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COMMUNITY PERCEPTION ON THE ENVIRONMENTAL IMPACTS OF
OIL PALM GROWING ON BUGALA ISLAND KALANGALA DISTRICT

BY
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NATURAL RESOURCES AND ENVIRONMENTAL SCIENCES

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DECLARATION

I **NAKABIRI ZIADAH** hereby declare that this report is a result of my own efforts and it is original and it has never been submitted to any university or any higher institution of learning for any academic award. I therefore accept to be responsible for whatever is contained in it.

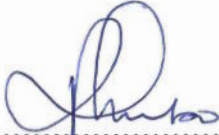
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APPROVAL

This is to acknowledge that the work titled “community Perception on the Environmental Impacts of Oil Palm Growing on Bugala Island Kalangala District” has been done by **NAKABIRI ZIADAH** under my close supervision and is now ready for submission to the Faculty of Natural Resources and Environmental Sciences.

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DEDICATION

I dedicate this report to my parents Mr. Lukwata Mohammed and Madam Nalwadda Sarah who have sacrificed everything to ensure my academic success, and my brothers Ddungu Abdu and Karagi Abubaker. I also dedicate it to my close friends Wasswa Hussein, Bisangabasaija Sufyan, Sekajugo John and Nazziwa Joan as a sign of appreciation for their unending efforts and support for my wellbeing. Thank you for giving me such a moral foundation on which I have managed to come this far. May the Almighty Allah reward you abundantly!

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LIST OF ACRONYMS

KOPGT	Kalangala Oil palm Growers Trust
KDLG	Kalangala District Local Government
NGO	Non Government Organization
KADINGO	Kalangala District NGO Forum
NAPE	National Association of Professional Environmentalists
IPCC	Intergovernmental Panel on Climate Change
MWE	Ministry of Water and Environment
EIA	Environmental Impact Assessment
NEMA	National Environmental Management Authority
NFA	National Forestry Authority
AIC	Aids Information Centre
VODP	Vegetable Oil Development Project
OPUL	Oil palm Uganda Limited
MWE	Ministry of Water and Environment
SPSS	Statistical Package for Social Scientists
WB	World Bank
EU	European Union
MPOC	Malaysian Palm Oil Council
JOPE	Journal of Oil Palm and the Environment
Ha	Hectare
NPK	Nitrogen Phosphorous Potassium
CBOs	Community Based Organizations
IFAD	International Fund for Agricultural Development
FAO	Food and Agriculture Organization
UNFCCC	United Nations Framework Convention on Climate Change

CBD	Convention on Biodiversity
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
CFR	Central Forest Reserve
FOE	Friends of the Earth
UPPAP	Uganda Participatory Poverty Project
PPE	personal protective equipment
AIC	Aids Information Centre
HIV/AIDS	Human Immune Virus/ Acquired Immune Deficiency Syndrome
DNRO	District Natural Resource Officer
DFO	District Forest Officer
GWP	Global Warming Potential
EFB	Empty Fruit Bunch
FFB	Fresh Fruit Bunch
POME	Palm Oil Mill Effluent
IPM	Integrated Pest Management
CPO	Crude Palm Oil
USD	United States Dollar
BSR	Basal Stem Rot
RSPO	Roundtable on Sustainable Palm Oil

ABSTRACT

This study focused on the community perception on the environmental impacts of oil palm growing on Bugala Island, Kalangala district.

Qualitative methods were used to collect data were used and this involved using questionnaires, interviews, observation and secondary data. The data was collected from a sample of 71 respondents and analyzed using excel and SPSS statistical packages and results presented using by use of frequency tables, pie charts, doughnuts and graphs among others.

In depth review of literature of various scholars, environmental agencies' reports and publication as well as browsing through internet was done with aim of achieving of the objectives of the study. The study focused on the most significant impacts of oil palm cultivation on soil, vegetation, micro-climate and water.

The study revealed that more men were involved in the lucrative activity of oil palm growing and majority of them were youths. The study also revealed that most of the growers of oil palm were married and majority of the respondents had attained up to secondary level of education. The study found out that majority of the people on the Bugala Island had stayed for more than 21 years. The major economic activity on the island was fishing with 32% followed by farming and the major crops grown were oil palm, cassava and matooke. The study revealed that the major problems faced by oil palm growers were pests and diseases, seasonal variations, delayed payments among others. The study also revealed that oil palm growing has adverse effects such as eutrophication, silting, destruction of breeding cycles among others on water resources, soil compaction, exhaustion and death of living organisms among others on soil.

The study revealed Changes in rainfall patterns and increase in temperatures among others as the major adverse effects of oil palm growing on micro climate, and deforestation on vegetation cover. The study also revealed that the respondents were aware of environmental laws and policies related to the activity of oil palm growing and these included observing the 200m buffer zone, wetlands policy, bye laws among others. Then also respondents were aware of the different forms of government intervention for example giving out seedlings, protecting central forest reserves, employing environmental personnel among others. Finally the study revealed that the people engaged in oil palm growing had received different forms of environmental guidance when growing the oil palm.

Basing on the findings of this study it is recommended that the growers of oil palm should plant trees at the borders of their plantations to reduce soil erosion, should not apply chemicals on the palm trees that were planted with in the buffer zone, then also should ensure that the buffer zones from water resources are observed all these will enable them carry out the activity with less contamination of water resources. The growers of oil palm should separate these gardens from food crop gardens and also should plant crops with same root system as the palm trees especially when they are still young, this will enable them solve the challenges associated with food insecurity. The company should encourage reforestation, planting trees at the borders of plantations and then the government should enforce the protection of central forest reserves because these shall curb deforestation, biodiversity loss and changes in the micro climate

CHAPTER ONE; INTRODUCTION

1.0 Introduction

This report presents an assessment of the community perception on the environmental impacts of oil palm growing on Bugala Island kalangala district.

1.1 Background of the study

Oil palm is a tropical tree crop which is mainly grown for the industrial production of vegetable oil and its cultivation has become central in the recent years. For industrial purposes, the oil extracts are used mainly for producing cooking oil, cosmetics and detergent making. The oil is also treasurable in the automobile industry, where the fossil fuels are decreasing and the demand from biofuels keeps increasing at the global scale.

In 1991, the government started the commercialization of oil palm growing on the Bugala Island and this was done through a public private partnership (ppp) between bidco and the state. This project was one of the components of vegetable oil development project (VODP) implemented by the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF).

The intention of promoting oil palm in Uganda was to alleviate poverty, increase domestic production of vegetable oils and reduce Uganda's reliance on vegetable oil imports. Before the beginning of the Vegetable Oil Development Project (VODP), Uganda was importing USD 90 to 150 millions of the precious oil every year according to the International Fund for Agricultural Development (IFAD, 2008) Later in 2003, the state acquired a loan from international fund for agricultural development and a nucleus estate was established on the island. Bidco together with Wilmer an international oil palm plantation company from Malaysia established oil palm Uganda limited (OPUL) which was responsible for running the nucleus estate and also ensuring production of crude oil that was to be taken to Jinja to make final products such as soap and cooking oil. The oil palm growing project is jointly funded by the International Fund for Agricultural Development (IFAD), Uganda government and the private sector comprising of BIDCO, Wilmer and out growers (MAAIF, 2000)

In 2003, at the beginning of oil palm growing the government intended to protect the ecosystem of Lake Victoria by imposing environmental constraints to BIDCO through the Environment Impact Assessment (EIA). The initial conditions mentioned that a buffer zone of 200 meters along the shores would prevent

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