IMPACT OF SUGARCANE GROWING TO THE LIVELIHOODS OF SMALL SCALE FARMERS IN NAMASAGALI SUB COUNTY

BY
KIJALI JULIUS
BU/UP/2011/732



SUPERVISOR DR. ALICE NAKIYEMBA

A RESEARCH REPORT SUBMITTED IN PARTIAL FULLFILMENT OF THE REQUIREMENT FOR THE AWARD OF A DEGREE IN BACHELOR OF SCIENCE IN NATURAL RESOURCE ECONOMICSOF BUSITEMA UNIVERSITY

JUNE, 2014

DECLARATION

I Kijali Julius, declare that am the sole author of this dissertation. The work presented in this dissertation has never been submitted to Busitema University for the award of a degree of Bachelor of Science in Natural Resource Economics or any other Higher Institution of Learning for any academic award. Thus, the work is original, a result of my own research, and where other people's research was used, the authors have been dully acknowledged.

Student	Date: 29/06/2014
Kijali Julius	
Supervisor:	Date 30/06/2014

DR. ALICE NAKIYEMBA

APPROVAL

This serves to certify that this work has been truly through the efforts of **Kijali Julius** towards partial fulfillment of the requirements for the award of a Bachelor of Science in Natural Resource Economics of Busitema University under my guidance and supervision.

Date 30/06/2014

Supervisor

DR. NAKIYEMBA ALICE

DEDICATION

This piece of work is dedicated to the family of Mr. and Mrs. Kisense James in appreciation of the support, care and love offered to me. I also dedicate to my beloved friends; Namatovu Hildahguard, Wanume Mathius, Tusiime Christopher, Basooma Sadic, Tiyonga Robert and Nalukenge Grace May the almighty Lord reward them abundantly.

ACKOWLEDGEMENT

I acknowledge my University supervisor Dr Alice Nakiyemba for the support and time offered during preparation of this work. Great thanks go to dear friends who helped during the time when this research was being conducted for guiding and encouraging me. Finally I acknowledge the family of Mr. and Mrs. Kisense James for their support. May God bless you.

I give great thanks to the Almighty GOD who gave me the gift of life and made me go through unbearable times at the University.

LIST OF ACRONYMS AND ABBREVIATIONS

NAADS	National agricultural advisory services
UBOS	Uganda national bureau of statistics
URN	Uganda radio network
NEPAD	New Partnership for Africa's Development
GDP	Gross domestic product
CO2	Carbon dioxide
SAIL	Sugar and Allied Industries limited
FAO	Food agricultural organization
KEGL	Kasinthula Cane Growers Limited
CSR	Corporate social responsibility
NAAÎP	National Accelerated Agricultural Input Programme
UGS	Uganda shillings
SPSS	Statistical package for social scientists)

LIST OF TABLES

Table 4. 1: shows relationship between education level and respondents who have benefited f	rom
growing of sugarcane	35
Table 4. 2: shows food crops that are grown in the study area	38
Table 4. 3: shows a relationship between education level and respondents who have ever face	d
hunger.	40

LIST OF FIGURES

Figure 1.1: Conceptual frame work	.,, 5
Figure 4. 1: sex of the respondent	25
Figure 4. 2: age of respondents.	26
Figure 4. 3: educational level	27
Figure 4. 4: marital status	28
Figure 4. 5: shows any other activity apart from farming	29
Figure 4. 6: land ownership.	30
Figure 4. 7: acres of land owned by respondents	30
Figure 4. 8: proportion of land allocated to sugar cane growing	31
Figure 4. 9: proportion allocated to food crops	32
Figure 4. 10: shows numbers of years respondents have been growing sugarcane	33
Figure 4. 11: respondents that benefited from growing sugarcane	34
Figure 4. 12: costs incurred in growing sugar cane.	36
Figure 4. 13: costs incurred in growing food crops.	37
Figure 4. 14: purpose of growing food crops	39
Figure 4. 15: respondents who have ever faced hunger	40

TABLE OF CONTENTS

DECLARATION	i
APPROVAL	í
DEDICATIONii	i
ACKOWLEDGEMENT	V.
LIST OF ACRONYMS AND ABBREVIATIONS	V.
LIST OF TABLES	i
LIST OF FIGURESyi	i
TABLE OF CONTENTSvii	ii
ABSTRACTx	i
CHAPTER ONE: INTRODUCTION	1
1.1 Introduction	İ
1.2 Background of the study	1
1.3 Problem statement	3
1.4 Objectives of the study	4
1.4.1 The main objective of the study is to:	4
1.4.2 The specific objectives are to	4
1.5 Research Questions	5
1.6 Conceptual frame work	5
1.7Significance	6
1.8 Limitation of the study	6
1.9 Scope of the study	7
1,10 Definitions of concepts	7
CHAPTER TWO: LITERATURE REVIEW	:n
2.1 Introduction	
2.2 History of sugarcane growing	
2.3 Sugar cane growing and incomes	
7.4 PHOO NECHELV SHOUE CARE OFOM/DIO	- 25

CHAPTER THREE: METHODOLOGY	22
3.1 Introduction	22
3.2 Research Design	22
3.3 Study sites	22
3.3.1 Study population	22
3.4 Sample size and procedure	22
3.5 Data types and Data collection methods.	23
3.5.1 Sources of Data	23
3.5.2 Data types	23
3.5.3 Data Collection methods	23
3.6 Validity and Reliability of data collection instruments	23
3.7 Ethical considerations	23
3.8 Data processing and analysis	24
CHAPTER FOUR: DATA ANALYSIS AND DISCUSSION	25
4.1 Introductions	25
4.1.1 Sex of the respondent	25
4.1.2 Age of the respondent	26
4.1.3 Educational level	27
4.1.4 Marital status	28
4.1.5 Any other activity apart from farming	29
4.2 To determine the size of land small scale farmers allocate to sugarcane growing a	nd food
crops	29
4.3 To establish the income that small scale farmers attain from sugar cane growing a	nd food
crops	32
4.4 To find out how food secure are families within the area of study	37
4.5 Strategies that will enhance sugarcane and food crop to reduce on the impacts	41
CHAPTER 5; RECOMMEDATION AND CONCLUSION	43
5.1 Introductions	43
	43

5,3 Recommendations	44
References	45
APPENDIX	47

ABSTRACT

Sugar cane growing is one of the activities that have become currently common in Busoga region and Namasagali Sub County in particular. It has been carried out in the area for the past five years and increasing with opening up of the sugar factory in Kamuli.

The main objective of the research was to assess the impact of sugar cane growing to the livelihoods of small-scale farmers in Namasagali Sub County. Specifically, the study was to determine the size of land small-scale farmers allocate to sugarcane growing and to food crops, establish the income that small scale farmers attain from sugarcane growing in relation to food crops, find out how food secure are the families within the study area, and suggest strategies that can enhance sugar cane growing and crop production enterprise to reduce on the impacts.

The study comprised of a sample of 70 respondents. We used questionnaires and interviews to gather information on sugar cane growing that involved interviewing sugar cane growers, small scale farmers in the study area. The data was analyzed using SPSS software which involved computation of percentages and frequencies including pie charts and bar charts.

The study found out that majority of the farmers own land that is used for cultivation of sugarcane and food crops where small scale farmers have not benefited from the growing of sugarcane as the income from the output is less that the costs that are incurred in growing of sugarcane hence getting less income and increasing poverty levels in the area. Also to some extent the respondent who had faced hunger the majority of them had just started growing sugarcane.

The findings from the study suggest that the government should set standard prices for the agricultural products, provide a steady market for the agricultural produce, improve on the transport network to enable farmers take their produces in the market centers, setting up of agricultural financial institutions to provide loans to farmers, putting up agricultural extension workers to provide advisory services to the farmers.

The study concludes that small scale farmers have not benefited from the growing of sugarcane but instead it has led to more poverty since farmers incur a lot of costs but get very small from sugarcane after harvesting. To some extent it also contributed to food insecurity in these families as they concentrate on sugarcane growing and ignore food production.

The study recommended that the government come in action to improve the livelihoods of the small scale farmers by setting standard prices for agricultural products, providing ready market, improving transport network, providing agricultural extension workers.

CHAPTER ONE: INTRODUCTION

1.1 Introduction

Namasagali Sub County is located in Kamuli district in eastern Uganda. It is located North Western part of Kamuli district along the eastern bank of the Victoria Nile approximately 25 km by road where the district headquarters are located. This location is approximately 89 km by road north of Jinja, the biggest city in the sub region. The coordinates of Namasagali are: 01 00 45N, 32 57 00E (Latitude:1.0125; Longitude:32.9500). Namasagali is naturally endowed with; water resources, fisheries resources, woodlands, land and soils, Energy (wood) resources, grasslands, wetlands and wildlife.

1.2 Background of the study

Sugarcane is a tropical, perennial grass that forms lateral shoots at the base to produce multiplestems, typically three to four metres high and about five cm in diameter. The stems grow into cane stalk, which when mature constitutes approximately 75% of the entire plant (http://en.wikipedia.org/wiki/Sugarcane). A mature stalk is typically composed of 11-16% fiber, 12-16% soluble 2-3% non-sugars, and 63-73% sugars, water (http://en.wikipedia.org/wiki/Sugarcane). A sugarcane crop is sensitive to the climate, soil type, irrigation, fertilizers, insects, disease control, varieties, and the harvest period. The average yield of cane stalk is 60-70 tonnes per hectare per year. However, this figure can vary between 30 and 180 tonnes per hectare depending on knowledge and crop management approach used in sugarcane cultivation. Sugarcane is a cash crop, but it is also used as livestock fodder (http://en.wikipedia.org/wiki/Sugarcane).

Uganda's economy is heavily dependent on agriculture and over 80 percent of the labor force and 85 percent of its poor people are directly or indirectly engaged in agriculture, live in rural areas and depend on agriculture for livelihood and as source of income (NEPAD, 2004).

According to the state of environmental report (2010), agricultural sector in Uganda is composed of crop and animal production, forestry and fisheries and the associated trade and processing industries. Agriculture continues to dominate the Ugandan economy though at a continually declining level. Agricultural production contributed approximately 15.1 of the total GDP in 2009

References

NEPAD (2004). New partnership for Africa development from

http://www.tandfonline.com/doi/abs/10.1080/17531055.2012.669569

NEMA (2010), National State of the Environment Report, 2010, National

Environment Management Authority, Kampala Uganda

Nelson Wesonga (2012). The sweet lure of sugar leaves Busoga farmers exposed to insecurity.

Accessed from http://tinywesonga.blogspot.com/2012/08/the-sweet-lure-of-sugar-leaves-

busoga.html on Wednesday, August 29, 2012

Word Bank (2006). Enhancing Agricultural Innovation: How to go beyond the strengthening of research systems. Washington, DC: Agriculture and Rural Development.

Uganda Bureau of Statistics (2010). Uganda Census of Agriculture for 2011/2012, volume iv http://www.infonet-biovision.org/default/ct/123/crops

FAO (2010).. Uganda Nutrition Profile 2010, Nutrition and Customer Protection Division.

Food and Agriculture Organization of the United States Accessed on 26/5/2013 from ftp://ftp.fao.org/ag/agn/nutrition/ncp/uga.pdf

FARA (2004): Sub-Saharan Africa Challenge Programme Proposal Volume 1.

Building sustainable livelihoods through Integrated Agricultural Research for Development,

Accra, Forum for Agricultural Research in Africa. pp. 260-266, April 2010

FAO, (2012). Uganda Nutrition Profile 2010. Nutrition and Customer Protection Division. Food and Agriculture Organization of the United States

S.P. Singh, B. Gangwar & M.P. Singh, (2008). Economics of Sugarcane-based Farming System in Western Uttar Pradesh. *Agricultural Economics Research Review* Vol. 21 January-June.

Waswa et al Journal of Applied Biosciences 52: 3685-3695ISSN 1997-5902, J. Appl. Biosci. 2011

Stephen Otage (2013). The rising number of sugar factories in the Busoga have threatened food security, accessed on Jan 11, 2011 http://www.monitor.co.ug/Business/Commodities/Sugarcane-farming-threatens-food-security-in-Busoga-/-/688610/1941614/-/13hnt9gz/-/index.html

Kenya sugar board (2004) Kenya sugar cane board quarterly bulletin of sugar statics January – march 2004

G. W. Nefondo, F. Waswa, L. Maina, T. Naisiko, N. Masayi & J. K. Ngaira (2010). Agrobiodiversity endangered by sugarcane farming in Mumias and Nzoia Sugar belts of Western Kenya. *African Journal of Environmental Science and Technology* Vol. 4(7), pp. 437-445, July 2010

M.D. Misango & Dr. D.V.N. Raju. (2010). Soil management approaches for sustainable sugar cane production. Retrieved on 11/November/2011 from http://www.kakirasugar.com/conte nt/about-us.

Kenya National Bureau of Statistics, (2010)