



**A CASE STUDY OF RESISTANCE SYSTEM
TOWARDS FISHERMAN'S BOAT IN KUALA
SELANGOR**

**M.MAHATIR BIN MOMSARIP
99191293**

A thesis submitted in partial fulfillment of the
requirements for the award of Bachelor Engineering
(Hons) (Mechanical)

**Faculty of Mechanical Engineering
Universiti Teknologi MARA (UiTM)**

MARCH 2004

ACKNOWLEDGEMENT

I would like to express my sincere gratitude and appreciation to my supervisor Mr. Shaharudin for his full support and commitment towards the completion of this project. It is a pleasure working with all the respective people in UiTM. The relevant authority officers from Jabatan Perikanan Negeri Selangor especially Encik Zaidil Abdilla Ahmad Salehuddin. Officer from Persatuan Nelayan Kuala Selangor, Encik Suzaini bin Sulaiman who was helping me a lot especially in the early stage of the project. Not forgotten, all the fishermen from Sungai Buloh whom I met during the conduct of surveys. I really appreciate your willingness to share your precious knowledge and experience with me, which from my point of view, without your feedback and information I couldn't even started this project.

To all of you, I would like to wish you all the best, a good time and lot of success in your current and future endeavors. It is pleasure and fun working with you all.

ABSTRACT

The Fishing industry is the main important business among the people in Kuala Selangor. However according to the statistic produced by Jabatan Perikanan Negeri Selangor the productivity of fishing industry is becoming stagnant from year to another. Initiative is taken by Faculty of Mechanical Engineering, Universiti Teknologi Mara to identify their main problem by conducting this case study. Apparently this study is trying to provide a best solution in term of engineering scope. After conducting a survey, Resistance System is identified as the main barrier on Class A fishing boat performance and deeper studies are done to get the exact value of total resistance on this boat. Later this value will open a door for more discovery for example getting the value for effective horse power for engine boat, propulsive coefficient and many more which are important for determining the efficiency of a fishing boat performance as a whole.

TABLE OF CONTENTS

CONTENTS	PAGE
PAGE TITLE	i
ACKNOWLEDGEMENT	ii
ABSTRACT	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	viii
LIST OF FIGURES	ix
LIST OF ABBREVIATIONS	x

CHAPTER 1 INTRODUCTION

1.1 Background of Project	1
1.2 Objective of Project	2
1.3 Scope of Project	2
1.1.1 Important of Project	3

CHAPTER 2 FISHING INDUSTRY IN KUALA SELANGOR

2.1 Information about Fisherman in Kuala Selangor	4
2.2 Problem Faced by Fisherman	10
2.2.1 Environment	10

CHAPTER 1

INTRODUCTION

1.1 Background of Project

This project was based on the initiative of Faculty of Mechanical Engineering, Universiti Teknologi Mara to initially contributing to fishing industry in Kuala Selangor. The area or prospect that study are concentrated was basically more on resistance system due to decision making after completing the survey. Furthermore resistance is the initial and vital knowledge that should be acquire before further study can be done to other areas such as propulsion system, floating and stability system, maneuverability system and so on.

Study on propulsion and resistance effect towards fisheries in Kuala Selangor is conducted purposely to know more about the real problem faced by the fishermen. Obviously the result gained from the survey showing us that resistance play the most important role in daily sea operation. This case study started to concentrate more on resistance system rather than the rest. Four theoretical calculations can be applied in order to get the value of total resistance. They might given difference values due to its main reason. Only two calculations can be done due to the availability of data.

Data for calculation is getting from Technical Specification for Vessel 15 GRT Fishing Vessel (Zone A) as this is the type of boat which this has the most population in Kuala Selangor. There is a small fishing boat with detachable engine or locally known as *bot enjin sangkut*, which has more numbers compare to the latter. But this type of boat couldn't do much in term of engineering due to its size as well as its short distance and light operation.