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BUSITEMA UNIVERSITY

FACULTY OF ENGINEERING

DEPARTMENT OF PTI

DESIGN AND DEVELOPMENT OF AN ECONOMICAL AND HIGH-YIELD COTTON SEED OIL EXTRACTION SYSTEM PROPOSAL

**Submitted as a partial Fulfillment for the award of
Diploma in Ginning and Industrial Engineering
(DGI)**

By

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ABSTRACT

This project focuses on the conception and construction of an affordable and efficient cotton seed oil processing machine aimed at small-scale production. By integrating innovative design elements and leveraging cost-effective materials, the system addresses the need for accessible technology in the agricultural sector. The machine employs a multi-stage extraction process optimized for maximum oil yield while minimizing resource consumption. Additionally, emphasis is placed on sustainability through the incorporation of eco-friendly components and energy-efficient mechanisms. This academic endeavor aims to contribute to the advancement of feasible solutions for rural communities and emerging markets seeking to enhance their cotton seed oil extraction capabilities in a cost-effective and sustainable manner.

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DECLARATION

"I, MUJUNI EDMON, registration number BU/UG/202/1607, hereby affirm that all the information provided in this proposal is accurate, complete, and truthful to the best of my knowledge and belief. It is the genuine work of my experience and research about the topic in question. It has never been submitted to any other institution. I, therefore, present it to Busitema University Examiners for examination purposes.

Signature: 

Date: 25/05/2024

APPROVAL

"I hereby approve and endorse the project proposal titled 'Design and Development of an Economical and High-Yield Cotton Seed Oil Extraction System' presented by MUJUNI EDMON, registration number BU/UG/2023/1607, I have thoroughly reviewed the content of the proposal and find it to be well-researched, coherent, and aligned with the academic standards of Busitema University. The proposed project addresses a crucial need in the cotton industry, aiming to create an affordable and efficient cotton seed oil processing machine. I believe it holds immense potential to significantly impact small-scale production. I fully support the submission of this proposal for examination purposes and anticipate the successful execution of the project.

Supervisor's Name: Okunji Samson

Signature: [Signature]

ACKNOWLEDGMENT

I express my sincere gratitude to the PTI Department at Busitema University for their unwavering support and guidance, pivotal in the conception and construction of the affordable and efficient cotton seed oil processing machine. Their mentorship and resources have been invaluable. I am deeply thankful to my parents and relatives whose unwavering encouragement and support have been the cornerstone of this endeavor. Their belief in my aspirations and their continuous assistance, whether through advice or practical help, has been indispensable. Their contributions, both tangible and intangible, have played a pivotal role in the development and execution of this innovative and sustainable solution for small-scale production.

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