# FUELWOOD UTILIZATION IN KAGANGO SUB COUNTY, SHEEMA DISTRICT

BY

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A RESEARCH REPORT SUBMITTED TO THE FACULTY OF NATURAL RESOURCES AND ENVIRONMENTAL SCIENCES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN NATURAL RESOURCE ECONOMICS OF BUSITEMA UNIVERSITY

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## DECLARATION

I NATUKUNDA ROSSET MUJUNI do hereby declare that this research is my own work and has never been submitted to any university or higher institution for any award.

Sign.....

Date.....9th July, 2013.....

## APPROVAL

This is to acknowledge that this research entitled Fuel wood utilization in Kagango Sub County, Sheema District has been done under my supervision and is now ready for submission to the Faculty of Natural Resource and Environmental Sciences of Busitema University.

Signed.....

MR. MASABA SOWEDI

(Research supervisor)

Date.....9/7/13.....

## DEDICATION

This research is dedicated to my dear children Edgar and Pearl in appreciation of their endurance during the period of my stay at the university May God bless you my dear children.

## ACKNOWLEDGEMENT

I would like to thank God for the untold and all-time grace that gave me enthusiasm to start and finish this this research

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Lastly, I am indebted to my dear children Pearl and Edgar for their endurance during my absence from home. Thank you my dear children for enduring. May God bless you.

## ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| FAO | Food and Agricultural Organization of United Nations |
| FD | Forest Department |
| MEMD | Ministry of Energy and Mineral Development |
| MoFPED | Ministry of Finance, Planning and Economic Development |
| MUIENR | Makerere University Institute of Environment and Natural Resources |
| MWLE | Ministry of Water, Lands and Environment |
| NEMA | National Environment Management Authority |
| NFA | National Forestry Authority |
| THF | Tropical high forest |
| UBOS | Uganda Bureau of Statistics |

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## ABSTRACT

The research aimed at finding out the trend in fuel wood utilization at household level with a case study of Kagango Sub-county Sheema District. The study concentrated on the sources of fuel wood in the sub county, the factors that affect fuel wood use and any appropriate measures that could be adopted to sustain fuel wood availability in Kagango Sub County. The study was cross-sectional, used both qualitative and quantitative approaches and interviews as methods of data collection. Data was collected from a sample of 50 respondents and analyzed using excel and statistical package for social sciences (SPSS).The study revealed that, most households use fuel wood as a source of energy which they either obtain from their own woodlots, gathering from forested wetlands, stealing from neighbors and sometimes buying. Most households uses inefficient energy practices characterized with use of poor stoves most commonly the three stone hearths. Also from the study, a small percentage of the respondents had been sensitized about use of energy saving technologies and were unable to meet their energy demands.

It's however recommended that if sensitization about use of energy saving technologies in addition to distribution of seedlings were done, respondents would be able to establish woodlots so as to meet their fuel wood demands. There is need to have some biomass energy initiatives in the country that would examine some of the barriers to dissemination of biomass energy technologies (BET). The initiatives mainly cover creating awareness and dissemination of technologies for tree planting and energy efficiency, particularly improved stoves and improved charcoal production techniques. There should be some activities addressing capacity building as well. Wide spread awareness about the charcoal project whose mission is to promote, facilitate, and advocate for the widespread adoption of clean burning technologies, sustainable fuel alternatives and policies that support energy alleviation for those who depend on biomass as their primary fuel would be a good attempt to minimize fuel wood related challenge

# CHAPTER ONE

# INTRODUCTION

## 1.1 BACKGROUND

Uganda's energy sector is characterized by over 90% of the population relying on the use of biomass with wood fuel being the main source of heating and cooking in rural and urban areas. The energy balance is dominated by biomass-based fuels where firewood and charcoal contribute 88% and 6% respectively to the country's total energy consumption. The remaining 6% is shared by electricity, petroleum products and other sources of energy.

In areas where fuel and charcoal production owing hard wood tree species that are targeted without plans for replacement planting, a wide range of undesirable ecological and environmental consequences such as land ,a host of other undesirable effects has generally resulted into disorganization ,inefficient production and very low yields.

With the current Uganda's forested estate that is made up of protected forests(those gazetted and managed by government agencies as forest reserves)that amounts to about 1,490,600ha,49% comprise of tropical high forest (THF),50.3% comprises of savanna woodlands, coniferous and eucalyptus plantations cover 0.7%.

From the figure derived from the land cover map of Uganda (1996)and those of the gazette areas, about 50% of the woody biomass is outside protected areas and is therefore prone to degradation due to lack of legislative protection. These un gazetted areas comprise of tropical high forests, woodland and bush land and are heavily encroached as they act as the major sources of firewood, timber and charcoal and are also sometimes used as grazing and subsistence farmlands

.Analysis shows that the current rate of deforestation is about 2% but some areas of the country are losing their forest cover at higher rate than others, leading cause being demand for fuel wood by rapidly growing population and demand for agricultural land(NFA, 2006). Studies by NFA in2003 on national biomass estimated the national forest cover to be 924,208ha (natural and

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