

**SIMULATION OF FINANCIAL PROFITABILITY AND SENSITIVITY  
ANALYSIS OF OIL PALM PRODUCTION IN MALAYSIA**

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**Final Year Project Report Submitted in  
Partial Fulfilment of the Requirements for the  
Degree of Bachelor of Science (Hons.) Technology  
and Plantation Management  
in the Faculty of Plantation and Agrotechnology  
Universiti Teknologi MARA**

**JULY 2019**

## **ACKNOWLEDGEMENTS**

Alhamdulillah, praise to Allah as I was able and had finished my degree thesis. I have had difficult times during the course of my degree thesis and therefore would like to thank some people. I revere the patronage and moral support extended with love, by my parents who financially support and passionate encouragement made it possible for me to complete this final year project.

First my sincerest thanks to my supervisor, Sir Muhamad Zahid bin Muhamad for giving me the chance to carry out my final year project under her supervision. Since that time. Sir Muhamad Zahid has provided a constant source of opportunity and inspiration. I appreciate the patience and support from my supervisor and cannot express my gratitude.

Lastly, I had faced a very tough obstacle and situation in the process of completing my final thesis. But I was able to overcome it and make my work ease with the help from my family, friends and other related person that had helped I with full commitment and hopefully this kindness will last forever.

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## TABLE OF CONTENTS

<b>DECLARATION.....</b>	<b>ii</b>
<b>ACKNOWLEDGEMENTS .....</b>	<b>iii</b>
<b>TABLE OF CONTENTS.....</b>	<b>iv</b>
<b>LIST OF FIGURES.....</b>	<b>vi</b>
<b>LIST OF TABLE.....</b>	<b>vii</b>
<b>LIST OF ABBREVIATIONS.....</b>	<b>ix</b>
<b>CHAPTER 1.....</b>	<b>1</b>
<b>INTRODUCTION.....</b>	<b>1</b>
1.0 Introduction .....	1
1.1 Research background of study .....	1
1.1.1 Oil palm plantation in Malaysia .....	2
1.2 Problem statement .....	3
1.3 Objective of the study.....	4
1.4 Significance of study .....	4
1.5 Limitation of study .....	5
<b>CHAPTER 2.....</b>	<b>6</b>
<b>LITERATURE REVIEW .....</b>	<b>6</b>
2.0 Introduction .....	6
2.1 Oil palm in Malaysia.....	6
2.2 Cost of oil palm in Malaysia .....	8
2.3 Concept of financial profitability and its relevant in agriculture production .....	9
2.4 Concept of Cash flow .....	11
2.5 Financial Feasibility Parameters.....	11

2.6	Sensitivity Analysis .....	12
2.7	Previous study on financial profitability and sensitivity analysis .....	13
<b>CHAPTER 3.....</b>		<b>15</b>
<b>RESEARCH METHODOLOGY .....</b>		<b>15</b>
3.0	Introduction .....	15
3.1	Estimated yield .....	15
3.2	Data collection and processing.....	16
3.3	Production cost .....	16
3.4	Financial Analysis and Financial Assessments .....	17
<b>CHAPTER 4.....</b>		<b>21</b>
<b>RESULT AND DISUSSION .....</b>		<b>21</b>
4.0	Introduction .....	21
4.1	Oil palm production.....	21
4.1.1	Oil Palm Production Cash Flow Analysis.....	21
4.1.2	Comparison of Operation costs on different field activities .....	24
4.2	Sensitivity analysis .....	28
<b>CHAPTER 5.....</b>		<b>34</b>
<b>CONCLUSION AND RECOMMENDATIONS .....</b>		<b>34</b>
5.0	Introduction .....	34
5.1	Conclusion.....	34
5.2	Recommendation.....	35
<b>CITED REFERENCE.....</b>		<b>37</b>
<b>APPENDICES.....</b>		<b>40</b>
<b>CURRICULUM VITAE.....</b>		

## ABSTRACT

### **SIMULATION OF FINANCIAL PROFITABILITY AND SENSITIVITY ANALYSIS OF OIL PALM PRODUCTION IN MALAYSIA**

The production cost of oil palm has increased dramatically, however the price of Fresh Fruit Bunch (FFB) have not risen that much. Thus, this research have been carried out to know the latest production cost of oil palm in Malaysia. This research is a qualitative research and the information on oil palm production cost was collected from literature review of previous study. Meanwhile, the price of FFB that have been used in cash flow is based on the average price of FFB by MPOB in May 2019. This research uses sensitivity analysis to value the potential of oil palm production. The result show that the NPV value is RM5030.9. IRR value is 13.48%, ROI is 35% and payback period is 8 years 10 months. This analysis have used discounted rate 10% and the FFB price is RM391/ton consistence over 25 years. Based on this study, establishing an oil palm plantation seems to be not very profitable investment on the basis of the assumptions made compared to 2013. It is because the cost of operation are increase every years and the FFB price are very low. This paper could help future farmers to make decisions weather to cultivate oil palm or other crops on their lands. This paper also prepare the latest information about the production cost of oil palm.

*Keywords: Financial profitability, Sensitivity analysis, Oil palm, Cash flow, Net present value, Return on investment, Internal rate return, Payback period*