LANDOWNERS AND SUPPLY OF LABOUR FORCE TO SALCRA PLANTATIONS:
A CASE STUDY OF LEMANAK AND BATU KAYA OIL PALM ESTATES,
SRI AMAN DIVISION, SARAWAK

JOSEPH BLANDOI

HD
9490.5
P343
J83
2002

KOTA SAMARAHAN
2002
LANDOWNERS AND SUPPLY OF LABOUR FORCE TO SALCRA PLANTATIONS: 
A CASE STUDY OF LEMANAK AND BATU KAYA OIL PALM ESTATES, 
SRI AMAN DIVISION, SARAWAK

JOSEPH BLANDOJ

A dissertation submitted 
in partial fulfilment of the requirements for the degree of 
Master of Environmental Management (Development Planning)

Faculty of Social Sciences 
UNIVERSITY OF MALAYSIA SARAWAK 
2002
I dedicate this study to my wife, Julita, and children: 
Jean, Joel, Jody, and Joey 
For their sacrifice and patience over the last 16 months 
&
My late grandparents: 
Lamiah Lingeh (Iban-Bisaya) and Bakul Kipas (Bisaya-Chinese). Whose “parenthood” is irreplaceable and from whom I learnt “Do not replace LOVE with LAW”

© Joseph Blando
Abstract

Plantation agriculture remains an important sector of the Malaysian economy. However, it faces problems of labour supply especially from the local population, which led to the recruitment of foreign labourers. This study, therefore, attempts to assess the degree of local labour participation in the plantation sector based on a case study of landowners who participated in SALCRA’s plantations at Lemanak and Baram Kaya Estate in the Sri Aman Division, Sarawak. The specific objectives are to determine participants’ demographic characteristics, and to examine how agro-economic diversifications and various forms of non-farm employment influence the local labour supply in the two estates.

Data for the Study were collected mainly through face-to-face interview using an interview schedule. A two-stage cluster random sampling was used to select the respondents.

The Study revealed that only 20% of the respondents/landowners’ household supply labour to the plantations. Landowners’ labour participation in SALCRA plantations is influenced by the household size and land participating in SALCRA’s plantations. Larger household has positive relationship with labour supply, i.e. the larger the household the more they would supply labour. On the other hand, the size of land involved in the plantations has a negative relationship with labour supply, which mean the bigger the size of land surrendered for SALCRA plantations, the less they would supply labour to the plantations. It was also found that landowners are not solely dependent on SALCRA for employment. The labour issue in SALCRA is not due to number, but how regular the local people would turn-up to work.

As the sample of the Study is small and confined to only two estates, its significance is only to provide an insight understanding of local labour supply characteristics of the Lemanak and Baram Kaya estates and cannot be taken to reflect the whole of SALCRA. To understand the whole picture of local labour supply characteristics in SALCRA a further study with expanded sample and wider coverage is needed.
Abstrak


Data bagi kajian ini diperoleh melalui teknik penggunaan sketsa ulang. Pemilihan responden dilakukan dengan menggunakan sampel kampung sahak di-tingkat.

Kajian ini mendapati bahawa hanya 20% daripada isimiah responden tetap di ladang. Penyertaan tenaga bahan penuh tenaga dalam ladang ladang SALCRA diperolehi oleh saiz isimiah dan keluasan tenaga yang terlibat dalam ladang. Saiz isimiah mempunyai hubungan yang positif dengan bilangan tenaga bahan yang disumbangkan, iaitu makin besar saiz isimiah makin rama tenaga bahan yang disumbangkan. Sementara itu, saiz isimiah mempunyai hubungan yang negatif dengan jumlah tenaga bahan, iaitu semakin besar saiz tenaga yang menyertai ladang SALCRA semakin kecil bilangan bahan yang disumbangkan. Dalam prosesnya, juga halawar pada pemilik tanah tidak bergantung sepenuhnya kepada SALCRA bagi mendapatkan sumber pekerjaan. Persen bahan di ladang SALCRA bolehkan saiz bilangan tenaga sahak keaterapan bahan tempatan ular bekerja.

Memandangkan saiz sampel kajian ini kecil dan terdiri kepada dua estet sahaja, kajian ini hanya signifikan untuk memahami ciri-ciri tenaga bahan tempatan di Estet Bato Kaya dan Lenawak dan tidak dapat dijadikan sebagai gambaran keseluruhan ladang SALCRA. Ragi membahagi ciri-ciri menyertai tenaga bahan tempatan di ladang-ladang SALCRA, kajian lanjut yang lebih besar dan liputan yang lebih meluas diperlukan.
ACKNOWLEDGEMENT

This Study would not have been possible without the assistance and cooperation of institutions and many individuals who have unselfishly rendered their help. Their names are too many for me to mention them all.

Foremost, I wish to accord my special thanks to Associate Professor Dr. Dimbab Ngadang for his willingness to be my supervisor and securing a study grant for the study.

My gratitude also goes to the Danish Cooperation for Environment and Development (DANCED) and UNIMAS for introducing the SLUSE programme and the sponsorship accorded to the course. To Associate Professor Dr. Gabriel T. Noweg and the SLUSE Management: thank you for introducing and admitting me to the programme.

My heartfelt thanks also go to my colleagues in SALCRA particularly, En. Noel Bucking, En. Semi Jie Jantung, En. Henry Daris and Pn. Minat Jagan of the Landowners' Development Department, Pn. Mary Melai of Field Operations Department for their tireless effort in assisting me to gather information for the study. My thank you also goes to Ms Diana Ningkan and Mr. John F. Noyen of UiTM for editing my drafts.

Special thanks also to The President and the Sarawak Bisaya Association, and to the Tun Jugah Foundation for the assistance in funding the Study.

I also accord my appreciation to all SLUSE lecturers and my 48 fellow students for the friendliness attitude and for making the course very interesting so much so that the 16 months become very short. To John and Bob, I enjoy our "quarrel" over the subjects that we discussed.

Lastly, to the participants of SALCRA from whom the findings of this study were derived, I convey my VERY SPECIAL THANK YOU.

"An unexamined life is not worth Living" – Socrates.

JB
UNIMAS
October 2002.
TABLE OF CONTENTS

Dedication  
Abstract  
Abstrak  
Acknowledgement  
Table of Contents  
List of Tables  
List of Figures

CHAPTER 1  STATEMENT OF THE PROBLEM  
1.1 Introduction  
1.2 Brief History of Plantation in Sarawak  
1.3 The Problem  
1.4 Objectives of Study  
1.5 Significance of Study

CHAPTER 2  LITERATURE REVIEW  
2.1 Introduction  
2.2 Definition of Plantation  
2.3 History of Plantation  
2.4 Atribute of Local Plantation Labour  
2.5 Factors Affecting Plantation Labour Supply  
2.5.1 Rural – Urban Labour Movement  
2.5.2 Education Level  
2.5.3 Land Ownership, Subsistence Farming and Labour Supply  
2.5.4 Plantation Management Practices  
2.6 Hypotheses

CHAPTER 3  METHODOLOGY  
3.1 Introduction  
3.2 Population under Study  
3.3 Research Design  
3.4 Research Instrument  
3.5 Data Collection  
3.6 Data Analysis  
3.7 Scope and Limitation of Study

CHAPTER 4  STUDY FINDINGS AND DISCUSSION  
4.1 Introduction  
4.2 Respondents’ Background  
4.2.1 Ethnicity, Gender and Age  
4.2.2 Education Attainment of Respondents  
4.2.3 Main Occupation  
4.2.4 Landownership in SALCRA Project  
4.2.5 Ownership of Off-estate Land  
4.3 Household Profile  
4.3.1 Family Size and Population  
4.3.2 Migration  
4.3.3 Age Structure of Remaining Population  
4.3.4 Income Level and Sources of Income  
4.3.5 Job Seekers  
4.4 Agro-economic Activities
LIST OF TABLES

Table 1  Local Labour Supply in SALCRA Plantations by Region
Table 2  Study Sample
Table 3  Gender of Respondents by Estate
Table 4  Educational Attainment of Respondents by Estate
Table 5  Ownership of Off-scheme Land by Estate
Table 6  Reasons to Migrate by Estate
Table 7  Reasons for Working Elsewhere by Estate
Table 8  Average Monthly Net Household Income
Table 9  Estimate of Household Annual Income and Sources
Table 10 Main reasons for Planting Padi by Estate
Table 11 Place of Working during Padi season by Estate
Table 12 Number of Cultural Occasion, Festivals, and Off-days
Table 13 Willingness to work in other villages' block by Estate
Table 14 Rules and Regulations by Estate
Table 15 Difficulty to follow rules by Estate
Table 16 Maintenance wage rate is reasonable by Estate
Table 17 Harvesting wage rate is reasonable by Estate
Table 18 Satisfied with incentives by Estate
Table 19 Relationship between dependent variable (Labour Supply) and independent variables
Table 20 SALCRA Projects, Planted Area and Participants
Table 21 List of Villages Participating in SALCRA Project
LIST OF FIGURES

Figure 1  Main Occupation of Respondents
Figure 2  Age Structure of Remaining Population
Figure 3  Map Showing Locality of SALCRA’s Business Centres
CHAPTER 1
STATEMENT OF THE PROBLEM

1.1 Introduction

The Vision 2020 and the Outline Perspective Plans (OPP) outline the precise direction in which the Malaysian economy will develop. The main thrust is on industrialisation and the creation of a knowledge-based society, which implies that the contribution of the agricultural sector to the economy would be reduced. Nonetheless, this does not mean that the agricultural sector would be abandoned, but merely a shift in focus and prioritisation of the nation’s resources. Despite this, the plantation sectors will continue to contribute towards export earnings, employment, and supporting a broad-based local industry. Their role is expected to be important, as was seen during the financial crisis of the late 1990s, when agricultural activities were reactivated.

In 1990, at the national level, three major plantation crops, i.e., rubber, oil palm and cocoa, accounted for 4.2 million hectares or 80% of the total cultivated land areas. In terms of employment, the plantation sectors employed a total workforce of an estimated 268,000 people. It also supported about 500,000 smallholders and 118,000 households in the public sector land schemes. A paper presented at the Malaysian Institute of Economic Research (MIER) 1989 Conference reported that the plantations industry regularly contributed 8% to 9% of the nation’s total tax revenue. In 1991 alone, the three major plantation crops contributed RM8.3 billion in export earnings to Malaysia (Mohamed, 1992).

The plantation agricultural sector, despite its significant role is facing one of the most pressing problems, that is, shortage of labour. In 1991, a survey done by the United Planting Association of Malaysia (UPAM) on plantations in Peninsula Malaysia showed that the sector has a shortage of more than 12,000 labours. In Sarawak, there has been a gradual decline in the number of economically active labour force over the years. Dandot (1994) mentioned that in 1970, agricultural labour accounted for 64.3% of the total labour force, but it dropped to 46.7% in 1990. In 2000, it was forecasted to drop to 36% (SPU, 2000). According to Mohamed (1992), what was more alarming was, the survey showed that the remaining workers were getting older, thus resulting in decreased productivity. Efforts to recruit locals also failed as the younger generation seemed more attracted to urban employment even though net incomes are lower. The greater emphasis on education resulted in a multiple number of young Malaysians with higher education aspiring for more lucrative and prestigious employment.

1.2 Brief History of Plantation in Sarawak

Due to its large tract of undeniased land, plantation agriculture is considered apt in Sarawak as a mean to improve and uplift the livelihood of the population, especially the rural poor. However, unlike Peninsula Malaysia that had started plantation agriculture is as early as 1903, beginning with rubber plantation by Petaling Rubber Estate Syndicate (Tan, 1983), plantation agriculture development in Sarawak is relatively new. Plantation development in Sarawak was started with the resettlement schemes, such as the Skrang
and Melugu schemes, which began in 1964. These early plantations were not profit-oriented but rather, for security reasons. It was designed to remove traditional cultivationists1, along the border areas of Sarawak, during Indonesian President Sukarno's confrontation against Malaysia (King, 1999). According to Ng and Dang (1991), the first government agency to undertake plantation development in Sarawak was the Sarawak Development Finance Corporation (SDFC), which was then assisted by the Department of Agriculture. In between 1964 to 1974, SDFC developed seven land development schemes, namely, Triboh, Melugu, Skrang, Meradong, Sibinteh, Lambir, and Lubai Tengah for planting rubber. It covered a total area of 5,800 hectares involving 1,175 families - then known as settlers. The management of these plantations, which were modelled based on the Federal Land Development Schemes (FLD) in Peninsular Malaysia (Cramb, 1989: 11 -15), were handed over to Sarawak Land Development Board (SLDB) in 1972 when SDFC was reorganised to form SLDB, Sarawak Economic Development Corporation (SEDC), and Sarawak Housing Development Commission (SHDC). Commercial plantation in Sarawak started sometime in 1967 when the Department of Lands and Surveys prepared a regional development plan for the Lambir-Subis Area in Miri – Bintulu area (then Fourth Division). The plan examined the natural and human resources in the area, in an area of 544 sq. kilometres. It traced the history of settlement and the rights of the inhabitants, and concluded that some 22,672 hectares of suitable State land would be available for agricultural development. The Government approved the plan in December 1967 and land was made available in 1968 to the Sarawak Oil Palm Sendirian Berhad (SOP), a subsidiary company of the Colonial Development Corporation (CDC) and to the then Sarawak Development Finance Corporation (SDFC) for cultivation of oil palm. By the end of 1969, SOP had planted 202 hectares of oil palms (Sarawak Report, 1984).

Plantations development in Sarawak started to gain attention in the 1970s. According to Dandot (1987), the emergence of plantations during the beginning of the 1970s was part of the State Government's programme towards raising the income of the rural community, providing employment opportunities, and as a means to alleviate rural poverty. Prior to 1980, land development activities were mostly undertaken by Government agencies. By 1981, there were three government agencies in Sarawak involved in plantation development, namely, SLDB, Sarawak Land Consolidation and Rehabilitation Authority (SALCRA), and Land Custody and Development Authority (LCDA). SALCRA and LCDA were formed in 1976 and 1981 respectively (Sarawak Report, 1984).

In the 1980s, efforts were intensified, when political leaders and government planners made "urgent" and "popular" calls for a vigorous dynamic effort to implement plantation or large-scale land development in Sarawak (Dandot, 1987). Following these calls, vigorous land development activities were pursued not only by Government agencies, but also by the private sectors. Several plantation houses from Peninsular Malaysia,

---

1 I disagree with the term shifting cultivators used by most writers, as the Natives of Sarawak has not been practising shifting cultivation, at least since the Sarawak Land Code was introduced in 1958. It would be appropriate to say that they are fallow-rotation system farmers.
1.3 The Problem

Developing large-scale land development or plantation is not easy. Apart from requiring large capital investments and land, availability of labour or workforce is also of critical importance as it determines the success of a plantation development venture. It is to be noted that plantation in Sarawak although providing income and employment opportunities it was not wholly taken to advantage by the locals. Sarawak is currently importing foreign workers in the plantation industry, especially from Indonesia. As at June 2001, out of 26,139 workers working in plantations located throughout Sarawak, 14,969 were Indonesian workers or equivalent to 57.3% of the plantations labour force. This figure excluded vacant jobs of 8,121 for the same period (MRLD, 2002). The figure suggested that the plantation sectors in Sarawak were facing labour shortages so much that foreigners have to be recruited to work in the estates. It also implies the reluctance of local labour to fill job opportunities offered by the plantation sectors in the State.

The employment of foreign labour requires a substantial amount of money for the recruitment fees that range from RM 900 to RM 1,200 per person, and wages and benefits to be paid to the workers. In the year 2001 alone, the plantation sectors paid about RM 13,472,100 to 17,962,800 on foreign workers’ recruitment fees. This increased the production costs to the plantations and caused an outflow of income to the State and country.

In order to realise the objectives set by the government in such sectors, and to avoid income outflows from Sarawak, a study as to why local labours could not fill the job opportunities offered by the plantation sector is necessary as basis for drafting solution measures. This is necessary, now that the Government of Sarawak (GOS) is planning to reach the target of 720,000 hectares of land for plantation agriculture by year 2005 (MRLD). Shortage of labour would impede or hinder the achievement of such target if a solution is not found to solve this critical problem, as it also drastically affects the State’s growth.

According to Lang (1987), a sufficient and steady pool of reasonably priced labour is a pre-requisite for a profitable plantation. He explained that the large acreage, huge investment, and timeliness of operations make it all the more necessary that workers follow fixed work schedules to ensure efficiency of operations. Workers of commercial plantations are generally well disciplined but the same cannot always be said of workers...
in government-run plantations, mainly because, in addition to being labourers, they are also plantation owners. In SALCRA's plantations, availability of sufficient and steady pool of labour is not possible despite the introduction of sedentary form of agriculture, which provides constant job opportunities and offers wage-labour. The participants, who form the majority of the labour force, continued to grow padi. As a result, availability of labour decreases during padi season, hence, disrupting plantation operations. Lang further cited that padi planting could not be 'abandoned' by the workers, as it is a way of life (culture) for generations.

Khor (1990:114) echoed Lang's views. He mentioned that one problem concerning labour supply is, not many local workers stayed long on plantation jobs. They tend to drift back to their traditional way of life than in preference to a fixed job even though the latter offers a more settled living and regular income.

Problems on labour shortages also arise due to poor project management, choice of areas to be developed, and inability to offer competitive wages as compared to other sectors. Commenting on SLDB's problems in 1980s, Puthucheary (1990) pointed out that apart from poor management of projects, problems on labour shortages were acutely aggravated by the choice of areas developed. Rapid development that occurred within reach of SLDB's development area, particularly the development of Bintulu and competition for workers from timber camps and employment opportunities in Miri and other areas where wages are so much higher than SLDB can afford, contributed further to the already chronic labour situation in the Lambir Subi area.

Workers or people's attitude and working preferences also lead to labour shortages. A former Minister for Land Development, Sarawak, mentioned, "... it boils down to the attitude of the people. They just do not want to go far from the kampungs or longhouses and to be involved in the tough work in the plantations." (Anonymous, 1987:47). He further remarked that many locals are not prepared to work in an organised and regimented system such as those needed in the plantations. They prefer to work in their own farms where the hours are flexible, and they too are not prepared to move into estates (Quoted by Puthucheary 1990).

Arising from this, a question is posed here, i.e., what makes the locals shy away from working in the plantations despite the huge number of job opportunities offered for grab? Was it because of culture, attitude, wages, and competition from other sectors or could it due to other reasons? As such, it is the intent of this study to find out reasons that contributed to the reluctance of Dayaks labour to work in the plantation sectors with a case study on SALCRA estates, which adopted the in-situ development approach and developed on Native Customary Rights (NCR) land.

SALCRA's projects are basically a marriage between NCR landowners and SALCRA, where the former were to provide labour and land, while the latter, with management expertise and funding. However, it must be noted that it is also not compulsory for landowners to work in the plantations. Despite its policy of relying on participants for its estates' workforce, problems of labour shortage in SALCRA's estates have emerged since the implementation of its first project in Lubok Antu in 1970s (Lang, 1987). This problem persisted until today to such an extent so that SALCRA has to recruit foreign workers (Indonesians) to work in their plantations. Local labour supply has been on a reducing trend since 1996 (Table 1). In between 1996 to December 2001, SALCRA has recruited
1.624 Indonesians to work in its estates. For 2001 alone, there were 604 Indonesian working in SARCRA's estates throughout the State. Estates under the Sri Aman Region of SARCRA were among the worst hit areas.

1.4 Objectives of Study

The purpose of this Study was to assess the degree of landowners' participation in SARCRA's plantation workforce in Lemanak and Batu Kaya Orin Palm Estates, Sri Aman Division.

Based on the general objective of the present study, the following specific objectives were stipulated as follows:

i) to determine participants' demographic characteristics; and

ii) to examine how agro-economic diversification, festive and cultural activities, and various forms of non-farm employment influence the labour supply in the two estates

1.3 Significance of Study

This study aims at providing an understanding on the nature of local labour supply in the two estates for planting purposes.
<table>
<thead>
<tr>
<th>No</th>
<th>Region</th>
<th>Harvester</th>
<th>General Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sri Aman</td>
<td>LR</td>
<td>547</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LS</td>
<td>349</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%LS</td>
<td>64%</td>
</tr>
<tr>
<td>2</td>
<td>Saratok/Saribas</td>
<td>LR</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LS</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%LS</td>
<td>N/A</td>
</tr>
<tr>
<td>3</td>
<td>Serian</td>
<td>LR</td>
<td>157</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LS</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%LS</td>
<td>61%</td>
</tr>
<tr>
<td>4</td>
<td>Bau Lundy</td>
<td>LR</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LS</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%LS</td>
<td>159%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>LR</td>
<td>704</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LS</td>
<td>445</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%LS</td>
<td>63%</td>
</tr>
</tbody>
</table>

Source: Field Operation Department, SALCRA
LR = Labour Requirement
LS = Actual Local Labour Supply
% LS = Percentage of Local Labour Supply
CHAPTER 2
LITERATURE REVIEW

2.1 Introduction

This chapter deals with relevant literatures with respect to plantation labour. It is divided into four main sections, namely: definition of plantation, history of plantation, attribute of local plantation labour, and factors affecting plantation labour supply.

2.2 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 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 has been debated by various writers and scholars. These differences stemmed from the different criteria used to describe or define a plantation. For example, Courtney (1976) and Jackson (1969) talked about the method by which the production is organized; Morgan (1978) regarded labour input and its organization as the most important factor in agricultural classification; and Rudenberg (1980) mentioned about perennial crops. Cramb (1990) used the degree of freedom in decision-making to define smallholders, while Malaysian officials used the size of land involved to define plantation, i.e., any land that is cultivated on more than 40 hectares (Ramasundran, 1984).

According to Goldthorpe (1987), the lack of agreement in terminology leads to confusion in classifying the plantation system within the scheme of global agricultural production. In addition, such definitions may be inadequate, as some other important characteristics of both plantation and smallholding agriculture need to be looked into, like cropping system, labour force, capital involvement, bureaucratic organization, purpose of production and land area.

i. Smallholding Agriculture

Smallholder producers are defined as independent decision-makers whose use of family labour to work or in conjunction with some hired workers, on farms that are termed smallholdings. Smallholders make their own decisions concerning cultural practices and agricultural production techniques they wish to adopt and where they sell their produce. Smallholdings unlike plantations do not have a bureaucratic internal structure (Goldthorpe, 1987, Cramb, 1990). Using the degree of freedom in decision-making as a criterion, Cramb (1990) further categorised smallholders into three main groups: (1) independent smallholders, that is, farm families which are living and
operating quite independently of each other and hence have almost autonomy in management decisions; (2) village-based smallholders, that is, farm families living in villages which are thereby constrained to some extent in their management decisions by requirement of the larger community; and (3) group or managed smallholders, that is, farm families which have been organized into larger groups for land development, like schemes managed by SALCRA. In Sarawak, according to Crumb (1990), the majority of smallholders belong to the second category.

However, there is a problem with the third category of Crumb's (1990) classification. Firstly, in SALCRA managed schemes, decisions are made by the SALCRA's management or the Board of SALCRA (BOS), and not by the smallholders. This can be seen from the fact that SALCRA has entered into a management agreement with a private management company in 1996, to manage SALCRA's estates, without consulting the smallholders. In addition, the choice of crops planted was also chosen by SALCRA, Decision-making followed the practice and style of a plantation. Secondly, SALCRA managed scheme has a bureaucratic structure to organize its daily operation while smallholder have none. Thirdly, it does not define the scale involved, i.e., what is the land size or scale of operation that can be categorised as smallholding.

In terms of cropping system, smallholding agriculture is characterized by mixed or multiple cropping systems, where food crops were grown alongside cash crops. It is a common scene in Sarawak to see farmers planting vegetables in their pepper gardens, or planting fruit trees side by side their rubber trees or on land adjacent to their padi farm. This cropping system is carried out to reduce any risk arising from market uncertainties, the spread of plant diseases and pest infestations. In addition, it can also increase income, improve efficiency of labour, and stabilise production. This can be explained by the fact that farmers would not work a whole day long in one crop, hence, need to tend other crops to complete their day. For example, tapping rubber only involves a half-day's work, i.e., from morning until noon and being a farmer, a smallholder would have less productivity if they were not involved in other activities. Therefore, the planting of other crops would be a logical choice.

On the production aspect, smallholders plant crops on a bi-purpose basis. Smallholders normally plant both cash and food crops. Cash crops were planted for sale and cash, while food crops are planted to cater for family daily needs although any surplus could be sold. In other words, smallholders plant crops for both subsistence and cash benefits.

Land areas covered by smallholding agriculture are relatively smaller than plantations and there has been no clear definition as to what is the exact size for such classification. However, from my observation of plantations in Sarawak, the minimum size of an estate is 900 hectares (Alam Wasa Sendirian Berhad, Sari, Miri) and above. In the case of Sarawak, anything less than 900 hectares can be considered smallholding.

In term of capital investment, as land size is comparatively small, the amount of capital involved for investment is also smaller than that of plantations.
hence have almost autonomy in the way they manage their businesses. However, smallholders are not always the same as farmers. Some smallholders are part of larger groups or organisations, such as the SARCRA (Smallholder Agricultural Credit and Research Association) which provides support and training to smallholder farmers in rural areas. This can help them to improve their productivity and increase their incomes.

2. Plantation

Plantation agriculture is defined as the production of commodity crops in large-scale, organized agricultural organisations (termed plantations) which have strict, bureaucratic internal structures. A plantation crop refers to crops that are grown on a large scale for commercial purposes, to be harvested and processed for export. Plantations are typically managed by large agribusiness organisations, which have strict internal structures to ensure maximum efficiency and profitability.

Although plantation agriculture may take many forms, depending on their geographical location, some common features can be observed. These features include:

- Large landholdings
- Bureaucratic organizational structures with managers, supervisors and workers arranged in a strict hierarchy
- Employment of wage labour on a permanent basis
- Agricultural production techniques standardized and broken down into a number of specialized tasks resulting in a sharp division of the workforce by function
- Strict supervision and control of the estate labour force and production methods by professional managers (known as planters)
- Production of only limited number of crops for marketing rather than consumption

Drawing from the above, some scholars (Lim, 1983; Courtenay, 1980) argue that there are three main types of plantation: nucleus estate/outgrowers scheme, quasi-plantation, and estate or plantation.

A basic concept of the nucleus estate is that the estate and factory complex act as focal point of outgrowers' development. The estate provides agronomic, management and commercial services to farmers outside the plantations growing the same crop as the plantation. The nucleus estate consists of a central plantation and associated processing factory surrounded by satellite small farms owned by farmers. These farmers are called outgrowers because they grow the crop under the supervision of estate staff and send the harvested produce to the central factory. The participation of this project, according to Goldthorpe (1987), are not smallholders in the usual sense, as they have to follow the instruction of the project management and do not have any choice concerning where their produce is sold to. They are to be distinguished from smallholdings, which do not have a bureaucratic internal structure.

Meanwhile, the term quasi-plantation refers to large-scale agricultural development projects or land schemes that applied plantation-type of technology and to distinguish the traditional division between plantations and smallholdings (Goldthorpe, 1987). The Federal Land Development Authority (FELDA) schemes or other government-run large-scale land development projects were categorised as quasi-plantation. Going by this classification, SARCRA's plantations fall within this category. Goldthorpe (1987) defined quasi-plantation as smallgrowers' development projects that incorporate to a greater or lesser degree, within their own internal structure: a bureaucratic organizational structure with intensive supervision of the farmers under centralized management. Courtenay (1980) however, disagreed with this categorisation and he
called both types of projects “national plantation”. The term quasi-plantation is being coined to distinguish between government land development projects that use large-scale, high input plantation technology from other small farmers’ schemes that involve little or no project supervision of the project participants (Goldthorpe, 1987).

2.3 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 19th 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 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 the cheap 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 (1994), 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 assist the planters by controlling production from non-plantation producers or smallholder to stabilise prices (like the Rubber Restriction Scheme in Malaya); and infrastructure facilities, such as investment in roads, drainage, irrigation and social infrastructure.

i. Cheap Labour

Plantation economies have consistently based their profits on cheap labour. Where locals refused low-wage rates, a frequent response has been to recruit from outside national borders (Loewenson, 1992). History of plantation, as mentioned by Goldthorpe (1984) has been characterised by the fact that labour requirements could not normally be met by the supply of labourers in the immediate neighbourhood of the plantations. Jackson (1968) quoted that in the 1889 Annual Report for the State of Perak, Malaya, stated that ‘Malay absolutely refuses to hire himself out as a labourer’ on any terms a planter could accept. The reason for this according to Gordon (2001) was that a planter would have accepted a very low wage. In addition, the availability of abundant land for cultivation helps the local population to enjoy economic independence, which constitute to a lack of desire (to change) for wage-earning employment.

Refusal of locals to work in the plantations and preferences to work on their own land marked the beginning of foreign labour recruitment in plantation agriculture. Cheap
The term quasi-plantation is being developed projects that use large-scale farmers' schemes that involve ants (Goldthorpe, 1987).

For the most part, colonial and the colonial states enforced policies of cheap labour. It is for this reason that efforts at explaining the plantation economy supplied the plantations by the government or state, according to the form of legislated exploitation of slavery and indentured of the immediate neighbourhood of the 1839 Annual Report for the State of Malaysia, the state's chief executive, had to hire himself out as a labourer for this according to Gordon (2001) at a low wage. In addition, the availability of the local population to enjoy economic privilege (to change) for wage-earning labourers, with no provision for wife and family” (1962: 153).

However, Jones noted and contradicted himself when he said:

“Wages of workers on many plantations too have often been no more than enough to support the labourers themselves, with no provision for wife and family” (1962: 153-9).

The statement that plantation work requires less skill is questionable, as it also involves a specialised workforce. According to Goldthorpe (1987) the breakdown of agricultural production process into a number of specific operations lead to a sharp division of work into distinct tasks, which are carried out by individual workers. In an oil palm estate for example, workers are divided into two categories, maintenance workers, and harvesters. Harvesting work requires certain skills to be able to produce high productivity. It is for this reason that in Sarawak, the Bugis oil palm harvesters from Indonesia are famous among plantation companies because they can harvest
about two tonnes or more fruits per day as compared to the locals or other foreign workers, who averaged about 0.8 tonne to 1.5 tonne per day.

ii. Cheap Land

The development of plantation agriculture requires the use of extensive land areas and the introduction of a complex structure of organizational management. For the development of a capitalistic type of enterprise, the basic requirements apart from capital and free labour are cheap land. Gordon (2001) pointed that the acquisition of cheap land in plantation in Asia was the act of primitive acquisition of the planters' capital. In Malaya for example, 'ridiculously cheap' land were made available in abundance for alienation to European interests (Jomo, 1988). Cheap lands were provided and granted by the colonial state through various means (see Wan Hashim, 1988; Lim, 1977; Loewenson, 1992) and as summarised by Gordon (2001) included:

a) Outright expropriation of the land of the colony.
b) Through the state assumption of ownership of "waste" land without any regard for the pre-existing patterns of the economic use of the land,
c) State backing for illegal "alienation" of indelible traditional land (partly through the imposition of Western laws of contract and property) with the use of force to crush local resistance where necessary, and,
d) Occasionally, through the provision and enforcement of favourable renting arrangement for plantations.

iii. Plantation and Independence

With independence, the colonial-style of plantation no longer existed, although retaining their old names. They are now transformed into agri-business, as were the case of rubber and oil palm plantations in Malaysia which operate like normal capitalist production units (Gordon, 2001). Indentured labour is no longer practised. Workers can now seek the most favourable wage bargain they can get. However, its success depends upon the accumulation of capital and usage of higher technology. For example, the invention of high yielding cloned planting materials and mechanisation reduce manual labour demand, hence, reduces bargaining power.

Mechanisation has particularly accentuated seasonal unemployment, shortening annual work and forced workers to combine wage employment with other activities. In India mechanisation and the use of high yield variety seeds were associated with overall reduction in employment during the "green revolution", with 20% decline in employment in the tea estates during 1958-68. Increased mechanisation in 1970s resulted in greater labour intensity, declining employment and reduced total earnings (Loewenson, 1992).

Loewenson (1992) further states that wage negotiations have generally benefited only permanently employed workers. In Malaysia, as the law only allows foreign workers to work for two years in the country, wage negotiations for foreign workers are out of the question. For locals, negotiations for workers to be given monthly pay have yet to materialise. Permission by the government for plantation sectors to recruit foreign workers, like the Indonesians has enable the plantation sectors to maintain the cheap
owed to the locals or other foreign per day.

The use of extensive land areas and anizational management. For the basic requirements apart from the acquisition of the labour that was started during the colonial period. Cheapest labour, as was during the colonial period persisted although its form now varies.

2.4 Attribute of Local Plantation Labour

Several literatures have touched on the attributes of the local plantation's labour. Some of the interesting attributes of local plantation labour are discussed below:

The Myth of Lazy Natives

Studies in Malaya showed that the colonial government gave various reasons for not recruiting local labour, i.e., the Malays. These reasons include lack of indigenous labour, not reliable, content to remain in their villages for social and cultural reasons and worst of all is that the Malays were deemed as 'lazy natives'. An example of this was quoted by Halim Saileh "...they do not even work three days a week: they only work when it suits them" (cited by Ramachandran, 1994: 41). This vision of the Malays, was reflected in a statement by Sweetenham that said "Whatever the cause, the Malays of Peninsular Malaya were, unquestionably opposed to steady continuous work" (Ramachandran, 1994).

These views were not only biased, racist but also untrue as only waged labour is considered work. As peasants, the Malays were economically self-sufficient in the communal setting, hence, explaining their reluctance to replace their subsistence economic activities with other forms of economic activity (Lim, 1977). This was made possible by the fact that they have available land for cultivation (Gordon, 2001). As such, there was no need for them to work under the strenuous working conditions and strict regulations of wage employment in the plantation (Ramachandran, 1994). In addition, according to Lim (1977), the work aspect of Malayan traditional economy formed part of the broader social pattern, which the colonial state failed to understand. For example, padi season began with feasts and ceremonies. While working for the padi to be harvested, they may also be involved with other activities like fishing, or doing other works, which are seen as wasting time and energy. The labelling was in fact used by the colonial government to exclude local labour and justify their recruitment of foreign labour, like the Indians or Chinese, which are cheaper compared to local labour.

Origin of Local Plantation Labour

A study of plantations in Kedah, Perak, Selangor and Negri Sembilan by Zawawi (1998) showed that 98% of the plantation workers are Malays. Workers are either checkroll (directly recruited by the plantation) or contract (recruited by contractors engaged by the plantation). The background of the local workers can be seen in terms of landownership, educational and economic backgrounds.

In terms of landownership, it was revealed that more than half (60%) of the local workers are landless and another 27% lacked access to family land (due to surplus family labour, but land not increased) while the remaining 12% have land but not enough to support their families due to unprofitable holdings or land fragmentation. In terms of their academic qualification, more than three-quarters of the workers had only Malay primary school education or less. From the point of view of economic background, most of the workers (83%) came from rural families, involved in peasant economic activities.
Women and Child Labour

Women and child labour have always played important roles in plantation economic activity mainly to supplement the adult males’ income contributions to their families. According to Ramachandran (1994), the women and female labour force in the plantation industry began in the late 19th century when women formed 20-15% of the total labour force. Currently, most female are employed in rubber and oil palm plantations, working generally as tappers, rubber-processing workers in rubber factories or as cutter-carrier teams in plantations, and as weeder sprayers in both rubber and oil palm plantations. He further mentioned that planters were and is still keen to employ women, as they cannot manage with male workers alone. In addition, the female workers help to create a ‘settled’ labour population in plantations, which is important for continuous and steady supply of labour in the industry.

Participation of children (aged below 16 years old) in the labour force is related to poverty and high incidence of large families, and the demand for child labour (Jomo et al., 1992). Child workers mostly came from large families with meagre incomes, often having bare minimum form of formal education. Children of poor household are therefore pushed to work for additional income. Inability to send children to school, children poor in studies and children’s low interest in their studies are amongst some of the reasons that led to child labour.

Demands for child labour had also dragged children into the labour force, as they are plenty and cheap. Child wages are said to be two or three times less than adult labour (Jomo et al., 1992).

2.5 Factors Affecting Plantation Labour Supply

2.5.1 Rural Urban Labour Movement and Supply of Plantation Labour

To be profitable, a plantation requires a sufficient and steady pool of reasonably priced labour (Lang, 1987:31). Supply of labour depended on the availability of able bodies in areas surrounding the plantations. Apart from the refusal of the locals to be wage earners, as mentioned by Gordon (2001), labour movement from rural to urban sectors also affects the supply of labour to the plantations.

An early attempt to explain the migration of labour from rural to urban or modern sector was made by Lewis (1954) and Todaro (1969; 2000). Lewis’ Model of Surplus Labour (1954) was based on the concept of dual economy consisting of traditional and modern sectors. This approach viewed development as a transition from the traditional sector to the modern sector. The most important assumption is that the surplus labour is in the agricultural sector, which can be removed at no opportunity cost, and to be transferred to the modern sector. Surplus labour in the traditional sector implied that as we expand production in the modern sector (by pulling labourers out of the agricultural sector and putting them to work in industrial sector), we do not have to experience a fall in agricultural production.

The problem with Lewis’ model is it does not provide an explicit reason on why workers from one sector would want to move to another. Many rural migrants flock to urban areas in the hopes of finding jobs and bettering their lives, but the grim reality is that many of