



**BUSITEMA  
UNIVERSITY**  
*Pursuing Excellence*

***FACULTY OF ENGINEERING***

***DEPARTMENT OF CHEMICAL & PROCESSING ENGINEERING***

***FINAL YEAR PROJECT***

***TITLE:***

***DESIGN AND CONSTRUCTION OF A MOTORIZED PEELING AND JUICE  
EXTRACTION MACHINE***

***BY***

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## ABSTRACT

Mango processing has become increasingly important in Uganda and represents an important food source. In addition, demand for the fruit is high and mangoes can provide small farmers with a valuable source of income.

Mangoes can be processed into purée from whole or peeled fruit. The most common way of removing the skin is hand-peeling with knives but this is time-consuming, expensive, and takes off flavors which may be present in the skin. Steam and lye peeling have been accomplished for some varieties but it has very high investment, operation and maintenance costs, requires skilled labor for operation and maintenance.

The purpose of this study is to design and construct a mango destoning machine that will be able to extract clean mango puree at household level which is beneficial to human health, easy to operate and affordable to both small scale farmers.

This shall be achieved through the adoption of the methodology below; research, analysis, fabrication, performance testing and economic analysis of the machine.

All those methodologies shall result into, an efficient, well assembled, tested and economically evaluated machine if all met.

## ACKNOWLEDGEMENT

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Great thanks goes to my supervisors Mr. Thomas Makumbi for the tireless efforts rendered to me during the preparation of this piece of work, may the good Lord abundantly bless u so much. I as well thank the workshop guys where I fabricated my machine Pr.Munyegera, thanks for the time and all the assistance.

## DECLARATION

I KALUBA MICHEAL, declare that the work in this proposal report is my own except where indicated with reference within the text and that it has never been submitted before to any university or institution of higher learning for the award of Degree in Agro Processing Engineering, APE. I therefore take full responsibility over it.

Student's signature: .....

Date: .....

## APPROVAL

This proposal report has been submitted for examination with approval from the following supervisor:

Mr. Thomas Makumbi

Signature .....

Date.....

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