The Rural Community’s Perception in relation to the Transformation of Agricultural Practice from Traditional Farming to Commercial Farming: A Case Study at Kpg. Sambir, Kota Samarahan, Sarawak.

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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgements</td>
<td>ii</td>
</tr>
<tr>
<td>Table of Contents</td>
<td>iii</td>
</tr>
<tr>
<td>List of Tables</td>
<td>v</td>
</tr>
<tr>
<td>List of Figures</td>
<td>vi</td>
</tr>
<tr>
<td>Abstract</td>
<td>vii</td>
</tr>
<tr>
<td>Abstrak</td>
<td>viii</td>
</tr>
</tbody>
</table>

1. Introduction
   1.0 Introduction
   1.1 Introduction of the Study
   1.2 Problem Statement
   1.3 Purpose of the Study
   1.4 Objective of the Study
   1.5 Significance of the Study
   1.6 Limitation of the Study
   1.7 Definition of Term in the Study

2. Literature Review
   2.0 Introduction
   2.1 Agriculture
   2.2 Agriculture System
   2.3 Farming System
   2.4 The Transformation of Malaysia’s Agriculture from Traditional Farming to Commercial Farming
   2.5 Aquaculture in Malaysia
   2.6 Commercial Shrimp Farming
   2.7 Related Studies
   2.8 Research Framework
   2.9 Hypotheses

3. Methodology
   3.0 Introduction
   3.1 Selection of Study Site
   3.2 The Aim of the Study
   3.3 Sampling Procedure
   3.4 Data Collection
   3.5 Data Analysis
   3.6 Inferential Statistics

4. Findings and Discussion
   4.0 Introduction
4.1 Respondent’s Demographic Characteristics 32
4.2 Findings on the Overall Perception 34
4.3 Influence of Demographic Factors (Gender, Age, Educational Background and Occupation) on the Overall Perception of the Rural Community on the Traditional Farming and Commercial Farming.
4.4 Relationship among the External Factors (Economic, Government, and Social Forces) and the Overall Rural Community’s Perception toward the Traditional Farming and Commercial Farming.
4.5 Social Economic Status of the Respondents 37
4.6 Favorable Choice of Project to be Implemented at Sambir Area by the Respondents
4.7 Discussion of the Findings 39

5. Conclusion and Recommendation
5.0 Introduction 45
5.1 Summary and Conclusion 45
5.2 Recommendation 49

6. Bibliography 51

7. Appendix A
   Questionnaire-English Version 56

8. Appendix B
   Questionnaire-Malay Version 62
LIST OF TABLES

Table 1  Distribution of the population based on different blocks at Kpg. Sambir. ......................................................... 28
Table 2  Inferential statistics and hypotheses testing. ........................................................................................................... 31
Table 3  Distribution of the respondent’s demographic background based on gender, age, educational background and occupation. .......................................................... 33
Table 4  The distribution of the overall perception of the respondents regards the transformation of agricultural practices from traditional farming to commercial farming. ...................................................................................................................... 34
Table 5  Result of T-test that shown the significant of the gender factor on the overall perception of the rural community toward the traditional farming and commercial farming. .......................................................................................................................... 34
Table 6  Result of One-way Anova test of difference in the rural community’s overall perception toward traditional farming and commercial farming based on age, educational background and occupation. .......................................................................................................................... 35
Table 7  Correlation Matrix of external factors and the overall respondent’s perception toward the traditional farming and commercial farming. ...................................................................................................................... 36
Table 8  Result of Correlation Test between the overall respondent’s perception toward the traditional farming and commercial farming and perception towards commercial shrimp farming. .......................................................................................................................... 36
Table 9  The distribution of the respondent’s household monthly Cash income. .......................................................................................................................... 37
Table 10 The result of Crosstabulation Test of family status in agriculture sector and ownership of land of the respondents. ................................................................................................................. 37
Table 11 The Result of Chi-square Test showed the association between the family status in agriculture sector and the land-ownership status of the respondents. ...................................................................................................................... 37
Table 12 The result of Crosstabulation Test of family status in agriculture sector and total household monthly cash income of respondents. ...................................................................................................................... 38
Table 13 The result of Chi-square Test showed the association between the family status in agriculture sector and the respondent’s family household monthly cash income. ...................................................................................................................... 38
Table 14 Summary of the frequency table showed the respondent’s majority choice 1 to choice 5. .......................................................................................................................... 39
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>The functions and linkages of an agricultural system.</td>
<td>7</td>
</tr>
<tr>
<td>Figure 2</td>
<td>Vicious circle perpetuating the low productivity of subsistence agriculture.</td>
<td>18</td>
</tr>
<tr>
<td>Figure 3</td>
<td>Research framework for this study</td>
<td>23</td>
</tr>
<tr>
<td>Figure 4</td>
<td>Location of study site</td>
<td>26</td>
</tr>
<tr>
<td>Figure 5</td>
<td>Location of Kpg. Sambir</td>
<td>27</td>
</tr>
<tr>
<td>Figure 6</td>
<td>Diagram of the transformation of agriculture-from traditional farming to commercial farming.</td>
<td>48</td>
</tr>
</tbody>
</table>
ABSTRACT

The Rural Community’s Perception in relation to the Transformation of Agricultural Practice from Traditional Farming to Commercial Farming: A Case Study at Kpg. Sambir, Kota Samarahan, Sarawak.

Liew Chiew Ing

This research is aimed to identify the overall perception of the rural community towards the transformation of agriculture from traditional farming to commercial farming. It focuses on the influences of the external factors that had been determined as the major driving forces (economic, government and social forces), which led to the transformation of agricultural practices in rural areas. In particular, this research was also intended to study the relationship among the driving forces and demographic factors in influencing the respondent’s opinion or thinking regarding the issue on the transformation of agriculture. As mentioned above, the driving forces analyzed in this research were focused on economic, government and social forces. As for the demographic factors, the personal background of the respondents in term of gender, age, educational background and occupation were studied. For the purpose of this research, Kpg. Sambir had been chosen as study location. Generally, Kpg. Sambir is a Malay village located at Sambir, Asajaya area, which is a potential area to be developed in the agricultural sector. Based on the respondent’s response to the interview, it was revealed that majority of the respondents were very pleased with the idea to transform the agricultural sector into commercial practices. Result of the t-test indicates that among the demographic factors analyzed in this research, gender is the only factor that influenced the perception of the respondents toward the issues of agricultural transformation. In addition, the finding of the Pearson Correlation test showed that three major driving forces or external factors (economic, government and social forces) examined in this research have strong relationships with the respondent’s perception. Any changes in either one of the external factors will consequently change the others. In other words, the combination of these three external factors can bring great changes to the transformation of agriculture from traditional farming to commercial farming. Study also revealed that respondents want to see the changes in the traditional farming. Respondents hope that the commercialization of agricultural sector can be carried out successfully at Sambir area by giving them a better life and better future. Finally, this study was done with the hope that the future transformation of agricultural sector will be more successful.
ABSTRAK


Liew Chiew Ing

Kajian ini adalah bertujuan untuk mengenalpasti persepsi keseluruhan masyarakat luar bandar terhadap pemindahan amalan kegiatan pertanian dari pertanian tradisional kepada pertanian komersial. Fokus kajian ini ialah kepada pengaruh faktor-faktor luaran yang telah ditentukan sebagai faktor-faktor pengerak utama (faktor ekonomi, faktor kerajaan dan faktor sosial), yang berkeupaya untuk menerajui pemindahan bagi amalan kegiatan pertanian di kawasan luar bandar. Secara khususnya, kajian ini juga berniat untuk mengkaji hubungan di antara faktor-faktor pengerak utama dan faktor-faktor demografik yang mempengaruhi pandangan atau pemikiran responden berkaitan dengan isu pemindahan bagi amalan kegiatan pertanian. Seperti yang telah dinyatakan di atas, daya pengerak utama yang dianalisiskan dalam kajian ini adalah tertumpu kepada daya ekonomi, daya kerajaan dan daya sosial. Bagi faktor-faktor demografik pula, laterbelakang individu bagi responden dari segi jantina, umur, pekerjaan dan laterbelakang pendidikan dikaji. Untuk tujuan kajian ini, Kampung Sambir ialah sebuah kampung melayu yang bersepakat di kawasan Asajaya, iaitu suatu kawasan yang berpotensi untuk dibangunkan dalam sektor pertanian. Berdasarkan kepada maklumbalas daripada para responden yang telah ditemuramah, ia menunjukkan bahawa majoriti daripada mereka adalah sangat berpuas hati dengan cadangan untuk mengubahkan sektor pertanian kepada corak kegiatan pertanian secara komersial. Keputusan daripada ujian-t menunjukkan bahawa di antara faktor-faktor demografik yang dianalisis dalam kajian ini, hanya faktor jantina yang mempengaruhi persepsi bagi para responden terhadap isu-isu pertanian. Selain itu, hasil dapatan kajian yang berdasarkan ujian Pearson Correlation menunjukkan bahawa tiga daya pengerak utama atau faktor-faktor luaran (daya ekonomi, daya kerajaan dan daya sosial) yang dikaji dalam kajian ini mempunyai hubungan yang kuat dengan persepsi responden terhadap transformasi pertanian. Lataran daripada sebarang perubahan dalam mana-mana satu faktor luaran akan membawa perubahan kepada yang lain. Dengan erti kata lain, kombinasi daripada ketiga-tiga faktor luaran ini dapat membawa suatu perubahan yang besar kepada penjelmaan bagi amalan kegiatan pertanian daripada pertanian tradisional kepada pertanian komersial. Kajian juga mempersembahkan bahawa para responden ingin melihat perubahan dalam pertanian secara tradisional. Para responden berharap sektor pertanian yang diusahakan secara komersial dapat dijalankan dengan berjaya di kawasan Sambir dengan memberikan mereka suatu kehidupan yang lebih baik dan masa depan yang lebih cerah. Akhir kata, kajian ini telah dijalankan dengan harapan bahawa proses perubahan bagi sektor pertanian pada masa hadapan akan lebih berjaya.
CHAPTER 1

INTRODUCTION

1.0 Introduction

This chapter presents the background of the study and the overall problem statement, the study's objectives and the significance of the study.

1.1 Introduction of the Study

Over the last century, traditional agricultural sector has formed the core of the rural development in most of the developing countries such as Thailand, Vietnam and Malaysia. The term “traditional” stated in this study refers to the agriculture patterns that are based on the traditional way, which had been practiced by the most of the rural communities.

Malaysia, like other developing countries, depends on the agricultural sector. The majority of the population lives in rural areas, which is characterized by low productivity, underemployment and poor living conditions. During the last century, agriculture had dominated the main stream of the rural development in terms of population, employment, income and production (Syed (ed.), 1987).

Nowadays, agricultural sector plays an important role in Malaysia’s economy. It not only remains as the main livelihood of the majority rural community, but also as the main contributor to the national economy. As stated by Effendi, (in Mirzan, et al. (eds.), 2001), agricultural sector in Malaysia encounters with various kinds of global challenges as the result of the emergence of globalization, liberalization, and e-commerce as well as biotechnology. Consequently, agriculture transformation is needed to deal with those new challenges and new economy system.

Sarawak, the biggest state of Malaysia, also have the same condition, where majority of the population are in the rural sector and depending on farming as their livelihood. This state is situated on the Northwest coast of the island of Borneo. The actual location is between the latitudes 0° 50’ North, longitudes 109° 30’, and 115° 40’ East. Total land area of Sarawak is 124,449 square kilometres (48,050 square miles) with a length of 740 kilometres (459.9 miles) and a maximum width of 257 kilometres or equivalent to 157.9 miles (Bugo, 1984).

Traditionally, rural community in Sarawak practiced various forms of traditional agriculture activities, such as rice farming and coconut cultivation and artisanal fishing. The survival of the community depends on the agriculture production of at least the subsistence minimum each year. For the rural community involved in the traditional agriculture farming, a poor crop may mean food shortages, starvation, illness, and mortgage, such essential assets as land and livestock (Dixon, 1990).
The increase in demand for shrimp in international and local markets compared to others crops that are produced by rural community involved in traditional agriculture has encouraged them to participate in commercial shrimp farming. Many of the rural community began to change their traditional agriculture to shrimp farming. Nowadays, intensive commercial shrimp farming is growing rapidly in most of the rural areas in Sarawak including Sambir area. Shrimp farming is expect to be an important aquacultural activity in the future for Sambir as this area has many attractive characteristics for the development in shrimp farming that are not found in many other rural area in Sarawak. These attractive characteristics are important for shrimp farming because it has a significant impact of the development of the community in term of standard of living. For Sambir, one of the main attractive characteristics is the availability of extensive warm brackish water sites, which is suitable for the shrimp farming.

1.2 Problem Statement

Conflicts between the traditional farming and the commercial farming have become an important issue. Sambir in Sarawak is also facing such a problem. According to the 1991 population census, Sambir area had a population of 467 with 87 households. Due to the development taking place there, people were provided with various types of community facilities and services, such as electricity and water supply, school, shop-houses, community hall, mini-library, clinic, mosque and others. For instance, clinic at Kpg. Sambir had been set up since 1974. Through the interview session carried out with the person in charge at the clinic there, it was found out that only 180 persons with 100 households lived at Sambir area in 1976. However, over the years, the population increased continuously until today.

Previously, the main land-use of the Sambir area was coconut farm, which was cultivated traditionally by the community, especially the Chinese farmers who hired the Malay workers living nearby. However, the recent development-taking place in this area has changed the land-use pattern. The outsiders brought in the development in the commercial farming. Consequently, now, some of the communities are starting to involve in commercial farming especially in shrimp farming. This change occurred due to the very good demand for shrimp in the local and international market compared to traditional crop like coconut and banana. Furthermore, the shrimp farming operation had created more employment opportunities by offering better wages and working condition.

Furthermore, there is a limit in expanding the traditional agricultural activities due to environmental constraints. The land and soils in many places of Sarawak cannot sustain intensive agriculture (King, 1993). Thus, the action to change the land-use from traditional agriculture to commercial shrimp farming can be one of the solutions to overcome these constraints.

In Sambir, conflict arises on the land-use pattern between the traditional coconut cultivation and commercial shrimp farming as both rely on the natural resources of land and water. Thus, if there is an expansion of shrimp farm in this area, it inevitably will generate competition among these two activities to utilize the same resources. In addition, brackish water production of the local people has also increased due to shrimp farming activities.

However, in order to ensure the potential for the development of shrimp farming involved in the area, a proper management of the shrimp farming activities is needed.

Through the research carried out, it is evident that the traditional farming and commercial farming activities can be transformed into sustainable agriculture development. Thus, the action to change the land-use from traditional agriculture to commercial farming can be one of the solutions to overcome these constraints.

1.3

Today, the people in Sambir area are actively involved in the traditional farming and other commercial activities. Furthermore, many of the rural communities have actively taken part in the commercial shrimp farming operations. Thus, the action to change the land-use from traditional agriculture to commercial shrimp farming can be one of the solutions to overcome these constraints.

1.4

This migration of the rural community has

addition, the intensive shrimp farming tends to cause environmental degradation such as water pollution and noise pollution (Yoo and Boyd, 1993).

However, it cannot be ignored that Sambir area has the availability of extensive warm brackish water sites since it is located near the sea, which is suitable for the shrimp farming. Besides that, commercial shrimp farming has a potential of reducing the needs of the community to import fisheries product. At the same time, it also can mean an increase number of jobs, better working condition, enhanced sport and commercial fishing and a reliable source of protein for the future (Landau, 1992).

In addition, Sarawak government also intends to encourage rural community to invest in rearing prawn, which is expected to be an important industry in the developing countries including Malaysia. In the Eight-Malaysia Plan, aquaculture is one of the potential economic activities. Thus, it is believed that commercial shrimp farming will ensure a bright future in aquacultural industry if the rural community act to shift their involvement in traditional farming to commercial farming which focus on rearing prawn.

However, traditional agricultural activities such as coconut cultivation still have certain economic and social value to the local community. Thus, this study is conducted in order to find out the overall perception of the rural community toward the transformation process of agricultural practice from traditional farming to commercial farming. It is also carried out to determine the major driving forces that able to influence the future development of the land-use pattern in the rural area.

Through this study, the rural community’s decision and position in relation to the transformation progress of agricultural practice can be understood by the developers and researchers. The reasons behind the transformation of the agricultural practice from traditional farming to commercial farming can be identified as the important change agents to the agricultural sector.

1.3 Purpose of the Study

Today, more people are concern about the social aspect of the rural community who are actively involved in traditional farming or commercial farming. Unfortunately, no broad research has been undertaken before in assessing the overall perception of the rural community who are involved in traditional farming and commercial farming regarding the agriculture’s transformation process in the rural area at the same time. Thus, this study is to determine the rural community opinion about the agriculture practice from two different perspectives, which are traditional farming versus commercial farming.

1.4 Objective of the Study

This main objective of the study will focus on the investigation of the rural community’s perception in relation to the transformation of agricultural practice from traditional farming to commercial farming.
Specific Objectives

1. To examine the external factors (economic, government and social forces) that influence villager’s decision to remain either in traditional farming or shift to commercial farming.

2. To identify the socio-economic status/standard of living/well being of the villagers.

3. To examine the influence of demographic factors (age, gender, occupation and educational background) on villager’s perception towards traditional farming versus commercial farming.

4. To determine the villager’s perception whether commercial shrimp farming has influenced their overall perception regarding the transformation of the agricultural practice.

1.5 Significance of the Study

This study is necessary, as it would provide the latest and valuable information with regard to the perception of the rural community who are involved in traditional farming and commercial farming. Through a detailed analysis of the information collected in the study, it allows the researcher to draw useful conclusions to reflect the actual opinion of those involved in traditional farming and commercial farming.

Based on the conclusion, it can provide policy makers an insight into the variables so that suitable policies can be formulated to promote the glossy aspect and to contain and even reverse the unfavorable factors. Furthermore, the government can use it as a guideline in planning rural development in the future. In other words, this study can lead to a strategic development planning by emphasizing the essential rural community activities that promised a better life for them and their future generation.

In addition, this study is also potentially valuable in providing the rural community with a better understanding of these two different farming activities and helps them in decision making to choose the potential activities to carry out in future.

Finally, the public can use the information gained from this study as a source to increase their knowledge. Besides that, this information can also be a reference for other researchers in the same field.

1.6 Limitation of the Study

This study was only done at Kpg. Sambir, thus, it cannot fully represent the perception of the whole rural community toward the transformation of agriculture practice from traditional farming to commercial farming. Furthermore, every village or rural area that located at different geographical background will have different culture and environment, therefore, the finding of this study may not be definite applicable in all situation. Besides that, the reliability of this study also depends on the willingness of the respondents. Nevertheless, it is very valuable with the researcher for further research.
respondents to give a honest and accurate feedback during the interview session. Nevertheless, this study can be uses as a guideline or reference for the future study deal with the transformation of the agriculture practice from traditional farming to commercial farming at the rural area.

1.7 Definition of Terms in the Study

Several terms used in this study will be explained in the context of this study. The definition given here is based on the understanding and perception accepted by the researcher.

1.7.1 Farming System

A way of organizing farms which arises from the common aims of a group of farmers and is characterized by specific adaptations of known cropping patterns and farm practices to the physical environment (soil, rainfall, temperature, etc.).

1.7.2 Traditional Farming

Traditional farming means to do agriculture practice the way the farmers have usually been doing since generation.

1.7.3 Commercial Farming

A modern farming system that operates and produces in big-scale with the utilization of high external inputs, such as chemical, fertilizer, and pesticides. In addition, the management system will be more systematic in all the production stages, including planning, producing and marketing.

1.7.4 Agricultural System

Agricultural system includes all the activities related to the agricultural sector, which includes the production practices, or how things are produced, as well as the types of enterprises, or what things are produced.

1.7.5 Driving Force

A change factor that is able to influence certain things. In terms of agricultural sector, the driving force is the factor that can bring changes to the pattern of agriculture or farming system practiced by the farmers. (For instance, social force, economic force and government force analyzed in this study).
CHAPTER 2
LITERATURE REVIEW

2.0 Introduction

Chapter 2 will discusses the review of the literature related to the study from various perspectives. This include concepts pertinent to the study and some of the outcome from other related studies. The concepts discussed here include agriculture, agriculture system, farming system, agriculture's transformation, aquaculture and commercial shrimp farming.

2.1 Agriculture

Casavant, et al. (1999) defined agriculture as "A complex system that begins with natural resources and involves farms, agribusiness, and governmental organizations in providing products of the land to consumers." Agriculture is a very large, diverse, and heterogeneous industry that manipulates the abundant land into a useful land-use practice, which need internal and external input to support the activities.

According to Cramer and Jensen (1991), agricultural activities cover a wide aspect of human daily life that include farms; financial institutions; marketing channel (processing, packaging, storage, transportation and distribution firms); public rule and regulation; pricing organizations; and retailers and restaurants. The whole processes of agriculture activities stimulate an amazing change to the development experience go through by a community and a country as a whole.

As noted by Rae (1994), agriculture is not a simple industry. It is a very dynamic industry that was integrated by multidisciplinary support. The whole agriculture industry is influenced by climatic conditions, technological achievement, market developments, and government intervention in regulate the agriculture activities. Because of this, agriculture can be stated as a mankind activity, which operate in an unstable condition in long-term since not much of the factors, which influenced the agriculture activities will remain static for long run.

For instance, market circumstances change from one session to another, so do the government policies, consumption demand, people need, and technology will continue to develop to a new era. In addition, the natural factors, such as weather cycle also are subjected to changes as well. All of the agriculture transformation processes will aim to achieve the sustainable level, where the farmers will practice the agriculture in a sustainable way. As stated by Dlott et al. (1994), the practice of sustainable agriculture is defined, albeit simplistically, as working toward a condition where there are socially equitable, culturally acceptable, ecologically sound, and economically viable agroecosystems.
2.2 Agriculture System

Figure 1: The functions and linkages of an agricultural system.


According to Adams (1988), agricultural systems have six functional components, namely production, supply and credit, marketing, research, extension and regulation. Production refers to the physical tasks involved in cultivating crops and raising livestock. Supply and credit are concerned with obtaining the physical inputs. Marketing is concerned with the storage, transport and sale of the output. Research aims to transfer this knowledge to producers. Extension aims to transfer this knowledge to producers. Regulation is concerned with the allocation of resources such as land and water, with agricultural rules, with quality control and so on.

Weaknesses in any one function or linkage can hold back development of the whole system. Thus, it would be pointless for an extensive service to promote improved practices for cash crops in the absence of a market outlet. The condition is the same if only agricultural research was promoted; it will be wasteful without transferring the outcome to the farmers (Adams, 1988).

Figure 1 above shows the agricultural system discussed by Adams, 1988. As shown in the figure, production, extension, supply and credit, regulation, marketing and research are able to influence each of the factors and there is a close link among themselves. Thus, any changes with a particular factor will bring changes as well with the other five factors.
If the idea regarding the agricultural system suggested by Adams (1988) is integrated into this study by grouping it under three main external factors (economic force, government force and social force) that had been determined as a contributor to the agriculture change, it can be concluded as follow:

(i) Economic Force

For the economic perspective, production, marketing and supply and credit are the factors included in economic force. This is because anything that deals with demand and supply of certain things can be discussed from the economic point of view. Furthermore, the law of demand and supply influences these three factors (production, marketing and supply and credit) from various perspectives (Parkin, 1998).

According to Seitz et al. (1994), agricultural production is subject to the risk, and uncertainties of weather, disease, and life cycles associated with the living things. Thus, the economic value of these agricultural production will be vary as well based on the total demand and supply in the agricultural market. At the same time, these demand and supply conditions are relatively insensitive to price changes at the local and international market, which the economic force from all over the world will determine the prices for this agricultural production.

Norton and Alwang (1993) pointed that the contribution of agricultural production significantly influences a country’s foreign change needs. This situation is obvious especially for the less developed countries, which have relied on exports of agricultural commodities as their major source of foreign exchange. Some of the countries, such as Myanmar, Indonesia and Vietnam have attempted to reduce their foreign exchange needs by increasing agricultural production to displace imports of food.

Furthermore, Casavant et al. (1999) agreed that the significant contribution of agricultural production is important to the annual overall output of the economy which refer to the gross domestic product (GDP). Hence, the availability of good market condition for the agricultural production plus the strategic marketing strategy will be able to increase the standard of living of the community that is involved in agriculture sector. Nevertheless, there is a need to have a strong financial support for the agriculture sector in order to increase the agriculture development by supplying it with an enough necessary internal and external inputs.

(ii) Government Force

As for the research and regulation, both of them can be considered as the government force. In this study, the government force refers to any plan, decision and action that can be carried out by the government. This include the involvement of government in the research project related to the agricultural sector, which aims to develop this sector. In addition, the implementation of agricultural policies or schemes by the government shows the power of government to control the
development of agricultural activities through the emphasizing of the agricultural rule and regulation.

In Malaysia, FELDA (Federal Land Development Authority) Land Schemes is one of the most successful land-scheme models that can be seen (MacAndrews in Wong, 1979). Even until now, FELDA still play an important role in developing the rural area, which include the development of the agricultural sector in Malaysia.

Pretty (1995) stated that government plays an important role in helping to develop the agricultural sector in the rural area. Support from the government can be in the form of providing the agricultural area with new infrastructure, such as irrigation schemes, roads, communication network, markets, guaranteed prices as well as a range of other related policies.

Furthermore, other administrative action and finance for the provision or expansion of various public activities and services will be needed in order to increase the operation of the commercial farming. Clammer (1996) agreed that the relationship between farmers and their political context should be considered when dealing with the farmer issue in future.

Seitz, Nelson and Halcrow (1994) described that government’s roles can be summarized into four major roles, which are:-

(a) Provide physical infrastructure

Government plays an important role to develop the physical infrastructure of an agriculture area especially the remoter area. This is because the physical infrastructure is needed in order to allow more efficient movement of inputs to the farm and outputs from the farm. This physical infrastructure includes transportation, communication network and public health facilities.

(b) Provide institutional infrastructure

The main purpose for the involvement of the government in providing agricultural sector with a better institutional infrastructure is to smooth the operation of agriculture economy that oriented by the market. Examples of the institutional infrastructure are consisting of property rights and the enforcement of rules and regulations governing market participation.

(c) Modify market outcomes with policy instruments

The government intervention in the agricultural sector can be make through the policies in order to alter market outcomes. Different policies had been implement by the government in most of the countries in order to control and support the market conditions when necessary.
(d) Perform as a market participant

Seitz, et al. (1994) stated that government usually performs as an important market participant. As can be noticed that government in most countries had established several agencies to produce and market many types of goods and services. For instance, government in the developing countries had produced and distributed the farm inputs such as fertilizers and seed varieties to farmers.

To conclude, the level of government intervention in agricultural sector will have certain limit. Government involvement is important in maintaining macroeconomic stability, and in particular to keep inflation sufficiently under control as well as to reform agricultural policies. Nevertheless, government should not interfere too much with international trade or the exchange rate, because this creates a wedge between domestic prices and the world prices that are the appropriate prices for project evaluation.

(iii) Social Force

Lastly, the extension factor will be grouped under the social force because every research outcome that aims to develop the agricultural practice will be transferred to the farmers. Every extension initiative as a result of research achievement will need the support from society.

Even it is arguable that different people will perceive that extension took place in agricultural transformation differently, but this public opinion tend to influence the further change ahead. As stated by Rockwell, (in Meyer and Turner II (eds.), 1994), a people’s belief’s may be strongly shaped by their own lifestyle, background, experience and historical events.

Hence, the transfer process that aims to extend the agriculture activities will depend on the response of the farmers whether they want to accept and change or reject any improvement or idea suggested by the developers. Peterson (in Marsden, et al. (eds.), 1990), pointed out that social force is one of the main instigators for the agrarian shifts initiated and generated.

Social force had certain influence because farmers in the rural areas believed in group custom and society point of view toward their daily activities. Social force is a factor created by the society living nearby and each society has their own social rule. The member of the society will follow the dos and don’ts practiced by the people around. The society will believe in what the majority said and treated it as a guideline to determine their future decision and action.

Lawson (2000) defined social rule, as a formulation of action that had been set up under specified conditions that occurred in a society. This social rule consists of a number of guidelines that must, should, or, can usefully, legitimately, meaning fully, or etc. to be carried out in the society’s daily life. It is assumed that society’s
lifestyle will be better with the guidance from social rule rather than a prediction or observation of an action.

The transformation of agriculture from traditional farming to commercial farming is seen as an outcome of the integration of factors mentioned above. Adelman, (in Adams and Pigliaru (eds.), 1999) pointed out that the spread effects of economic growth, which will influence the agricultural transformation process can be explained from the socio-economic and political perspectives. Peterson (in Marsden, et al. (eds.), 1990) stated that world trade, science push, market pull, social, institutional changes and political upsets are the main instigators for the agrarian shifts to be initiated and generated. Hence, economic force, government force and social force can influence the agriculture transformation in the study area.

2.3 Farming System

In agriculture, there are a wide variety of agricultural systems that can be identified in this world. Different regions in this world will practice different agricultural practice. This is because every place owned different advantage and disadvantage in practicing the agricultural activities. The natural resources, culture, history, and other factors for moving the agricultural sector will be vary from one region to another region. In addition, these factors will change the agricultural systems over time by transforming the agricultural practice from traditional farming to commercial farming. Loomis (in Norton and Alwang, 1993) stated that:-

"The agricultural pattern that has emerged in each area is in part the result of ecological factors—a particular combination of climate and soil—and in part the result of economic and cultural factors in the society that grows the crops."

In other word, the condition of world economy, the structure of the political system and the social and cultural patterns of a nation will influence the transformation process of agriculture pattern from traditional farming to commercial farming.

2.3.1 Traditional Farming

According to Ghatak and Ingersent (1984), the term “traditional farming” refers to a form of agricultural practices that had been carried out in countries where agriculture is the dominant employer (including those who are self-employed).

Traditional farming is diverse, but it has some common characteristics that can be identified as guidelines. Norton and Alwang (1993) summarized traditional farming as below:-
1. Traditional farming usually involved the small peasants who operated their own farms. The farming and family decisions regarding the agricultural activities often are intermixed.

2. In the traditional farming practice, the agriculture production is mostly for own consumption and the extra production will be sold or traded locally at their village or nearby area.

3. The labor usage for the traditional farming and land area per farm is small, but labor input per hectare is high. Hence, labor forces in the traditional farming play an important role.

4. The traditional farming is responding to market signals because the changes in the local economy will influence the labor market and agricultural products market.

5. Farmers who practice traditional farming did not relied on external inputs. The productivity and use of purchased inputs of the traditional farmers are low but efficiency is high.

6. Traditional farmers are rational but risk averse. Most of the time, traditional farmers are afraid to take any actions that have high risk. For instance, the usage of high-technological agricultural practices is difficult to be accepted by them because the traditional farmers will assume that it is a costly investment and cannot promise a good production.

7. They often live in extended or joint families. Usually, one household can consist of few families extended from their children or other relatives.

8. Traditional farms differ by region, and as farms change some people, particularly the landless, may be left behind unless improved institutions and education accompany new technologies.

In such farming type characterized as the traditional farming, most of the time, the farming activities were practiced without much external subsidies in term of energy and materials. Previously, most of the traditional farming is focused on the production of food for human consumption, where the community livelihoods are relying on agricultural production.

Traditional farming often make use of locally available resources rather than rely on costly inputs imported from distant sources. They allow for the simultaneous satisfaction of local needs together with a significant contribution to demands on a larger scale (Gliessman, in Altieri and Hecht (eds.), 1990).

Arms (1994) have defined traditional farming as organic farming because the farmers grow the plants without an intensive use of pesticides and inorganic fertilizers. On the other words, traditional farming means by Arms (1994) is referred to the farming practice that requires low-external inputs.
In the old days, most of the times when talking about traditional farming, the smallholders will be considered as the main actor in the traditional farming. Smallholders here refers to those farmers who grow some cash crops and practice traditional farming mainly for subsistence. Usually, they will use traditional methods that give low yields per hectare and per person. Besides that, traditional farming is often viewed as wasteful or destructive of natural resources (Webster and Wilson, 1980).

In addition, traditional farming is viewed as a complex and diverse farming activities. It depends on the requirements and decision of each farmer. Farmers themselves will decide the agricultural operations, marketing and storage facilities of their agricultural produce. This is quite different from the commercial farming practiced by the modern farmers where the outsiders involved in business and industrial units will play an important role in determining the whole process of agricultural activities (Surendra Kumar Gupta, 1993). Hence, traditional agriculture is disadvantaged from economic perspective.

As stated by Wrigley (1982), traditional farmers are also classified as the simple agriculture community, where the household labor will predominate the farm activities. Most of the time, agriculture products that had been produced are for the farmer's own consumption, only the left out will be market locally.

Furthermore, one of the reasons that discourage traditional farmers to market their agricultural product is due to their location and accessibility constraints. These groups of farmers usually live in the remoter areas that lack infrastructure and amenities. Thus, it will be a problem for them to transport their agricultural production to the market and sell it.

Nevertheless, throughout the time, traditional farming were periodically modified as a result of external influence. As mentioned by Marten, (in Altieri and Hecht, 1990), agriculture has gone through a rapid transformation along with the adoption of modern technologies. The modernization of agriculture from various perspectives had generally increased the agricultural production and farmers' incomes.

Besides that, an attractive demand in local and international market for agriculture production has increased the interest of traditional farmers to change their mindset. Due to expansion of human population, more food will be needed in order to fulfill the demand of the future generations. This will prepare a big market for the agricultural products. Thus, farmers' opinion regarding the purpose of planting for own consumption had changed as well. They start to think about the agricultural marketing issue and tend to experience new ways to increase the agricultural production.

As a conclusion, traditional farming need to change as the population continues to grow in the future. The introduction of new technologies or technical know-how and the changes took place in the institutional, human cultural and political aspects will be strong driving forces to transform the agricultural
sector. The agricultural transformation process will move to new farming systems aimed at commercializing the agriculture production in a local or international market.

2.3.2 Commercial Farming

Commercial farming is just like a human enterprise, which is designed to meet recent human needs. In contrast to the traditional farming, commercial farming usually operates in a big-scale that requires greater use of external inputs of chemical and water supply. In addition, commercial farming has a tendency to specialize in farming activities.

For example, a commercial farm may concentrate in certain specific crops or livestock. A commercial farm may be based on few main crops, such as orange farm, coconut farm or shrimp farm in a big operation. In contrast, traditional farm is a single farm will be planted with various types of crops and sometime at the same time, they will rear livestock as well.

Kohls and Uhl (1990) argued that the farmer is influenced by certain motivation in deciding their agriculture activities. Farmers are motivated by a number of goals, such as farm growth, production efficiency, preservation of the family farm, economic independence and market freedom. Besides that, the stability, the good life, and the provision of a wholesome, reasonably priced food supply also will give motivation to the farmers. The same goes for the farmers’ decision to convert their traditional farming to commercial farming, farmers also will be influenced by the motivation aspects stated by Kohls and Uhl (1990).

As argued by Bruan and Kennedy (1994), there are a number of reasons behind choices made by poor farmers and many ways in which commercialization can be advantageous for them. Below are the reasons that influenced poor farmer’s decision to participate in the commercial activities.

I. Maintenance of home production

Small-holders and producers of agricultural sector consciously try to maintain subsistence production for their own consumption. At the same time, they will practice new commercial production, which is expected to earn higher returns to land and labor from the cash crops. The reliance of the farmers on food from own production under household control is a response to high transaction costs and risks due to markets, employment, and production. The action of the farmers to maintain the home production can be described as an insurance policy in order to overcome a risky income environment.

II. Development of financial markets

The improvement of the technology for agricultural sector intends to help the farmers to commercialize their agricultural products in low-risk ways. In
addition, the development of financial and insurance markets is complementary and produces payoffs in gains from agricultural commercialization.

III. Benefits to small-holders

Usually, the smallest farm households participate less than proportionally in their respective commercialization schemes. However, if they are willing to involve in the commercial agricultural activities, they tend to be more radical adopters to the changes brought by the new commercial technology or technique. This condition can be improved with government intervention. For example, legal arrangements can be implemented in order to encourage the smallest farms to join the commercial schemes.

IV. Employment

Commercialization of agriculture entails a substantial expansion of demand for hired labor in virtually all study environments, but particularly when much processing is involved. To the extent that hired-labor households rank among the malnourished poor, this employment effect is of particular benefit.

V. Increased Incomes

The net income gains, in general, are substantial but much less than the gross income gains from commercialized crops because of large substitution effects within agricultural production and between agriculture and off-farm employment. Labor-intensive cash-crop production draws family labor and hired labor back into agriculture. This is favorable for reduced urbanization.

VI. Increased Spending

The commercialization of agriculture also brings to the issue of its impact to the household’s level food security. It was a question of whether the poor earn incremental income and how such incremental income is spent if they are involved in the commercial agricultural. The commercial agricultural tend to increase the overall income earned from commercial crops, thus, there must be a change of their spending patterns. Farmers involved intend to spend much more for food consumption compared to the last time when they practiced traditional farming.

Although commercialization of agriculture might essentially be considered as a matter of stimulated private-sector activity, public action is also crucial to facilitate the power of its “driving forces”. The principal driving forces of commercialization include the macro and trade policies and the reformation of the market trend. Furthermore, the improvement of the rural infrastructure especially for the remoter area and the development of legal and contractual environments also can lead to the success of the transformation of the agricultural practice from traditional farming to commercial farming. Besides that, government intervention in term of implementation of suitable policies...
related to these driving forces would strongly influence the nature and speed of the agricultural commercialization process (Bruan and Kennedy, 1994).

Bruan and Kennedy (1994) also stated that policy action is needed in transforming the traditional farming to commercial farming. To maximize the potential benefits to agricultural commercialization and minimize the potential damage, priorities for policy are to:

1. Promote technological change in subsistence food crops along with commercial crop production for household food security in areas with risky food markets,

2. Improve infrastructure, especially in remote areas, when a change in production toward nonfoods may lead to shift to a net food import balance and thereby to drastic price changes; integrate women farmers and the smallest farms into schemes for commercialization, and address land tenure and land allocation problems when net returns to land increase substantially;

3. Develop effective rural financial systems to generate savings and make credit available not only to scheme participants but also to the community as a whole; and

4. Develop and promote community health and sanitation services to maximize the health and nutrition returns of increased incomes.

Nowadays, commercial farming is determined as one of the potential activities that can bring together an overall development to a rural area and country as a whole. The adoption of commercial farming by the local traditional farmers can generate employment opportunities and increase the economic growth at that area. In terms of value to the society, commercial farming will act as an important contributor to improve the standard of living of the rural community.

2.4 The Transformation of Malaysia’s Agriculture from Traditional Farming to Commercial Farming

In most of the developing countries, such as Indonesia, Thailand and Malaysia, agricultural sector is an important type of land-use practice. It is a main source that provides adequate food for a rapidly expanding population. Even if there are changes and diversities in the land-use pattern throughout the world from year to year, most of the countries especially the developing countries still ultimately depend on the agriculture production to feed their population. Instead, agricultural sector also remains as one of the main export components, which is able to earn high foreign currency (Arms, 1994).

According to Arnon (1987), agriculture is still primitive and being characterized by ignorance of modern techniques and resultant low productivity of land and labor. The