



**BUSITEMA
UNIVERSITY**
Pursuing Excellence

FACULTY OF ENGINEERING

DEPARTMENT OF WATER RESOURCES ENGINEERING

FINAL YEAR PROJECT IMPLEMENTATION REPORT

**DESIGN AND CONSTRUCTION OF A REMOTE CONTROLLED SOLAR POWERED
WATER HYACINTH REMOVING MACHINE.**

(Case study: Lake Victoria, Jinja)

BY

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Abstract

Water hyacinth is a floating plant scientifically known as *Eichhornia Crassipes* which is a problem throughout the entire world in terms of navigation, national security, irrigation and drainage water supply, hydro-electricity and fishing whose rate of multiplication and growth is high in areas where it is introduced. The methods used for the removal of water hyacinth include mechanical removal using various machines, biological removal using weed's natural enemy, physical and chemical deposition. In Uganda, the water hyacinth is rapidly growing on water bodies of Lake Victoria and Lake Kyoga with majority of its hotspots on Lake Victoria and therefore essential to remove it from water bodies. The aim of this proposed research work is to design and construct a remote controlled solar powered water hyacinth removing machine which can effectively collect the aquatic weed (water hyacinth), chop them in smaller quantities and moved to the shore to be for other uses or disposed or burnt.

Keywords: Water hyacinth, remote control, solar powered, shredding, DC motors,

Declaration

We the undersigned, declare that this research proposal is our original work, except where due acknowledgement has been made. We declare that this work has never been submitted to this University or any other institution for funding/for partial fulfillment for any award.

Signature:

Date:

Signature:

Date:

Supervisor(s) Approval

This research proposal submitted as a partial fulfillment for the award of Bachelor Degree in Water Resources Engineering of Busitema University, with our approval as the academic supervisor(s).

Signature:

Date:

Acknowledgement

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