



UNIVERSITI TEKNOLOGI MARA
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DESIGN, ANALYSIS AND FABRICATION OF
AUTOMATIC FEEDER FOR COWS

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It would be nice if I express my gratefulness towards God here in my dissertation, as I am able to complete this long, tough, and challenging journey of Final Year Project. All the hard works and struggles were being witnessed by this dissertation. I am so grateful that I am still being given the energy, strength, and the motivation to complete my project, which is fabricating the Automatic Feeder For Cows.

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ABSTRACT

Unhygienic cow barns do contribute to the tendency of the cows getting infected by Lumpy Skin Disease (LSD). Farms that are prone to flies, ticks and lice are risky for the cows because they might be infected, since we do not know which flies or ticks are bringing the LSD disease. Even though this disease is not pandemic or seldomly spread, it is still important to keep the cows healthy as they are the key in cattle industries, where human consume their meats, milks, and eccetera. Nobody wants to consume sick cows' products, so that is why cows' health is significant. Little by little efforts are being done to cure the cows, but for this project, it is to prevent any future spread of the LSD among cows, that is why the Automatic Feeder for Cows is being fabricated even though it started from fabricating the prototype first. The prototype of this project has been successfully fabricate. It has an element which will automatically release the food when needed only, and has covers to protect the foods from flies and ticks. The prototype is able to release the food automatically when the operator needs to feed the cows.

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INTRODUCTION

1.1 Background of the project

Lumpy Skin Disease (LSD) is a disease which is infectious that is caused by a virus from a family of *Poxviridae*. The disease can be detected by inspecting the lumps on the cows' skins. This product, which is Automatic Feeder for Cows is specially design to at least help reduce the risk of Lumpy Skin Disease among livestock. Livestock feeding is one of the ways to maintain the livestock animals. Farmers usually feed cows with a bunch of hay. Hay is considered as a nutritious food for cows as it supplies energy, protein, and sugar and the low-soluble carbohydrates that are indispensable for digestion. but it has to be plucked, taken care very carefully, otherwise the nutrients in the hay will be destroyed and will subsequently contribute to other diseases among cows. Healthy cows are important in cattle industry, not only being healthy but also being clean.

Therefore, to ensure the freshness of the hay, proper ways of handling it is very important. It also requires protecting the hay from being overly exposed to the sun and rain. This method will not only preventing the hay being destroyed by natural causes, but also protecting it from any flies or parasites that might contribute to the spread of Lumpy Skin Disease, for example mosquitoes and flies.

1.2 Problem statement