



**COMPARISON OF THE COOKING EFFICIENCY OF CHARCOAL AND
EUCALYPTUS SAWDUST BRIQUETTES**

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Declaration

I NAMBALE AMOS Reg. No. BU/UP/2017/1369 hereby declare that this Project Report titled “*Comparison of the Cooking Efficiency of Charcoal and Eucalyptus Sawdust Briquettes*” is original and has not been published and/or submitted for any other degree award to any other University before.

Signature: -----

Date: -----

Approval

This Project Report titled “*Comparison of the Cooking Efficiency of Charcoal and Eucalyptus Sawdust Briquettes*” has been submitted for Examination with the approval of the following supervisor/s.

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Dedication

This project work is dedicated to the ALMIGHTY GOD for making me being able to start up and successfully finish in sound health. Also to my parents as well for being supportive in the course of this project work both financially and spiritually. To all my church members for the moral support and the spiritual support with the sincere prayers they made for me to attain this success. To my brothers, sisters and close friends for being supportive and kind to me during the course of this project work. Finally, I take sincere appreciation to my dear friend **Mr. Isabirye Ayubu** for the kind tireless support he rendered to me during this work. May the almighty God bless you all abundantly.

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Abstract

The study was aimed at making a better quality of briquettes from eucalyptus sawdust for efficient cooking in comparison to the available charcoal and is guided by the following objectives, to determine the time taken to boil a certain amount of water at a particular interval, to determine the proper ratio of the sawdust and loam soil for quality heating as compared to charcoal and to determine the time of lighting both charcoal and the produced briquette.

This study mainly focused on efficient use of the sawdust after cutting trees for other purposes for example roofing rather than being left wasted. The research was motivated by; the need to produce an affordable and efficient source of fuel for cooking so as to help the local people who cannot cope with the rapidly changing prices of charcoal, fire wood and other forms of fuel energy for example electricity, the need to conserve the environment as the study looks at; reduction in cutting down of trees for fire wood, the need also to create an income generating business for the local people and help people who don't have tree plantations to also access fuel.

Experimental methods were used by heating one liter of water in the sauce pan using the designed briquettes made from different ratios of soil and sawdust and the variation of temperature with time for every 20 minutes after one minute were noted.

A Graph of temperature against time was plotted to analyze the results of the study considering temperature of water and time taken to heat up the water.

The researcher therefore found out that better quality of the briquettes was made from a mixture of sawdust and loam soil in the ratio of 1:5 respectively as it is observed by figure 4.2.