

**BUSITEMA UNIVERSITY  
FACULTY OF NATURAL RESOURCE AND ENVIRONMENTAL  
SCIENCES**

**IMPACT OF RICE GROWING ON WET LANDS IN KAMULI DISTRICT**

**A CASE STUDY NAMASAGALI SUB COUNTY**

**BY**

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**A RESEARCH REPORT SUBMITTED TO THE DEPARTMENT OF NATURAL  
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FULFILLMENT OF THE AWARD OF A BACHELORS DEGREE IN NATURAL  
RESOURCE ECONOMICS**



**June 2015**

**DECLARATION**

**I Nambooze Josephine** hereby declare that this research report is my own work and best of my knowledge. It has never been submitted to any other institution of higher learning for any award.

Signature.....Jose.....


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**APPROVAL**

This is to certify that the work entitled “impact of rice growing on wetlands in Namasagali Kamuli district” has been done under my supervision and is now ready for submission to the Faculty of Natural Resource and Environmental Science.

Signature:   
.....

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Supervisor

Date:   
.....

## **DEDICATION**

I dedicate this work to the Almighty God for his divine guidance, and to my mother Namuddu Agnes, my sister Aisha Senjala and her husband Hussein Senjala ,my brothers SSegane, Kato, Waswa, Pius Mubiru and entire family for the encouragement and support they have provided for me in my entire education on which I have managed to come this far. May the God reward you abundantly.

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## **LIST OF ABBREVIATIONS/ACRONYMS**

ADC	Agribusiness Development Centre
FAO	Food and Agricultural Organization
IPCC	Intergovernmental Panel on Climate Change
JICA	Japan International Cooperation Agency
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MAFAP	Monitoring Africa's Food and Agricultural Program
MEAs	Multilateral Environmental Agreements
MoFPED	Ministry of Finance, Planning and Economic Development
MoNR	Ministry of Natural Resource
MWE	Ministry of Water and Environment
NBSAP	National Biodiversity Strategy and Action Plan
NEMA	National Environmental Management Authority
NERICA	New Rice for Africa
SPSS	Statistical Package for Social Sciences
UBOS	Uganda Bureau of Statistics
WMD	Wetlands Management Department

## **ABSTRACT**

The study examined the impact of rice growing on wetlands in Namasagali Sub County, Kamuli district. The overall objective was to assess the impact of rice growing on the wetlands in Namasagali Sub County.

Qualitative and quantitative approaches to collect data were used and this involved use of secondary data, observation, interviews and use of questionnaires. The data collected from a sample of 50 respondents was analyzed using SPSS and EXCEL statistical packages and results presented by use of pie charts, frequency tables, line graph and bar graphs.

The study revealed that men were more involved in rice growing than women and mainly youth and also it revealed that rice growing in wetlands was mainly carried out for commercial purpose. The study found out that the majority of rice growers were small scale farmers holding land size between 0.5 to 3 acres. The study found out that rice growing in wetlands have led to increased income and improved standards of living of rice growers. The study also found out that rice growing has great impact on wetlands leading to loss of animal, grass and tree species, change of water colour to green and black, bad odour, increased quantity and flow of wetland water, birds have increased. Also it has led to decreased production of other agricultural crops such as sweet potato, maize, cassava and it has also led to decreased watering area for animals and water for domestic use.

It is recommended from this study that farmers should transfer from paddy rice growing to upland rice varieties with special focus on NERICA 4 and NARIC 3 that have ability to high yielding among other species ; this will make the farmers to continually harness the benefits accruing from the wetlands such as raw-material for making mats, animal watering and grazing, firewood and reduce on loss of wetland animal, grass and tree species; organize themselves into farming groups such that they are able to device means how best they sustainably conserve and utilise their wetlands . Also Government and Non-Government should advocate and sensitize farmers about wetland conservation and translation of the wetland use policies and laws into local languages such that people can clearly understand them.

## CHAPTER ONE

### 1.1. Introduction

#### 1.2. Back ground of the study

Rice (*Oryza* spp.) is the world's most important cereal crop considering the area under cultivation and the number of people depends on it (FAO, 1995; Africa Rice Centre, WARDA, 2009). Rice is increasingly becoming important in the diet and farming systems in Africa. Madagascar is the leading producer of rice in Eastern and Southern Africa region (ADC, 2001; Luzi-Kihupi, 1998). It is estimated that by 2001, East African countries were producing 503,137 metric tons annually, which was below their estimated demand of 625,795 metric tons, primarily due to low crop yields. Tanzania which is the largest producer of rice in East Africa is estimated to produce slightly over 500,000 tons annually. In Uganda rice growing started after 1970, following the establishment by Government of commercial farms in Kibimba (Bugiri district), Doho (Butaleja district) and Olweny (Lira district). A major shift in the farming system of poor rural farmers in Uganda over the past three decades has been directed toward the commercialization of rice production as a strategy to reduce poverty in the households (Oonyu, 2011).

Rice growing in Uganda is dominated by rural small-scale farmers living in areas adjacent to and within wetlands (ADC, 2001; MAAIF, 2008) and a total of 70,000 hectares of wetland have been drained for rice production (According to Justus Imanyuma) and (according to wetland management department (2009)), in 1964 the total area of wetlands was estimated at 32,000 km<sup>2</sup> but by 1999, it had decreased to 30,000 km<sup>2</sup> or about 13% of total area and rice acreage has greatly expanded because of the increased demand in urban areas like Kampala, Mukono, Jinja, the changing food habits and the decline in the production of traditional food crops, particularly bananas, cassava, potatoes and finger millet (ADC, 2001; MAAIF, 2008; MOFPED, 2009). Since 2004, the government has directly intervened to promote the cultivation of rice as a strategy to achieve reductions in household poverty and reduce rice imports in the country and

The major rice producing areas in Uganda include the districts of Pallisa, Butaleja, Iganga, Lira, Bundibugyo and Gulu, (Oonyu, 2011).

Rice growing in Kamuli district and in particular Namasagali sub-County is recent activity particularly grown on small scale with few large scale farmers in the area. And it is grown

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