

UNIVERSITI TEKNOLOGI MARA

**DESIGN AND FABRICATION OF
PORTABLE SINK**

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ABSTRACT

A portable sink is a project that work basically just the same as traditional sinks because it completely supplied with water supplies. The difference between traditional and this portable sink are a portable sink is not connected with plumbing system, so water does not flow from the source and into the pipes. Most of the food stalls are facing difficulties due to lack of sink in their stall. Mostly, owners will bring pail or water container from their home to the stall to be use as their sink. Other than that, traditional sink needs plumbing system to supply water that would be hard for food truck vendors to install at their stall. Besides, some improvement features are added in this project to make an easier for them to use sink at their stall and this project also can bring them easily with folding method that can reduce space used to store the sink. Additionally, this project also used no plumbing system for the sink and the anchor for the sink used material from stainless steel that difficult to rust if it used at outdoor event. The objective of this project is to provide clean and safe running water for handwashing stations wherever it may be needed. In conclusion, hope this project will help all of food stalls to solve their problems in having clean water.

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CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Portable sinks provide hand washing stations with hot or cold running water for use in environments without access to plumbing or running water. The food vendors simply can unpack, place in the desired location, fill with water and plug them in. Some of the portable sinks are available with battery or propane power so they can be operated without electricity.

There are many issues related to this sink problems faced by the vendors. One of the issues is high cost of installation due to complex plumbing system. Other than that, other issues that are faced by the vendors is lower mobility and hard to handle. Lastly, vendors always facing an issue to find water supplies for the traditional sink. This is because traditional sink needs to use direct water supply.

Portable sink is made to solve all the problems that food vendors facing off. Portable sink is using cheap and low-cost materials that have good durability same with traditional sink. It only used simple piping for waterways going in and out. This project will ease the vendors to bring the sink outside their stall to be use for their customers because it has wheels under the portable sink.

To overcome these problems, I propose a portable sink was proposed to help all the food vendor's issues about the sink for their customers. This project is portable as it is called because it is easy to handle and easy to move to other places. This portable sink uses mild-steel as it material for the frame because the material can use for long time and durable. It uses a concept like a method that can extend the steel to be longer and the height can be adjust.