

# **DRIVERS OF RIVERBANK DEGRADATION**

**A case of Aturukuku/Osia river in Rubongi sub-county, Tororo District.**

**BY**

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## DECLARATION

I ANYANGO ROBINA, declare that this research report is my original work. It has never been submitted to any University or higher institution of learning for a degree award or any other academic award. I, therefore, take full responsibility for any errors that may arise in this work as a result of omission or otherwise.

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## APPROVAL

This serves to certify that this research by **Anyango Robina** has been submitted with my approval as a University supervisor of Busitema University, Namasagali campus.

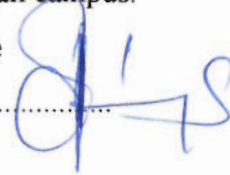
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25/06/2019

Signature



## **DEDICATION**

This report is dedicated to my dear parents Mr Odoi David Livingston and Mrs Kyakuwaire Florence, my lovely sister Mrs. Auma Barbra who managed to sacrifice everything for my education. Thank you for giving me such a strong academic and moral foundation on which I have managed to come this far. May the good **Lord** reward and bless you abundantly.

I also dedicate it to all people who will read it.

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I would like to thank God for enabling me reach this far in my academic life struggles.

Though I did this work alone, i was socially and technically offered support and the following need to be appreciated.

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I would like to thank the community living adjacent to Aturukuku River for availing me with the information that has enabled me come up with research findings that I used in compiling this report.

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## **ABSTRACT**

The research study on the drivers of riverbank degradation of Aturukuku River was conducted on an 8km stretch in Rubongi sub-county, in Tororo district.

The aim of the study was to assess the drivers of riverbank degradation, assess the different activities carried out in the area and determine those that contribute to riverbank degradation, and finally assess the appropriate measures suitable for reversing riverbank degradation.

A number of methodologies used included interviews, questionnaires, observation and secondary data to obtain information. The gathered information was coded and edited in Excel spreadsheet, SPSS, Minitab and analyzed using bar charts and tables.

Findings revealed that riverbank degradation is majorly caused by activities such as agriculture, sand excavation, and cattle grazing. In addition to that, it was also found out that the negative impacts of riverbank degradation out weighed the positive ones. The study further established that riverbank degradation is on the increase as a result of poverty, poor governance, increased population that increase pressure on land, and unsustainable land use in the water areas of the river.

The study makes some recommendations that include; a forestation, buffer-zone demarcation, awareness campaigns, ridging, bridging, Regulations and dam construction to cover the consequences of riverbank degradation.

## **LIST OF ACRONYMS AND ABBREVIATIONS**

|              |  |
|--------------|--|
| <b>NEMA</b>  | National Environment Management Authority              |
| <b>SPSS</b>  | Statistical Package for Social Science.                |
| <b>FAO</b>   | Food and Agricultural Organization.                    |
| <b>DF</b>    | Degree of freedom                                      |
| <b>NGO</b>   | Non Government Organization                            |
| <b>LC</b>    | Local Community  |
| <b>NAADS</b> | National Agricultural Advisory Services                |
| <b>UPPAP</b> | Uganda Participatory Poverty Assessment process        |
| <b>GDP</b>   | Gross Domestic Product.                                |
| <b>NFTPA</b> | National Forestry and Tree Planting Act.               |
| <b>MAAIF</b> | Ministry of Agriculture, Animal Industry and Fisheries |
| <b>NPF</b>   | Nature Palace Foundation                               |
| <b>NAPE</b>  | National Association of Professional Environmentalists |

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## **CHAPTER ONE: GENERAL INTRODUCTION**

### **1.0. Introduction**

Riverbanks are continuously utilized in a hazardous manner resulting to the degradation such as collapsing of the riverbanks, siltation of the river which raises its level thus causing floods with minimum waters during the peak of the rains. Many streams and rivers were reported to have flooded due to riverbank degradation causing a lot of disasters. It is on this premises that interests of concern on riverbanks arose; that information on the drivers, activities that contribute to the degradation, effects and possible mitigation and control measures became wanting for the government, planners and stakeholders.

### **1.1. Background**

Population pressure in Tororo district in general and in Rubongi sub-county in particular is one of the factors that persuade people of Rubongi community to cultivate along the riverbanks and other areas around the river. The fertility of the soils is also one of the pull factors. Crop cultivation and livestock grazing form the main land use. Cultivation which is mainly done on the riverbanks has led to the depletion of the natural vegetation and this exposes the soil to erosion hence the type of land use in the area seem to be unsustainable as there is hardly any observable soil and riverbank conservation in use.

Riverbank degradation have often led to flooding in the area that is Rubongi sub-county in particular during the rains with adverse effects and the habitat people have learnt to bear with the losses thereof. The El-Nino exceptional high rain rainfall of September 1997 generated much run off and sediments thus leading to floods.

### **1.2 Statement of the problem.**

Riverbanks are utilized in a hazardous manner resulting in the degradation such as collapsing of the Riverbanks ,siltation of the river bed thus raising its level that cause floods with minimum waters during the peak of the rains.

In addition to that, cattle watering along the riverbanks are not organized i.e. sections built/ designed for livestock water is not planned, cultivations up to the banks facilitate soil erosion and siltation, washing clothes/bathing with detergents pollutes the water, tapping water for irrigation

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