



**DESIGN AND FABRICATION OF ROBOTIC  
SYSTEM FOR INTENSIVE FISH FARM  
INDUSTRIES**

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## **ABSTRACT**

This project discusses about design and fabrication of robotic system for intensive fish farm industries. The first stage of the project is about identifying the need requires in the fish farm sector and produces the strategy in order to meet the need. The solution here is to design and fabricate a prototype of robotic system for feed feeder based on problems and user requirements in the fish farm sector. The information about fish farm that had been obtained be gathered and studied. Then, the problems had been identified and the user requirements had been listed. After that, the user requirements been analyzed in order to get the important feature and produce engineering specification of the feed feeder. The analysis of the requirement and the design specification then been used to create the system and the design concept of the feed feeder. Finally base, on the system and the design concept, the system of feed feeder has been fabricated.

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## CHAPTER I

### INTRODUCTION

#### 1.0 INTRODUCTION

It is important to increase the Aquaculture stuff specifically fish because of many country in the world including Malaysia make fish as a main protein resource compare to the other animal, instead a request of fish increase critically almost to 9.1% between 1985 to 2004. Otherwise fish is acceptable to all of the ethnic groups of Malaysia. Per-capita annual consumption of fish increased from 51 kilograms in 1996 to 56 kilograms in 2010. Demand for fish and seafood is forecast to grow to 2 million tones by 2005 and local fish supply is not expected to be able to fully satisfy demand (*Hanafi, H. H, 1991*). Imports of fish and seafood are therefore forecast to increase in future. Therefore, Aquaculture sector us important to increase the production of fish not only to fulfil country's needs but also to export .

Fish is the cheaper protein resource and easy to get in Malaysia. However, there are still several problems in the aquaculture sector especially for east of Malaysia such as water pollution, the sea is big seething, the destroyed of fish prolific, lack of boat dock, equipment use is old (traditionally) and transportation system is not advancing. For that reason, the government has been vicious the fishermen to culture the fish (fish farm) as commercial.