
**LAND CONFLICTS AND PRODUCTIVITY OF SMALL PLOTS IN KISORO DISTRICT: A CASE
STUDY OF KISORO MUNICIPALITY**

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ABSTRACT

The major objective of this study lied in finding out whether there was a relationship between land conflicts and productivity of small plots in Kisoro Municipality, Kisoro district. Other objectives included: To find out the forms of land conflicts experienced by smallholder farmers in Kisoro Municipality, Kisoro District and to establish the management strategies used by smallholder farmers to manage land conflicts in Kisoro District. To obtain a sample size of eighty participants from Kisoro Municipality using Solvin's formula, the study used a research methodology based on case studies, cross-sectional in qualitative, and quantitative research designs, as well as simple random probability sampling and intentionally selected procedures.

At $r = 0.775$, it was discovered that there is a very strong positive correlation among land conflicts and small-plot worker efficiency. Since the sig. value (.000) was much lower than the threshold level of significance (0.01) needed to declare an important connection between land conflicts and small-plot productivity, this suggests that the intensity of land conflicts has a significant impact on small-plot effectiveness. The study found that the majority of those who participated in Kisoro municipality indicated that taking land by a brother or family member (40%) is the main cause of land dispute within the study area, followed by relocating the land's boundary (25%), grabbing land by a member of another clan (20%), and forced government land takeover of 15% of the participants.

Local officials and other interested parties, particularly those at the district level, need to do a better job of handling property disputes and, when it's feasible, examine the laws, regulations, and policies relating to land. This can be done with

support from the Uganda Law Society, Uganda Land Board and the Ministry of Lands Housing and Urban Development. Such laws should clearly spell out the scope and nature by which land can be owned through inheritance.

Key words: land conflicts and productivity

Background of the study

According to Advocates Coalition for Development and Environment (2009) land conflicts will escalate in at least 30 districts in Uganda unless urgent measures are taken to resolve them. Problems with borders with neighboring nations, boundary disputes among districts, disputes between landlords and tenants, and resistance by tenants to land acquisitions by investors are only a few of the issues. Many land conflicts and disputes over the years have resulted in deaths or at the very least promises to kill one other.

Due to a high fertility rate (6.7), Uganda's population is expected to rise at a fast rate of 3.2%, reaching 39.3 million in 2015 and 54.9 million in 2025. In addition to increasing shortages of land, this relatively rapid rate of population expansion is additionally characterized by significant regional variability. According to Mugisha (1998), population densities range from 12 per km² in the North to 282 per km² in the West.

In Uganda, access to and management of land are very unequal between individuals and between districts. In addition to the potential that the disregard for women's rights may have made it harder for widows to avoid inheritance-related conflicts, tenure insecurity discourages land users from making investments in land enhancement, erecting permanent buildings, and implementing water and soil preservation programs. It is abundantly obvious that there have been huge and numerically significant production losses as a result of land conflict, which implies that efforts to lessen its frequency will

have a considerable impact on the profitability of the agricultural industry.

Land disputes have become unavoidable as a result of population expansion that is nearly double in most nations, land shortages, and unequal land tenure. Uganda Bureau of Statistics, UBOS, 2014). As a key component of agricultural output, land is under increasing strain due to Uganda's population growth of 3.4% annually.

36% of rural communities in Kisoro District are involved in some sort of land dispute, some of which have persisted for years (Mugisha, 1998; UBOS, 2014), but there has been no new research on this deadlock that might offer solutions. Therefore, it was thought important to conduct a study to comprehend how to manage land disputes and investigate tactics that smallholder Irish potato farmers could use to control disputes over land.

Statement of the problem

Uganda has a 174 person/square kilometer the density of people. Kisoro District, in particular, has a population density of 446 people per square kilometer (UBOS, 2014). To feed the expanding population, this population needs strong forces to boost food yield for staple commodities like Irish potatoes. However, since land is seen as a source of subsistence in agrarian economies, demand for the resource increases as the population grows. The 287,179 families in the Kisoro District have an average of 1 ha of land each, which is substantially less than the suggested minimum of 2 ha that is advised for a smallholder agricultural household (FAO, 2011; UBOS, 2014). Conflicts on the land are caused by competition between groups for the limited amount of land that may be used for agriculture. Conflicts lead to a decline in Irish potato output. However, the Irish potato variety 'Kisoro' provides proof of the crop's historical significance in the study region. 36% of the rural households in Kisoro District are involved in some kind of land dispute, some of which have persisted for a

very long time (Mugisha, 1998; UBOS, 2014). Irish potato small-scale cultivators account for the vast majority of these land disputes (Kisoro District Local Government, KDLG, 2017). The nature of these land conflicts and their impacts on the profitability of small plots, particularly smallholder Irish potato cultivation, had not, however, been the subject of extensive information. Furthermore, no recent study has offered suggestions for potential land conflict resolution strategies for smallholder Irish potato farmers in the Kisoro District to resolve these problems. Finding a link between land disputes and the productivity of tiny plots in Kisoro Municipality's Kisoro region was consequently an issue.

Specific objectives

- 1. To find out the forms of land conflicts experienced by smallholder farmers in Kisoro Municipality, Kisoro District.*
- 2. To establish the management strategies used by smallholder farmers to manage land conflicts in Kisoro District.*
- 3. To find out the relationship between land conflicts and productivity of small plots in Kisoro Municipality, Kisoro district.*

Research questions

- 1. What are the forms of land conflicts experienced by smallholder farmers in Kisoro Municipality, Kisoro District?*
- 2. What land conflict management strategies are being used by smallholder farmers to resolve land conflicts in Kisoro District?*
- 3. What is the relationship between land conflicts and productivity of small plots in*

Kisoro

*Municipality, Kisoro
district?*

Methodology

Research Design

It includes the techniques for gathering data, analyzing it, and drawing conclusions that put the approach into action (Kothari & Gaurav, 2014). Because just a small random sample of the population was to be chosen for the study, the researcher utilized a cross-sectional survey design incorporating both qualitative and quantitative methodologies. The cross-sectional survey research strategy was chosen because it allows for the collection of data from a variety of people who participate in a sizable number of distinct categories all at once.

Target population

3000 individuals of Kamonyi Village in Kisoro Municipality made up the study's population of interest. 341 participants were chosen as the sample population for this study using a correlation between this and Solvin's formula for determining sample size. 250 farmers, 89 victims of land conflicts, the Kisoro District Lands Officer, and L C 1 made up the study's target population.

representative of Kamonyi Village. Because the researcher is interested in the differing perspectives of all those who are concerned with the problem, all of these groups made up the study population.

Sample size and selection

A sample is a small subset of the total population (George & Mallery, 2003).

The study sample comprised of 341 respondents out of 3000 of the total population where 89 respondents were Victims affected by Land conflicts, 250 were farmers, Kisoro District

Lands Officer and L C 1 Chairperson of Kamonyi Village.

Table 2: The Sample Size and Selection of the Study

<i>Type of population</i>	<i>Sample Size</i>	<i>Sampling techniques</i>
<i>Kisoro District Lands Officer</i>	<i>1</i>	<i>Purposive sampling</i>
<i>L C 1 Chairperson of Kamonyi Village</i>	<i>1</i>	<i>Purposive sampling</i>
<i>Farmers</i>	<i>250</i>	<i>Simple random</i>
<i>Victims affected by Land</i>	<i>89</i>	<i>Purposive sampling</i>
<i>TOTAL</i>	<i>341</i>	

Primary Source: Primary data (2022)

Data collection methods and Instruments

Data collection is a process of gathering data and measuring information on variables of interest in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes (Syed Muhammad Sajjad Kabir, 2016). Primary data was sourced by physical and visiting of the files and collecting data through variable tools.

Questionnaires

Key informants were questioned using a questionnaire with the goal of gathering pertinent data based on the study's objectives. Through survey responses, participants were given plenty of time to read the questions and understand what the researcher was looking for, resulting in the production of specific, dependable, and accessible data. In general, this technique served to mitigate weaknesses that are likely to be encountered in personal interviews since participants might not be able to react right away because they are occasionally preoccupied with their official duties. Self-completion In this study, one of the strategies that the investigator utilized to get data from all four groups of his participants was using surveys.

Interviewing method

In this method, informed members were selected to inform the researcher about specific issues regarding the study. The instrument employed a key informative guide which included questions on the specific objectives of the study. This helped in capturing of qualitative information needed in this study.

Interview guides

The investigator also created an interview guide with a list of open-ended inquiries to ask participants during an interview. While conducting an interview, the investigator personally documented the comments given by study participants. This tool was used to gather information from purposefully chosen participants, including the LC1 Chairperson of Kamonyi Village and the Kisoro district land officer, in order to gain precise details regarding the occurrences of land disputes in the study area.

Data analysis

The statistical package for social science (SPSS) tool was used by the investigator to compute percentages, frequency, and tabulate reactions, as well as to employ a variety of qualitative and quantitative types of data. To find and correct mistakes made by participants, data was modified. The answers provided to the questions were then coded into several categories. The data were analyzed using descriptive statistics like distributions of frequencies and proportions. The answers were all grouped according to their theme categories and their contents were evaluated for the qualitative information using content analysis techniques. Presentation materials included tables, charts, and figures. Software from the Statistical Package for Social Sciences (SPSS) will be used to assist with data analysis.

RESULTS

Response rate

Questionnaire return rate

All the 341 questionnaires were given out, 200 were returned, thus representing 59% response. The study was considered good because according to Peil (1995), questionnaire return rate above

50% is considered good for a study.

Personal information of respondents

Information regarding to the personal background of the respondents included their age, gender, marital status, occupation and education level.

Age of the respondents

Information regarding the age of the respondents was added to questionnaires during the piloting process. The following information regarding the ages of the respondents was analyzed and presented in form of grouped data as shown in the table 1

Table 1: Age of the respondents

Age of respondents	Number of respondents	Percentage (%)
0-10 years	20	10
10-20years	30	15
20-30 years	70	35
30-40years	60	30
40-50years	20	10
TOTAL	200	100

Source: Primary data (2022)

From table 1, it was determined that 35% of the individuals who took part in the survey belonged to a mature group, or were between the ages of 20 and 30. This led to the conclusion that the researched adult brains were responsible for the correctness and dependability of the information that was gathered. Additionally, the investigator discovered from Table 1 that 10% of the people who participated in Kisoro municipality were aged among 0 and 10 years, 15% were aged among 10 and 20 years, 30% were among 30 and 40 years old, and 10% were among 40 and 50 years old.

Gender of Respondents

The study investigated the gender of the respondents and the findings were as shown in the table

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Table 2: Gender of respondents

Gender	Frequency (No. of Respondents)	Percentage (%)
<i>Males</i>	80	40
<i>Female</i>	120	60
TOTAL	200	100

From table 2, it was found out that, majority of the respondents were females with 60% compared to males with 40%. This shows that females produce a lot of girl children than the boy babies. The simple random sampling technique offered each member of the population an equal and non-zero chance of participation in the study.

Occupation of the respondents**Table 3: Occupation of respondents**

Occupation	Frequency (No. of Respondents)	Percentage (%)
<i>Farmer</i>	120	60
<i>Civil servant</i>	10	5
<i>Teacher</i>	30	15
<i>Trader</i>	40	20
Total	200	100

Source: Primary data (2022)

The bigger percentage of the respondents lied in farming (60%), 5% were civil servants, 15% were teachers and 20% were traders.

Marital status

The study investigated the marital status of the respondents and the findings were as shown in the table 4

Table 4: Marital status of respondents

Marital status	Number of respondents	Percentage (%)
<i>Single</i>	100	50
<i>Married</i>	60	30
<i>Divorced</i>	40	20
Total	200	100

The major percentage of the respondents in the study were single (50%), 30% of the sampled respondents were married and only 20% of the sampled respondents had

divorced.

Educational level of the respondents

Information regarding the academic background of respondents in Kisoro municipality, Kisoro district was obtained and tabulated as shown in table 5

Table 5: Educational background of the respondents

Educational level	Number of Respondents	Percentage (%)
Primary and below	30	15
O' Level	40	20
A' Level	30	15
Certificate	20	10
Diploma	10	5
None	70	35
TOTAL	200	100

***Source: Primary data
(2022)***

From table 5, it was found out in an analysis of interviews and questionnaire that majority of the respondents with 35% of the sampled respondents had not attended any education level in their lives, 15% had finished primary and below, 20% had completed ordinary level, 15% had completed advanced level of education, 10% had completed certificate level of education and only 5% of the sampled respondents had completed diploma level of education. From the statistics, it's indicating that the education of people in Kisoro municipality is lacking and needing.

The forms of land conflicts experienced by smallholder farmers in Kisoro Municipality, Kisoro District

This Section describes the independent variable (Land conflicts). The independent variable was addressed in Section B of the questionnaire for respondents. Information regarding the forms of land conflicts in Kisoro municipality, Kisoro district was tabulated in table 6 below.

Table 6: The forms of land conflicts

<i>Forms of land conflicts</i>	<i>Number of respondent</i>	<i>Percentage (%)</i>
<i>Dislocation of the boundary of the land</i>	50	25
<i>Grabbing of the land by a brother/member of family</i>	80	40
<i>Grabbing of land by a member of another clan</i>	40	20
<i>Taking over land by force by the government</i>	30	15
<i>Total</i>	<i>200</i>	<i>100</i>

Source: Primary data (2022)

The study established that the majority of the respondents in Kisoro municipality revealed that grabbing of the land by a brother/member of family (40%) is the major form of land conflict in the area of study, 25% revealed that it is by dislocation of the boundary of the land, 20% revealed that it is by grabbing of land by a member of another clan and 15% of the respondents revealed that they lose land by taking over land by force by the government.

Table 7: Level of land conflicts in Kisoro municipality

<i>Responses</i>	<i>Frequency</i>	<i>Percentage (%)</i>
<i>Very High</i>	<i>110</i>	<i>55</i>
<i>High</i>	<i>60</i>	<i>30</i>
<i>Low</i>	<i>20</i>	<i>10</i>
<i>Very low</i>	<i>10</i>	<i>5</i>
<i>Total</i>	<i>200</i>	<i>100</i>

Source: Primary Data (2022)

The findings in the table 7, revealed that 55% of the respondents suggested that the level of land conflicts in Kisoro municipality is very high, 30% of the respondents noted high level, and

10% revealed low level and the remaining 5% of the respondents noted very low level.

This implies that land conflicts are very common in Kisoro Municipality, Kisoro district.

Table 8: When can a land conflict arise?

<i>Responses</i>	<i>Frequency</i>	<i>Percentage (%)</i>
<i>When planting / cultivation along the plot/land borderline</i>	<i>10</i>	<i>5</i>
<i>On harvesting</i>	<i>60</i>	<i>30</i>
<i>Every season of cultivation</i>	<i>20</i>	<i>10</i>

<i>When he/she is selling or intends to sell the land/plot</i>	110	55
Total	200	100

Source: Primary Data
(2022)

The findings in the table 8, revealed that 55% of the respondents suggested that land conflicts arise when someone is selling or intends to sell the land/plot, 30% of the respondents noted land conflicts arise on harvesting, 10% noted that land conflicts arise very season of cultivation and 5%

of the respondents suggested that land conflicts arise when planting / cultivation along the plot/land borderline.

Table 9: Ways in which land conflicts affected potato farming activities

Responses	Frequency	Percentage (%)
<i>Delayed planting which affects quality of harvest</i>	60	30
<i>Increased Injuries and death of some potential potato farmers</i>	120	60
<i>Widens quarrels and court cases which waste time needed for potato farming</i>	20	10
Total	200	100

Source: Primary Data
(2022)

The findings in the above table revealed that 30% of the respondents suggested that land conflicts cause delayed planting which affects quality of harvest, 60% of the respondents revealed that land conflicts cause increased injuries and death of some potential potato farmers and 10% suggested that land conflicts widen quarrels and court cases which waste time needed for potato farming.

The management strategies used by smallholder farmers to manage land conflicts in Kisoro District

Table 10: Managing strategies to solve land conflicts

Responses	Frequency	Percentage (%)
<i>Take the person to court</i>	70	35
<i>Ask for family heads to intervene</i>	80	40
<i>Fight the person out of the land</i>	40	20
<i>Ignore and leave it</i>	10	5
Total	200	100

The findings in the table 10, revealed that 35% of the respondents suggested that they can take the person to court to manage land conflicts, 40% revealed that they can ask for family heads to intervene, 20% revealed that they can fight the person out of the land and only 5% of the respondents revealed that they can just ignore and leave it because we harvest nothing on earth.

Table 11: Parties taking lead in reducing land conflicts in Kisoro municipality

Responses	Frequency	Percentage (%)
<i>The Local Leaders</i>	10	5
<i>Courts</i>	60	30
<i>Clan elders</i>	20	10
<i>The Local Government</i>	110	55
Total	200	100

Source: Primary Data
(2022)

The findings in table 11 revealed that 5% of the respondents suggested that local leaders are leading in reducing land conflicts, 30% revealed that courts of law play an important role in reducing land conflicts, 10% revealed that clan elders and 55% of the sampled respondents in Kisoro municipality suggested that the local government is leading in reducing land conflicts in Kisoro Municipality, Kisoro district.

Relationship between land conflicts and productivity of small plots in Kisoro Municipality

Table 12: Showing Pearson Correlation between land conflicts and productivity of small plots

Correlations		Land conflicts	Productivity of small plots
Land conflicts	Pearson Correlation	1.00	.775
	Sig. (2-tailed)		.000
	N	200	200
Productivity of small plots	Pearson Correlation	.775	1.00
	Sig. (2-tailed)	.000	
	N	200	200

**** Correlation is significant at the 0.01 level (2-tailed).**

Source: SPSS output page

Table 12 indicates that there is a very strong positive relationship between land conflicts and productivity of small plots at $r = 0.775$ and since the sig. value (.000) was far less than 0.01, which is the maximum level of significance required declaring a significant relationship between land conflicts and productivity of small plots, this implies that the level of land conflicts greatly affects the level of productivity of small plots.

Conclusion of the Findings

Bufumbira South is experiencing an increase in land disputes. Irish potatoes, the main agro-based activity in the research area, were much less productive overall because land methods for conflict resolution were known but rarely used.

Land conflicts in the Kisoro District take the form of land attracting border clashes or boundary movement, selling to several buyers, and disputes between brothers over who will inherit the family farm. All of factors increase the frequency of land disputes in Kisoro Municipality and Kisoro District.

Recommendations

Local officials and other interested parties, particularly those at the district level, need to do a better job of handling property disputes and, when it's feasible, examine the laws, regulations, and other regulations relating to land. The Uganda Law Society, Uganda Land Board, and the Ministry of Lands, Housing, and Urban Development can all help with this. Such rules ought to be quite specific about the extent and conditions under which land can be inherited. Referring to the Uganda Land Policy and the Land Act, 1998 with its revisions, proper succession mechanisms need to be included in Uganda's land-related laws.

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