on how the people could benefit from the game reserve and appreciate its existence. Karugutu respondents suggested that the government should rehabilitate the reserve by putting in more animals or looking after the existing ones properly. Additionally, the Semliki Lodge should be rehabilitated, so that the reserve recovers as a tourist attraction, bringing in

Semliki Lodge should be rehabilitated, so that the reserve recovers as a tourist attraction, bringing in tourist revenue and employment opportunities. They also suggested that the road through the reserve to Ntoroko be rehabilitated so that they could get easy access to the Ntoroko fishing business. The Makondo community wanted the reserve boundary to be changed to the original demarcation, after which they would appreciate the usefulness of the reserve. Secondly, if allowed access to land in the reserve they would get organised, use the land effectively, and adopt mixed farming. For the pastoralists, the reserve is very useful during floods, when cattle are driven to the raised area of the reserve. Cattle are also taken to the game reserve during severe droughts and other crises such as grass pests invasions.

There is no understanding about the game reserve contributing to the construction of infrastructure in the area. All communities were interested in the short term and direct benefits of resources such as firewood, cultivable land, and grazing. However, there is some clear realisation or appreciation of the usefulness of the game reserve. The fishing community appreciates the reserve area that contains the swamps that are breeding place for fish. They also regard it to be important for thatching material, poles, and firewood though these materials are collected illegally. There is also the general perception of trees having a cooling effect on the climate.

The Karugutu community, although referring to the Rwenzori Forest National Park, indicated a realisation of the effect of resource conservation on the environment, when they say that:

The forest reserve has now become a watershed and rain maker. It is also a source of firewood and building materials.

Communication between the Game Department and the people is poor. The communities interviewed say that there is no communication between them and the game people. Most communities interviewed said that when the game people are invited for meetings, most never turn up. Those who bother to turn up are newly posted personnel, who later also stop coming. However, in Ntoroko it was mentioned that the Assistant Regional Game Warden occasionally comes for RC meetings.

Most communities interviewed expressed the desire to have effective communication between the Game Department and themselves. They also feel that the Game Department should endeavour to educate people about the usefulness of the game reserve and other protected areas. In the Makondo area people meet with game officials when they seek assistance in using the reserve during crisis times. However, there is a personal understanding between people and game rangers to get access, especially for grazing. The Makondo respondents also suggested that if game officials would adopt an interdependency approach between the people and the Game Department for game reserve management, such as game officials teaching people how to live harmoniously with animals, people would change their attitudes towards animals and stop killing them. In addition to teaching people how to live with animals, the Game Department should allow grazing.

## V. GENERAL CONCLUSIONS

Settlement in the areas around the reserve is generally recent. The latest arrivals are migrant workers from Kabale District and people who have been evicted from the nearby gazetted areas of Kibale Game Corridor and Rwenzori Forest National Park. The influx of pastoralist refugees from neighbouring Zaire has also increased pressure on the available grazing area in Rwebisengo Subcounty, which may also increase overall grazing pressure on the reserve. This may exacerbate the land shortage in the Toro Game Reserve area, accelerate land degradation, and therefore increase pressure on the reserve.

Although the migrant workers were able to acquire individual land with little difficulty, the evictees have had to share land with their friends or relatives. Some managed to buy land while others opted to squat on the reserve. Pressure on the reserve from agriculturalists particularly in the south may also have resulted from people being confined by Rwenzori Forest National Park on the one side and Toro Game Reserve on the other. For the agriculturalists, pressure on the reserve would be for cultivable land, while for the pastoralists it would be for grazing, particularly in the dry seasons.

### A. LAND TENURE

The majority of the cultivator communities hold customary tenure on public land while a few own titles and leases. The cultivator communities interviewed are uncertain of their land tenure rights due to a highly confusing state of rights and settlement in and around other gazetted areas where people have been evicted and harassed. The cultivator communities interviewed, particularly Karugutu and Kasesenge which are primarily migrant Bakiga communities, expressed an uncertainty of their stay on the lands which they occupy. They constantly referred to the evictions of the Kibale Forest and Game Corridor as something that would happen to them. However, they could not explain whether they should adopt a more secure land tenure system like titling their land, since most of them were suspicious of government intentions and decisions.

In the cattle keeping area (Makondo Subcounty), land is almost all public land except for two leased ranches. Community members hold grazing land as common property. Every member of the community is free to graze. Outsiders are not allowed to settle with them. However, there is a need for the pastoralists to develop a grazing mechanism that would control grazing areas and the number of animals one should keep. Without such a mechanism there will be a spillover to the reserve as both human and animal populations increase.

The highly confusing situations of administrative decisions by government officials in and around gazetted areas may repeat itself in the Toro Game Reserve area. The statements made by the former Minister of Tourism about degazetting the area that has been encroached and the stretch that was later included on the reserve has created antagonism between the local communities concerned and the Game Department. People were made to believe that these areas would be given to them, yet it was never discussed anywhere in the offices concerned, and people are still hoping that these areas will be returned. The delay has been blamed on the Game Department for refusing to act quickly. It is in the interest of the Game Department to clear this up by explaining the issue to people and improving its relations with them.

## B. ECONOMIC ACTIVITIES

A subsistence economy of cultivators, **having permanent fields** with production based largely on the use of simple tools and simple farming methods, and **cattle keepers** dominates the area around the game reserve. The fishing villages on Lake Albert are an exception to this agricultural economy and are largely a cash-based society dependent on fish taken from the lake. Other activities include business trade along the Zaire border, **commercial tea growing**, and small-scale, open-cast gypsum mining. Wage employment is largely confined to **hired labour** for odd manual jobs and tea plantation workers.

In all cases, cash income opportunities are **limited by** a general lack of proper road infrastructure. Some areas along the escarpment are **completely inaccessible**, which dramatically affects the prices and demand for food crops. The lack of a **potentially lucrative trade** in fresh fish between Ntoroko and the neighbouring towns is largely attributed to **the poor road** to Ntoroko through the reserve. While the majority of the people in Makondo produce surplus milk, limited local market opportunities, and the absence of **milk collecting centres** and a good road have prevented sales to neighbouring towns and limited cash incomes.

However, cattle selling is important among **the Makondo people**; it is their largest source of cash income. Buyers come from as far as Fort Portal, Kasese, and Mwenge. This has probably led to better living standards for the pastoralists in **comparison** with the cultivator communities.

## C. NATURAL RESOURCES

The survey showed that the communities are largely still dependent on resources outside the reserve, though there were a lot of complaints against the Game Department for preventing access to reserve resources. Although community members clearly indicated the importance of the resources they were using, they did not indicate **any appreciation** for the value of such resources.

The resources that were most often desired **from the reserve** were cultivable land, grazing, and trees for both firewood and building materials. Other resources mentioned were palm trees, fibers (ropes and strings), mushrooms, grass thatch, and **game meat**. Medicinal plants and craft materials were not mentioned at all, suggesting that the **reserve is of little importance** as a source of supply. People emphasised game meat in order to encourage **the government** to look after the animals so that they increase in number and can be killed for meat. This may indicate that people would want to have access to game meat though they claim they **do not poach** for it.

Although respondents mentioned the existence of **a little soil erosion**, there was no indication of any understanding of how serious the problem could be if unchecked. There is no appreciable conservation practice on the fields. In the **higher areas** bordering the reserve, there were no serious checks to guard against erosion.

Although the pastoralists system of free movement of cattle with common access to grazing without seasonal migration has worked well, they have not adapted concrete livestock and range management methods to sustain these **grazing resources**. This has led to serious range degradation by overgrazing as evidenced by bare patches in the area. Although the area is ecologically good for

grazing, there is need to establish control- and management-mechanisms in order to achieve sustainable utilisation of the resource.

#### D. ATTITUDES TOWARDS THE RESERVE

The attitudes about the reserve were in **general negative**, although there were two or three positive statements. A number of factors seem to **be responsible for** this attitude.

First, communities living around the reserve **do not see** any tangible direct or indirect benefits coming from the reserve, yet they are **constantly limited** in their access to the reserve resources. Local communities know that the **Game Department** controls resources such as cultivable land, grazing, trees, and game meat and **denies access to these** resources; they see the government as believing that wild animals are **more important than people**.

Secondly, wild animals are perceived to **be destructive** and people see no reason why the government should protect them. The **destruction of crops** by baboons and bush pigs is not imaginary, and people spend a considerable **amount of time** guarding against these animals, leading to losses for the farmer in terms of time **and production**. Although the animals may not come directly from the reserve, they are **associated with the** reserve and therefore as belonging to government. Thus, if the Game Department **could control** crop damage by baboons and bush pigs, even though they may come from **outside the reserve**, it would greatly contribute to the establishment of good relations between the **Department** and the people.

Improving the control and management **of access to** resources in the reserve in favour of communities would also be a **greater contribution to Game Department** relations with the people. It should be noted that the provision of indirect **benefits, such as** improved roads, schools, health units, etc., however good it may be, is not **feasible for the Game Department** due to its limited tourist revenue collection activities. Hence, it is time that the Game Department also got involved in full-time tourist revenue activities.

Communication between the people and the **Game Department** could also help improve the relationship between the people and the **game reserve**. This could be done by Game Department officials or rangers attending RC council **meetings, educating** people about the usefulness of wildlife, and adopting an interdependency **approach between** game and people for game reserve management, as was suggested by respondents in Makondo.