



UNIVERSITI PUTRA MALAYSIA

***COMPARISON OF ATTITUDE TOWARDS BIODIVERSITY AND
WILLINGNESS TO PARTICIPATE IN SUSTAINABLE PALM OIL
CERTIFICATION BETWEEN INDEPENDENT AND ORGANIZED
SMALLHOLDERS IN PENINSULAR MALAYSIA***

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FH 2016 64

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SMALLHOLDERS IN PENINSULAR MALAYSIA**

By

SHAKINAH BINTI MOHD ESA

**A Project Report Submitted in Partial Fulfillment of the Requirements
for the Degree of Bachelor of Forestry Science in the
Faculty of Forestry
Universiti Putra Malaysia**

2016

DEDICATION

For my beloved family:

Mohd Esa Bin Abdul Rahman

Rogiah Binti Kandar

Also my siblings.

To all my friends,

Interviewees and residents I had done my interview.

Thank you for your encouragements supports

And the sacrifices that you have given.

Last but not least,

I dedicated this dissertation to Mohd Akmal Bin Buang

Who has encouraged me, helped and give so much support during
conducting this research and in my study.

Thank you for everything. May Allah Bless All of us.

ABSTRACT

Oil palm plantations are often considered to be the cause of the destruction of forests. Owner of the plantation should take into account towards biodiversity conservation in their farmland to change the perception. This study was conducted to compare the attitude smallholders on biodiversity in oil palm farm and their willingness of sustainable palm oil certification in Peninsular Malaysia between independent and organized oil palm smallholders. Since this study was a pilot project, two groups of smallholders in Peninsular Malaysia are assessed to provide baseline data reflecting the attitude towards biodiversity and willingness in sustainable oil palm. Data were collected from 300 respondents by using semi-structured method and representative of all smallholders in Peninsular Malaysia. However, the results of this study may have implications for other groups on a practical basis. Organized smallholders have more awareness about biodiversity concepts, compared independent smallholders. However, independent smallholders are willing to increase biodiversity in oil palm farm than organized smallholders. Overall, respondents had the most positive perception about the biodiversity concept and were the least positive about the sustainable palm oil certification.

ABSTRAK

Ladang kelapa sawit sering dianggap sebagai punca kemusnahan hutan. Pemilik ladang perlu mengambil kira terhadap pemuliharaan biodiversiti di ladang sawit mereka untuk mengubah persepsi tersebut. Kajian ini dijalankan untuk membandingkan sikap pekebun kecil terhadap biodiversiti di ladang kelapa sawit dan kesanggupan mereka terhadap pensijilan minyak sawit mampan di Semenanjung Malaysia antara pekebun kecil persendirian dan pekebun kecil berkelompok. Oleh kerana kajian ini merupakan projek perintis, dua kumpulan pekebun kecil di Semenanjung Malaysia dinilai untuk menyediakan data asas mencerminkan sikap terhadap biodiversiti dan kesediaan dalam minyak sawit mampan. Data dikumpulkan dari 300 responden dengan menggunakan kaedah separa berstruktur, dan mewakili semua pekebun kecil di Semenanjung Malaysia. Walau bagaimanapun, hasil kajian ini mungkin mempunyai implikasi bagi kumpulan-kumpulan lain secara praktikal. Pekebun kecil berkelompok mempunyai lebih banyak kesedaran mengenai konsep biodiversiti, berbanding pekebun kecil persendirian. Walau bagaimanapun, pekebun kecil persendirian mempunyai kesanggupan untuk meningkatkan biodiversiti di ladang kelapa sawit berbanding pekebun kecil berkelompok. Secara keseluruhan, responden mempunyai persepsi yang paling positif mengenai konsep biodiversiti dan adalah yang paling positif mengenai pensijilan minyak sawit mampan.

ACKNOWLEDGEMENT

Alhamdulillah and thank to Allah S.W.T with all His Gracious and His Merciful for giving me strength and the ability to accomplish this project successfully. I would like to take the utmost opportunity to express my sincere and gratitude to my supervisor Dr. Badrul Azhar bin Md. Sharif, who is always giving me supports and guidance.

My greatest appreciation also goes to the people that have been involved directly or indirectly in making this research project paper success. They are residents of Felda Layang-Layang, Johor, residents of Felda Ayer Hitam, Johor, residents of Felda Lurah Bilut, Pahang, residents of Kuala Selangor, residents of Kuala Langat and residents of Hulu Langat, Selangor. Nurul Izati Binti Wagimin, Fatihah Binti Awang, 'Izzah Hafizah Binti Johari, Akram Bin Gimin, Freddy Ngu and Muhammad Abrisam Bin Firdaus. Not forgetting Miss Nazira Binti Khabibor Rahman, researcher officer from Sustainability, Conservation and Certification Unit from MPOB for her assistance in giving information about certification that very helpful me in completing this research paper. Their cooperation and assistance during the field survey had been very helpful to me.

Finally, to my parents and siblings, special thanks are given to them. Appreciation and gratitude are also expressed to my friends and colleagues for their help and constructive suggestion through this study. Last but not least to those whose names are not mentioned, I wish to express my special thanks for their helps in one way or another during this project.

APPROVAL SHEET

I certify that this research project report entitled “Comparison of Attitude towards Biodiversity and Willingness to Participate in Sustainable Palm Oil Certification Between Independent and Organized Smallholders in Peninsular Malaysia” by Shakinah Binti Mohd Esa has been examined and approved as a partial fulfillment of the requirements for the Degree of Bachelor of Forestry Science in the Faculty of Forestry, Universiti Putra Malaysia.

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LIST OF ABBREVIATIONS

CPKO	Crude Palm Kernel Oil
CPO	Crude Palm Oil
CWG	Criteria Working Group
EU	European Union
FAO	Food and Agriculture Organization
FELDA	Federal Land Development Authority
FFB	Fresh Fruit Bunches
GAP	Good Agricultural Practices
IOI	Industrial Oxygen Incorporated Sdn Bhd
ISCC	International Sustainability and Carbon Certification
ISH	Independent Smallholders
ISPO	Indonesia Sustainable Palm Oil
MPOB	Malaysian Palm Oil Board
MSPO	Malaysian Sustainable Palm Oil
NGO	Non Government Organization
OSH	Organized Smallholders
RSPO	Roundtable Sustainable Palm Oil
RSPO P&C	Roundtable Sustainable Palm Oil Principles and Criteria
SPOC	Sustainable Palm Oil Certification
SPOCS	Sustainable Palm Oil Certification Scheme
SPOTT	Sustainable Palm Oil Transparency Toolkit
UNDP	United Nations Development Programme
WWF	World Wide Fund

CHAPTER 1

INTRODUCTION

1.1 General Background

Palm oil is edible vegetable oil that produced from oil palm tree (*Elaeis guineensis*). It is a major industrial commodity that is used in a range of consumer goods from food to Oleochemicals to biofuels. It was originated from West Africa and now is planted on 4.2 million ha, less than 13% of total land area of Malaysia. This country still has at least 18.55 million ha and about 56.5% of its total area under forest, national park, wildlife and nature reserves.

Nowadays, Malaysia is number one trade and the second largest palm oil producer in the world after in 1917, oil palm was introduced at Tenmaran Estate, Kuala Selangor and till now oil palm expansion become rigid from time to time because of demand for vegetable oil grows as the global population is on increase. A hectare of oil palm planted area can produce ten times more than soybeans. Therefore, palm oil most productive oil crop and affordable vegetable oil sources in the world with high outputs but keep production costs relatively low. Palm oil is a versatile substance with chemical properties that make it applicable to wide range consumer goods.

The Malaysian oil palm industry directly employs over half a million workers and they will lose their livelihoods as a result of an oil palm boycott (Wilson, 2010). Rejecting all oil palm could have bad consequences. As producers

will continue to find a market in regions that are not so choosy about social and environmental issues then it will lead to severe environmental damage. Therefore, to save the environment and sustain the livelihood of workers, palm oil is produced by complying with Sustainable Palm Oil Schemes such as RSPO. These schemes should be comprehensible to all oil palm holders, including smallholders and plantation companies.

Smallholders usually have less than fifty hectare land, holders of land title or customary right and Malaysia have about 680,000 smallholders. There are two types of smallholders, which are organized and independent smallholders. Organized smallholders are the farmers that complies with a particular scheme, who will supply specific mills to market their yields or farmers who cultivate oil palm with the support of either government or any organization which provide technical assistance, agriculture inputs and financing. While independent smallholders are the farmers who supply whichever mill they choose without be bound in any scheme or farmers who cultivate oil palm without direct assistance from the government, organization or any private company.

In other words, organized smallholders are relying on certain organization that will organize their palm while independent smallholders most of time makes their own decision towards their palm. Plantation companies are usually certified by with Sustainable Palm Oil Certification (SPOC) such as Indonesia Sustainable Palm Oil (ISPO), Malaysian Sustainable Palm Oil (MSPO), Roundtable Sustainable Palm Oil (RSPO), and Good Agriculture

Practices (GAP). They will provide technical assistance, agriculture inputs or financing to smallholders such as Federal Land Development Authority (FELDA), Malaysian Palm Oil Board (MPOB), Sime Darby Berhad and IOI Group.

In my study, I aimed to conduct interviews in order to determine the comparison of attitude and willingness between independent and organized smallholders on farmland biodiversity. This study was conducted in selected regions on a Peninsular which are Selangor (Tanjung Karang, Kuala Selangor and Kuala Langat), Pahang (Felda Lurah Bilut) and Johor (Felda Layang-Layang and Felda Ayer Hitam).

1.2 Problem Statement

Oil palm always associated with tropical deforestation, violation of social rights, and biodiversity loss, but in a manner we can change that perception by applying sustainable oil palm plantation. In order to address these environmental issues, the Roundtable on Sustainable Palm Oil (RSPO) standard has been established in 2004 for monitoring oil palm cultivation (Wangrakdiskul & Yodpijit, 2013). During the period 1990–2005, 55%–59% of oil palm expansion in Malaysia, and at least 56% of that in Indonesia occurred at the expense of forests (Koh & Wilcove, 2008).

The NGO campaigns against production methods and the expansion of oil palm production, combined with the conviction of businesses that a steady

supply in the future would necessitate a more sustainable production, lead to the development of the RSPO as a multi-actor arrangement to improve the conditions of oil palm production and expansion (Schouten & Glasbergen, 2011). Besides that, an existing certification scheme only focuses on major oil palm players such plantation companies and not comprehensive to smallholders. There is no doubt when in RSPO list only the big companies that are listed while only few organized smallholders that participate and none for independent smallholders. This is because some requisites of RSPO cannot be fulfilled by smallholders.

Group organization is the only way for smallholders to meet the certification costs because smallholder certification costs are extremely expensive. RSPO standard is an unsuitable tool for poor smallholders in developing countries. However, oil palm products without RSPO certification may not be able to be marketed in the European United (EU) countries (Wangrakdiskul & Yodpijit, 2013). In many previous researchers focus on the impact of oil palm production on faunal biodiversity, oil palm expansion causes deforestation and subsequently biodiversity loss, but no information with respect to human-wildlife or biodiversity dimension. How ordinary oil palm growers would interact with wildlife and forest biodiversity.

To understand this, I collected data related to knowledge and attitude from oil palm smallholders that will drive the implementation of environmentally friendly practices in oil palm management and will lead to human-wildlife dimension friendly and sustainable natural resources management.

According to Aikanathan et al. (2015), the perception of the growers and traders or manufactures indicated that their actual behavior does not tally with the views of environmental Non-Government Organizations (NGO) and media. Although the industry has established its principles and criteria which are the backbone of the certification schemes, stakeholders still differ in their perception towards oil palm.

For my study, I conducted surveys from bottom to up which means knowledge, attitude, willingness and perception of smallholders are important to determine either certification relevant or not to be applied by government. Perhaps, lack of biodiversity knowledge and lack of positive attitude among smallholders either organized or independent that may cause them not to support certified sustainable palm oil schemes.

1.3 Aim and Objectives

The aim of this study was to compare the attitude and willingness between independent and organized oil palm smallholders in Peninsular Malaysia.

Two specific objectives were designed to meet these aims which are:

- i. To compare the attitude of independent and organized smallholders about farmland biodiversity.
- ii. To evaluate the willingness of independent and organized smallholders in taking action in biodiversity conservation or to participate in CSPO schemes.

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