

**LABOUR FORCE PARTICIPATION OF LOCAL YOUTH  
IN THE OIL PALM PLANTATION: CASE STUDY IN THE  
SELECTED STATES OF NORTHERN MALAYSIA**

**NURFARAHAIN BT ZAINOL**

**MASTER OF ECONOMICS  
UNIVERSITI UTARA MALAYSIA  
JANUARY 2015**

**LABOUR FORCE PARTICIPATION OF LOCAL YOUTH IN THE  
OIL PALM PLANTATION: CASE STUDY IN THE SELECTED  
STATES OF NORTHERN MALAYSIA**

**By  
NURFARAHAIN BT ZAINOL**

**A Project Paper Submitted to  
Othman Yeop Abdullah Graduate School of Business,  
Universiti Utara Malaysia,  
In Partial Fulfillment of the Requirement for the Master of Economics**

## **PERMISSION TO USE**

In presenting this dissertation/project paper in partial fulfillment of the requirements for a Post Graduate degree from the Universiti Utara Malaysia (UUM), I agree that the Library of this university may make it freely available for inspection. I further agree that permission for copying this dissertation/project paper in any manner, in whole or in part, for scholarly purposes may be granted by my supervisor(s) or in their absence, by the Dean of Othman Yeop Abdullah Graduate School of Business where I did my dissertation/project paper. It is understood that any copying or publication or use of this dissertation/project paper parts of it for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the UUM in any scholarly use which may be made of any material in my dissertation/project paper.

Request for permission to copy or to make other use of materials in this dissertation/project paper in whole or in part should be addressed to:

**Dean of Othman Yeop Abdullah**

**Graduate School of Business**

**Universiti Utara Malaysia**

**06010 UUM Sintok**

**Kedah Darul Aman**

## ABSTRACT

The Malaysian oil palm industry is labor-intensive, especially in the oil palm plantations. It is reported that in 2013, the total number of plantation workers comprise of 69% foreigners and 31% local. The small number of local participation indicates their lack of interest to work in the industry and this urged the industry to resort to employing foreigners. The issues of rising social and security problems related to foreign workers; as well as the increasing the cost of foreign workers following higher recruitment costs, thus affecting the cost of palm oil production. The best solution is to locate the local labor youth in oil palm plantation sector. This study aims to investigate factors of labor shortage in oil palm plantations among local labor youth in Perak, Perlis, and Kedah. By identifying factors that can attract more local to work in oil palm plantation, Malaysia can reduce dependency upon foreign workers. A survey method through questionnaire was used to collect data using random and purposive sampling method. A total of 332 respondents in FELCRA and FELDA were analysed using Probit model. Finding shows that age and race are positively significant with the probability to participate in oil palm plantation. Whereas gender, marital status, level of education, parents's jobs are negatively significant. Imposing policies that improve the plantation environments, job's status, facilities and benefits will help to attract local youth to participate in plantation sector, specifically the oil palm.

**Keywords:** *plantation, local labor youth, labor force participation, foreign workers*

## ABSTRAK

*Industri sawit Malaysia adalah intensif buruh , terutamanya di ladang-ladang kelapa sawit . Ia melaporkan bahawa pada tahun 2013 , jumlah pekerja ladang terdiri daripada 69 % warga asing dan 31 % tempatan . Jumlah kecil penyertaan tempatan menunjukkan kekurangan yang mereka minat untuk bekerja dalam industri ini dan menggesa industri itu untuk mengambil warga asing. Isu-isu yang semakin meningkat seperti masalah sosial dan keselamatan yang berkaitan dengan pekerja asing ; serta peningkatan kos pekerja asing berikutan kos pengambilan yang lebih tinggi dan akan menjejaskan kos pengeluaran minyak sawit . Penyelesaian terbaik adalah untuk mencari belia buruh tempatan dalam sektor perladangan kelapa sawit . Kajian ini bertujuan untuk menyiasat faktor kekurangan buruh di ladang-ladang kelapa sawit di kalangan belia buruh tempatan di Perak , Perlis , dan Kedah . Oleh itu, antara faktor-faktor yang boleh menarik lebih ramai tempatan untuk bekerja di ladang kelapa sawit dienalpasti, Malaysia boleh mengurangkan pergantungan kepada pekerja asing . Satu kaedah tinjauan melalui soal selidik telah digunakan untuk mengumpul data kajian secara rawak dan bertujuan. Seramai 332 responden di FELCRA dan FELDA telah dianalisis menggunakan model PROBIT . Dapatan kajian menunjukkan bahawa umur dan kaum adalah positif yang signifikan dengan kebarangkalian untuk mengambil kerja dibahagian dalam ladang kelapa sawit . Manakala jantina , status perkahwinan , tahap pendidikan, pekerjaan ibu bapa adalah negatif yang ketara . Mengenakan dasar-dasar yang meningkatkan persekitaran ladang , status , kemudahan dan faedah pekerjaan yang akan membantu untuk menarik belia tempatan menyertai sektor perladangan , khususnya di kelapa sawit .*

*Kata Kunci : perladangan , belia buruh tempatan , penyertaan tenaga buruh , pekerja asing*

## **ACKNOWLEDGEMENT**

All praise due to Allah WST, the Lord of the world that makes it possible for me to complete this project. Blessing and salutation also are on the Prophet of Allah SWT, Muhammad S.A.W. I would like to take this opportunity to express my gratitude and appreciation to the following individuals whose guidance and contribution in preparing this paper.

Firstly, I would like to express my gratefulness and appreciation to my supervisor, Prof Madya Dr. Norehan binti Abdullah for her guidance, encouragement and advices throughout the process of completing this project paper. A word of appreciation also goes to all the respondents of local youth for their cooperation, tolerance and concerns. I am truly indebted for their contribution in term of time, patience, attentions and efforts for the completion of this project paper.

A very special thanks to my parents and my siblings for their constant demonstration of love and continuous moral support throughout my years of study. I would like to express my thanks to FECRA Lekir, FELCRA Seberang Perak, FELDA Trolak in Perak, FELDA Teloi Timur in Kedah, and last but not least FELDA Rimba Mas, Padang Besar Perlis. I would like to thank all respondents of this study without which this study would not have been successful. Last but not least, my thanks to all who are involved directly or indirectly in the process of completing this study.

Thank you.

## TABLE OF CONTENT

TOPIC	PAGES
PERMISSION TO USE	i
ABSTRACT	ii
ABSTACK	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENT	v
LIST OF TABLE	ix
LIST OF FIGURE	viii
LIST OF ABBREVIATIONS	x
<b>CHAPTER ONE : INTRODUCTION</b>	<b>1</b>
1.1 INTRODUCTION	1
1.2 THE MALAYSIAN PALM OIL INDUSTRY	9
1.3 BACKGROUND OF STUDY	13
1.3.1 Federal Land Consolidation Rehabilitation Authority (FELCRA)	18
1.3.2 The Federal Land Development Authority (FELDA)	18
1.4 PROBLEM STATEMENT	19
1.5 RESEARCH QUESTION	20
1.6 OBJECTIVE OF THE STUDY	20
1.7 SIGNIFICANCE OF STUDY	21
1.8 SCOPE OF STUDY	22
1.9 ORGANIZATION REPORT	22
<b>CHAPTER TWO : LITERATURE REVIEW</b>	<b>23</b>
2.1 INTRODUCTION	23
2.2 THEORETICAL AND CONCEPT	24
2.2.1 Definition of plantation History of	24
2.2.2 plantation	25
2.2.3 Participation	26
2.2.4 Labor shortage in oil palm plantation	27
2.2.5 Factors affecting participant labor youth in oil palm plantation sectors	29
2.2.5.1 Level of education	29

2.2.5.2	Immigration	30
2.2.5.3	Foreign workers in oil palm plantation sectors	34
2.2.5.4	Socioeconomic and welfare effect	36
2.3	EMPIRICAL	38
2.4	CONCLUSION	43
<b>CHAPTER THREE : DATA AND RESEARCH METHODOLOGY</b>		44
3.1	INTRODUCTION	44
3.2	CONCEPTUAL FRAMEWORK	45
3.3	RESEARCH DESIGN	46
3.4	SOURCES OF DATA	47
3.4.1	Primary data	47
3.4.1.1	Questionnaire	48
3.5	DATA COLLECTION	48
3.5.1	Population and sample	49
3.5.2	Unit of analysis	49
3.5.3	Data collection procedure	50
3.6	MEASUREMENT OF VARIABLES	51
3.7	DATA ANALYSIS	52
3.7.1	Statistical package of social science (SPSS)	52
3.7.2	Data analysis and statistical software (STATA)	53
3.7.3	Descriptive Statistic	53
3.7.4	Data screening	53
3.8	ANALYTICAL TECHNIQUE	54
3.9	CONCLUSION	56
<b>CHAPTER FOUR : ANALYSIS AND INTERPRETATION OF RESULT</b>		57
4.1	INTRODUCTION	57
4.2	DESCRIPTIVE ANALYSIS	58
4.3	DEMOGRAPHIC BACKGROUND	58
	Part A: Descriptive analysis	58
	Part B: Perception about participating in oil palm plantation	65
	Part C: Probit analysis	71
4.4	CONCLUSION	74



<b>CHAPTER FIVE : SUMMARY AND CONCLUSION</b>	75
5.1 SUMMARY	75
5.2 DISCUSSION OF THE STUDY	77
5.3 POLICY IMPLICATION	78
5.3.1 Improve working condition for oil palm plantation	78
5.3.2 Increase of facilities and benefits for local youth labor in oil palm plantation	79
5.4 SUGGESTION FOR FUTURE STUDY	71
<b>REFERENCES</b>	82
<b>APPENDIX 1 : QUESTIONNAIRE</b>	
<b>APPENDIX 2 : DESCRIPTIVE STATISTIC</b>	
<b>APPENDIX 3 : PROBIT REGRESSION</b>	

## LIST OF FIGURES

Figure 1 : Oil Palm Planted Area by Category at December 2013	11
Figure 2 : The Map of Northern Region in Malaysia	14
Figure 3 : Conceptual Framework for Involvement of Local Youth in Oil Palm Plantation	45
Figure 4: Marital Status in Percent (%)	61
Figure 5 : Category Age n Percent (%)	62
Figure 6 : Respondent who work or not work in Oil Palm Plantation	63

## LIST OF TABLE

Table 1: Overview of Oil Palm in Malaysia	9
Table 2: Distribution of Oil Palm Planted Area by State and Sector in 2013	15
Table 3: Estimated Total Workforce in Oil Palm Cultivation in Malaysia by Category of Work	42
Table 4: Definition and Measurement of Independent variables	51
Table 5: Descriptive Analysis	59
Table 6: Economic Fortune	65
Table 7: Work Environment	66
Table 8: Social Facilities	68
Table 9: Social Status Job	69
Table 10: Government/Employer Policies	70
Table 11: Probit Estimation Result	71

## **LIST OF ABBREVIATION**

CPO	Crude Palm Oil
DOA	Department of Agriculture
EPF	Employees Provident Fund
FELCRA	Federal Land Consolidation & Rehabilitation Authority
FELDA	Federal Land Development Authority
FFB	Fresh Fruit Bunches
FGVH	Felda Global Ventures Holdings
IMPAC	Institute of Malaysia Plantation and Commodities
IOI	IOI Corporation Berhad
GDP	Gross Domestic Product
GNI	Gross National Income
KOML	Plantation Mechanization Operator's Course
MAPA	Malayan Agricultural Producers Association
MPI	Minister of Plantation Industries and Commodities
MPOA	Malaysia Palm Oil Association

MPOB	Malaysia Palm Oil Board
MPOC	Malaysia Palm Oil Council
NDP	National Development Policy
NVC	National Vision Policy
PLASMA	Malaysian Palm Training Center
RISDA	Rubber Industry Smallholders Development Authority
SPSS	Statistical Package of Social Science
STATA	Data Analysis and Statistical Software
UNRSD	United Nation Research Institute of Social Development

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Introduction**

The oil palm industry forms the economic backbone of Malaysia and continues to face new challenges in the face of globalization. As of 2012, total planted oil palm in Malaysia is about 5, 037,959 hectares (MPOB, 2012). Sabah is a state that has the most extensive area of oil palm cultivation in Malaysia. The total is 1.28million hectares which represent 30 percent the total area of oil palm cultivation in Malaysia (MPOB, 2012). Palm oil was exported to 145 countries around the world and all thus placing it as an economic generator in the agriculture sector (MPOB, 2012). The increase in commodities is expected to continue based on its advantages and its ability to generate income to oil palm cultivation in Malaysia. In Malaysian oil palm plantations work force is needed because the use of mechanization and high technology has not yet comprehended. Sufficient force is important to ensure the operation of the farm will be completed on schedule to meet the needs of Malaysian palm oil industry. Dominance of foreign workers in the plantation sector in Malaysia is not something unusual. Statistics produced by the Labour Department where a total of 300,000 foreign workers employed in farm and industrial commodities, especially in oil palm plantations at the moment (Che Johari, 2008). However, the current percentage of foreign employment has decreased due to several factors. Government tries to reduce reliance on foreign workers in the plantation. Migrants from Indonesia also declined following the opening of large-scale oil palm

plantations in Indonesia. According to Sabri (2010), many of the return Indonesian workers subsequently get jobs in plantations in Kalimantan. Furthermore the remuneration and the fringe benefits are more competitive compared which were offered by the plantation sector in Malaysia. Decrease intake of foreign labour migration in the local area to reduce further safeguard to the socioeconomic activities of the local population. As the plantation sector is still oriented labour force, companies need a local workforce to replace the foreign labour force. Proactive measures should be taken at the opening of oil palm plantations on a large scale in Kalimantan, Indonesia. Promotion of local residents to work in oil palm plantations owned by companies would be able to solve the labour shortage problem and also can boost their economy while living in their own commodities. Oil palm plantation companies would enhance the social-economic value of the local people who work in the field. All benefits and facilities required by the workers as a high basic salary, housing, water and electricity, allowance, Employees Provident Fund (EPF), medical benefits, school aid, insurance and others should be given to local people and should be reviewed (Selvakumaran and Shanmugam, 1995). However, due to several factors, local residents are not interested to work in the plantation.

Oil palm serves as a raw material for industry and a source of foreign exchange. Production of palm oil now accounts for 37 percent of the total global output of oilseeds, overtaking soybean oil as the leading vegetable oil. Malaysia and Indonesia dominate world production and trade with 90 percent of global output, while West Africa accounts for a negligible 3.5 percent. The rapid expansion of oil palm cultivation will stimulate

job opportunities in plantation and oil palm mills. The cultivation of oil palm plantation and oil palm mill processing are labour intensive. The lack of mechanization and high technology machineries create over reliance on manual labour. Even though the government sets the quota of foreign labour worker to accommodate for 10 hectares the number of foreign labour still increasing with the rapid land expansion especially in Sabah and Sarawak.

Malaysia is a multiracial country. The formation of a multiracial country is a result of migration of people from other countries to Malaysia during the British colonial. According to Syarisa (2002), there were three general phases of migration flows from Indonesia in which the first phase, starting from 1969 until 1979, the second phase from 1979 until 1989 and in the third phase, which since 1980s.

The existence of job opportunities in many areas has stimulated the rural-urban migration. In agriculture, it needs more labour, especially in oil palm plantations. In this case, more workers were required, such as from Indonesia and Philippines. To fill the gap in labour supply, plantation companies began to recruit foreign workers. Initiating, these workers enter the country illegally, because at that time there were no legal provisions for the importation of unskilled or semi-skilled workers (Syarisa, 2002). To overcome the surplus of the foreign workers' problem, there were varieties of further action taken by the government. In 1991 until 1994, this country had given a period of amnesty to foreign workers who were not registered. However, the response of foreign workers and employers were not encouraging (Azizah, 1997). As reported by Bank Negara Malaysia



(1997), the immigrant came into Malaysia started in the early 70s until the 90s. The increasing number of foreign workers in the two decades was estimated about 1.7 million people until 1997. This increasing was about 21.25 percent compared with workers in Malaysia, which were 8 million people.

The development of oil palm in Malaysia has been remarkable. Starting off as an ornamental, the crop has developed into a multibillion Ringgit industry. In Africa, the crop originally existed wild in the groves and various constraints were faced in the efforts towards domestication. It is in Malaysia that much of the crop's full potential has been exploited. This transformation from the wild to being domesticated, where it is grown in neat rows in well-managed plantations, has not been without cost. A lot effort has gone into understanding this 'new' crop, and the means of fitting it to its new home. It has been during the development of this crop that more has been learnt about its interaction with the environment. Success in developing the crop in plantations has led to a new challenge, i.e. in the processing technology. Again, being the pioneer, Malaysia has had to take the lead in this new endeavor. Technologies both upstream and downstream, including those related to the environment were developed and were continually improved.

The present status of labour-to-land ratio is one man to 10 hectares of oil palm area. Assuming the Malaysia's plan to develop another 500,000 hectares for oil palm and the labour-to-land ratio is maintained, an additional 50,000 workers will then be required by the oil palm plantation operators by 2020. This will mean that the total plantation

workforce is set at 550,000 workers by 2020. Therefore, the issue here is whether Malaysia can easily obtain the additional workforce by 2020 despite currently grappling with the mounting foreign labour shortage situation. Currently, many foreign plantation workers, particularly fruit harvesters and collectors from Indonesia, have opted to head home given the booming oil palm sector in the republic (The Malaysian Times, 2012).

The oil palm plantation area was the largest recorded in the agricultural sector in 2004 which was 1,133,409 and it was planted the area decrease to 1,330,364 hectares in 2008. Based on the data, oil palm planted area was reduced because of the oil palm scheme was reduced. But at the same time a smallholding and the estate were kept increasing. This study was conducted for a particular reason. Agriculture sector was one of the sectors that contributed a large portion in Sabah's GDP. According to the Department of Statistics Malaysia (2010), agriculture sector contributed RM 8,029 million in (2007) or 28.8 percent out of total GDP at purchasers' prices in Sabah. Lately the plantation sector has raised many issues in the economy. In specific, the objectives of this research is to explore the impact of total foreign workers in the oil palm plantation sector flows on the employment and wages of local workers in long and short term and Malaysia's labour woes in plantation perhaps can be via mechanization. In fact, some quarters are optimistic that labour-to-land ratio can even hit 1:12 (one man to 12 hectares) via the substitution of mechanization. Many also bravely assumed that mechanization would reduce the labour requirements by 90,000 workers, whereby the total labour requirement in the plantations will only be 460,000 by 2020. Of Malaysia's total plantation workers, 75 percent are foreign workers out of which over 20 percent are fresh fruit bunches (FFB) harvesters or collectors mainly from Indonesia. The Malaysian Palm Oil Board's

(MPOB) mechanization harvesting pole, contains, for example, holds promise since it can reduce the labour requirement by 30 percent. However, counties to date can only reach up to five meters on the young palms which comprise only about 30 percent of the total planted oil palm area. Hence, Malaysia will still need to implement appropriate measures to facilitate the recruitment and retention of foreign workers. With Indonesia rapidly developing its own palm oil industry, Malaysia will need to source elsewhere for workers.

Youths are invaluable assets that no country can afford to waste. They bring energy, talent, innovation and creativity to the world of work together with new skills and the inspiration that enable companies to grow, innovate and prosper. It is crucial the involvement of local youth in the oil palm plantation perceptions, repulsion and attraction of local youth employment in the plantation sector the important sector from which the country will have to depend on for decades to come. Studied by Hanim Adnan (2010), 350,000 foreigners work in oil palm plantation from the total 557,900 workers in the oil palm sector. This showed 60 percent of oil palm workers are foreigners. This scenario gave the red alarm to the oil palm industry, which are highly dependable on foreign workers. The government and the plantation sectors need to be proactive to solve the problem. Beside the rapid expansion of oil palm plantation in Kalimantan many of Indonesian experienced workers not returning to work in Malaysia. This happened due to competitive package to the Indonesian workers that include good remuneration and infrastructure.

The “ Plasma Scheme” which similar to Felda Scheme also adversely affected the interest of Indonesian workers to work in Malaysia. The numbers of workers were reduced from last year. The oil palm industry scarcity of labour amounting to 42,707 in 2010 (Ramli et al., 2011). According to the Minister of Plantation Industries and Commodities Tan Sri Bernard Dompok (2012) through Bernama, oil palm plantation is facing a severe labour shortage of about 35,473 workers and it needs to undergo a paradigm shift from heavy reliance of labour to modern mechanism. The other pressing issue was the crime and the social problems that never ended as long as the oil palm industry still depends on foreigner workers. The TV3 prime time News on 2nd February 2011 announced 1.3 million foreigners still stay in Malaysia. In Sabah the rate of illegal immigrant was increased to 60 percent not only in the plantation sector, but also in the seaweed farming. About 77 percent of the 442,094 workers in the oil palm plantation sector in the country are foreign workers. Minister of Plantation Industries and Commodities Datuk Douglas Uggah Embah said, based on statistics until December from the Malaysian Palm Oil Board (MPOB), it clearly showed the dependence of the sector on foreign workers. In this regard, he said the ministry sought to overcome the problem by training more locals, especially among the youths for the sector. “Using local manpower will reduce dependence on foreign workers. The ministry will train more local youths towards this end,” he said in his speech during a function at the Malaysia Oil Palm Industry Training Centre in Keaton in 31 Mac 2014.

As reported in the local paper, recently held its first roundtable talk on palm oil with four prominent captains of the industry Malaysian Palm Oil Council (MPOC) chief executive officer Tan Sri Dr Yusof Basiron, IOI Group executive director Datuk Lee Yeow Chor, Felda Global Ventures Holdings Bhd group president or CEO Datuk Sabri Ahmad and United Plantations Bhd vice-chairman Datuk Carl Bek-Nielsen (The Star, 25 August 2012). Conferring roundtable discussion found out that the single biggest challenge the industry is facing today and what needs to be done is labour. Labour is the key to this industry. Datuk Bek-Nielsen mentioned,

“We’re wasting billions of Ringgit in terms of wastage in the fields. We need more clarity in terms of ridding our dependency on foreign labour. The immediate issue is that we have fruits in the trees, but we cannot harvest. The fruits will be rotten and you will waste money. We have to think of working together with the regulators on how to make sure that we can be more systematic in bringing in the labour force here. Ultimately, it will take time also to get the Malaysian labour force here to work in the plantations. We have tried with the FELDA second generation, but not many want to go back to the fields. There is a big gap in labour.”

Prime Minister Datuk Seri Najib Tun Razak, expressed his disappointments that Malaysians are no longer the dominant workforces in the plantation sector. Over 450,000 workers in the palm oil sector, only 83,000 were locals and the majority foreigners. He also added that, the palm oil industry, one of the key contributors to the national economy with acreage of 4.9 million hectares, produced 19 million tons of oil palm and earned RM80 billion in exports year 2011 (MIC, 2012).

## 1.2 The Malaysian Palm Oil Industry

Palm oil accounts for 33 percent of all of the world’s production of vegetable oils, with soybean oil—at 27 percent—its nearest competitor. One of its uses is as a raw material in the production of palm oil-based biodiesel fuel. Malaysia’s palm oil industries are longtime main contributors to GNI and boost the sector’s value to Malaysia’s economy. Palm oil production has halved in recent decades, owing to the success and upkeep of research and development activities in emerging high-yielding, better quality crops by the Malaysian Palm Oil Board (MPOB) and emboldening Malaysian farmers to participate through smallholder schemes.

Table 1: Overview of Palm Oil in Malaysia

Key statistics	2010	2011	2012
Planted area	4.8 million ha	5.0 million ha	5.1 million ha
CPO Production	16.99 million tonnes	18.91 million tonnes	18.79 million tonnes
Exports of palm oil	16.66 million tonnes	17.99 million tonnes	17.58 million tonnes
Exports of palm oil and products	23.04 million tonnes	24.27 million tonnes	24.59 million tonnes

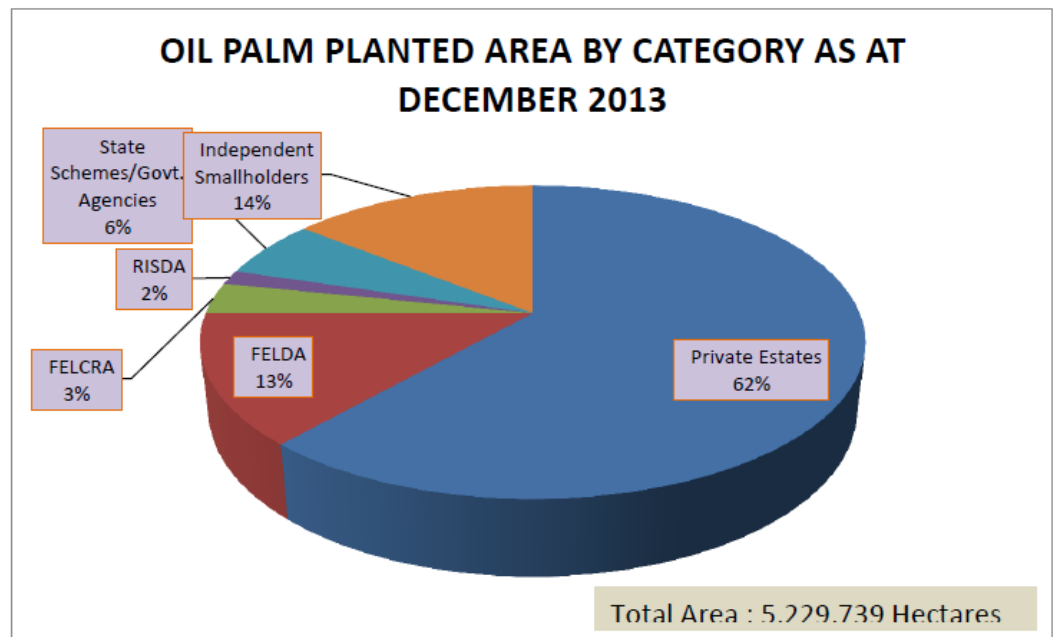
*Sources: Malaysian Palm Oil Board (MPOB)*

Oil planted areas in Malaysia has increased significantly over the years from 2010 to 2012 in table 1 above. In 2012, the total planted area increased to 5.08 million hectares. In the lead is still Sabah, accounting for 28.4 percent (1.44 million hectares), and followed by Sarawak with 21.2 percent (1.08 million hectares).

The production of palm oil has long been associated with reports of tropical deforestation, biodiversity loss, water pollution, and violation of customary land rights (Anon. 2004, 2009; Koh and Wilcove 2008; Then 2009). In the past, Malaysia was among 14 countries with annual deforestation rates in excess of 250 000 ha per year (Wood 1990). Most of this is attributable to the country's large timber industry and the growing oil palm plantation sector. An analysis by Koh and Wilcove (2008) suggests that during the period 1990–2005, close to 60% of the oil palm expansion in Malaysia was at the expense of forest conversion, with the remainder coming from existing cropland (e.g., rubber, cacao). Oh, and Grace (2006) argues that the substantial loss of forests in Sabah was due primarily to over-harvesting, poor logging practices, short logging cycles and the absence of rehabilitation following harvesting. These activities resulted in a massive reduction of primary forest cover between 1975 and 1995, from 2.8 million hectares to 300 000 hectares, and a corresponding increase in degraded forest, which reached 2.5 million hectares (Mannan and Yahya 1997, cited in The and Grace 2006).

Malaysia is located in Southeast Asia and is split into two land areas; one is on a peninsula south of Thailand and the other is on the island of Borneo, which borders with Indonesia and Brunei. Malaysia and Indonesia together produce 85 percent of the world's palm oil. The climate of these two countries is particularly well suited for the growing of palm oil, Hisham Hashim said. There have been attempts to grow palm oil in countries further north, such as Cambodia, but it is possible only in the southern part of the country because it is too dry farther north. Although the palm oil is not native to Malaysia it was brought over from Africa it is now well established, and it serves as both a food crop and

a cash crop. The Malaysian palm oil industry has been around for more than 100 years, and there are now 5 million hectares of palm oil plantations almost 14 percent of the country's total land area (May, 2012).



Sources: Malaysian Palm Oil Board (MPOB)

**Figures 1: Oil Palm Planted Area by Category as at December 2013**

As of December 2013, 62 percent of the total planted area are under private ownership, particularly plantation related companies with integrated operations covering the entire production process from plantation to refining and consumer products. 24 percent of the planted areas are under Government land schemes, such as RISDA, FELDA, and FELCRA while the remaining 14 percent belongs to individual smallholders. The largest upstream player is FELDA through its private listed company FELDA Global Ventures Holdings (FGVH). FELDA was established in 1956 with the socioeconomic mandate of



developing agricultural land for the rural poor and landless. FELDA accounts for 14 percent of the total planted area in 2012.

Until recently, Malaysia was the world's largest producer of palm oil. It is now second to Indonesia, which has much more area available to grow the palms. Because Indonesia consumes a portion of its palm oil domestically, Malaysia remains the world's largest exporter of palm oil and palm products. In 2011, it exported 24.3 million metric tons of the oil (Chin, 2011). Two of Malaysian based companies; Sime Darby and FELDA are the world's largest plantation companies.

The cultivation of oil palm continued into the early 1960s when it began to increase significantly due to the government's agricultural diversification program that promote the planting of oil palm as a means to reduce dependency of the country's economy on natural rubber and tin. In the same decade, land settlement schemes for oil palm cultivation were introduced with the purpose of eradicating poverty among the rural poor and landless. The Federal Land Development Authority (FELDA) started its oil palm cultivation on 375 hectares of land in such scheme in 1961. Oil palm plantation became largely based on the estate management system and smallholder scheme. In 1966, Malaysia overtook Nigeria as the world's leading exporter of crude palm oil (CPO).

The Malaysian government has identified the palm oil industry as 1 of the 12 national key economic areas to spearhead its economic transformation program, whose goal is to transform Malaysia into a developed nation by 2020. The Malaysian Palm Oil Council

(MPOC) was tasked with developing a comprehensive strategy to position Malaysia as an international leader in the oils and fats market through promotional activities. The growth strategy for the palm oil industry is not to increase the acreage being planted with palm oil, but rather to increase production to 6 metric tons per hectare per year. “It is already a very productive crop,” Hisham Hashim said, “but we intend to increase productivity further through genetic methods and so on.” Another focus is on value-added downstream activities, such as processed foods, oleo derivatives, phytonutrients, and palm biodiesel. Most of Malaysia’s palm oil-derived exports—almost 75 percent—are in the form of the crude palm oil itself, with products such as oleo chemicals, palm kernel cake, palm kernel oil, and biodiesel making up far smaller percentages (May, 2012).

In Malaysia, Palm oil industry is a significant source of employment with a total labour force of 1.16 million people. About 578,000 of them work on oil palm plantation, which represents 40-45 percent of the employment in agriculture.

### **1.3 Background of Study**

This study focused on the palm industry in the Northern States of Malaysia. In 1980, around the time that oil palm was first introduced as an industrial crop in the area, the district had a population of 2.01 thousand people in Kedah, 0.24 thousand people in Perlis, and last but not least 2.45 thousand people in Perak. (Department of Statistic Malaysia, 2013). The main ethnic groups in Northern region Malaysia are Malay, China,

and India. Figure 2 shows the location of the northern states, namely Perak, Penang, Kedah and Perlis.



**Figure 2: The Map of Northern Region in Malaysia**

Table 2 illustrates the distribution of oil palm planted area by state and sector in 2013. According to the Department of Agriculture, the area planted with oil palm plantation in the district amounted to 470054 hectares in 2013, is equivalent to approximately 9 percent of the district's land area. The majority of the district's population comprises oil palm smallholders (others are fishers, small-scale traders, plantation workers and civil servants). The oil palm is the main cash crop, followed by rubber, rice and coffee (Beluran District Office 2010).

Generally, there are three major types of oil palm producers: independent smallholders, producers in the land development schemes, and private estates (Table 2). The farms of independent smallholders are generally small (less than 100 hectares). Land development schemes are projects introduced by the government to resettle landless farmers on new land as producers of export crops such as palm oil. One main agency entrusted with this scheme is the Federal Land Development Authority (FELDA), which is also involved in the marketing of the produce. Other land development agencies are FELCRA (Federal Land Consolidation and Rehabilitation Authority) and RISDA (Rubber Industry Smallholders Development Authority).

**Table 2: Distribution of Oil Palm Planted Area by State and Sector in 2013**

DISTRIBUTION OF OIL PALM PLANTED AREA BY STATE AND SECTOR IN 2013 (Jan-March)  
(Hectares)

State	SECTOR						Total
	Smallholders	FELDA	FELCRA	RISDA	SEDC/Govt. Agencies	Private Estates	
Johor	188,627	131,340	22,474	4,191	37,156	338,073	721,861
Kedah	21,853	717	1,064	893	2,451	57,249	84,227
Kelantan	3,759	35,369	2,799	1,180	20,058	73,039	136,204
Melaka	9,975	2,460	2,519	1,296	-	36,660	52,910
Negeri Sembilan	20,840	44,648	7,379	9,721	399	85,291	168,278
Pahang	39,008	299,791	32,816	23,327	61,713	244,122	700,777
P.Pinang	94,984	24,355	31,049	17,966	19,391	194,400	382,145
Perak	58	94	126	-	-	-	278
Perlis	8,496	-	472	-	-	4,454	13,422
Selangor	40,828	8,054	3,811	290	1,438	82,144	136,565
Terengganu	9,569	42,465	21,220	18,580	10,554	68,937	171,325
<b>Peninsular Malaysia</b>	<b>437,997</b>	<b>589,293</b>	<b>125,729</b>	<b>77,444</b>	<b>153,160</b>	<b>1,184,369</b>	<b>2,567,992</b>
%	17.1	22.9	4.9	3	6	46.1	100
<b>Sabah</b>	<b>186,552</b>	<b>112,455</b>	<b>15,698</b>	-	<b>77,689</b>	<b>1,066,814</b>	<b>1,459,208</b>
%	12.8	7.7	1.1	-	5.3	73.1	100
<b>Sarawak</b>	<b>84,259</b>	<b>7,517</b>	<b>27,925</b>	-	<b>76,483</b>	<b>908,329</b>	<b>1,104,513</b>
%	7.6	0.7	2.5	-	6.9	82.2	100
<b>Malaysia</b>	<b>708,808</b>	<b>709,265</b>	<b>169,352</b>	<b>77,444</b>	<b>307,332</b>	<b>3,159,512</b>	<b>5,131,713</b>
%	13.8	13.8	3.3	1.5	6.0	61.6	100

Source: MPOB

Private estates are farms which are larger than 100 hectares and operated by private firms. Currently, private estates account for about 45 percent of the area planted with oil palm, land settlement schemes 46 percent and independent smallholders 9 percent

(PORLA, 1992). In Perak, 94 hectares for FELDA of the area planted with oil palm, and 126 hectares for FELCRA of the area planted with oil palm. Perlis and Kedah, 0 hectares and 717 hectares of the area planted in oil palm for FELDA and 472 hectares and 1064 hectares of the area planted in oil palm for FELCRA respectively.

However, the development of this sector is hampered by the shortage of labour. Many estates encountered difficulties in employing sufficient workers, especially from amongst the locals. According to Malayan Agricultural Producers Association (MAPA), about 80 percent of the plantation workers in Sarawak are foreign workers, the majority of whom are Indonesians. The shortage of farm labour had been felt since the early 1980s, when the State first embarked on industrialization. The wage rate differentials between the industrial and the agricultural sectors have prompted many rural folks, especially the youths to migrate to urban centers in search of better employment (Aziz, 1998). This problem is accentuated by the apparent lack of interest in agricultural work among Malaysians.

As Malaysia aggressively expands its oil palm plantations, there is a huge dependency on foreign labour in the upstream industry. Malaysia is facing the acute shortage of foreign labourers who work as an oil palm fruit harvester in the local plantations. This is due to the dwindling labour supply from neighboring countries, tightening regulations on foreign labour by the Malaysian government, rising social and security problems. The total number of plantation workers (577,900) comprise of 60 percent foreigners (350,000) and 40 percent local.

To overcome this problem, estate management has resorted to foreign labour. However, the foreign workers could not provide the long term solution to the problem. Moreover, the recent stringent controls imposed by the government on foreign workers' entry to the country have furthered worsened the shortage of labour. Labour shortages pose direct pressure on production cost, resulting in lower productivity and loss in profit for oil palm plantations (Borneo Post, 4 April 2005). Thus, this problem unless rectified, may pose constraints on production growth and affect the productivity and competitiveness of the oil palm plantation industry in the future. This calls for the need to study the welfare or socioeconomic status of the estate workers vis-a-vis workers of other sectors in the economy. Currently, there are very few studies on why the estate workers are unwilling to work in the estates.

Plantation workers are often seen as a deprived, poor and underprivileged group. For instance, it was reported that oil palm estate workers are amongst the lowest paid employees in the country (Sin Chew Jit Poh, 15 February 2000). All these tend to suggest that there is a high rate of poverty amongst them. In 2014, the federal government stipulated a guaranteed minimum wage rate of RM 900. However, this represents only 80 percent of the poverty line income at the national level and less than 50 per cent in the state. This study aims to find out why the plantation workers are poor, and why labour, youth in Perak, Perlis, and Kedah are unwilling to work in the estates. The main issues that are examined include, among others the remuneration, living conditions and other socioeconomic aspects of workers as well as the reasons why many are unwilling to work in the estates.

### **1.3.1 Federal Land Consolidation and Rehabilitation Authority (FELCRA)**

FELCRA was formed in 1966 by the Federal Government, with the task of developing rural sectors and assisting the community in contributing towards national economic activities, while improving their quality and standards of living (FELCRA, 2005).

FELCRA's mission are first is to uphold the participants philosophy and continuously grow with equity, while at the same time manage, maintain and protect the interests of its target group, the participants as a whole, to accomplish its social obligation activities and to re-develop existing productive lands into other profitable business sectors and finally to vary activities that is profitable while at the same time to plan and to execute export oriented programmes in achieving successful future (FELCRA, 2005).

### **1.3.2 The Federal Land Development Authority (FELDA)**

FELDA was established in 1956 to continue effort in uplifting the standards of the rural agricultural population by undertaking new land development for agriculture settlements. The Federal Land Development Authority (FELDA) started its oil palm cultivation on 375 hectares of land in such scheme in 1961. The oil palm plantations became largely based on the estate management system and smallholder scheme. In 1966, Malaysia overtook Nigeria as the world's leading exporter of crude palm oil (CPO).

#### **1.4 Problem Statement**

This study aims to investigate the perception and demographic factors that might cause the local youth to work in the oil palm plantation. This study is also expected to contribute to the clear picture and solution on how to attract the local youth to work in oil palm plantation. The government and oil palm sector can find alternative ways considered at the end of the research outcomes. As a result, the expected outcome will help solve the main issue facing the oil palm plantation, that is, labour shortage. With planning local youth's future in the field of Palm Oil plantation, to date, a lack of understanding perception factors would make it impossible to correct their interest perceptions and views, for instance youth's domestic role, and future plans for this industry's progress would be likely to fail because they would be in conflict with the established and existing values of an industrial society. This study is undertaken to focus on local labour, youth into groups of oil-palm estate workers, namely the estates managed by government agencies in Perak, Perlis, and Kedah. A government managed estates, FELDA and FELCRA was covered in this study.



## **1.5 Research Question**

From the problem statement, the research questions are:

- 5.1 How significant the involvement of local youth in the oil palm plantation sector?
- 5.2 What are the factors that influence the participation of local youth in the oil palm plantation sector?
- 5.3 What are the actions of the government policies to enhance participation among labour, youth in the oil palm plantation sector?

## **1.6 Objectives of the Study**

General objective of this study is to investigate the labour force participation of local youth in the oil palm plantation.

The main objective is to investigate the perception factors that might cause the local youth to work in the oil palm plantation. This study embarks on the following objectives:

- a) To explore the involvement of the factor local youth in the oil palm plantation.
- b) To analyses the factor local that influence that of local youth in the oil palm plantation.

## **1.7 Significance of the Study**

In view of the labour shortage oil palm industries in Malaysia, a study in this area is now appropriate and timely. Consequently, it is significant to conduct research involving local youths under a collective culture. This study is important to establish a preliminary model (approach or perspective) of perception factors that might cause the local youth to work in the oil palm plantation, cultural influences on aspirations towards self-employment and its relationship to the development of local youth to working in oil palm plantation. This study intends to investigate perception factors that might cause the local youth to work in the palm oil plantation.

These study expectations provide an understanding of a different kind of interpretation of how the perception factors that might cause the local youth to work in the oil palm plantation. The findings of this study could provide insights into and recommendations for effective pedagogical processes and programs of employment for local youths; as well as to make recommendation to relevant departments and organizations in order to increase the development of local youths in the field of palm oil plantation. To future researcher, the proposed study will benefit and help the future researcher as their guide.

Different from other studies on oil palm plantation and employment, this paper investigates the element of how perception factors that might cause the local youth to work in the palm oil plantation. In planning for youth's future in the field of oil palm industries, a lack of understanding of these labour shortage and palm oil plantation would make it impossible to correct traditional perceptions and views on these industries to

attract more local youths to get involved in these industries and choose as a career path for the future.

### **1.8 Scope of the Study**

The study will be carried out in the Felda and Felcra Scheme and selected village nearby plantation in Perlis, Kedah, and Perak. The focus group will be the local Youth between age 13 years to 45 years old. The study only focuses on the factors that can influence the involvement of local youth in oil palm plantation. The scope of the study involves the factors of participation local youth in oil palm plantation where a participant as a dependent variable and factors influence the participation of local youth such as wage, education, race, age, incentive, and race as an independent variable. To be able to reach the objectives stated, this study chooses primary data as a sample in Perlis, Kedah, and Perak as 332 samples.

### **1.9 Organization of Report**

This report is divided into seven chapters. Chapter One introduces the issue of local youth in Oil Palm plantation, world Oil Palm issues and objectives of the study. The theoretical and empirical evidences on this study are discussed in Chapter Two. Then, Chapter Three will presents the data and methodology, while Chapter Four presents' analysis results and Chapter Five discussed the ends the report with a discussion and conclusion.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This section will present theories and previous studies that relevant to this study. The researcher has used a variety of reference materials as a guide such as journals, books, newspaper, magazine, thesis, mass media and other printed material has been used and referred. All these materials are used to help researchers understand and deepen the research. In addition, this section will describe the approach and findings of previous studies either locally or globally related to this study.

The literature review is intended to look more closely at the objective and a critical assessment of previous studies that have to do with the perception, attraction and repulsion factors that might influence the local youth to work in the oil palm plantation whether it is more affected by internal or external factors. In addition, this section will discuss several models and theories related to working in the plantation sector.

## **2.2 Theoretical and Concept**

This section is part of literature is to review on the part of theoretical on independent variables such us definition of plantation, history of plantation, participation, labour shortage in oil palm plantation, and factors of affecting participant labour youth in oil palm plantation sectors.

### **2.2.1 Definition of plantation**

Many scholars have made several studies and published literatures related to this study. Arising from these, several definitions, terms, typologies, or theories have emerged to explain the nature and characteristics of plantation agriculture and how it differs from smallholding agriculture. In order to understand what a plantation is, it is important to distinguish between plantation and smallholding agriculture. The review of literature on the plantation as a system of agriculture found no general agreement on the definition of the term 'plantation agriculture'. Likewise, the agricultural production unit, which is known as 'plantation' or 'estate', has a variety of meanings and had been debated by various writers and scholars. These differences stemmed from the different criteria used to describe or define a plantation.

In addition, such definitions may be inadequate, as some other important characteristics of both plantation and smallholding agriculture need be looked into, like cropping

system, labour force, capital involvement, bureaucratic organization, the purpose of production and land area.

### **2.2.2 History of plantation**

Plantations are essentially tropical and are intimately bound up with colonial and imperialist conquest and exploitations (McBride, 1935). The Industrial Revolution that erupted in Europe in the 19<sup>th</sup> century had not only resulted in the race to obtain colonies among colonial powers, but also the demand for cheap raw materials for their processing and manufacturing industry in their motherland. Plantation agriculture was then introduced in the colonies to produce crops to feed their factories. Plantation cultivation was designed for the production of commercial crops to be exported overseas. Crops grown were those that were highly demanded by foreign countries. Plantation is, therefore, as pointed out by Gordon (2001), associated with colonial rule and coercion; planted crops are associated with industrial processing and manufacturing; and are closely related to a new form of capitalism, i.e., the pursuit of super-profits returns and the exploitation of labour. To support the plantations in their production process, the colonial states enforced policies to protect planters, such as in the form of cheap land and cheap labour. It is for this reason Gordon (2001) suggested that any theory or attempt in trying to explain a plantation system must take its basis in cheaper land and labour supplied to the plantations by the colonial states. These supports given by the colonial government or state, according to Loewenson (1992) and Ramachandran (1995), are in the form of legislated expropriation of land (through land policies); cheap labour the

enforcement of slavery and indentured labour, the recruitment and control of labour; financial assistance; restriction where the colonial assists the planters by controlling production from non-plantation producers or smallholder stabilize prices (Like the Rubber Restriction Scheme in Malaya); and infrastructure facilities, such as investment in roads, drainage, irrigation and social infrastructure.

### **2.2.3 Participation**

It's impossible to explain the meaning of participation in formal way, though; it can be described through understanding of interpretation of the some in development thinking. United Nation Research Institute of Social Development (UNRSD) defines the participation as the organized exertion to increase control over resources and regulative institution by groups and movements of those excluded from such control.

The description recognizes this is theoretically conflictual, and that reorganization of power is involved. There will be an interest opposing participation, including the political affiliation, class, race, ethnicity, or gender.

According to Rahman (1990), recognized at several dimensions of empowerment which to provide a good initial point for developing statistics about participation. There are creativity, knowledge of their social environment and its processes developed by the disadvantage, and a progress for women in articulating their points of view, and the evolution of gender relations towards equality, as assessed by women themselves.

Participation by the people in the institutions and systems in government, their lives are basic a human right and also elemental of readjustment of political power in favor of disadvantaged groups and for social welfare and economic development. Besides that, in the rural development strategies, it can realize on their full potential only through motivation, active involvement, and organization at the workers' level of rural peoples, with special importance on the minimum advantage.

#### **2.2.4 Labour shortage in oil palm plantation**

The main challenging factor the plantation industries are facing is the labour shortage. The problem is, it's not just in Malaysia but facing all over the world which involved in agriculture and plantation. For instance, Puerto Rico a country which is famous in producing coffees also facing the labour shortage in the coffee plantation. According to Rivera Lyles (2007) from the Los Angeles Times, the coffee plantation facing the problem of labour shortage, especially during main operation to carry out harvesting operation. Most of the coffee bean was not collected which faced about 30% and 40% losses in the Coffee Industry in Puerto Rico. Sri Lanka faces similar problems in labour shortage for the tea plantation.

The local prefer to work in manufacturing and house maid rather than to work in tea plantation the perception of the Locals find work in the plantation were labelled low standard. This stimulates them to work in better condition and environment (Ghosal



2009). Malaysia is also facing the similar experience with Sri Lanka after rapid expanding the oil palm plantation.

According to the Minister of Plantation Industries and Commodities Tan Sri Bernard Dompok (2012) through Bernama, oil palm plantation is facing a severe labour shortage of about 35,473 workers and it needs to undergo a paradigm shift from heavy reliance of labour to modern mechanism. The numbers of workers were reduced from last year. The oil palm industry shortage of labour amounting to 42, 707 workers in 2010 (Ramli et al., 2011).

The contributing factors and scenarios to labour shortage are largely due to the local people are not interested to work in Plantation. The local only interested to work in administrative work as Executive, Staff and Mandore compared to work in operation and heavy duty job. Local workers perception fewer opportunities in plantation are another reason why they are not inclined to involve in plantation sector (Daud Amatzin 2006). The migration of local to work in another sector which, influenced by the various policies formulated by the government have resulted in the rapid growth and employment creation such as National Vision Policy (NVC) and National Development Policy (NDP) which diversify into manufacturing caused the local not interested to work in plantation in addition of sub-standard of education and standard of living are a pull and push factor the local to work in the plantation (Mohamad Audong 2009).

Labour shortages have been widely reported in many estates in Malaysia, particularly in the eastern States of Sabah and Sarawak. Lack of interest to work in the estates and high turnover among the locals are the prime reasons that contribute to this problem. KH Lee and Sivanathiran (1996) also observed labour shortages in the oil palm plantations in Malaysia. The study revealed that employers resort to foreign workers because of a shortage of local workers and the high turnover among local workers. According to them, the estate management usually prefers foreign workers because they are easier to manage, work longer hours and more cost effective.

### **2.2.5 Factors of affecting participant labour youth in oil palm plantation sectors**

This section will discuss about the factors of affecting participant labour youth in oil palm plantation sectors such as level of education, immigration, foreign workers in oil palm plantation, and socioeconomic and welfare effect which is study in this paper.

#### **2.2.5.1 Level of education**

Local workers usually receive high levels of education. Studies have indicated that the local workers in Malaysia are more academically qualified compared to the foreign workers. For instance, Khoo. K.M and D. Chandramohan (2002) noted in their studies that many plantations in the country are stripped of the younger, better-educated workers

who migrate to work in the vibrant manufacturing sector in urban areas, which offers not only better working environment but also better pay.

According to previous studies by Elder (1963), education beyond high school has assumed crucial significance as a determinant of the life chances of rural youth, whether they seek plantation or non-plantation occupations. Against this situation, the problem of a comparatively high dropout rate from high school and a relatively low rate of college attendance among youth from rural areas. By surveying the research literature found that rural youth are more suitable than urban adolescents to be disadvantaged in achievement opportunities, exposure to achievement values and high goals, and achievement motivation. An examination of the progress of rural and urban youth in a large land grant organization exposed rural youth to be less really prepared for college and to choose fields of specialization, which differed from the choices of urban students.

#### **2.2.5.2 Immigration**

There are many theories that explain about immigration and its impact on the economy. Immigration affects the employment in certain countries. And there is also a situation where a country with a higher percentage of foreign workers does not affect the employment rates of local workers (Angrist and Kugler, 2003). Immigration could give positive and negative effect on the economy in terms of employment rates (Carrasco et al, 2008).

According to Bailey (2008), the researcher stated that the immigration and migration are closely linked and often interchangeable, but there are differences in these two activities. A previous study by Carrasco (2008), the immigration means movement of people from one country to another with the intention of becoming perpetual residents in the country to which there are relocating. Therefore, from each country has a different effect of immigration on wages and employment rates. A study conducted by the Jean et. al (2007) showed that although the number of immigration in a country was high, but the unemployment rate was low, and there was also a situation where, high immigration and the unemployment. Thus, immigration does not have any impact on the labour market performance certainly. Thus, the researcher stated that if a country has a high wage rates, there is more immigration into that country.

In the theory of conjecture that, the impact of immigration on local workers are small as immigrant take or force to take jobs from local workers by Piore (1979). In the theory neoclassical principles of utility maximization for individual and profit maximization for the employee, it explains about the effects of immigration on individuals, firms and governments in a country. The discussion of theories begins with Neoclassical model and followed by Area Analysis Model which is a variant of Neoclassical model and the Hecksher-Ohlin which is another one of the variant of Neoclassical model.

According to Borjas (2006), in a particular country, immigrant has higher productivity than local workers. They also easily adapt to in the labour market of the host country. Besides, Rowthorn (2004) also stated that, if there were a huge percentage of unskilled

workers who migrate to a particular country, it will give advantage to the host country with cheaper labour job. Generally, there will work in the plantation, and also services sector, such as restaurant and so on. But for local workers sides need to compete with these immigrants, it will be not an advantage to the economy. They will compete to get a job. The larger the number of immigrant in this country, it will bring less opportunity for local workers to get jobs in certain areas.

Accordingly, to Longhi (2006), stated that immigration will not only affect the labour market performance, but it also can affect inflation, housing, social cohesion, and environment. Therefore, immigration can give more effects on employment opportunities compared to local wages. Based on Dustmann (2005), in the short term change factor in wages and employment may not affect on immigration. It can affect on wages and employment for local workers. In consequence, immigration will increase workers' wages if foreign workers were complementing.

In the beginning 1982, the general observation has concluded that immigrants take jobs from local workers. Because of this, it will increase the unemployment rate to 8.3 per cent in 1986 based on previous studies by Hugo (1993). Based on Longhi (2006), an increase in 1 percent of the total immigration it will decrease around 0.024 percent of workers in the employment of locals. Besides, Dustmann (2005) found that, in increasing of 1 percent of immigrant in population, it will reduce the employment rate by 0.07 percent of local workers.

Based on Longhi (2006), found that increasing in labour demand in a country is because of their need to use too many labour. This may cause labour intensive techniques or they specialize in labour intensive. In addition, the local workers who compete with foreign workers (substitute) will manage to earn lower wages, but this migration will increase the employment of complement workers with the skills possessed by foreign workers. For this idea, it can explain that, wages would be reduced if local and foreign workers were substituted and wages will increase if local and foreign workers were complementing. According to Asadul Islam (2008), an immigrant can define as the substitute to the local workers in certain occupations, and complementary in some jobs.

Dustmann (2003) stated that immigration does not harm the local workers. However, Rowthorn (2004) found that the immigration will cause demand for local workers to be low. Besides, it will cause a voluntary unemployment among the local workers as wages fall. Because of that, they are more likely not to participate in the labour market (Dustmann, 2005). But for local workers who had been working and still working in the particular industry, their wages will rise. This indicates that a difference there between the wages of local workers and immigrant, while they do the same job. Immigrant inflow in an area will increase the demand for housing and this will cause the highly in the cost of living. Accordingly, to Rowthorn (2004) also stated that, to compensate their workforce, many employers are likely to raise money wages. If the increasing in wages is less than the original increase in the cost of living, local workers will be worse off even though they are being paid more. Thus, immigration is advantage to higher money wages, but it is not definite proof that immigration can give benefit to local workers.

### **2.2.5.3 Foreign workers in oil palm plantation sectors**

The flow of international migration in Malaysia is not current phenomenon. It started during the colonial period during the British occupation in Malaysia.

Originally, the immigrants were brought from the most densely populated neighboring regions like Java, China and India. Besides, the British during that particular time, the colonial rule preferred the Indians rather than to the Javanese and Chinese. Because it is due to migration costs for Indian are cheap compared to Chinese and Javanese to Malaysia (Selvakumaran and Shanmugam 1995). According to Karim et al. (1999), before the colonial rule, inter-island migration rule was very common in this region and it's continued during the British Administration as well. The policy of Inter-island migration was allowed many Indonesian entered the Peninsula Malaysia on a voluntary basis to search employment and subsequently these Indonesian were integrated into the culture and they had started living permanently and worked in plantation especially in Johor, Perak, Sabah and Kuala Lumpur. The huge percentages of Indonesian immigrants actually were Javanese who recruited through Dutch authority mostly from 1921 to 1931 and they employed as workers in the rubber estates under the Indenture System through European farm and supplied to Malaya.

The Indonesian workers formed their own settlements, while some of them assimilated with the locals Malay (Azizah, 1997). Many of them therefore, took Malaysian citizenship after Independence Day in 1957. The arrival of Indians in Malaya is also not a

sudden occurrence. The modern immigration of Indian workers in Malaya during the British occupation and rules, the Indian immigrants were allocated in large number in coffee estates (Karim et al., 1999)

The previous study by Michael (1980), generally workers who came from South of India are from the ethnic Telegu and Tamil. The Indian workers increased at the end of the 19th Century and at the beginning of the 20th century to fulfill the demand of the colonial government to be employed in the rubber and sugar plantation. The Indian workers were fully demanded due to the rate of wages offered was cheaper from Chinese and Javanese. The most prominent people's arrival of Chinese came to Malaya was a trader. In accordance with Selvakumaran and Shanmugam (1994), the first recorded of Chinese traders entered to Malaya occurred in the 14<sup>th</sup> Century. The Chinese settlements were discovered in Malacca after its foundation in 1403, but they started coming in large numbers when Penang was founded by the British in 1786. At the beginning, a few of thousands of them were imported by British in the first quarter of the 18<sup>th</sup> century and working in the tin mines (Karim., et al 1999). Most of the Chinese came from three China's Provinces i.e Kwantung, Fukien and Kwangsi (Selvakumaran and Shanmugam 1995).

Accordingly, to Yap Chee Boon (2004), stated that the first foreign workers arrived in Sabah (formerly known as North Borneo) were the Chinese from Kwang Dong, China in about 1882. There are Hakka ethnic and mostly Christians and were recruited to work in



rubber plantation and in construction. In 1949 the Chinese plantation workers formed about 25 percent of the North Borneo.

#### **2.2.5.4 Socioeconomic and welfare effect**

According to Bossen 1982 the factors that impact plantation labour recruitment has important social and economic effects not only upon permanent plantation communities, but also upon the peasant communities that supply labour to the plantation sector, whether as seasonal or permanent workers. In selecting the plantation labour force, plantation management is interested in maintaining a high degree of control over the workers in order to certify the smooth operation of a large-scale enterprise. The ever-rising demand for agricultural products both locally and globally creates yet another chance for the youth to actively engage themselves in agriculture and earn income from agricultural activities. Additionally, most African countries are creating below the potential yields implying that more improvements are possible with increased labour and land productivity (Brooks 2012). The exact reasons affecting youth employment in agriculture have received little research attention nationally.

In a study of the determinants of youth participation in agricultural labour in Abia State, Nigeria by Agwu et al., 2012. The study, therefore, recommends that attempts should be made to boost income from the plantation. The outcome had determined that because non- farm sources provide better and higher income that youths tend to go for them, leaving out agriculture. Furthermore, the cost inputs and other related factors should be

made affordable to the labour. Although the cost of inputs was not included as one of the variables, it should be noted that mechanization that normally should have attracted youths towards agriculture came out with a negative sign. This could probably mean that because of the high cost connected with the mechanization of which youths may not be able to afford and participation becomes hard.

According to the study by Mohammad et al., (2014), the key factors that caused the local youth to be not attracted to work as an employee of palm oil plantations were the factors of heavy work and no fixed salary. The absence of a fixed monthly wage in palm oil plantation makes the employee face problems to apply loan amenities from financial institutions. Because of this reason, labour, youth more interesting to other job with stabilizing income. Hence, they can also make a loan from financial institutions. On the other hand, Palm oil plantation works such as load and unload fruit, oil palm plantation maintenance and fertilizer application are heavy, dirty and dangerous works. The lack of mechanization applications in palm oil plantation is the cause of this problem occurs. Implementation of the effective and efficient mechanization in the oil palm plantation can lighten the workload of plantation workers.

### **2.3 Empirical**

Research has done by Agwu et al., (2012) The determinants of agricultural labour participation among youths in the study area as indicated in Table 16 below, showed that the coefficients of education of the respondents, income from non- agricultural sources, occupation of the parents, education of the father, farm size and the rate of mechanization were major determinants of agricultural labour participation among the youths in Abia State, Nigeria.

The source of the data was the primary source, so this study employed the use of a questionnaire, which was administered to the respondents. A multi-stage sampling technique was used in the study. Firstly, 4 LGAs were selected from each of the agricultural zones. Secondly, 10 communities were randomly selected from each of these LGAs. Finally, 10 youth farmers were chosen from the 10 communities. The total numbers of 100 farmers were used for the study. In analyzing the data, descriptive statistics were used in describing the types and composition of farm labour engaged by the respondents in the study area, while the Probit model was employed in the estimates of the determinants of agricultural labour participation among youths in Abia State, Nigeria.

Etwire et al., (2013) the study relied on primary data for analysis about the soybean production in Saboba and Chereponi based on gender. Semistructured questionnaires were designed, pre-tested and administered to soybean farmers in the Saboba and Chereponi districts. The questionnaire was developed to sufficiently collect data on

plantation worker and worker characteristics. A multi-stage sampling technique was adopted for the study. Saboba and Chereponi districts were purposively selected because they are key soybean producing districts in the Northern Region and by extension Ghana. Nine communities were selected in each district based on simple random technique. On the average, 10 farmers were randomly enumerated in each community. A total of 180 farmers were enumerated in 18 communities.

Rendering by Mohammad et al., 2014 exemplifies the demographic factors of the 200 respondents in their study. A total of 131 (65.5 percent) respondents were males and 69 (34.5 percent) were females and an average age of respondents is 28 years. In terms of marital status, a total of 53 per cent of the respondents is single while the rest are already married. This study lists eleven factors that can attract the local that are EPF, SOCSO, pre-school children (kindergarten), transport to schools, medical facilities, house and furniture, housing scheme, compensation scheme, electricity supply, clean water, and community halls. The responses were then analyzed based on three demographic factors, namely gender, age and marital status.

Previous studied by (F.N Nnadi et al., 2009) the determinants of the labour sustained use decision behaviors include age, education, family size, farm size, annual farm income and number of information sources available. These underscore the importance of the labour socioeconomic factors, technological attributes, and communication related variables in designing extension intervention approaches like participatory approaches like the farmer field school should be utilized in designing and disseminating technologies so as to

incorporate labour socioeconomic conditions and expectations for sustained adoption. Extension education campaign should utilize multimedia for increased awareness, clarification and reinforcement of extension agents' efforts. An extension enlightenment campaign by the state Agricultural Development Program should be increased to induce and motivate labours towards enlisting in labour co-operative societies. Labour socioeconomic factors should be considered fundamental in designing extension intervention strategies.

Besides, Falola et al., (2013) the target population for research was youth rice farmers in the study area. A three-stage random sampling procedure was employed to obtain the data and a total of 120 youth rice farmers were used for the research. Information was found with the use of structured questionnaires expanded with oral interview. Data collected include the socioeconomic profile of the respondents, agricultural production data, prices of farm inputs used and rice output, and constraints faced in agricultural production.

Recent empirical finding in Nigeria by Damisa et.al (2007) highlighted in their study in spite of diverse in social, economic and various other constraints about youth, women have high level participation in agriculture and they are very dedicated in their agricultural activity. However, the researcher found the level of participation of youth, women in farming sectors decision making was found very medium. The range of involvement and decision making in agriculture activities like intercultural operations is 48 percent in the harvesting of crops 45.33 percent, and storage of farm produce is 42.67

percent. Besides, 42.00 percent in sales of farm produce and in subsidiary occupation like animal husbandry and dairy business is 38.67 percent and financial management is 36 percent only (Unnati et.al, 2012).

Based on the existing literature, there are plenty of benefits being offered by contract farming and this agriculture activity should be sustained. The expanding number of ageing farmers in agricultural activity nowadays indeed requires a drastic movement from the related agriculture agencies. In the previous study by Norsida (2007), the number of farmers was increased to 56 years old in Malaysia. To maintain the contract farming in Malaysia, the acceptance, attitude and knowledge of youth in this activity is the main basis to achieve the objectives. Recently in Malaysia, the number of youth in Malaysia now is 40.18 percent, while the number of unemployment among local youth is reaching 4 percent.

The contributing factors and scenarios to labour shortage are largely due to the local people are not interested to work in Plantation. The local only interested to work in administrative work executive, staff and mandore compared to work in operation and heavy duty job as showed in the table 4.

**Table 3: Estimated Total Workforce in Oil Palm Cultivation in Malaysia by Category of Work**

Category	Local	Foreign	Total	Foreign %
Harvesting Mandore	6,629	4,656	11,285	41%
General Mandore	28,079	15,493	43,572	36%
Harvester	9,677	176,795	186,473	94%
FFB Collector	3,221	29,142	32,363	89%
L/ Fruit Collector	1,646	12,389	14,036	88%
Field workers	26,290	91,814	118,104	77%
General Workers	16,705	35,481	52,186	67%
Sub Total	92,247	365,772	458,018	80%
Executive	14,450	815	15,265	5%
Staff	25,045	2,489	27,533	9%
Sub Total	39,495	3,304	42,799	12%
Total	131,741	369,076	500,817	74%

Source: (Mohd Arif Sameh, MPOB 2010)

Table 3 shows the percentage of foreign labour utilization vis-a-vis local labour. The operation and production was dominated by foreign labour. About 94 percent of the harvesting operation was represented by foreign workers. Most foreign workers work as loose fruit collector (88 percent) and a total of 77 percent and 67 percent from the field and general workers, respectively. The local workforce has a large tendency to work in administration and supervisory task, when more than 90 percent work in the category. Foreign worker only represented about 5per cent and 9 per cent at executive level and supervisory level, respectively. In addition to the penetration of foreign towards to administration and supervisory level showed an unhealthy scenario.

According Zulfadlie (2011), the students of higher institution with agriculture background and have the highest acceptance level are not interested to work in plantation due to work in rural area. Based on Daud Amatzin (2006), local workers perception less opportunities in plantation is another reason why they are not inclined to involve implantation sector. Recent empirical finding by Mohamad Audong (2009), the migration

of local to work in other sector which influenced by the various policies formulated by the government have resulted in the rapid growth and employment creation such as National Vision Policy (NVC) and National Development Policy (NDP) which diversify to manufacturing caused the local not interested to work in plantation in addition of substandard of education and standard of living are a pull and push factor the local to work in plantation.

## **2.4 Conclusion**

Overall, this chapter has discussed in detail about the factors that drive an entrepreneur to become a successful women entrepreneurship, the factors that influence success and failure in business operations and problems encountered. The information obtained could support the findings in future. The studies were conducted by researchers locally and globally also proved that the research area that is being conducted is indeed very important and appropriate to study in our country. Next, chapter four will discuss the methodology and methods used for this study.



## **CHAPTER THREE**

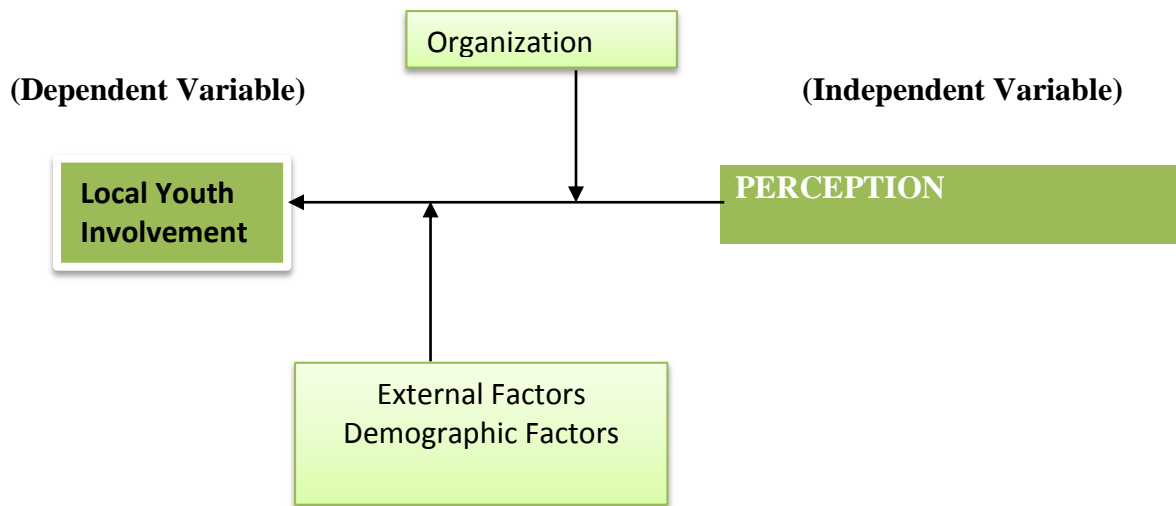
### **DATA AND RESEARCH METHODOLOGY**

#### **3.1 Introduction**

In this section, research methodology will discuss clearly researcher research plan. All the method used to gain understanding and answers to the research objectives, research questions and the research hypotheses. Research is simply the process of finding solutions to a problem after a thorough study and analysis of the situational factors (Sekaran: Research Methods for Business, 2005). This section discusses the methods that will be used in the study. The scope that will be discussed, including the research design, sampling and data collection, the instruments used for the research, measurement and scaling, and the procedure in data analysis.

### 3.2 Conceptual Framework

The conceptual framework was needed in order to know the relationship among the variables. The conceptual framework for this study was divided into dependent and independent variables that is illustrated in Figure 3. The objective of this study was to examine the to explore the involvement of the factor local youth in the oil palm plantation and to analysis the factor the local youth influence in the oil palm plantation.



**Figures 3: Conceptual Framework for Involvement of Local Youth in Oil Palm Plantation**

### **3.3 Research Design**

This study relied on survey research using a questionnaire. The selected labour, youth in Perak, Perlis, and Kedah were requested to answer in this questionnaire. Research design is a master plan specifying the methods and procedures for analyzing and collecting the needed information. According to previous study, it is a framework or blueprint that plans the action for the research project. It details the procedures necessary for obtaining the information needed to structure or solve the research problem. Causal Research Design was used in this research to identify cause and affect relationship among variables, where the research problem has already been narrowly defined. The researcher wants to identify whether the factors such as wage, education, age, parents' job, incentive, and race affect the participation of local youth in oil palm plantation.

Sekaran (2000) claimed that the questionnaires are the most useful instrumentation, data collection method, especially when a large number of visitors are to be reached in different geographical regions. Further, questionnaires are a popular method of collecting data because the researchers can obtain data easily, and the questionnaire responses are easily coded. In this study, it chooses quantitative to do this research because these ways suitable to measure the result, gain answer, also to achieve the objective. Quantitative research gains the data in the form of numerical data.

The numerical data come from the respondents that answer the question at palm plantations in Perak, Perlis, and Kedah. This research needs the primary data by

questionnaires ways. The respondent is labour, youth who are working and stay at palm plantations. They will answer the question about the factors influence the way among them not interested work in palm plantation and level of perception in differences factors among labour youth about participant work in oil palm plantation sectors.

### **3.4 Source of Data**

The data of this study can be obtained from primary sources. Primary data can be referred to the information obtained firsthand by the researcher on the variables of interest for the specific purpose of the study.

#### **3.4.1 Primary data**

The researcher firstly studies the entire journal from the internet, newspaper, library and other related press to understand what influence the participation of local youth in oil palm plantation. The previous research reports, books, libraries and articles are important sources to understand the issues. The data are being collected using the question air data by collecting in Perlis, Kedah, and Perak as 332 samples.

### **3.4.1.1 Questionnaire**

The questionnaire is divided into 5 sections: A, B, C, D, and E. Section A seeks the background information of the respondents includes gender, age, ethnicity, marital status, occupational status of parents, the higher education of respondents, and about the information on labour market such as employment status. In section B, divide into three parts which are, ‘ Sedang bekerja diladang’, ‘Pernah bekerja diladang’, and ‘Tidak pernah bekerja diladang’. In section C, it is about happiness among the labour, whether they used to work in plantation sector or not. In section D, is asked about what problems come out when the foreign labour work in Malaysia. Last but not lease, in section E, it is an opinion among the respondents about youth labour participate in plantation sectors. This questionnaire is written in Malay language.

### **3.5 Data Collection**

According to Sekaran (2005), data collection methods are an integral part of the research design. Data collection is a way of gathering information for use in various studies or decision making situations. Depending on the required outcome or information needed methods of data collection can vary and even be combined to achieve needed results.

### **3.5.1 Population and sample**

Population is a kind of collecting data and information in research methodology which is contributing individuals, families, groups and organizations that can give benefit to researcher to collect the data and information to complete this research. In this study, the population in three states which are Perlis, Perak, and Kedah is about 227,075 peoples, 2,258,428 people, and 1,947,651 people respectively. The population was selected in FELDA and FELCRA area. The sample was only focused on youth labours in these areas. The ages were selected from 15-45 years old to represents generation Y in this study.

A sample is a subset of the population. Base of the previous study by Sekaran (2011), sample comprising some members selected from it, however, it's just some, but not all, elements of the population are from the sample. Therefore, suitable and accurate method of sampling is chosen in order to achieve the objectives in this study. In this study, the sample is 332 respondents because of the limited time and budget constraints.

### **3.5.2 Unit of analysis**

According to Sekaran (2011), unit of analysis is the major entity that projects or promotes analyzing in the research. The unit of analysis of this study is the individual workers and not workers such as student Gen Y between the ages of 15 – 45 years old from FELDA and FELCRA located in Perak, Perlis, and Kedah.

### **3.5.3 Data collection procedure**

In this study, the data collection procedure is through distribution of questionnaires. These questionnaires were distributed to the Gen Y in FELDA and FELCRA area at Perak, Perlis, and Kedah. All the questionnaires were distributed to the respondents by an interview and groups. Based on Joseph (2004), use of questionnaires is practical, large amounts of information can be collected from a large number of people in a short period of time and in a relatively cost effective way. When data has been quantified, it can be used to compare and contrast other research and may be used to measure change (Sekaran, 2011). Some of the respondents it was not easy to meet because of the routine daily activities in their life such us works. Some of the respondents were interviewed in the landing complexes and interviewed by telephone. Although, some of the respondents it easier to contribute the feedback to the questionnaire by talking thorough a mobile phone.

### 3.6 Measurement of Variables

This section discusses the definition and measurement of independent variables in table 5 below.

**Table 4: Definition and measurement of Independent Variables**

<b>Independent Variables</b>	<b>Definitions</b>	<b>Measurement</b>
Age	Age in year	Direct measurement with the scale
Gender	Gender of respondents	0 if a respondent is female 1 if a respondent is male
Marital Status	Marital status of respondents	Nominal Scale: 1 = Berkahwin 2 = Duda/Janda 3 = Belum berkahwin
Educational level	Educational level of respondents	Nominal scale: 1 = Tidak pernah bersekolah 2 = Sekolah rendah 3 = UPSR 4 = SRP/PMR 5 = SPM 6 = Sijil kemahiran/Teknikal 7 = STPM/STAM 8 = Diploma 9 = Ijazah/Sarjana/PhD
Race	Race of respondents	Nominal scale: 1 = Melayu 2 = Cina 3 = India 4 = Kadazan 5 = Iban 6 = Bidayuh 7 = Lain-lain
Parents' job	Parents' job of respondents in oil palm plantation sector	Nominal Scale: 1 = Yes 2 = No
Participants work in Oil palm plantation	Dependent Variables	Nominal Scale: 1 = Who work at the Oil Palm Plantation 0 = Who doesn't work on the Oil Palm Plantation



**Table (Continue)**

Perception of participant in Oil Palm Plantation	Respondents satisfaction on 1. “Economic Fortune” 2. “Work Environment” 3. “Social Facilities” 4. “Social Status Job” 5. “Government/Employer Policies”	Scale Likert 1 = Extremely disagreed 2 = Disaggregated 3 = Neutral 4 = Aggred 5 = Extremely aggred
--	--	---

### **3.7 Data Analysis**

This chapter will reveal the finding of the study, which is obtained through the regression analysis of the data. The purpose of data analysis is to answer the research questions. The data will be analyzed by using the Statistical Package for Social Science (SPSS) and STATA. A variety of statistical techniques such as multiple regressions, the *t*-test, the *f*-test, correlation analysis, and coefficient of determination were used to analyze the data collected.

#### **3.7.1 Statistical Package of Social Science (SPSS)**

SPSS software for windows will be chosen to analyze the data collected. SPSS is one of the most widely available and powerful to summarize data determine whether there is a significant difference between group; examine relationship among variables and graph results. All the data is treated and interpreted by using relevant information from analysis method.

### **3.7.2 Data Analysis and Statistical Software (STATA)**

STATA is a general-purpose statistical software package. Status capabilities include data management, statistical analysis, graphics, simulations, regression analysis (linear and multiple), and custom programming. For this research, we will use probit analysis to find out the magnitude of participating local youth in oil plantation with the facts. Probit regression, also called a probit model, is used to model dichotomous or binary outcome variables. In the probit model, the inverse standard normal distribution of the probability is modeled as a linear combination of the predictors.

### **3.7.3 Descriptive statistic**

Descriptive statistics are used to show the characteristics of the sample (De Vaus, 2002). It also helps to simplify the data into frequency table that consists of frequency, percentage form and probability (Rani, 2004; Mason and Lind, 1990). The results of mean, minimum value, maximum value and standard deviation values are presented in descriptive analysis.

### **3.7.4 Data screening**

Prior to conducting a statistical analysis, sufficient data screening methods should be used for all research variables to identify miscoded, missing, or otherwise messy data. The primary purpose of these exercises was to demonstrate the role of data screening techniques and their potential to improve the performance of statistical methods. Overall cleaning raw data by determining normality and linearity problems, outer influences, and

missing value presence proved to increase the R squared values if only by very small increments (Sekaran, 2011). In this study, Normality and Linearity test will be performed during data screening procedure.

### **3.8 Analytical Technique**

This study used data analysis, which assisted the researcher in summarizing the conclusion of the study. According to Sekaran (2011) the purpose of data screening is to check if the data had been entered correctly, such as out-of-range values and check for univariate outliers, check for multivariate outliers, and deciding how to deal with outliers. Based on the input gathered from the questionnaires, the researcher keys in the data to be analyzed by using Statistical Package for Social Science (SPSS Window) version 22.0 for checking if a data error occurs. Then the hypothesis test was carried out to make assumptions about the data. In contrast, the goal of hypothesis testing is to make a decision about the value of a population parameter based on sample data (Joseph, 2004).

Data analysis involved the use of descriptive statistics and regression model of probity. Descriptive analysis, such as frequency distribution tables, percentage, mean, standard deviation was used to analyze the response socioeconomic characteristics. All items and variables were coded and formulated in order to carry out analysis. The purpose of having this test was to help the researcher categorize the most suitable items for each dimension of independent variables (IV) such as hiring and staffing, training and development, performance appraisal and rewards and compensations with dependent

variables (DV). Subsequently, Regression analysis of profit and correlation and coefficient were used to examine the relationship between independent and dependent variables by using the software of STATA.

The Probit model is specified thus:

$$Participant = f ( z_1 )$$

Where the unobservable  $z_1$  is a linear combination of the observed explanatory variables.

The explanatory variables are specified thus;

X1= Age of labour, youth

X2= Sex of labour, youth

X3= Marital Status of labour, youth

X4= Level of education

X5 & X6= Experienced of parents (Mom and Dad) worker

X7= Wage of labour in plantation

X8= Race of labour, youth

### **3.9 Conclusion**

This chapter describes the research methodology for this study. Both, the research methodology and designs clarified following the research framework and research objectives. The realization and the collection of appropriate methodology are essential to make sure that the research study can complete or achieve its objective. Also, this chapter explained the various statistical tests that will be used in this study. The tests such as data screening, regression and correlation and coefficient analysis will determine the relationship between independent variables and a dependent variable. After the research method has been decided, it will be easier for the researcher to plan instrument that will be utilized to get the respond of the study. The information and analysis are important elements in understanding the subject being studied. Thus, all data and information gathered need to study carefully.

## **CHAPTER FOUR**

### **ANALYSIS AND INTERPRETATION OF RESULT**

#### **4.1 Introduction**

This chapter will report the result from the analysis all the data that had been studying under the methodology that had been mentioned before. The discussion covers the objective of the study regarding on the participants of labour, youth in the palm oil plantation sector. This chapter will report all the results of the empirical analysis, starting with the descriptive analysis and followed by the probit regression analysis. In the section on descriptive analysis will discuss on demography and the background of the correspondents. The probit regression technique is used to look at the factors that can influence the local youth in oil plantation. The factors are a participation of labour, youth in oil palm plantation (1 = work on oil palm plantation, 0 = not work on oil palm plantation), age, gender, marital status, level of education, age, race, and experience of parents worker were included in the regression model. The correlation analysis had been done two shows the relationship between the independent variables. The correlation coefficient is the percent variance of dependent variable (Y) being explained by the independent variables.

## **4.2 Descriptive Analysis**

This section uses this method on the data collected to interpret the final result on the demographic aspect, the background of the labour youth and others section. The descriptive analysis that are used in providing results of finding the distribution of demographic in respondent's background and socioeconomic condition. Descriptive results of the analysis provided the characteristic of all the respondents in the study area. Descriptive statistics was applied in order to rank the factors according to the demographic factors of the respondents such as gender, age, and marital status, level of education, race, and work status in oil palm plantation.

## **4.3 Demographic Background**

The total number of respondents for the study was 332 labours youth. The result is reported by the distribution of the frequency and the percent for every aspect in term of demographic, facilities and the indicator of perception about participants in oil palm plantation also the excuses about using the scheme.

### **Part A: Descriptive analysis**

This part will be explained by the table and histogram graph for demographic analysis, which are gender, race, level of education, marital status, age, and last but no least result who work on oil palm plantations or no work.

**Table 5: Descriptive Analysis**

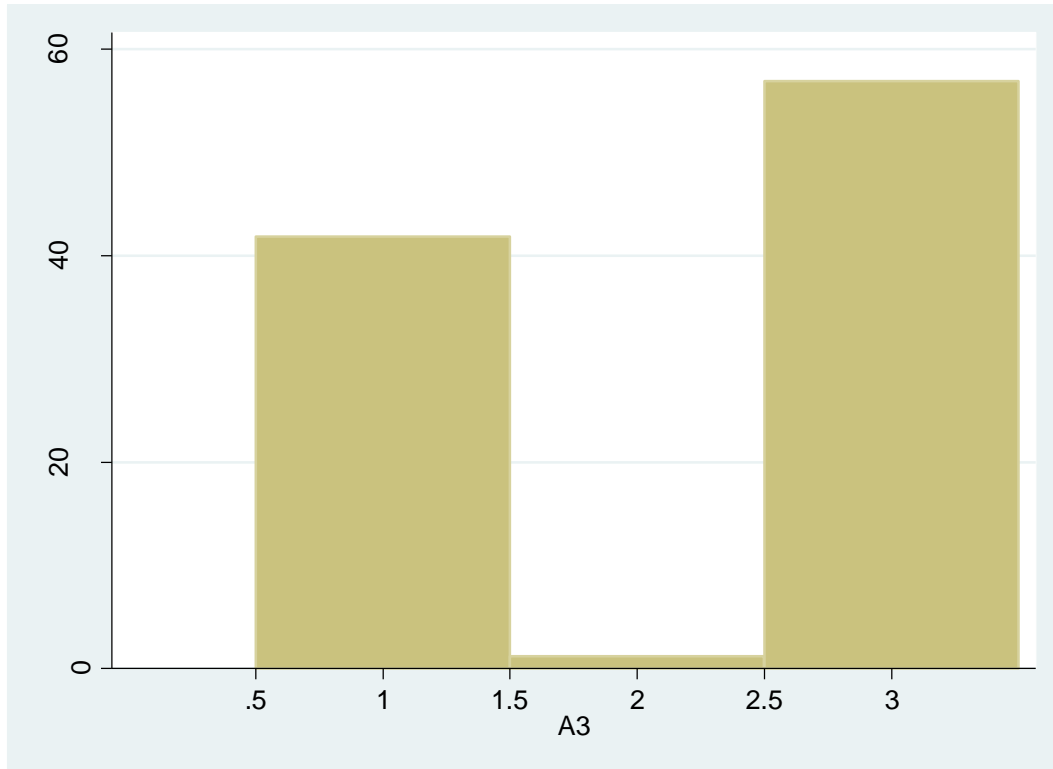
<b>Content</b>	<b>Details</b>	<b>Frequency</b>	<b>Percent (%)</b>
<b>Gender</b>	Man	192	57.83
	Women	140	42.17
	Total	332	100.0
<b>Race</b>	Malaya	328	98.80
	India	2	0.60
	Cina	2	0.60
	Total	332	100.0
<b>Level of education</b>	Tidak pernah bersekolah	3	0.90
	Primary School	2	0.60
	UPSR	3	0.90
	SRP/PMR	23	6.93
	SPM	181	54.52
	Sijil kemahiran/Teknikal	20	6.02
	STPM/STAM	23	6.93
	Diploma	36	10.84
	Degree/Master/PHD	41	12.35
	Total	332	100.0
<b>Marital Status</b>	Married	139	41.87
	Separated	4	1.20
	Single	189	56.93
	Total	332	100.0
<b>Age</b>	13 – 25	161	48.50
	26 – 35	123	37.05
	36 – 45	48	14.45
	Total	332	100.0
<b>Worked status in oil palm plantation</b>	Worked	88	26.51
	Not worked	244	73.49
	Total	332	100.0

There were participating in the study, 192 of them were men and 140 was women. Descriptive finding for the respondent's ethnicity are summarized in Table 6. The majority of the respondent are Malay (98.8% or 328 respondents), followed by Chinese (2 respondent) and Indian only two correspondents also. I have summarized that labour,



youth was dominant by Malay ethnic in this study area. This result shows a contradiction to what other studies such as Key et al.,(2000); Olarinde and Kuponiyi (2005) and Omonona and Agoi, (2007) have found out. The reason could be that farm produce were mainly being sold at the farm gate by male gender before getting to the local markets where the control is left to the female.

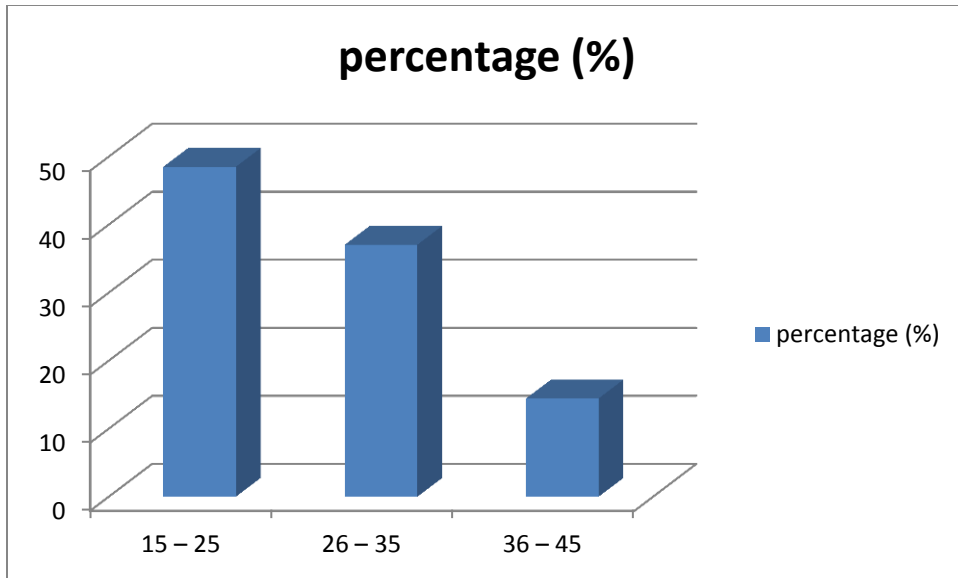
Descriptive analysis on the level of education among labour, youth in this study area shows that education background differs between respondent. As shown in Table 6, the education of SPM level is the highest percentage among respondent (54.52 percent or 181 respondents), and the second highest education of degree/master/PhD holder is 41 respondents (12.35 percent). While the lower level education is about 0.6 percent in primary school (2 respondents). The rest, not school and UPSR level have same results which are only three respondents about (0.9 percent). Then, PMR and STPM/STAM level share same result is about 6.93 percent or 23 respondents of labour youth in northern area. Besides, sijil kemahiran/ technical level and diploma level is 20 (6.02 percent) and 36 (10.84 percent) respondents respectively.



**Figure 4: Marital Status in percent (%)**

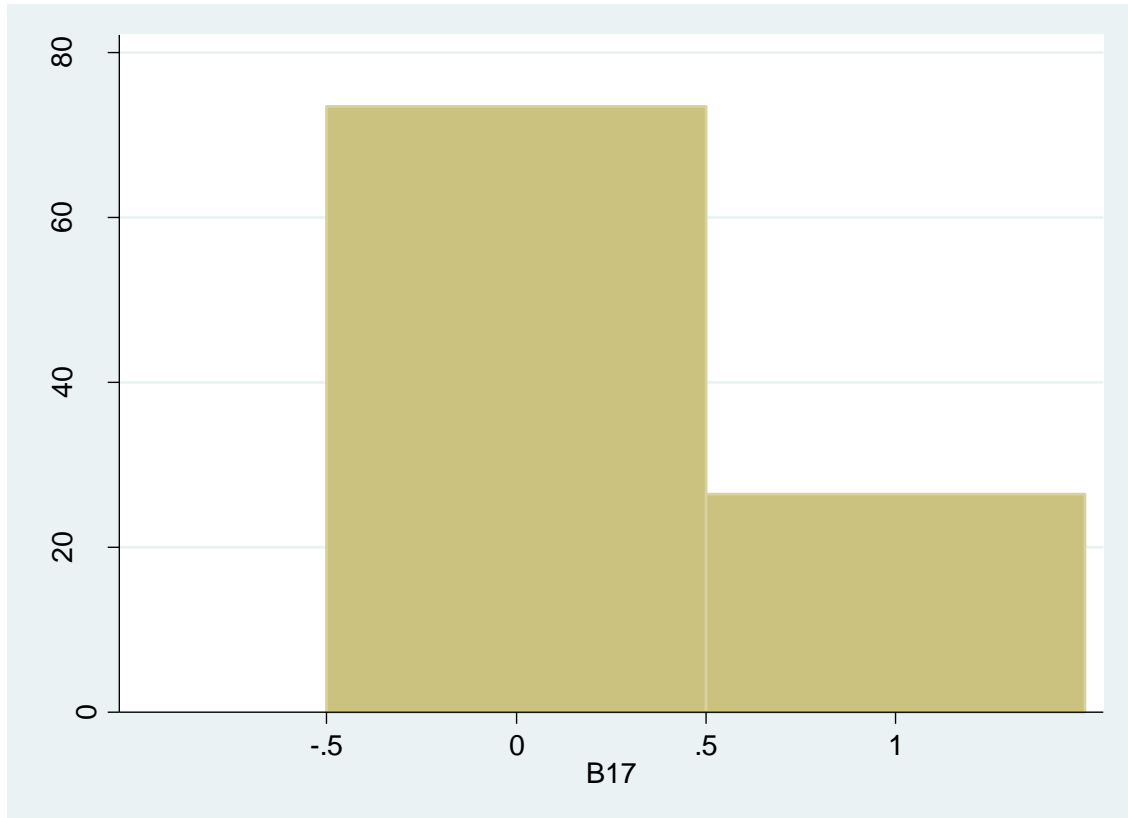
Base on the histogram above, the majority is single about 56.93 percent(189 respondents), follow by married status is about 41.87 percent (139 respondents). Last but not lease, the separated status shown that only 4 labour, youth respondents (1.20 percent).

Our focus of this study is to know what the factor to persuade labour, youth participants in oil palm plantation sectors. Our dependent variable shown in the histogram below presents those only 88 respondents who work in oil palm plantations. Thus, only 244 respondents aren't working on oil palm plantations.



**Figure 5: Category Age in percent (%)**

The minimum age for this study is 15 and the maximum is 45. The range was of productive age between 15-25 years old is about 48.50 percent (161 respondents), 26-35 years old is about 37.05 percent (123 respondents), and 36-45 years old is about 14.45 percent (48 respondents). This shows that there was potential for productivity to be high in the area, thus increased market participation (Benfica et al., 2006).



**Figure 6: Respondents who work and not work on oil palm plantation**

Based on the histogram above, the result shows that 73.49 percent of the respondents aren't working on oil palm plantation. However, only 26.51 percent of the respondents work at an oil palm plantation. Apparently, there seemed to be difficulty in attracting these unemployed and under-employed youth to work in the plantation sector. Thus, innovative and effective approaches must be adopted to tap the abundant pool of rural youth to work in the plantation sector. Other than that, measures must be set to mobilize such under-utilized manpower in the country to not only reduce dependency on foreign labour but also address labour shortage in the oil palm industry. The main of causal factors of no interest in working as an employee of oil palm plantation is because of hard

work. Other than that, the causal factor that they not interested to work on oil palm plantation is due to the lack of facilities provided for employees.

Presently, the oil palm industry offered employment to some 630,000 people, where covering the whole production chain from nurseries, plantations, mills, refineries to the oleo-chemical plants. The plantation sector employed close to 450,000 workers or 71.4 percent of the total workforce in the palm oil industry. By this total number of workers in the plantation sector, only 350,300 or 77.8 per cent are foreign workers. Sabah accounts for the largest number of foreign workers by virtue of having the largest planted area by region. Besides, Sabah provides employment to 150,800 foreign workers in the plantation sector. This is followed by Peninsular Malaysia, which provides employment for 119,800 foreign workers and Sarawak with 79,700 foreign workers.

Labour has been a limiting factor in the expansion of agricultural crops, particularly in the perennial crop Subsector in the Malaysian agriculture. This resulted from the continual decline in the size of the agricultural workforce as they migrated to the industrial sectors which provide higher returns. Labour accounts for 40-60 percent of perennial crop production costs and is also significant in annual crop production. Oil palm is labour-intensive crops where the labour issue is one of the most intransigent problems facing the industry.

Nevertheless, Malaysia needs to quickly review its policy and strategy on labour in the oil palm plantations to ensure that it can be managed in a more efficient and integrated manner among the relevant ministries, agencies and association in the industry.

### **Part B: Perception about participating in oil palm plantation**

In part B, we will show the level of satisfaction on “Economic Fortune” among respondents about work in oil palm plantation. In this research, researcher put five levels of satisfaction such as ‘very not agree’, ‘not agree’, ‘neutral’, ‘agree’, and ‘very agree’. The table below also shows the overall mean scores for the “Economic Fortune” condition range from 3.13 until 3.78. This result will be based on the scale Likert table above. For the information, this part divided by three subs which are Part B1: “ECONOMIC FORTUNE”, Part B2: “WORK ENVIRONMENT”, Part B3: “SOCIAL FACILITIES”, Part B4: “SOCIAL STATUS JOB”, and Part B5: “GOVERNMENT/EMPLOYER POLICIES”.

**Table 6: Economic Fortune**

<b>Part B1: “ECONOMIC FORTUNE”</b>	<b>Mean</b>
<i>Pendapatan sebagai seorang pekerja diladang mencukupi bagi menampung perbelanjaan harian</i>	3.13
<i>Kemudahan kewangan dan faedah yang diberikan oleh syarikat kepada pekerja lading adalah menarik</i>	3.15
<i>Pembayaran gaji secara borong (piece-rated) adalah TIDAK menguntungkan pekerja</i>	3.31
<i>Elaun pendidikan anak-anak pekerja dapat menarik minat orang tempatan</i>	3.53
<i>Pembayaran gaji secara bulanan dapat menarik minat orang tempatan</i>	3.62
<i>Insentif dan keperluan asas pekerja ladang yang tinggi dapat menarik minat orang tempatan untuk bekerja diladang</i>	3.69
<i>Dasar upah minimum (Minimum Wage) dapat menraik minat pekerja</i>	3.53

<i>tempatan untuk bekerja diladang</i>	
<i>Subsidi/elaun makanan yang disediakan semasa waktu bekerja dapat menarik minat pekerja tempatan</i>	3.78

Based on the Table 6 above, the highest mean of the factor related to “Keberuntungan Ekonomi” is “Subsidi/elaun makanan yang disediakan semasa waktu bekerja dapat menarik minat pekerja tempatan” about 3.78. It is because, expectation of the worker who work at an oil palm plantation is given a subsidies or food allowance while working. Thus, the workers can spend the food money for other things like home expenditure, transportation expenditure and so on. The lowest mean in this part is “Pendapatan sebagai seorang pekerja diladang mencukupi bagi menampung perbelanjaan harian” about 3.13. For the information, basic wage for worker in oil palm plantation is about RM900 per month based on the minimum wage in Malaysia. Sometimes, their wage base on daily, every 15 days, and contract/wholesale. The oil palm industry frequently makes statements that the industry has helped to alleviate poverty in Malaysia. However, the industry has had difficulty finding enough workers due to the low wages and rough working conditions. Besides, they need to pay all the bills and other expenditures to continue their life. The basic wage is not enough for them. This is one of the factors why youth labour not interested in working in the oil palm plantation sector. On the other hand, the respondents are agreed that there is no fix salary as their main reason to be not interested in oil palm plantation.

**Table 7: Work Environment**

<b>Part B2: “WORK ENVIRONMENT”</b>	<b>Mean</b>
<i>Pekerjaan diladang adalah membahayakan dan berisiko tinggi.</i>	3.16
<i>Pekerjaan diladang adalah kotor/selekeh atau busuk.</i>	3.39

<i>Pekerjaan diladang adalah susah dan membebankan.</i>	3.42
<i>Hari dan waktu bekerja yang tidak menentu (disebabkan faktor cuaca) TIDAK menarik minat.</i>	3.50
<i>Kawasan ladang yang jauh ke pendalaman TIDAK menarik minat pekerja lading bekerja di ladang.</i>	3.55
<i>Suasana ladang yang aman &amp; tenang secara semulajadi menarik minat pekerja tempatan.</i>	3.73
<i>Pekerja ladang lebih suka bekerja diladang milik kerajaan berbanding ladang milik swasta.</i>	3.68
<i>Persekitaran beerja diladang yang kurang terdedah kepada pencemaran udara/bunyi/air dapat menarik minat pekerja tempatan.</i>	3.69
<i>Pematuhan Kod etika keselamatan Occupational Safety and Helath Act (OSHA) dapat menarik minat pekerja tempatan.</i>	3.75
<i>Merasa kurang privasi tinggal di kuarters kerana kerap berlaku pemeriksaan oleh majikan dan termaktub dengan undang-undang diladang.</i>	3.66

Table 7 above shows that level satisfaction in “WORK ENVIRONMENT”. “Pematuhan Kod etika keselamatan Occupational Safety an Helath Act (OSHA) dapat manarik minat pekerja tempatan” have a higher mean which is 3.75. It is because, all its employees firmly believe that the health and safety of one and all as well as the quality of the environment are fundamental to our business and our sustainable growth. The lowest mean (3.16) in level satisfaction is “Pekerja di ladang adalah membahayakan dan berisiko tinggi”. The result shows that, work in plantation is not too risky. Besides, nowadays, the companies take more precaution and safety for their workers, especially those who work in plantations. Thus, most of the employers should ensure a healthy and safe workplace and clean working environment; prevent any likely accidents and occupational illnesses; and conduct an annual review and audit of our operations. Accordingly, to Sulin (2004), a reason to leave the job among workers is due to the unsecured position, work condition, high conflict, job opportunity and low job satisfaction.



**Table 8: Social Facilities**

<b>Part B3: “SOCIAL FACILITIES”</b>	<b>Mean</b>
<i>Kemudahan computer &amp; akses internet perlu disediakan untuk menarik minat pekerja tempatan.</i>	3.78
<i>Kemudahan fasiliti/kelab sukan dan rekreasi yang lengkap dan terkini hendaklah diperluaskan untuk semua lapisan pekerja.</i>	3.87
<i>Ketersedian pasar malam/pasar tani/ kedai runcit/pasar raya mini di dalam kawasan ladang dapat menarik minat tempatan.</i>	3.79
<i>Kemudahan Dewan Serbaguna di setiap kawasan perumahan ladang dapat menarik minat pekerja tempatan.</i>	3.93
<i>Kesedian Pusat hiburan/karaoke dapat mengekalkan para belia tinggal dan bekerja diladang.</i>	3.70
<i>Pembinaan masjid/Tempat ibadah yang kondusif dapat menarik minat pekerja tempatan.</i>	4.12
<i>Pengangkutan anak-anak ke sekolah yang PERCUMA dapat menarik minat pekerja tempatan.</i>	3.99
<i>Kemudahan klinik kesihatan dan pegawai pelawat perubatan yang tersedia dapat menarik minat pekerja tempatan.</i>	4.12

Based on the Table 8 above, it is a perception about “SOCIAL FACILITES” in participant in oil palm plantation. ‘Pembinaan masjid/tempat ibadah yang kondusif dapat menarik minat pekerja tempatan’ dan ‘Kemudahan klinik kesihatan dan pegawai pelawat perubatan yang tersedia dapat menarik minat pekerja tempatan’ share same highest mean, 4.12. Oil palm is a valuable economic crop and provides a source of employment. It allows small landholders to participate in the cash economy and often results in improvements to local infrastructure and greater access to services such as schools and health facilities. In some areas, the cultivation of oil palm has replaced traditional practices, often due to the higher income potential of palm oil. The lowest mean is 3.70 which is ‘Kesedian Pusat hiburan/karaoke dapat mengekalkan para belia tinggal dan bekerja diladang’.

In addition, the equipped of EFP as a major factor can attract labour, youth in Perak, Perlis, and Kedah to work in oil palm plantation sectors. Thus, youth labours more prefer the accommodation and education facilities.

**Table 9: Social Status Job**

<b>Part B4: “SOSIAL STATUS JOB”</b>	<b>Mean</b>
<i>Penjenamaan semula pekerjaan diladang dapat meningkat status pekerja ladang kelapa. (Contoh: Pemetik buah = Operator pengeluaran)</i>	3.87
<i>Generasi muda Enggan bekerja di Sektor perladangan kerana pekerjaan ladang yang tidak glamor/popular.</i>	3.75
<i>Menarik taraf pekerjaan disektor perladangan kepada separuh mahir dapat menarik minat pekerja tempatan untuk bekerja disektor perladangan.</i>	3.89
<i>Penstrukturan semua system bekerja yang lebih moden dapat menarik minat pekerja tempatan</i>	3.95
<i>Pemakaian seragam dapat meningkat imej pekerja ladang dan seterusnya dapat menarik minat pekerja tempatan.</i>	3.72

The highest mean at Table 9 above is ‘Penstrukturan same system bekerja yang lebih modern dapat menarik minat pekerja tempatan’, 3.95, and the lowest mean is ‘Pemakaian seragam dapat meningkat imej pekerja ladang dan seterusnya dapat menarik minat pekerja tempatan.’, 3.72.

**Table 10: Government/Employer Policies**

<b>Part B5: “GOVERNMENT/EMPLOYER POLICIES”</b>	<b>Mean</b>
<i>Perlaksanaan dasar upah minimum dapat menarik minat pekerja tempatan.</i>	3.75
<i>Skim Tabung Amanah sebagai persediaan sebelum bersara perlu disediakan bagi menarik minat pekerja tempatan.</i>	3.91
<i>Prospek pembangunan kerjaya yang terhad tidak dapat menarik minat pekerja tempatan.</i>	3.67
<i>Dasar pengambilan pekerja asing untuk bekerja diladang perlu diberhentikan untuk menarik minat pekerja tempatan.</i>	3.77
<i>Pertambahan bilangan pekerja asing di sector perladangan mengurangkan</i>	3.74

<i>minat pekerja tempatan untuk memasuki sector perladangan</i>	
<i>Ketersediaan skim perumahan kerajaan yang mudah dan murah (dalam bentuk pinjaman perumahan) dapat menarik minat pekerja tempatan.</i>	3.97
<i>Skim Pembinaan rumah sedia ada yang dilaksana oleh majikan dapat menarik minat pekerja tempatan.</i>	3.72
<i>Kerajaan perlu memperketatkan dasar pengambilan buruh asing dengan hanya mengambil pekerja dari satu Negara sahaja bagi mengurangkan impak negative pada gejala social dan kebudayaan.</i>	3.76

In the “GOVERNMENT/ EMPLOYER POLICIES”, the highest mean is 3.97 which is ‘Ketersediaan skim perumahan kerajaan yang mudah dan murah (dalam bentuk pinjaman perumahan) dapat menarik minat pekerja tempatan.’ Presently, the government already implemented and emphasized the minimum monthly wages in April, 2013 but, however, it not economical with manufacturing sector and become the second riddle to local. Additionally, the government should give more benefits in this industry to improving the standard of living of labours. This is very important factor of the locals in determining their interest to work in oil palm plantation sectors. Thus, the lowest is 3.67, ‘Prospek pembangunan kerjaya yang terhad tidak dapat menarik minat pekerja tempatan.’

### Part C: Probit Analysis

In this section we present the results of our study for respondents of labour, youth on the issue of interest – that is participation labour youth in oil palm plantation. The explanatory variables above used to show the full model of the single-bounded approach. Upon elimination of the insignificant variables, our final model is presented in the table below.

*Participant in oil palm plantation*

$$\begin{aligned}
 &: \beta_0 + \beta_{1t}AGE + \beta_{2t}AGE^2 + \beta_{3t}GENDER \\
 &+ \beta_{4t}LEVEL\ OF\ EDUCATION + \beta_{5t}RACE + \beta_{6t}DAD\ JOB \\
 &+ \beta_{7t}MOM\ JOB + \beta_{8t}WAGE + \beta_{9t}MARITAL\ STATUS
 \end{aligned}$$

**Table 11: Probit estimation result**

VARIABLES	PROBIT		
	Coeff.	T-statistic	P-value
CONSTANT	-2.33	-1.21	0.225
A1 (AGE)	0.194	1.70	0.088***
AGE <sup>2</sup>	-0.0028	-1.47	0.141
A2 (GENDER)	-1.152	-5.20	0.000*
A3 (MARITAL STATUS)	-0.0967	-0.73	0.465
A4 (LEVEL EDUCATION)	-0.1722	-2.70	0.007*
A6 (RACE)	0.338	0.56	0.578
A8 (DAD JOB)	-0.278	-1.23	0.220
A9 (MOM JOB)	-0.100	-0.50	0.620
B20GAJI (WAGE)	0.0014	5.92	0.000*
PSEUDO R <sup>2</sup>	0.3801		
CHI SQUARED	145.95		

Note: \*Significant at 0.01 levels, \*\*Significant at 0.05 levels and \*\*\*Significant at 0.1 levels

The final model of foreign visitor has Pseudo R<sup>2</sup> for Probit models. It indicates that the variables included in the model explain about 38.01 percent of the variation in the independent variable. The variables included in the final model that are significant at the 10 percent level is A1 (AGE). A2 (GENDER), A4 (LEVEL EDUCATION), and B20GAJI (WAGE) that are significant at the 1 percent level. A1 (AGE), A6 (RACE), and B20GAJI (WAGE) have a positive sign relationship with the participant work in oil palm plantation. However, other variable which is A2 (GENDER), A3 (MARITAL STATUS), A4 (LEVEL EDUCATION), A8 (DAD JOB), and last but not least A9 (MOM JOB) has a negative sign relationship with the participant youth labour in oil palm plantation.

Based on the positive sign by race, it is because; races, youth was found to have a good and positive level of acceptance, attitude and knowledge towards participation in oil palm plantation sectors. Based on the independent t-test done, races possessed an equal level of acceptance, attitude and knowledge about work skills in oil palm plantation sectors.

The important factors which influence youth labour's participation in the oil palm plantation sector in the study area was identified and analyzed. The result shows that variables conform to a prior expectation with appropriate signs. The wage is a significant at 0.05 level of significance. It is because they existed of a fixed monthly wage in oil palm plantation makes the employee face difficulties to apply loan facilities from financial institutions. Besides, the scheme of daily wages which is normally implemented in the oil palm plantation low income compared to the manufacturing industry. It is shown that as age increases, there is a decrease in participation in the market. A unit

increase in the age of the respondent will lead to a probability of 0.01 percent decrease in market participation ( $P > 0.10$ ).

The level of education was significant ( $P > 0.01$ ) but have a negative sign. This means that a unit increase in level of education will probably reduce market participation by 0.03 percent. The implication is that as the level of education increases, the respondent would like to disengage in farming in the village and migrate to the urban center. This result deviates from what other researchers (Adenegan et al., (2004); Eskola (2008); Heltberg and Tarp, (2002)) have found out.

#### **4.4 Conclusion**

The purpose of this study is to analyse the participation of local youth labour in oil palm plantation across diverse states in Perak, Perlis, and Kedah based on questionnaire source. The study clearly depicts active involvement and participation of local youth labour in the oil palm plantation sector in Perak, Perlis, and Kedah where the respondents are actively participating in non-agricultural activities which includes house-hold industry, service sector etc. . In addition, heavy work and no fixed salary are the main factors that making the oil palm industry unattractive to the locals. Finding shows that age and race are positively significant with the probability to participate in oil palm plantation. Whereas gender, marital status, level of education, parent's jobs are negatively significant. Other than that, benefits and better basic facilities such as EPF are found to be the main factors that can make oil palm plantations more attractive to the local workers.

## **CHAPTER FIVE**

### **SUMMARY AND CONCLUSION**

#### **5.1 Summary**

The majority of the respondents is male, age between 20-21 years old, taking degree course, spend between Ringgit Malaysia 301-400 a month, currently work on oil palm plantation, live in urban areas, have no agriculture family background and have received information regarding oil palm plantation sectors. From the analyses done, it can be concluded that the majority of youth have a high and positive acceptance, attitude and knowledge towards the oil palm plantations. From the PROBIT test performed, it can be clarified gender is a significant factor to create a better acceptance, attitude and knowledge towards oil palm plantation among youth in Malaysia.

The results show that the majority of the farmers are well advanced in age and youth are rarely engaged in farming in the study area. Also, most of the farmers are male and almost all the farmers are married hence; the use of family labour on the farm is effective. Illiteracy level was higher among the farmers in the study area and majority of them uses farm labour for their marketing activities, there is a big household size in the area.



From the data collected, it manages to fulfill the objective of this paper which is to reveal any difference that might occur between male and female respondents on their acceptance, knowledge and attitude towards plantation sectors. In Malaysia, Norsida (2007) and Gidarakou (1999) has stressed that youth, especially women, has a low acceptance, attitude and knowledge towards agriculture. The objective of this study wants to explore the involvement of the factor local youth in the oil palm plantation and to analyses the factor local that influence that of local youth in the oil palm plantation.

Based on these objectives, we can see that the factors of age and race have a positive relationship with the participant of local youth in oil palm plantation. Thus, the rest variable which is level education, parent's job, wage, gender, and marital status have a negative relationship with the participant of labour youth in oil palm plantation. Other than that, other factors like social environment, social facilities, and social economic should be important too. It is because, by assessing the environmental and socioeconomic impacts of palm plantations associated, we have examined options to minimize the negative impacts while maximizing the potential for social and economic benefits.

On the other hand, EPF and better basic facilities are found as the main factors that can make oil palm plantations more attractive to the local workers. This attraction factor which involved of EPF can give interest to local youth labour to participate in oil palm industry. This finding support study by Sulin (2004), state that the plantation career is unsecured job. In additionally, heavy work and no fixed salary

are the main factors that making the oil palm industry unappealing for the locals, mainly to the local youth labour in Perak, Perlis, and Kedah. However, the interest of local workers in oil palm plantations is diverse based on the demographic factors such as gender, age, and marital status.

## **5.2 Discussion of the Study**

The participation of local labour youth in oil palm plantation is declining. Given that prevailing employment and entrepreneurial opportunities in the sector are often characterized by low pay and profitability, harsh working conditions and physically demanding tasks, local labour youth seem to lack motivation to work in oil palm plantation, even in more skilled positions. Also, rural youth have limited access to educational programmes that respond to sectoral skill needs.

Enforcing minimum wage legislation contributes to ensuring fair pay for work performed, and this in turn contributes to increasing workers' purchasing power. Governments and firms should ensure equal opportunities and treatment equal pay and access to education, training and credit for all their workers, including women, local labour youth, migrant workers and indigenous people.

Although some firms have improved social benefits and working conditions to allow a better balance of productive and reproductive work, especially for the women, much still needs to be done to ensure equality and protection. In addition, it is found in social

facilities where both male and female respondents chose the EPF as a major factor which can attract them to work as plantation workers in the oil palm sector.

### **5.3 Policy Implication**

It will be discussed in two sections which are improving working conditions for oil palm plantation workers and increase of facilities and benefits for local labour youth participants in oil palm plantation.

#### **5.3.1 Improving working conditions for oil palm plantation workers.**

There is a need to raise awareness among oil palm plantation stakeholders of the importance of decent working conditions for the productivity and sustainability of the sector. Likewise, vulnerable groups, such as women, local labour youth, migrants and small scale operators, should be informed about their rights. Improving working conditions, guaranteeing access to social protection for formal and informal oil palm plantation workers, adopting safer practices, and guaranteeing more secure and stable contracts all have the potential to increase the productivity. Efforts are needed to eliminate all forms of discrimination and to ensure minimum living wages, equal opportunities for women and men, the elimination of child and forced labour, and the protection of the rights of indigenous people. In line with efforts to extend the coverage of social protection in rural areas, public employment programmes should be further promoted. Such programmes could employ local people, develop relevant skills among

participants while contributing to the achievement of environmental objectives. High levels of casual work and vulnerable employment among oil palm plantation workers call for measures to promote access to social security, including pension systems and other social insurance schemes.

### **5.3.2 Increase of facilities and benefits for local labour youth participant in oil palm plantation.**

Towards the labour shortage issues in oil palm plantation, the government had founded the Institute of Malaysian Plantation and Commodities (IMPAC) to provide skills training to locals particularly the youth with the cooperation of the plantation industry. Under IMPAC, a number of training programs related to the oil palm industry had been conducted, encompassing all the skills required by the plantation sector including milling and processing, storing, support services and marketing. Thus, it will increase a number of local youth labour to participate in oil palm plantation sectors. Accordingly, to Minister of Plantation Industries and Commodities Datuk Amar Douglas Uggah Embas, said that through the regional campus at Pusat Latihan Sawit Malaysia (Plasma – Malaysian Palm Training Centre) in Keratong, Pahang, IMPAC has produced a total of 1,275 graduates in Plantation Mechanization Operator's Course (KOML), who are now part of the workforce of major plantation companies.

Besides that, the Federal Government should give the support to the rural farmers by introducing more adult literacy programs which would encourage them to participate in the oil palm plantation sectors, especially in local labour youth in Malaysia. This would expose the oil palm plantation workers to the latest findings. The Government should also introduce more programs and policies aimed at increasing the interest of the workers. Such as it should include activities skills development programmes for the farmers workforce could be strengthened in collaboration with the private sector and agriculture producer organizations. Training programmes should be complemented with monitoring and certification systems that accredit workers' skills and thus increase their employability.

#### **5.4 Suggestion for Future Study**

This study is to examine the factors why labour, youth in the North State (Perlis, Perak, and Kedah) not interested to work in oil palm plantation sectors which, measured by wage, level of education, sex, marital status, parents' job, age, and race at the oil palm plantation sector in Perak, Perlis, and Kedah. This study has answered the objectives developed which is, want to explore the involvement of the factor local youth in the oil palm plantation and to analyses the factor local that influence that of local youth in the oil palm plantation. The result shows that only race and age have a positive effect on participation labour, youth in oil palm plantation based on case studies at the oil palm plantation sector in Perak, Perlis, and Kedah.

However, this study has only covered limited scope and area which is only at Perak, Perlis, and Kedah. Hopefully, future studies will use more other variables that could affect the labour, youth performance in a particular country and accomplished across all sectors, job types and areas in a particular country.

## REFERENCES

- Adenegan, K.O, O.I. Oladele and M.N. Ekpo. (2004): Impact of Agricultural Exports on Food Security in Nigeria. *Journal of Food, Agriculture and Environment JFAE* Vol.2 No.1 pp.107-112 WFL Publication.
- Agwu, M.N., Nwankwo, E.E., and Anyanwu, C.I. (2012). Determinants of agricultural labour participation among youths in Abia State, Nigeria. *International Journal of Food and Agricultural Economics*. Vol. 2 No. 1 pp. 157-164.
- Ahaibwe, G., Mbowa, S., and Lwanga, M.M. (2013). Youth engagement in agriculture in uganda: challenges and prospects. *Economic Policy Research Centre (EPRC)*. Research series no. 106.
- Angrist J. D and Kugler A. D .(2003). Protective or Counter-Productive? Labour Market Institutions and the Effect of Immigration on EU Natives, *The Economic Journal*, **113**, Malden
- Asadul Islam. (2008). The Substitutability of Labour Between Immigrants and Natives in the Canadian Labour Market, Circa 1995” Department of Economics, Monash University.
- Azizah Kassim. (1997). Illegal Alienlabour in Malaysia: Its influx, Utilisation and ramifications:Indonesia and Malay World, *Oxford University Press , Oxford, No 17, March, pp50-82*
- Bank Negara Malaysia. (1997). The Central Bank and the Financial System in Malaysia: A Decade of Change Kuala Lumpur: BNM
- Bailey, Rayna. ( 2008). Immigration and Migration, Global Issues, Facts on File, New York.
- Beinart, W. (1991). Transkeian migrant workers and youth labour on the natal sugar estates 1918-1948. *The Journal of African History*, Vol. 32, No. 1, pp. 41-63.
- Bernama. (2014, April 1). Nearly 80 per cent of workers in oil palm sector foreigners. Retrieved:<http://www.theborneopost.com/2014/04/01/nearly-80-per-cent-of-workers-in-oil-palm-sector-foreigners/>
- Bethe, Ernest E. (2010). Increasing Benefits for Oil Palm Smallholders. Presentation at the 8th Roundtable Meeting on Sustainable Palm Oil.
- Borjas, G. J. (2006). The Impact of Immigration On The Labour Market, Conference on Labour and Capital Flows in Europe Following Enlargement, organized by the International.

- Bossen, L. (1982). Plantations and labour force discrimination in Guatemala. *Current Anthropology*, Vol. 23, No. 3, pp. 263-268. Monetary Fund, the Joint Vienna Institute, and the National Bank of Poland.
- Brooks, C. (2002). Introductory Econometrics for Finance. *Library Congress Cataloguing in Publication Data*. United Kingdom.
- Business News. (2012, August 25). The Star. Retrieved: <http://www.thestar.com.my/Business/Business-News/2012/08/25/The-future-is-in-our-palm/>
- CEPA. (2005). Moving out of poverty in the estate sector in Sri Lanka: understanding growth and freedom from the bottom up. Final draft.
- Carrasco, R, Juan. F. J & Ortega. A. C. (2008). The effect of immigration on the labour market performance of native-born workers: Some evidence for Spain”, *Journal Popular Economics* **21**:627-648.
- Chandrabose A. S. (2006). Labour turnout in the plantation sector: a study on selected large scale tea estates in Sri Lanka. *Economic Review, Peoples Bank*.
- Che Johari , M. (2008). 300,000 WargaAsingBekerja di SektorPerladangan ,*BeritaHarian* , 3 July
- Daud Amatzin. (2006). Labour Constraint in Plantation Industry *Oil Palm Economic Journal Vol 6(2) 2006*
- Ghosal, S (2009). Workers walk out of Tea Gardens for greener pastures. Retrieved from *The Economic Times* :[http:// articles. Economic times. Indiatimes.com/2009-12-14/news/27665](http://articles.EconomicTimes.Indiatimes.com/2009-12-14/news/27665).
- Damisa, R. Samndi and M. Yohana. (2007). “Women Participation in Agricultural Production- A probit Analysis” *Journal of Applied Sciences*. 7(3): 412-416.
- Department of Statistics Malaysia. (2010). General Report of the Population Census of Malaysia: 2010, Volume 1 and 2, Kuala Lumpur
- Department of Statistics Malaysia. (2013). Retrieved 18 November 2014, from <http://www.epu.gov.my/documents/10124/2257e64f-b08d-41b7-bed0-b6e6498c38a3>
- Dustmann, Christian. (2003). Return Migration, Wage Differentials, and the Optimal Migration Duration, *European Economic Review*, vol. **47** (2), April, 353-67.
- Dustmann, Christian. (2005). The Impact of Immigration on the British Labour Market, *The Economic Journal*, vol. **115** (November), Royal Economic Society 2005, Malden.



- Dyson, J. (2008). Harvesting identities: youth, work, and gender in the Indian Himalayas. *Annals of the Association of American Geographers*, Vol. 98, No. 1, pp.160-179.
- Elder, Jr. G.H. (1963). Achievement orientations and career patterns of rural youth. *Sociology of Education*, Vol. 37, No. 1, pp. 30-58.
- Environmental Impact Assessment (EIA) Guidelines for oil palm plantation development, Sabah, Malaysia. (2002). *The Environmental Conservation Department (ECD)*.
- Eskola, E. (2008). Commercialization and Poverty in Tanzania: Household-Level Analysis. Internet Discussion Paper <http://www.econ.ku.dk> Retrieved August 2008.
- ETP Annual Report. (2012). NKEA: Palm Oil and Rubber.
- Etwire<sup>1</sup>, P.M., Dogbe, W., Wiredu, A.N., Martey, E., Etwire, E., Owusu, R.K., and Wahaga, E. (2013). Factors influencing farmer's participation in agricultural projects: the case of the agricultural value chain mentorship project in the northern region of Ghana. *Journal of Economics and Sustainable Development*. Vol.4, No.10.
- Falola, A., Vivian, O.A., and Ojehomon, E. T. (2013). Economic analysis of rice production among the youths in Kwara State, Nigeria. *Albanian j. agric. sci.* 2013;12 (3): 503-510.
- Hanim Adnan. (2010, February 9). Labour shortage effecting oil palm plantations. Retrieved December 20, 2014, from <http://www.thestar.com.my/Story/?file=%2F2010%2F2%2F9%2Fbusiness%2F5637194>
- Heitberg, R. and F. Tarp. (2002). Agricultural Supply Response and Poverty in Mozambique, *Food Policy* Vol. 27 No 2 pp. 103 – 124.
- Idris, U.A. (2010). Levels of farmers' participation in sudan savanna challenge programme in Bunkure local government area of Kano State. Department of adult education and community service.
- Immigration Statistic Department. (2012). Retrieved: [http://www.statistics.gov.my/portal/download\\_Labour/files/migrasi/Migration\\_Survey\\_Report\\_Malaysia\\_2012.pdf](http://www.statistics.gov.my/portal/download_Labour/files/migrasi/Migration_Survey_Report_Malaysia_2012.pdf)
- Jean. S, Causa. O, Jimenez. M and Wanner. I. (2007). The Unemployment Impact of Immigration in OECD Countries. *Migration in OECD Countries: Labour Market Impact and Integration Issues*.

- Karim, A. Z., Abdullah, M.A and Bakar, M.I. (1999). Foreign Workers in Malaysia : Issues and Implications. *Utusan Publication and Distribution SdnBhd . Kuala Lumpur*
- Key, N, E. Sadoulet and A. de Janury. (2000). Transactions, cost and agricultural household supply response. *Amer. J. of Agric. Econ.* 82(2): 245– 259.
- Longhi. S, Nijkamp. P, and Poot. J. (2006). The Impact of Immigration on the Employment of Natives in Regional Labour Markets: A Meta – Analysis, *ISER Working Paper 2006-10, Institute for Social and Economic Resarch.*
- Malaysia Indian Congress. (2012, April 19).  
<http://www.mic.org.my/news-events/national-news/2012/malaysian-no-longer-dominant-workforce-plantation-sector-pm>
- Mello, L.D., Filho, N.M., and Scorzafave L.G. (2006). Improving labour utilisation in brazil. *Organisation for Economic Co-operation and Development.* Economics department working papers No. 533.
- Michael Stenson. (1980). *Class, Race and Colonialism in West Malaysia*, University and Queensland Press.
- Mielke, T. (2011). Global supply and demand outlook for palm and lauric oils Trends and future prospects. Presentation at MPOC POINTERS 2011 internet conference. Retrieved: [http://www.pointers.org.my/report\\_details.php?id=46](http://www.pointers.org.my/report_details.php?id=46)
- Mohamad Audong. (2009). Migration of Local Labour: Pull and Push Factor . *Proceeding International Planters Conference 2009. Pp 7-21*
- MPOB. (2014). Oil Palm & The Environment (updated March 2014) Retrieved: <http://www.mpob.gov.my/palm-info/environment/520-achievements>
- MPOB. (2013). Malaysian Oil Palm Statistic 2012. Retrieved: [http://www.mpob.org.my/Malaysian\\_Palm\\_Oil\\_Industry.aspx](http://www.mpob.org.my/Malaysian_Palm_Oil_Industry.aspx)
- MPOB. (2012). Malaysian Oil Palm Statistic 2011. Retrieved: <http://www.mpob.gov.my/palm-info/environment/520-achievements>
- MPOB.(2010). Malaysia Oil Palm Statistic 2009. Retrieved: [http://bepi.mpob.gov.my/images/document/Overview202010\\_final.pdf](http://bepi.mpob.gov.my/images/document/Overview202010_final.pdf) (Hanim Adnan, 2010)
- Nnadi, F.N. and Akwiwu, C.D. (2009). Farmers’ sustained adoption decision behaviors of maize/cassava intercop technology in Imo State: lessons for extension policy development. *World Rural Observation.* 1(1):1-6.

- Nnadi, F.N. and Akwiwu, C.D. (2008). Determinants of youths` participation in rural agriculture in Imo State, Nigeria. *Journal of Applied Sciences*, 8: 328-333.
- Nnadi, F.N. and Akwiwu, C.D. (2005). Rural women's response to selected crop production technologies in Imo State, Nigeria. *Global Approaches to Extension Practice Journal*; 1(1): 47-55.
- OECD (2006). *Employment Outlook*, OECD, Brazil.
- Official website of Ministry of Plantation, Industries And Commodities. Retrieved: <http://www.kppk.gov.my/index.php/news-cutting/2496-palm-oil-industry-nearly-80-per-cent-of-workers-in-oil-palm-sector-foreigners.html>
- Olarinde L.O and F. A. Kuponiyi (2005). Rural Livelihood and Food Consumption Patterns among Households in Oyo State, Nigeria: Implications for Food Security and Poverty Eradication in A Deregulated Economy. *Journal of Social Sciences* Vol. 11 No. 2 pp. 127-132.
- Omonona B.T. and Agoi, G.A. (2007). An Analysis of Food Security Situation Among Nigerian Urban Households: Evidence from Lagos State, Nigeria. *Journal of Central European Agriculture*, Vol. 8 No. 3 pp.397-406.
- Piore, Michael J. (1979). *Birds of Passage: Migrant Labour and Industrial Societies*. Cambridge, UK: Cambridge University Press, New York.
- Ramli, A., Azman, I., and K,A. (2011). Labour Requirement in Malaysian Oil Palm Industry in 2010. *Oil Palm Industry Economic Journal*, 11(2), 1-12
- Ramachandran, S., & Shanmugam, B. (1995). Plight of plantation workers in Malaysia: defeated by definitions. *Asian Survey*, 394-407.
- Rivera –Lyles, J (2007). Puerto Rico is coffee- rich but worker poor. Retrieved from *Los Angeles Times*: [http:// articles. Latimes.com/2007/sep/30/new/adna-coffee30](http://articles.Latimes.com/2007/sep/30/new/adna-coffee30)
- Rowthorn, Robert. (2004). *The Economic Impact of Immigration*, Economics Faculty, University of Cambridge, A Civitas Online Report.
- Sabri , A. (2010). Malaysian Palm Oil Industry suffers labour shortage. Retrieved from <http://www.aseanaaffairs.com>.
- Selvakumaran, R., and Bala, S. (1995). Plight of plantation workers in malaysia: defeated by definitions. *Asian Survey*, Vol. 35, No. 4, pp. 394-407.
- Shunsuke, K. (2010). Tea estate plantation community in Nuwara Eliya district of Sri Lanka: An introductory overview of social issues and poverty among residents. *Yokohama Journal of Social Sciences*, Vol. 15 No. 6.

- Sulin, E. (2004). *Factors Influencing Job Withdrawal Intention among Employees of Public and Private Sectors*. Bachelor of Economics Dissertation. Universiti Malaysia Sabah
- Syarisa Yanti Abu bakar. (2002). Migrant Labour in Malaysia: Impact and Implications of the Asian Financial Crisis, EADN Regional Project on the Social Impact of the Asian Financial Crisis.
- The Malaysian times. (2012, May 29). Labour shortage to get worse with Indonesian oil palm boom . Retrieved: <http://www.themalaysiantimes.com.my/labour-shortage-to-get-worse-with-indonesian-oil-palm-boom/>
- United States Department of Agriculture (USDA). (2012, December 11). Retrieved: <http://www.pecad.fas.usda.gov/highlights/2012/12/Malaysia/>
- United States Department of Agriculture (USDA). (2011, Jun 28). Retrieved: <http://www.pecad.fas.usda.gov/highlights/2011/06/Malaysia/>
- Unnati. A, G.S Ankush and A. V. Mande. (2012). “Extent of participation of farm women in Decision making” *Journal of Dairying Foods & Home Sciences*. 31 (1): 72 – 74.
- WWF. (2012). In palm oil production analysis of incremental financial costs and benefits of RSPO compliance.
- Yap Chee Boon. (2004). Immigrant Workers in Sabah: Perspective of the Federation of Sabah Manufactures (FSM) *Proceeding of Seminar on Public Responses To Foreign Workers in Sabah*. UMS. Pp 19-26
- Yusof, B. (2008). Malaysia’s Oil Palm – Hallmark of Sustainable Development. *Business Magazine* Vol.5 Issue 4.
- Yusof, B. (2007). Palm oil production through sustainable plantations. *Eur. J. Lipid Sci. Technol.* 109, 289–295.
- Yusof, B., and Chan, K.W. (2004). The oil palm and its sustainability. *Journal of Oil Palm Research* Vol. 16 No. 1, p. 1-10.
- Zulfadlie Johansah .(2011). *Kajian Keatas Minat Pelajar Bidang Pertanian di Institusi Pengajian Tinggi Terhadap Kerjaya di Sektor Perladangan Kelapa Sawit* . Disertasi Ijazah Sarjana Muda Pertanian( Kepujian) Universiti Malaysia Sabah