

**ECONOMIC ANALYSIS ON FACTORS AFFECTING OIL PALM
PRODUCTIVITY AMONG DIFFERENT CATEGORIES OF
SMALLHOLDERS: A CASE STUDY IN FELCRA BERHAD
LEKIR**

MUHAMMAD SHAFAT BIN AHMAD NAZAR

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

JULY 2019

ACKNOWLEDGEMENTS

Alhamdulillah and praise to ALLAH S.W.T because of His mercy and blessing, I was able to complete and submit my final year project report successfully. I wish to thank ALLAH S.W.T for giving me strength, bless and challenging journey successfully. The completion and writing of this dissertation are one of the most challenging tasks that I had to face in completing my Degree Programme. It is with great appreciation for the contribution and cooperation by many along this process. I wish to express my sincere gratitude and thanks to my supervisors, Madam Nur Wajihah Binti Mohd Nawawi for her continuous encouragement and patience in helping me to complete my report. Thank you for the support, patience and ideas in assisting me with this project.

My gratitude and thanks also go to all my lecturers for their continuous support and cooperation in guiding me through writing up my project report. I also would like to express my gratitude to the smallholder in Felcra Berhad Lekir, Sitiawan, Perak for giving their cooperation in making this assessment. This journey would not have been possible without the support and help of my friend. Thank you for listening, offering me advice, help me, and supporting me through this entire process. Finally this thesis is dedicated to my beloved mother and father for the vision and determination to educate me. This piece of victory is dedicated to both of you. Alhamdulillah

Muhammad Shafaat Bin Ahmad Nazar

TABLE OF CONTENTS

	<u>Page</u>
ACKNOWLEDGEMENTS	iii
TABLE OF CONTENTS	iv-v
LIST OF FIGURES	vi-vii
LIST OF TABLES	viii-ix
LIST OF ABBREVIATIONS	x
ABSTRACT	xi
ABSTRAK	xii
<u>CHAPTER</u>	
1 INTRODUCTION	
1.0 Introduction	1
1.1 Background	1
1.1.1 Oil palm plantation in Malaysia	1-3
1.2 Objective	3
1.3 Problem statement	3-4
1.4 Significance of study	4-5
1.5 Objective of study	5-6
2 LITERATURE REVIEW	
2.0 Introduction	7
2.1 Categories of smallholder in FELCRA	7-8
2.2 Factor affecting oil palm productivity	9
2.2.1 Labour	10
2.2.2 Fertilizer	10
2.2.3 Herbicide	11
2.2.4 Mechanization	11-12
3 MATERIALS AND METHODS / RESEARCH METHODOLOGY	
3.0 Introduction	13
3.1 Location of study	13-14
3.2 Sample of study	14
3.2.1 Population	14-15
3.2.2 Sampling method	15
3.3 Research of method	15
3.3.1 Survey questionnaire	16-17
3.3.2 Secondary data	17
3.3.3 Interview	17
3.4 Data analyses	18
3.4.1 Descriptive analysis	18
3.4.2 Correlation regression	18
3.4.3 T-test	18
3.4.4 Benefit cost ratio	18
3.4.5 Theoretical framework	19
4 RESULTS	20
4.0 Introduction	

4.1	Descriptive analysis	20
4.1.1	Demographic information for exit scheme	20
4.1.1.1	Gender	22
4.1.1.2	Marital status	23
4.1.1.3	Education level	24
4.1.1.4	Age	25
4.1.1.5	Experience in managing oil palm	26
4.1.1.6	Monthly income	27-28
4.1.2	Demographic information for under scheme	
4.1.2.1	Age	29
4.2	Parameters of study	30
4.1.2	Mechanization	30-32
4.1.3	Labour competencies	32-44
4.1.4	Fertilizer	44-47
4.1.5	Herbicide	47-50
4.1.6	Yield of fresh fruit bunch	50-52
4.3	Cost and budgeting on factor parameters of study	53
4.4	Yield	53
4.5	Revenue	53-54
4.6	Benefit cost ratio	55
4.7	Correlation analysis	56-58
4.8	T-test analysis	59-60
5	CONCLUSIONS AND RECOMMENDATIONS	61-63
	CITED REFERENCES	64-65
	APPENDICES	65-103
	CURRICULUM VITAE	104

ABSTRACT

ECONOMIC ANALYSIS ON FACTORS AFFECTING OIL PALM PRODUCTIVITY AMONG DIFFERENT CATEGORIES OF SMALLHOLDERS: A CASE STUDY IN FELCRA BERHAD LEKIR

Different management scheme can technically affecting the overall performance of oil palm productivity for a certain organization. Under Federal Land Consolidation and Rehabilitation Authority (FELCRA), there are two different categories of smallholders which are under scheme and exit scheme. Since there is still lack information regarding the economical effectiveness between the two different categories of smallholders, thus this research was done. The objectives of this study were to know comparison in terms of the economic and technical factors that affecting oil palm productivity among different categories of smallholders. Other than that, this study was done to investigate the relationships between factors of productivity (which includes mechanization, labour competencies', fertilizer and herbicide application) for the two different categories of smallholders. The location of the study at Felcra Berhad Lekir and the data was taken that involved the population of smallholders under and exit scheme. The number of samples taken from the exit scheme is 63 while from under scheme is 38. Data collection methods that have been used were primary and secondary data with the methods of distributing questionnaire, interview and collection data from the office management. Data analyses involved in this studies was descriptive, statistical t-test, benefit cost ratio and correlation. The results from this study showed that smallholders exiting FELCRA schemes have lower oil palm productivity compared with under scheme smallholders. But, overall it can be concluded that exit scheme smallholders were having more economical and cost effectiveness based on the production factors studied. These were due to some of uneconomical charges that have been charged to under scheme smallholders which reduce the income that can be obtained by the smallholders although the productivity was higher. It was recommended to FELCRA management so that it can improve its management system focusing on the production factors and making it is more economical effective to ensure the smallholders stay loyal under the scheme provided.

Keyword: Smallholders, Productivity, Oil Palm Plantation, scheme, Economical, Management