AWARENESS AND PERCEPTION AMONG IUKL ACADEMICIANS TOWARDS THE ISSUES OF SUSTAINABILITY FOR MALAYSIAN PALM OIL INDUSTRY

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ABSTRACT

Oil palm cultivation currently is one of the most controversial issues in worldwide in terms of sustainability. The aims of this research was to determine the preferred cooking oil consume by IUKL academicians. Besides that, it was also to determine the awareness and perception levels among IUKL academician towards the issues of sustainability in Malaysian palm oil industry. In this study, 150 sets of questionnaires were distributed manually to IUKL academicians. This questionnaire was divided into three sections. Section 1 about demographic information, section 2 about awareness level and section 3 was about perception level. The data gathered from the questionnaires were administered and analysed using Independent t-Test by using SPSS software. The result from this study showed that there is no significant difference between demographic information on awareness and perception towards the issues of sustainability in Malaysian palm oil industry. From this study, it is shown that the awareness among IUKL academicians was high towards the issues of sustainability in Malaysian palm oil industry. In future, it is recommended for researchers or academicians to determine the level of awareness and perception among students towards the issues of sustainability in Malaysian Palm Oil Industry as to promote sustainable agriculture and give positive reaction towards this 'golden crop'.

Keywords:
Awareness, Perception, Oil Palm Industry.

INTRODUCTION

The words "sustainable" is very popular in alternative energy circles because some people are concerned about how can Malaysia sustain the traditional energy resources such as oil and gas. In agricultural, the word sustainable implies the relationship to an ecological balance such as conserving an ecological balance by avoiding the depletion of natural resources. Palm oil is used in many products and a lot of people are probably not aware of this because there are so many edible oil available in the markets. People in the world consuming millions of tons of palm oil products as well as soap, cosmetics, toiletry products, pharmaceuticals and a whole host of industrial including lubrication oil. Palm oil is not only a renewable source because it is easy to grow but also biodegradable which means that they ensure environmentally friendly products (MPOB, 2014). The good demand for oil as well as biodiesel an alternative fuel will give colourful journey to Malaysia palm oil industry. However, issues of sustainability of palm oil such as environmental issues are part of the challenges that must be faced by industry in the future because of the rapid development of this industry creates many questions on the issues of sustainability.

LITERATURE REVIEWS

In Malaysia palm oil has been an important agriculture sector in the economy for the past three decade. The important role of this industry to the Malaysian's economy is not only because Malaysia depends substantially on oil palm for its foreign exchange earnings, but also because palm oil is used as a development tool in poverty alleviation program. Currently, Malaysia and Indonesia are the world's largest producer of palm oil that contributed almost 85% of world production (MPOB, 2014).

The palm oil has the distinction of being the most productive of all oil crops with an average yield in major producing countries of about 3-4 tonnes of mesocarp (palm) oil/ha/year. By contrast, the yields of most competing oil crops are typically less than one tonne/ha/year. This means that the productivity of oil palm is at least 3 - 8 times more than most oil seed crops. Thus, only 7 million hectares of oil palm are required to supply 20% of the world demand for oil and fats (1.09 billion tonnes), compared to the 80 million hectares of oilseeds needed to supply another 24% of this demand.

The rapid expansion of oil palm cultivation has raised concerns about the sustainability and environmental impact of oil palm plantations, in particular with regard to biodiversity, deforestation and air pollution. Conversion of primary forest to oil palm plantation accounted for more than 10% of deforestation in Indonesia and Malaysia between 1990 and 2010 (Koh et al. 2008). Issues of deforestation made by NGOs about the potential impact of palm oil plantation on environment and people could cause significant damage in the eyes of a consuming public that consider it as socially conscious (Suhaila, 2012).

Roundtable on Sustainable Palm Oil (RSPO) is sustainable. It is one of many certification labels to justify a sustainable palm oil practice. (Faris, Mukhamad, and Setiadi, 2017). About 20% of global 2015 palm oil production was certified by the RSPO (Garrett, Carlson, Rueda and Noojipady, 2016). Access to RSPO certification for those smallholders is important for two main reasons: first, it may enhance the sustainability of their production system, and second, it may be a prerequisite for market access if RSPO certified oil palm will become the norm. Globally, there are 3 million oil palm smallholders who contribute 40% of global oil palm production (RSPO,2016).

Sustainability research for palm oil has been increasing since 2004 with the majority research related to palm oil residue and lacks of other aspects, such as economic benefit (Hansen et al. 2015). Creating a sustainable oil palm industry requires technology, strategy, and solution to be able to adapt with industrial dynamics. (Wisena et al. 2014). Wisena (2015) wrote a structure of system element of change for sustainable palm oil management with oil palm certification, ISPO and RSPO, as the initiative action.

Long-term challenge facing the palm oil sector is the non-tariff barriers against palm oil in many important export markets, particularly the EU and the USA. These barriers are linked to the issues of sustainability and life cycle greenhouse gas reductions in biofuel uses. (James, 2009). According to Lim and Teong, (2010) and Kushairi (2014), in terms of technological advantage, Malaysia has relatively mature technologies in the oil palm sector. Malaysia has proven herself as being at the frontline for palm-based biodiesel with the successful invention of two biodiesel products: a summer and a winter palm biodiesel product.

In maintaining the competitiveness of the Malaysian palm oil in the world market, it is important that this sector continues to developed and adopted numerous environmentally sound and sustainable practices in the cultivation and production of the oil palm crop (Kamalrudin, and Ramli Abdullah, 2014).

OBJECTIVES

The objectives of the study can be summarised as follows:

- To determine the background of IUKL academicians.
- To determine the preferred edible oil consuming by IUKL academicians.
- To determine the differences between type of user (preferred palm oil and non-palm oil user) towards the awareness on the issue of sustainability.
- To determine the differences between type of user (preferred palm oil and non-palm oil user) towards the perception on issue of sustainability.

METHODOLOGY

Research Design

This study applied correlational design.

Research Location

The study was conducted at IUKL.

Sample Size

The total number of respondents for this study was 100 respondents.

Survey Methods

A set of closed ended questionnaire were given to respondents to answer through online and a face to face interview was conducted to obtain the data. The questionnaire consisted three section namely Section 1 for demographic, Section 2 for awareness and Section 3 for perception.

Data Analysis Techniques

Data were analysed using SPSS version 18. The data were subjected to descriptive analysis, and Independent t-Test.

Measurement

Table 1 indicates the Likert scale used in this study.

Awareness:

Respondents were asked to give their opinions on scale of 1 to 5. Respondents were asked to indicate the scale based on their awareness. There were 10 items tested which were in biodiversity, ecosystem, best management practices in oil palm plantation, sustainable agriculture practices in oil palm plantation, plantation land, sensitivity towards environmental issues, economic, cultural, sustainability and negative coverage in media about oil palm industries. The score range from 10 to 50. Higher score indicated more awareness among the respondents.

Perception towards the issue of sustainability for Malaysian palm oil industry:

Three Likert scale were used in this study. Respondents were asked to indicate the scale based on their perception towards the sustainability issue. There were three items tested which were environment, social and economic. The score range from 3 to 9, whereby higher score indicated more positive perception on the issues of sustainability.

Table 1: Likert Scale for Assessment in this Study

Scale	Description
Awareness	
1	Strongly disagree
2	Disagree
3	Neutral
4	Agree
5	Strongly Agree
Perception	
1	Less contribute
2	Neutral
3	Highly contribute

RESULT AND DISCUSSION

Table 2 indicates the respondent's background. Based on the survey, 32.8 % were male, and 65.2% were female academicians in IUKL. 87.0% of respondents were age between 26-40 years old while 13% were between 41-55 years old. There were three major races in IUKL which were 87% Malays, 8.7% Indians and 4.3% were Chinese. In terms of educational level, 91.3% were PhD and Master holders while 8.7% were bachelor holders. Among all the respondents, 69.6% had income level between RM2001-RM4000 while 30.4% were between RM4001-RM6000. 65.2% of respondents chose palm oil as their cooking oil while 34.8% preferred to use non palm oil as cooking oil.

Table 2 : Respondents' Demographic

Aspect	Percentage
Gender	
Male	32.8
Female	65.2
Age	
21-40	87.0
41-55	12
Race	
Malay	87.0
Indian	8.7
Chinese	4.3
Education level	
Degree	8.7
Master and above	91.3
Type of user	
Preferred palm oil	65.2
Preferred non-palm oil	34.8

Table 3 showed the percentage of type of cooking oil preferred by respondents. 65.2 % of respondents preferred palm oil as cooking oil while 17.4% preferred non-palm oil (Olive oil and Sunflower oil respectively) as their cooking oil.

Table 3: Preferred oil in cooking among IUKL academicians

Aspect	Percentage
Palm oil	65.2
Non-palm oil:	
Olive oil	17.4
Sunflower oil	17.4

Table 4 shows the descriptive statistic on awareness level between palm oil user and non-palm oil user. From the table, the level of awareness among respondents were high regardless what type of cooking oil they choose. An Independent T-test was conducted to measure the significant difference of awareness between palm oil user and non - palm oil user (Table 4). There was no significant difference in scores for palm oil user (M=35.00, SD=4.20) non-palm oil user (M=32.50, SD=4.84; t (21)=1.325, p=.21] towards their awareness on the issues of sustainability in Malaysian palm oil industry.

Table 4 : Mean For Awareness among Respondents

Type of user	Mean	SD
Palm oil user	35.00	4.20
Non palm oil user	32.50	4.84

As for respondents' perception towards the issues of sustainability, the result of t-test indicate that there was no significant difference in scores for palm oil user (M=62.0, SD=4.97) non-palm oil user (M=59.0, SD=5.97; t(21)=1.286, p=.21] towards their perception of environmental issues (Table 5).

Table 5 : Mean For Perception of the Sustainability Issues among Respondents

Type of user	Mean	SD
Palm oil user	7.07	4.97
Non palm oil user	6.87	5.97

CONCLUSION

From this study, it can be implied that, IUKL academicians were aware about the issues of sustainability for Malaysia palm oil industry. 62.5% of respondents were consuming the oil palm oil in daily life compared to 34.8% of non-palm oil user. In term of awareness level, respondents were aware on sustainability issue of Malaysian palm oil industry. For perception level, there was no significant different in term of perception between palm oil user and non-palm oil user. Therefore, it is very important for the Ministry of Plantation Industries and Commodities to educate and to increase consumer awareness, especially on the issues of sustainability to Malaysian citizens. Besides that, it is very important to remove the negative perception to ensure that palm oil in the country is within the boundary of sustainable development. Last but not least, the Ministry of Education also need to take part on these issues seriously to make sure educators and students are aware on the benefits and sustainability of the palm oil as a backbone of the economy. Palm oil is a natural product hence it could lead to more demand and commitment from the palm oil industry to attain sustainability and to remain sustainable in the future.

RECOMMENDATIONS FOR FUTURE RESEARCH

For future, it is recommended for researchers or academicians to determine the level of awareness and perception among students towards the issues of sustainability in Malaysian palm oil industry. It is very important for us to access them so that, our palm oil industry can sustain and expand successfully in global market and worldwide.

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