

Short Communication

Contract Farming Practices by Rock Melon Growers in Terengganu, Malaysia

**Nalini Arumugam and Mohd Annas Shamsudin*

School of Agribusiness and Extension, Faculty of Agriculture, Biotechnology and Food Sciences,
Universiti Sultan Zainal Abidin (UniSZA), Tembila Campus, 22200 Besut,
Terengganu Darul Iman, MALAYSIA.

***Corresponding author; E-mail: nalini@unisza.edu.my**

ABSTRACT

Contract Farming (CF) is essentially an agreement between unequal parties, companies, government bodies or individuals with small-scale farmers. The two parties will mutually agree on the price and quantity as well as quality of produce. In the era of globalization, CF is an effective way to coordinate production and marketing in agriculture. The scale to which contract farming is practiced in Malaysia is difficult to assess since quantitative data available are very limited. Much of the literature assumes that producers predominantly contract to earn additional income although a subset of studies do acknowledge, or at least imply that individual farmers may contract for other varying reasons. The objective of this study was to examine the rock melon growers' attitudes toward CF. A total of 89 rock melon growers in the state of Terengganu, Malaysia, were interviewed. The data obtained were analyzed using SPSS to describe the respondents' profile and contract farming practices. At the present moment, the rock melon growers have a contract agreement with the Terengganu Agriculture Development Centre (TADC) which functions as a facilitator agent to help in linking these rock melon farmers with the market. Contract farming could be evaluated as a way to improve rock melon growers' production and marketing practices in Malaysia. The study revealed that rock melon farmers in Terengganu have mixed thoughts or perceptions on contract farming practices.

Keywords: Contract farming, contract marketing, contract production, marketing practices, rock melon growers

ABSTRAK

Perladangan Kontrak (PK) pada dasarnya adalah satu perjanjian di antara parti yang tidak setanding, dari kalangan syarikat, badan kerajaan atau individu dengan petani kecil. Kedua belah pihak akan saling bersetuju berkenaan harga dan kuantiti serta kualiti hasil. Dalam era globalisasi, PK adalah satu cara yang berkesan untuk menyelaraskan pengeluaran dan pemasaran dalam bidang pertanian. Perladangan kontrak yang diamalkan di Malaysia adalah sukar untuk dinilai kerana data kuantitatif adalah sangat terhad. Kebanyakan literatur menganggap bahawa perladangan kontrak memberi pendapatan tambahan kepada petani. Walau bagaimanapun, terdapat subset kajian yang mengakui, atau sekurang-kurangnya membayangkan, individu petani mungkin menyertai kontrak di atas pelbagai sebab yang lain. Objektif kajian ini adalah untuk mengkaji sikap penanam tembikai *rock melon* ke arah PK. Seramai 89 penanam tembikai *rock melon* di negeri Terengganu, Malaysia, telah ditemubual. Data yang diperolehi telah dianalisis dengan menggunakan SPSS untuk menggambarkan profil responden dan kontrak amalan pertanian. Pada masa ini, penanam mempunyai perjanjian kontrak dengan Pusat Pembangunan Pertanian Terengganu (PPPTI) yang berfungsi sebagai agen pemudah cara dalam membantu menghubungkan penanam dengan pasaran. Perladangan kontrak boleh dinilai sebagai satu cara untuk meningkatkan pengeluaran tembikai *rock melon* penanam dan memperbaiki amalan pemasaran penanam tembikai *rock melon* di Malaysia. Kajian ini mendedahkan bahawa penanam tembikai *rock melon* di negeri Terengganu mempunyai pemikiran atau persepsi campuran mengenai amalan pertanian kontrak.

Kata kunci: Kontrak perladangan, kontrak pemasaran, kontrak pengeluaran, amalan pemasaran, penanam tembikai *rock melon*

INTRODUCTION

Currently, the Malaysian Government gives priority measures in increasing the production of rock melon. Melon (*Cucumis melo* var. *cantalupensis*) is an important commercial crop in many countries. It is mostly cultivated in the temperate regions of the world due to its good adaptation to temperate soil and climate. Rock melon fruits are highly consumed in the summer and are popular because of their sweet pulp and pleasant aroma (Villanueva *et al.*, 2004). In Malaysia, the cantaloupe type, especially the cultivar *Glamour* (known locally as *Golden Langkawi*) with its striking golden yellow color is the favorite. Normally, a rock melon weighs between 1.3 and 1.5 kg while its sweetness level on the BRIX scale is twelve and below (Bernama, 2010).

In Malaysia, for more than three decades, the agriculture sector experienced tremendous development particularly in efforts to enhance production. The

Malaysian government has invested millions of Malaysian Ringgit (RM) to boost the agricultural sector. The globalization and liberalization of the Malaysian agricultural sector in recent years resulted in the need for the production of export-oriented quality products having comparative advantage. Thus recently, contract farming (CF) has become a national agenda to help increase agricultural production as well as reduce the import bills.

The concept of contract farming in Malaysia was first implemented by the Malaysian Federal Land Development Authority (FELDA) (Glover and Kusterer, 1990). Norsida and Nolila (2010) noted that in Malaysia, contract farming (CF) is seen as a mean of fostering smallholder participation in new high-value product markets and improving quality standards, thus increasing and providing stability to smallholder incomes. Arumugam *et al.* (2010) found that factors such as extension services, access to new markets, market assurance, protection for farmers, skills transfer, and indirect benefits will influence or motivate the farmers to participate in CF.

The scope of the Contract Farming Programme in Malaysia involves farmers under the supervision of the Department of Agriculture, Farmers Organisation Authority, Malaysian Pineapple Industry Board, Ministry of Agriculture and Food Industry Sabah and the Ministry of Modernization of Agriculture Sarawak as a producer. FAMA/Malaysian Pineapple Industry Board acts as a buyer that agrees to guarantee a market for crops where farmers will produce the crop by type, variety, quality, grade, packaging and set production schedules.

The existing literature provides a rich and varied analysis of many salient issues relating to the motivations for small-scale producers to participate in contract production in different countries (Little and Watts, 1994; Key and Runsten, 1999; Singh, 2002; Masakure and Henson, 2005). However, there are very few papers about contract farming in Malaysia. It is necessary to research the smallholders' motivation to participate in contract farming in Malaysia. Therefore, the overall objective of this study was to examine CF as the new marketing practice among rock melon growers in the state of Terengganu, Malaysia. The specific objectives of the study were to examine the respondents' perception towards CF, identify respondents' practices toward the CF and suggest a policy to ensure the sustainability of CF in Malaysia.

MATERIALS AND METHODS

A descriptive study design was used for this investigation. The target population for this study consisted of rock melon farmers who practiced contract farming in Terengganu, Malaysia. A total of 250 rock melon farmers participated in contract farming schemes in Terengganu and 89 rock melon growers were interviewed. The data collection was carried out in selected districts such as Dungun, Kuala

Terengganu and Hulu Terengganu. Face to face interviews were conducted using questionnaires as a survey instrument. A pilot study was initially conducted in two districts with the participation of 30 rock melon growers and the value of alpha was 0.886. Data was analyzed by using the SPSS 17.0 software.

The farmers' perception towards contract farming practices were operationalized as the extent of their agreement with the statements related to the selected indicators of contract farming practices, which was obtained from reviews of the literature. The respondents were asked to indicate the extent of their perception on each indicator using a Likert-type five-point continuum such as strongly agree, agree, neutral, disagree and strongly disagree with assigned scores of 5, 4, 3, 2 and 1.

RESULTS AND DISCUSSION

Demographic profile

Table 1 shows the demographic profile of the rock melon farmers surveyed. Most of the rock melon farmers were between 40-49 years old, while 27 (30.3%) were between 50-59 years old; 12 (13.4%) were between 30-39 years old; 11 (12.3%) between 60-69 years old; 7 (7.8%) less than 29 years old and 2 (2.2%) were between 70-79 years old. The findings showed that there should be more promotion and awareness activities to encourage more young people to be involved in contract farming.

The findings showed that the majority (81 farmers, or 91.0%) of rock melon farmers were male, while only 8 (or 9.0%) were female. Most of the rock melon farmers worked as a family with both husband and wife working together.

In terms of education, the findings showed that 7 (7.9%) of the rock melon farmers did not undergo formal education, 34 (38.2%) of them were educated up to primary level, 41 (46.0%) of them had secondary-level education and only 7 (7.9%) had tertiary education which included agriculture institutes such as the RISDA College. There were also farmers who were government retirees.

Twenty three (or 25.8%) of the rock melon farmers owned their farms while 66 (74.2%) farmers rented the land for rock melon production. Most of the rock melon farmers who rented their farms worked in a group. Saving costs, time and energy were the main factors for the farmers to work in a group.

The types of contract farming carried out among the rock melon farmers in Terengganu are listed in Table 2. Most of the rock melon farmers were involved in formal contract arrangements where the farmers had to follow certain requirements stated by the sponsor. The survey also indicated that most of the Terengganu rock melon farmers preferred contract production rather than contract marketing. Most of the contract agreements were made based on trust and mutual understanding between the rock melon farmers and the buyers.

Table 1. Socio-demographic profile of the rock melon farmers respondents (n=89)

Variables	Frequency	Percentage (%)
Age		
< 29	7	7.8
30-39	12	13.4
40-49	30	33.7
50-59	27	30.3
60-69	11	12.3
70-79	2	2.2
Total	89	100.0
Gender		
Male	81	91.0
Female	8	9.0
Total	89	100.0
Education Level		
No Education	7	7.9
Primary	34	38.2
Secondary	41	46.0
Tertiary	7	7.9
Total	89	100.0
Farm Ownership		
Own	23	25.8
Rented	66	74.2
Total	89	100.0
Number of Years Involved in Farming		
1-5	19	21.3
6-10	57	64.0
11-15	13	14.7
Total	89	100.0

Table 2. Types of contract farming.

Types	Verbal	Formal	Percentage (%)
Production	1	76	86.5
Marketing	0	12	13.5
Total	1	88	100.0

The reasons behind the rock melon farmers' participation in contract farming are listed in Table 3. It was observed that 88 (98.8%) of the rock melon farmers stated that the reason was easy market access, meaning they did not have to worry about marketing their produce after harvesting. Another 87 (97.8%) of the farmers stated that the improved farming practices motivated them to be involved in contract farming. Additional reasons included 88 (98.8%) of the farmers claiming that they were provided credit support by the contractor; all 89 (100%) were happy with the technical and extension services provided by the sponsors; 86 (96.6%) were glad that the market was guaranteed by the sponsors; 82 (92.1%) were confident that the buyers would supply reliable and affordable input supply; and 86 (96.6%) stated that their incomes were guaranteed.

In terms of ranking the importance of the above-stated reasons, the three most important reasons for the rock melon farmer's participation in contract farming were: firstly, market for their produce was guaranteed by the buyers or contractors; secondly, improved farming practices; and thirdly, price security of their produce by the contractor. These are the three main reasons the Terengganu rock melon farmers participated in contract farming or contractual arrangements.

Table 4 indicates that the Terengganu rock melon contract farmers faced a number of problems, such as inappropriate pricing system and late payments (96.6 %); late supply of inputs (95.5 %); stringent requirements (89.9 %); no representative in decision making (87.6 %) and inadequate input supply (48.3 %). The rock melon farmers also viewed the pricing system as unfair and not based on proper grading procedures. Due to this, some farmers resorted to side marketing their produce. Farmers also preferred that the buyers should state the prices at the beginning of the planting season.

Table 5 compares the attitudes of farmers towards contract farming. It was observed that 58 of the 89 farmers (65.2%) agreed to the statement: "*sponsors normally undertake to purchase all produce*". The statement "*contracts can also provide farmers with access to managerial, technical and extension services*" received positive responses from 66 (or 74.2%) of the rock melon farmers. Fifty six (62.9%) of the rock melon farmers agreed that "*contract farming introduces appropriate technology to upgrade agricultural commodities*" whereas 50 (56.2%) agreed that "*contract farming easily gain access to the market*". Most of the rock melon farmers also agreed that "*contract*

“farming improves quality of produce and the income is stable” and “contract farming reduces marketing risk”.

Table 3. Reasons for participating in contract farming

Reasons	Yes	
	Number	Percentage (%)
Market access	88	98.8
Improved farming practices	87	97.8
Credit support	88	98.8
Technical and extensions services	89	100
Guaranteed markets	86	96.6
Reliable and affordable input supply	82	92.1
Assured income	86	96.6

Table 4: Constraints in contract farming

Items	Frequency	Percentage (%)
An inappropriate pricing system and late payment	86	96.6
Late supply of inputs	85	95.5
Stringent requirement	80	89.9
Inadequate input supply	43	48.3
No representative in decision making	78	87.6

Sixty two (or 69.7%) rock melon farmers agreed that contract farming helped to create a path whereby the *“farmer has easy access to marketing information and extension services”*. On the statement regarding *“inputs and production services are supplied by the buyer”*, it was observed that 63 (or 70.8%) of the farmers agreed. Fifty six (62.9%) farmers noted that by practicing contract farming they received reliable inputs. Most farmers also agreed that by *“practicing contract farming they do not worry about the marketing of produce”* and *“contract farming can open up new markets and protect farmers from incurring losses in sales due to downward price fluctuations”*.

From these findings, contract farming seems to be a promising option and has been practiced by the rock melon growers in Terengganu to increase their income and livelihood. The farmers were generally satisfied with the assured market for their produce and credit support from the government. This indicates that the rock melon growers are still relying on government support (in this case, the Terengganu Agriculture Development Centre) in marketing their produce. The

findings also show that the government or TADC needs to take some corrective measures to avoid or prevent the reoccurrences of failures in contract farming practices. History of an inappropriate pricing system and late payment may be the main reasons for the farmers to opt out from participating in future contract farming.

CONCLUSION

The study revealed that rock melon growers in Terengganu, Malaysia, have mixed thoughts or perceptions on contract farming practices. The rock melon farmers believe that participating in contract farming can improve and enhance the production of rock melon. However, they expressed their dissatisfaction on the inappropriate pricing system, stringent requirements, inadequate input supply and no representative in any decision making. From these findings, contract farming is seen to help the farmers gain better knowledge in cultivation practices, enabling them to easily obtain access to marketing information and to market their produce as well as helping them to better utilize their farm resources. At the same time, contract farming or contract arrangements can be a valuable source of knowledge that can be employed to enhance the productivity of the entire farming enterprise.

Table 5: Rock melon growers attitude on contract farming practices (n = 89)

Items	1*	2*	3*	4*	5*	Mean
Purchase all produce	7.9	2.2	-	65.2	24.7	4.12
Access to managerial, technical and extension services	2.2	4.5	-	74.2	19.1	4.10
Appropriate technology to upgrade agricultural commodities	7.9	1.1	-	62.9	28.1	4.18
Gain access to markets	1.1	1.1	1.1	56.2	40.4	4.34
Improve quality of produce	3.4	2.2	-	58.4	36.0	4.27
Stable income	5.6	-	-	61.8	32.6	4.21
Reduce marketing risk	4.5	-	-	65.2	30.3	4.26
Access to marketing information and extension services	3.4	4.5	-	69.7	22.5	4.11
Access to loans or credit to finance production inputs	1.1	4.5	2.2	70.8	21.3	4.07
Inputs and production services are supplied by the buyer	2.2	1.1	4.5	70.8	21.3	4.08
Acquire knowledge for use on new crops	1.1	4.5	-	73.0	21.3	4.15
Reliable supplies inputs	1.1	3.4	4.5	62.9	28.1	4.13
No need to worry about marketing produce	2.2	4.5	-	66.3	27.0	4.18
Guaranteed minimum prices	2.2	3.4	-	61.8	32.6	4.25
Skill transfer such as record keeping	1.1	4.5	-	73.0	21.3	4.15
The efficient use of farm resources	1.1	4.5	-	73.0	21.3	4.15
Improved method of applying chemicals and fertilizers	1.1	2.2	-	68.5	28.1	4.24
Contract farming can open up new markets	2.2	1.1	-	61.8	34.8	4.33
Protect farmers from incurring losses	2.2	4.5	2.2	40.4	50.6	4.43

Note: *Indicator: 1 – Strongly Disagree; 2 – Disagree; 3 – No Opinion; 4 – Agree; 5 – Strongly Agree

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