

UNIVERSITI TEKNOLOGI MARA

**DESIGN AND FABRICATION OF
RICE WASHING MACHINE**

**MUHAMMAD LUQMAN ARIF BIN MOHD
AZMI 2020894102**

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ABSTRACT

Rice is a daily staple food and the country's primary source of calories. As a result, rice is in great demand. The automated system must be given priority to meet the demand. The issue is that hand-washing rice grains in large quantities is time-consuming. As a result of this invention, caterers will be able to wash their large quantities of rice grains more efficiently and with less energy. The problem is that washing rice grains in large quantities by hand is laborious. As a result of this project, the caterers will be able to wash their vast numbers of rice grains with little energy in a short time. Because this machine works with rice, stainless steel has been used for the spinner. This project is expected to be cheap and durable. In conclusion, this machine will benefit caterers, college students, and lower-income families at an affordable price.

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CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Malaysia has transitioned from an agricultural-based to an industrial-based economy over the last few decades. An economy based on manufacturing and services. In the fact that the agricultural sector's contribution to GDP has decreased, despite its relative decline in importance, it remains a critical component of the economy[1]. In Malaysia, rice is the most well-known grain. Rice is preferred by almost everyone in Malaysia over any other grain. Rice is very important in Malaysian society since it promotes agricultural activities and helps to feed a growing population[2]. As a significant pillar of Malaysian agricultural production, the rice sector is also an important source of employment. Furthermore, rice is a daily staple food and the major source of calorie intake in the country. Because of that, the demand for rice is so high. In order to satisfy the demand, the automated system needs to prioritize. The problem is that washing rice grains in big quantities by hand is laborious. Especially caterers who prepare enormous quantities of rice on a daily basis for their customers. Due to the fact that the washing would be done by hand, most of caterers may have difficulty washing big numbers of rice grains. The caterers will be able to wash their vast numbers of rice grains with greater efficiency and less energy as a result of this machine.

1.2 Problem Statement

The issue at hand is that rice grains are difficult to wash by hand in large amounts. Especially caterers who make large amounts of rice daily for their tenants.