



**BUSITEMA
UNIVERSITY**
Pursuing Excellence

FACULTY OF ENGINEERING

**DEPARTMENT OF MINING AND WATER RESOURCES
ENGINEERING**

FINAL YEAR PROJECT REPORT

**DESIGN AND SIMULATION OF A GRAVITY FLOW SCHEME FOR
BUFUMBO SUBCOUNTY**

BY

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*A final year project Report submitted to the Department of Mining and Water Resources
Engineering as a partial fulfillment of the requirements for the award of a Bachelor of
Science in Water Resources Engineering*

ABSTRACT

This project was designing a gravity flow scheme for Bufumbo subcounty to supply the insufficient water supply.

Therefore, this project sought to design a water supply system to improve on the livelihoods of the people by provision of water. It will help the individuals carry out all activities which require the use of water.

This report consists of five chapters, chapter one contains the background which looks at the global, nationwide themes about water supply and generally looks at water supply in Bufumbo, Problem Statement, Significance of the study, Justification, objectives and scope of the study.

Chapter two contains the literature review of the project, Chapter three shows the various steps that I undertook to achieve my specific objectives, chapter four shows the Results and discussions and chapter five has the conclusion, Recommendations and appendices

DECLARATION

I JOSEPH GESEI, BU/UP/2015/669 hereby declare and confirm that this report is original copy of my work and has never been presented or submitted by any other person for any other Academic awards at any institution of higher learning except me.

Signature:

Date:

APPROVAL

This piece of work has been approved by;

MAIN SUPERVISOR

MR. BAAGALA BRIAN SSEMPIIJA

Signature.....

Date.....

DEDICATION

This piece of work is dedicated to all those who have supported, guided and financed me throughout this level of education especially my parents.

Sincere dedication to the Staff of Mbale District Water Office who have granted the opportunity to carry out my research from this site. Great thanks to Eng. Simon Wandera, the District Water Officer, and Mr. Abubakar Gidudu, Scheme Attendant.

ACKNOWLEDGEMENT

I am very grateful to the Almighty God for the protection, guidance and good health he has provided to me.

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I would like to thank the staff in the department of Mining and Water Resources Engineering and other lecturers for their guidance and assistance during the research.

Sincere appreciation to the Staff of Mbale District Water Office who have granted the opportunity to carry out my research from this site. Great thanks to Eng. Simon Wandera, the District Water Officer, and Mr. Abubakar Gidudu, Scheme Attendant.

I appreciate my parents for their guidance and financial support they have rendered to me. May the Almighty God bless the works of their hands!

Finally, I appreciate my friends who helped me to accomplish this project work especially Andrew Nsubuga, John Achuka and Bright Kemanzi. May the Good Lord bless and richly reward them with success in their endeavors.

LIST OF ABBREVIATIONS

WHO.....	World Health Organization
NWSC.....	National Water and Sewage Corporation.
OD.....	Outside Diameter
HDPE.....	High Density Polyethylene
uPVC.....	unplasticized Polyvinyl Chloride
nr.....	number
Km.....	Kilometer
MDPE.....	medium density polyethylene
GI.....	Galvanized Iron
GPS.....	Global Positioning System
HH.....	Household(s)

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