

# The Implementation of Contract Farming of Fresh Fruits and Vegetables (FFV) for Smallholders in Malaysia: Government Roles and Initiatives

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## Abstract

Contract Farming (CF) in Malaysia has been identified as a system capable of stimulating agricultural production and was given a central role in the latest strategy by the government to encourage the production of vegetables and fruits. It is also seen as a means of fostering smallholder participation in new high-value product markets and improving quality standards, thus the application of CF is increasing the smallholder incomes. This paper is a review study that contributes in defining the role of government in fostering the CF in Fresh Fruits and Vegetables (FFV) for smallholder in Malaysia. The purpose is to understand the relation between CF and the country's economic growth as well as farmers' standards of living. The findings of this paper indicated that the government plays an important role in fostering the CF of Fresh Fruits and Vegetables (FFV) of smallholders in Malaysia. Indeed, the development of programs (Contract Farming Programme), effective management method, and strong commitment from the players and strong support from the government are considered as the strongest tools for facilitating economic growth and improving farmers' standards of living in Malaysia.

*Keywords:* Contract Farming (CF), fresh fruits and vegetables (FFV), government roles and initiatives

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## 1.0 INTRODUCTION

The contracting of crops has existed since ages ago. In ancient Greece, the practice was widespread with specified percentages of particular crops being a means of paying tithes, rents and debts. During the first century, China also recorded various forms of sharecropping. In the United States as recently as the end of the nineteenth century, sharecropping agreements allowed for between one-third and one-half of the crop to be deducted for rent payment to the landowner. These practices were, of course, a form of serfdom and usually promoted permanent farmer indebtedness in the first colonies controlled by European powers. For example, at Gezira in central Sudan, farmers were contracted to grow cotton as part of a larger land tenancy agreement. This project served as a model from which many smallholder contract farming projects subsequently evolved (Eaton and Shepherd, 2001).

## 2.0 THE CONCEPT OF CONTRACT FARMING

There are various definitions coined by many scholars on contract farming. Contract farming may also be defined as agricultural production carried out according to a prior agreement in which the farmer commits to producing a given product in a given manner and the buyer commits to purchasing it. Often, the buyer provides the farmer with technical assistance, seeds, fertilizer and other inputs on credit and offers a guaranteed price for the output (Minot, 2007).

Based on Eaton and Shepherd (2001), it is defined as an agreement between farmers and processing and/or marketing firms for the production and supply of agricultural products under forward agreements, frequently at predetermined prices. The arrangement also invariably involves the purchaser in providing a degree of production support through, for example, the supply of inputs and the provision of technical advice. The basis of such arrangements is a commitment on the part of the farmer to provide a specific commodity in quantities and at quality standards determined by the purchaser and a commitment on the part of the company to support the farmer's production and to purchase the commodity. The intensity of the contractual arrangement varies according to the depth and complexity of the provisions in each of the following three areas which are market provision, resource provision and management specification.

While the nucleus of the idea is the same, there are some elaborate definitions that are worth noting such as the one that was put forward by Baumann (2000) who refers to contract farming as "a system where a central processing or exporting unit purchases the harvests of independent farmers and the terms of the purchase are arranged in advance through contracts. The terms of the contract vary and usually

specify how much produce the contractor will buy and what price they will pay for it. The contractor frequently provides credit inputs and technical advice. Contracting is fundamentally a way of allocating risk between producer and contractor; the former takes the risk of production and the latter the risk of marketing”.

In Malaysia, contract farming is expanding in many businesses. The Federal Land Consolidation and Rehabilitation Authority (FELCRA) has its contract farming scheme for cash crops and livestock involving settlers in its land and rural areas nationwide (Bernama, 2009). For instance, Nestlé (Malaysia) contracted the farming of red rice to some small village farmers in Sarawak (Borneo Post, 2010). There are ample indications of the growing acceptance of contract farming in Malaysia. (Norsida and Norlila, 2010).

In terms of the implementation process, most contract farming involve both private and public sectors. It is likely that public sector involvement, whether in direct management or in supportive policy, will be necessary if contract farming schemes are extended to tree farming. Based on Baumann (2000), there is evidence that some governments have intervened on behalf of smallholders through for example, price stabilisation, guaranteeing debts or trying to obtain better contract conditions and services for smallholders.

Therefore, the overall objective of this study is to examine the implementation of contract farming for smallholders based on the structural government policies and programs in Malaysia. The specific objectives are: (1) to identify the government’s role in contract farming, (2) to identify issues regarding the implementation process in contract farming programme and (3) to suggest policy recommendations for the sustainability of contract farming.

### ■3.0 GOVERNMENT ROLES ON CONTRACT FARMING IN MALAYSIA

The literature review presents definitions and government roles related to contract farming. Based on Da Silva (2005), certain factors were needed for successful contract farming undertaking and emphasised that an appropriate enabling environment is the most fundamentally important factor which included government related issues such as labour relations, land tenure, taxes, foreign exchange, international trade, property rights, anti-trust measures and commercial licensing. The importance of this normative and policy framework cannot be overemphasised. Governments wishing to promote farm-agribusiness linkage via contracts should start by assessing, streamlining and expunging the framework from restrictive features.

Rehber (1998) mentioned that in a developing world, available infrastructure needs intensive government involvement, financial support of domestic and foreign donor agencies as well as initiatives from national and multinational companies. He also elaborated on Ghee and Dorall’s (1992) study which anticipated that the success of Malaysian and Indonesian schemes are to be more successful due to the continuous and strong support from the government.

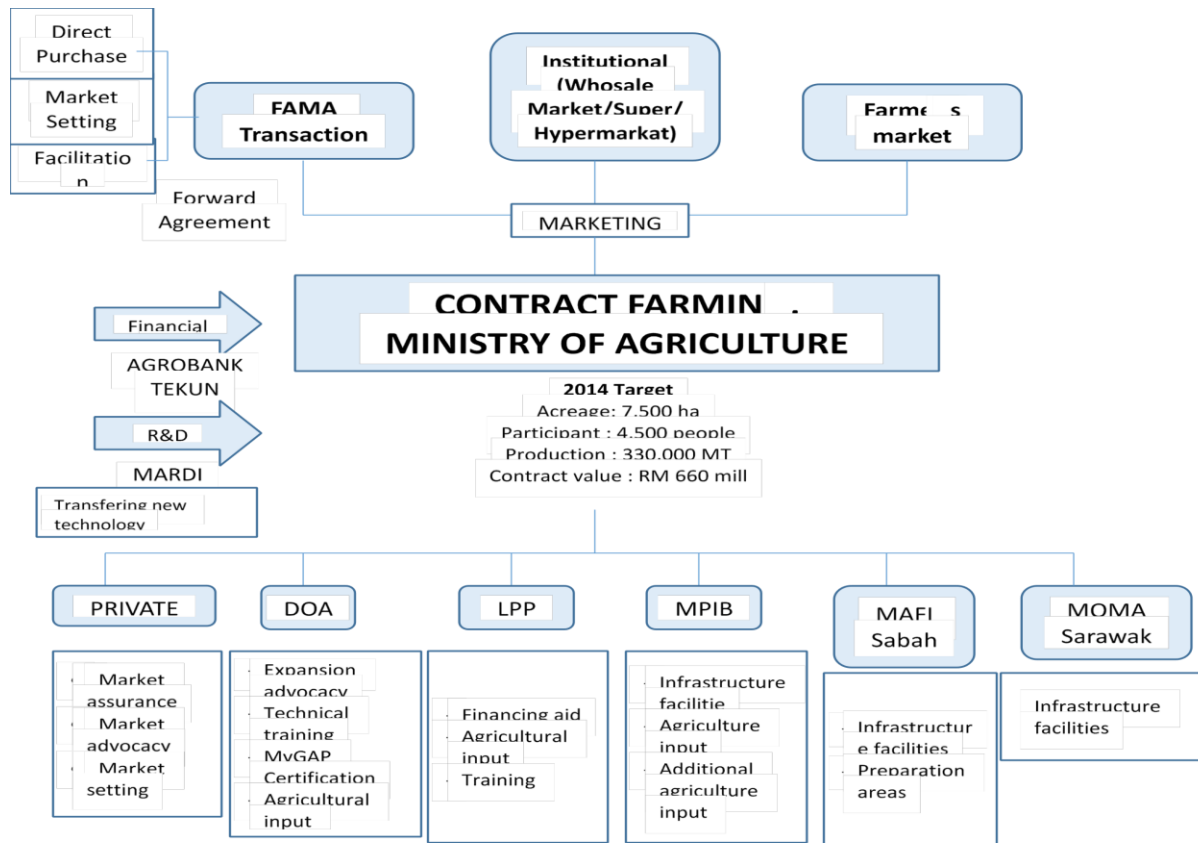
Despite the indication of a scholarly consensus on the definitions and government roles to contract farming, there are still some differences to it. Most of the debates on contract farming focus on the benefits and perceptions towards it. Although it is generally true that contract farming brings a wide array of advantages to farmers, particularly small ones, but there are still some arising issues and problems throughout the process.

### ■4.0 GOVERNMENT ROLES ON CONTRACT FARMING IN MALAYSIA

Contract farming in Malaysia was initiated in the Ninth Malaysia Plan which took place from 2006 until 2010 under a high impact project known as the National Implementation Directorate. The focus was given to production and value-added activities that can increase the country’s economic growth through the agriculture sector. Therefore, emphasis was given to agriculture development including quality productions which will add high value through processing, grading, packaging, labeling and branding activities. However, the program introduced by government was specialised only for fresh fruits and vegetables (FFV).

According to National Agro-Food Policy 2010-2020, among the factors that led Malaysia to initiate contract farming for FFV was due to the inconsistency of agriculture production, failure to meet the market demand in terms of production quality, poor market infrastructure, the globalization of supermarkets and uncompetitive farm price set by middle men who make profit from small farmers.

Hence, the Malaysian Government introduced Contract Farming Programme as one of the mechanisms to help small farmers get commensurate return for investment on their farm. The program was implemented by several agencies and integrated under the Ministry of Agricultural and Agro-based Industry (MOA). The linkage, functions and integration of the agencies were summarized in Figure 1.



**Figure 1.** Integration of Agencies Involved in Contract Farming in Malaysia. Source: Support Services and Industry Development Division, MOA (2014)

## 5.0 PROGRAMMES RELATED TO CONTRACT FARMING

Contract Farming Development Programme was introduced to assist small and medium-scale farmers in marketing their products and generate income that commensurate with their output and efforts. The implementation of this program is led by the Federal Agricultural Marketing Authority (FAMA) which acts as a buyer and responsible to assure the existence of market based on crop type, variety, quality, grade as well as packaging and production schedule. Additionally, it takes into account all related activities along the supply chain of agricultural production such as support services and post-harvest facilities, which include the collecting and grading centre. Through this programme, FAMA intends to increase the income of producers, improve the quality of fruits and vegetables, fulfil market needs as well as improve technology transfer throughout the supply chain.

The strategies include increasing productivity in existing areas such as the Food Production Zone and the Permanent Food Production Park. This is achieved through the implementation of more activities to upgrade the breed of crops; for example, durian kampung' will be upgraded to durian 'musang king'. These upgrading activities were carried out on a variety of fruits that have potential in the market. The development of anchor companies were expanded whereby the State Farmers Organisation assumed the role of an anchor, while the District Farmers Organisation acted as the vendor. These strategies helped to foster business partnerships that yield profits for the farmer, anchor and vendor.

In addition, to ensure quality and continuity, emphasis is placed on farming during the suitable agro climatic conditions. This programme also takes into account youth development to cultivate the interest of the younger generation in the field of agriculture. Based on the Report on Evaluation Survey of Contract Farming Programme by MOA, the Contract Farming Project aimed to develop 7,500 hectares of crop area in 2013 with the participation of 4,500 stakeholders. By the end of 2013, this programme had successfully developed 75 areas spanning 7,462 hectares involving 4,157 participants. The progress of Plantation Development Program Contract according to departments or agencies are shown in Table 1.

**Table 1.** Farm Development Program Contract until 31 Dis 2013 by Department / Agency (Capacity and Participants).  
Source: Document of National Agro-Food Policy 2010-2020

Departments/Agencies	Capacity (Hectare)			Participants		
	Target	Achieved	%	Target	Achieved	%
Ministry of Modernisation of Agricultural Sarawak (MOMA)	747	787	105.4	534	541	101.3
Private	2,560	2,616	102.2	1,434	1,367	95.3
Department of Agriculture (DOA) (Peninsular of Malaysia)	2447	2403	197.3	1390	1239	160
Malaysian Pineapple Industry Board (MPIB)	809	785	97.0	486	448	92.2
Farmer's Organization Authority (FOA)	498	467	93.8	359	321	89.4
Ministry of Agriculture and Food Industry State of Sabah (MAFI)	439	404	92.0	297	241	81.1
<b>Total</b>	<b>7,500</b>	<b>7,462</b>	<b>99.5</b>	<b>4,500</b>	<b>4,157</b>	<b>92.4</b>

As part of its marketing initiatives, FAMA also runs a programme to increase the supply from Contract Farming to the market called Enhancement Program of Contract Farming Supply to the Market (Program Pengukuhan Bekalan Ladang Kontrak ke Pasaran (KUKUH)). This programme is to ensure that agricultural products are sold directly in markets with the aim of offering the products at a price that is reasonable to both consumers and producers. The KUKUH programme was first implemented at the end of 2012 and to date, has matched 362 producers with 76 marketers at farmer's markets throughout the country.

Hence, these programmes have benefited small farmers in many ways such as getting market assurance on their products, increasing their income, receiving technical advice and systematic farm management from government agencies, assurance on convenience credit input and training of agriculture knowledge.

### 5.1 The Role of the Malaysian Government on These Programmes

As mentioned earlier, there were many government bodies that were involved in this high-impact project led by FAMA. The main function of this agency is to buy products from small farmers who joined the programme and either market them to retailers or export to other countries. Moreover, FAMA will market the products through several channels such as in wholesale markets, hypermarket and supermarket chains, retailers, agro-based entrepreneurs and exporters. Apart from that, FAMA also provides support services such as farm infrastructure, market information, advisory, consultancy and market development.

The infrastructure provided by FAMA for the farm is to ensure the efficiency and effectiveness of the marketing. FAMA will set up the farm collection centre as a place to do post-harvesting activities including grading, packaging and labelling. The centre is equipped with machines and tools related to these activities and located at a strategic place. In the production process, market information plays an important role so that farmers can make the best decision regarding the production. Due to this factor, FAMA also provides the information to contract farming participants to guide them throughout the process. The given information include market prices in various stages of supply chain, supply and demand information, study of potential markets and list of market mediators.

As for some small farmers, they might experience a dilemma in choosing the right commodity to be cultivated. However, they can seek advisory and consultancy from FAMA to solve their problems and help optimize their production and income. This agency also gives

marketing guideline to ease farmers to market their products effectively and meet the market needs. FAMA also plays an important role to explore and develop new potential markets to ensure the farmers get their return as agreed before. This activity is done actively in domestic level or overseas via trade mission, promotion as well as exhibition and working trip.

Other than FAMA, the Department of Agriculture Malaysia (DOA) also takes part in implementing contract farming by giving technical support especially on expansion consultative. They also offer agriculture incentive aid and technical training. Contract farmers are encouraged to participate in Good Farming Practice Scheme organised by the department to ensure that production quality meets the market demand.

In addition, the Malaysian Pineapple Industry Board (MPIB) provided attention to all matters related to the pineapple industry in this country. Therefore they monitor pineapple contract farming progress which is one of the commodities listed in the programme. They give agriculture input aid, infrastructure facilities, financial assistance and training to pineapple farmers.

Apart from that, the research and development aspects of contract farming were done by the Malaysian Agricultural Research and Development Institute (MARDI). One of their missions is to transfer the technologies and commercialisation to improve agriculture productivity and food quality, as well as to create viable agri-businesses. The contract farming participants are required in the agreement to cultivate seeds that have been approved by MARDI. Any new technologies that are suitable for contract farming will be transferred to increase crop and livestock production.

## 5.2 The Implementation Method and Processes

In the early stage of implementation, the government targeted existing farmers who were registered with government bodies either individual or cluster farmers. The government also targeted commercial producers and participants who run government projects. All contract farming participants must own their land site legally and are involved directly with the project. Experience and adequate capital were another criteria for participants' selection.

They were taught about market-production-market where production is in market-oriented. The most important element in the early stage of this program is to convince the participants. However, it can be achieved through sale and purchase agreement and also floor price offer. There are two purchasing methods run by FAMA. The first method is purchasing based on percentage agreed between both parties. Normally, FAMA will buy 50% of farmer's production while the balance will be sold by the farmers themselves. This means that the products will be sold based on a rotation. For example, the first production will be sold to FAMA while for the second production will be sold by the farmer at the farm market. Another method of purchasing is giving the advance of not more than 20% of the production to the farmer. The advance was considered as a debt and will be deducted from the products sold to FAMA.

Main commodities cultivated in contract farming are fruits, vegetables, herbs and flowers. For herbs commodity, it is cultivated only for those with back to back arrangement with the processor from the industry. Same goes to flowers commodity which cultivated on early arrangement with the exporters. The market for these commodities are smaller and seasonal as compared to fruits and vegetables, thus the cultivation had to be arranged earlier based on the demand. The list of types and variety are as in Table 2.

**Table 2** Main Commodities Cultivated in Contract Farming by MOA. Source: Support Services and Industry Development Division, MOA (2014)

Fruits	Vegetables	Herbs	Flowers	Others
Starfruit	Red chillies	Misai kucing	Orchid	Roselle
Papaya	Lady's finger	Kacip Fatimah	Sunflower	Sugar cane
Dragonfruit	Old ginger	Tongkat Ali		Tapioca
Guava	French bean	Dokong Anak		Sweet corn
Lime	Long bean	Hempedu Bumi		Coconut
Mango	Sweet potato	Ginger		
Pineapple	Cabbage	Pegaga		
Jack fruit	Pumpkin	Limau purut		
Banana	Angled loofah	Mengkudu		

Watermelon	Brinjal	Mas cotek
Longan	Cucumber	
Durian	Tomato	
Mangosteen	Potatoes	
Rambutan	Shiitake mushroom	
Dokong		

As mentioned before, in the early stage of implementation, contract farming participants are selected from experienced farmers to ensure the success of the program. After several years, the program started to show a significant increase of production among participants. An evaluation survey was done in 2011 by University Putra Malaysia (UPM) in five states of Malaysia which were the main producers for six main commodities of contract farming. The products were pineapple, banana, watermelon, sweet pumpkin, red chilli and cucumber which represent 60% of acreage registered in contract farming. The survey involved 130 farmers.

Based on the survey results, the production of contract farming is increasing positively with 1,262 tonnes of production compared to 1,130 tonnes prior to the program implementation. This pattern is similar to farmers' income which show an increase from RM 4,728,150.00 per year to RM 7,136,200.00 per year. The success of this program also gave positive impact towards government agencies. The trust of the public in terms of input buying had increased 5%, market assurance increased 25% and the increment of effectiveness of sale and purchase agreement by 37% than before the respondents joined the program.

Production efficiencies were obtained via activities done under contract farming. At least 45% of the respondents with the same acreage had increased their production to more than 5 tonnes metric per acre. Changes in attitude and perception of producers in investment to increase their production can be seen positively where 76% of respondents have used technology in their farms after joining the program. 74% of the respondents also felt confident to continue joining the program thus giving a positive indication about the effectiveness of contract farming in improving the country's food production. The success of this program has attracted more small farmers to take part. In 2014, the government was targeting a total of 1,620 new players. For half of the year, the target was already achieved by 55.6% with a total of 901 new participants had joined the program.

### 5.3 Implementation Issues and Challenges

In Malaysia, problems in contract farming rise in areas of:

#### i. Financing and Management Issues

As for farmers, there were no complaints raised regarding the financing issues. However, the government who are the mediator in the programme are facing financing and management issues especially at the ministry level. The yearly budget of a mere RM3 million for contract farming programme in MOA is allocated for:

- a. Farm infrastructure preparation;
- b. Agriculture input aid;
- c. Courses and training; and
- d. Promotion and marketing activities.

This allocation is not enough if the government intends to expand and attract more small farmers to join this programme. Based on performance, contract farming had proven its success in increasing the national food production. However, it has to compete with other quite similar programme created by the government such as Idle Land Development Programme to secure the allocation.

#### ii. Disaster Risk (Force Majeure) Issue

Force Majeure is the unforeseeable circumstances that prevent someone from fulfilling a contract such as disaster risk. Constraints associated with force majeure in Malaysia can be considered as minor issues. However, based on the big flood which had happened in the East Coast of Peninsular Malaysia at the end of 2014 can be set as a precedence case. Many farmers were affected by the incident including contract farming participants as their crops were damaged. In some areas, the flood damaged farm infrastructure such as stores and roads. The loss in agriculture sector was quite huge and the demand for food supplies were increasing. Luckily, despite the increase in demand, the food price can be stabilised by the government at that moment because they were using the food stockpile which FAMA collected from contract farming.

### iii. Ethical Issue – Commitment from farmers and sponsors

In Malaysia, the government also acts as the sponsor for contract farming. Commonly, the ethical issues involved are mostly on red tape and bureaucracy in the implementation process. In initiating the process of contract farming, there are thirteen work processes or procedures when registering new participants, which is challenging as there is a time constraint. According to the MOA's standard operation procedure on contract farming, the application to join the programme is done at the FAMA district office. Then, there will be an initial site visit with officers from related agencies such as DOA, MPIB, FOA, MOMA or MAFI to check the suitability of crop to be cultivated and acreage. Next, the application form needs to be verified by the related agencies at the district level before being submitted to the FAMA state office for approval. After the application has been approved by the FAMA state office, the copy of the application form will be sent to the related agencies for monitoring process. The FAMA state office will also issue a letter of approval to the participant and the FAMA headquarters for the record. Finally, the participant's information will be kept in the database system.

Additionally, farmers' commitment is also needed. There are cases where the farmers were opportunists i.e. the agriculture input aid given to them such as fertilizers have been sold to other parties just to get easy money. They were also easily demotivated when the return and crop yield did not turn out as expected due to crop diseases, wrong technique applied and natural disasters.

### iv. Legal Issues

Most of the participants in this programme are lacking knowledge in legal matter. However, they signed the agreement because they had trust in the government. They had the perception that the government will always put them on the priority list and assist them should the project fails. However, in reality, there are still some issues regarding the legality of the agreements that the participants are not aware of especially on the terms of the agreement. This will lead to misunderstanding among the players and will later create an unsupportive environment to the production.

Moreover, the legal issue of land has always been among the popular issues in the implementation of contract farming. In Malaysia, there are 100,273 hectares of idle land reported in 2014. These lands offer huge potential to expand the contract farming project. However, the most challenging part to develop the land is to identify the owner and the process would be time consuming. To date, only 60% of the land owners can be identified and the process in the distribution of inheritance takes a very long time. Hence, this will lead the contract farming expansion project to be postponed.

## 5.4 Recommendations and Way Forward

Contract farming schemes offer governments the potential of combining development issues with foreign exchange earnings. They are; therefore, often very politically attractive. They avoid foreign ownership of large tracks of land and may also create the impression that other features associated with plantations such as the enclave effects are avoided. Contract farming may also appeal to governments who whilst realising the political necessity of addressing the needs of the smallholders, prefer to keep them under a central authority. Ellman (1986) has found the stated aims of the government to increase cash and food crop production; maximised rural employment generation; improve social facilities and rural infrastructure often clash with implicit objectives which are (1) to accord political acceptability to a plantation-type project; (2) to mobilise cheap family labour for production; and (3) to move possible reluctant farmers from a heavily populated area to an under populated one. Contract farming is often linked to, and facilitates absentee landlords, especially with crops such as rubber (and trees in Thailand on a Commonwealth Development Corporations scheme) which are not labour intensive (Baumann, 2000).

Therefore, based on the issues and challenges in the implementation of contract farming above, below are some policy recommendations that can be applied in solving those issues:

### 1. Effective Financing and Management Method

With effective management, contract farming can be a means to develop markets and to bring about the transfer of technical skills in a way that is profitable for both the sponsors and farmers. The approach is widely used not only for trees and other cash crops but, increasingly, for fruits and vegetables, poultry, pigs, dairy produce and even prawn and fish (Eaton and Shepherd, 2001).

In Malaysian context, MOA should reassess the entire program, which has similar objective and quite similar method so that the programmes can be combined and integrated. By doing so, the budget allocation will be adequate and the human capital involved can be increased so they can focus on expanding the program. As an example, Contract Farming Program can be integrated with Idle Land Development Program because both programmes provide the same aid to the participants. Contract farming program needs more land to expand while idle land development participants need market to sell their yield. Therefore, they complement each other and are better to be integrated.

### 2. Strong Commitment from the Players

Contract farming system should be seen as a partnership between agribusiness and farmers. To be successful, it requires a long-term commitment from both parties. Exploitative arrangements by the managers are likely to have only a limited duration and can jeopardise

agribusiness investments. Similarly, farmers need to consider that honouring contractual arrangements is likely to be in their favour especially when it comes to long-term benefits (Eaton and Shepherd, 2001).

In Malaysian context, the government should reduce the red tape and bureaucracy by using business process reengineering method which focuses on the analysis and design of workflow as well as business process within the organisation. This method involves the radical redesign of core business processes to achieve dramatic improvement in quality cycle times and productivity.

In addition to their commitment, the time taken to process the application should be mentioned to public as their client charter. In order to curb the farmer's attitude problem, the government has to take decisive action to cancel the forward agreement signed by both parties.

### 3. Strong Market Demand in Agriculture Industries

Contract farming is becoming an increasingly important aspect of agribusiness, whether the products are purchased by multinationals, smaller companies, government agencies, farmer cooperatives or individual entrepreneurs. As noted above, the approach would appear to have considerable potential in countries where small-scale agriculture continues to widespread, as in many cases small-scale farmers can no longer be competitive without access to the services provided by the contract farming companies. It must be stressed; however, that the decision to use contract farming modality must be a commercial one. It is not a development model to be tried by aid donors, governments or non-governmental organisations (NGOs) because other rural development approaches have failed. Projects that are primarily motivated by political and social concerns rather than economic and technical realities will inevitably fail (Eaton and Shepherd, 2001).

### 4. Strong Support from Government and Associations

Contract farming in fruits and vegetables has proven its success. Therefore, it can also expand to other sectors such as fisheries and livestock. Currently in Malaysia, contract farming in those sectors are led by private parties without government intervention and aid.

## 6.0 CONCLUSION AND RECOMMENDATIONS

In conclusion, contract farming in Malaysia has successfully increased the production of food and enhanced the farmers' income. The government has demonstrated a strong commitment to support the program by giving special allocation. As a cover, the contract farming program has achieved the main objective of its creation. Hopefully in the future, agriculture in Malaysia can be one of the major contributors to the national economy, thus making the country as one of the main agricultural product exporters.

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