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The Financial and Non-Financial Performance Indicators of Paddy Farmers' Organizations in Kedah

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Over the years, the agriculture sector has steadily become an important contributor to Malaysia's Gross Domestic Product (GDP), employment, export revenue, export excise and duties, as well as the economic and rural development. In terms of percentage share of real GDP by sector, the three largest sectors in 2011 were services at 58.6 per cent, manufacturing at 27.5 per cent and agriculture at 7.3 per cent, while the remaining sectors were mining at 6.3 per cent and construction at 3.2 per cent (Borneo Post, 2012). Hence, the agriculture sector which is the third major component of the GDP is seen by government as an important sector which need to be given special attention especially with regard to the needs and performance of the farmers' organizations which are distributed all over Malaysia. Recognizing the fact that the contribution of the Malaysian farmers' organization can be further enhanced if the performance of these organizations can be further improved. Thus, the purpose of this research is to investigate the performance measurement indicators that can be used by Farmers Organization in order to measure its performance. This study is aimed at identifying the financial and non-financial performance indicator of farmers; organization. The study was conducted on the rice farmers' organizations in the Muda Agricultural Development Authority (MADA) which is located in the northern state of Kedah. The rice farming region of MADA is regarded as the rice bowl of Malaysia because it is the most important and largest rice producing region of Malaysia. This research employed the qualitative convergent interview approach on the Farmers Organization in MADA. In this study, 9 performance indicators of the MADA Farmers' Organization were identified.

Field of Research: Financial and Non-Financial Performance Indicators; Farmers' Organization

1. Introduction

A search of the literature showed that in the last twenty years, interest in business performance measurement has seen a significant increased (Taticchi, Cagnazzo and Botarelli 2008; St-Pierre and Delisle 2006, Garengo, Biazzo and Bititci 2005; Jarvis, Curran, Kitching, and Lightfoot 2000; Fisher 1992). According to Taticchi, Cagnazzo, and Botarelli (2008), performance measurement has evolved from focusing a financial perspective to a non-financial perspective. In order for business enterprises to be able to

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remain competitive in a continually changing and dynamic environment, they have to monitor and measure the performance of their enterprises. As advocated by Sharma, Bhagwat and Dangayach (2005), performance measurement forms a critical component towards improving an enterprise business performance.

According to Chong (2008), a large proportion of the existing literature is devoted to studies on how large organizations measure their performance. He further argued that there is an apparent gap in understanding how small and medium enterprises (SMEs) measured their performance. This gap is due to the nature and complexity of the business structure, and the extent of owners-managers who are willing to participate in the research process. Along the same line of argument, farmers' organizations in Malaysia which are also bona fide business organizations much remain to be understood about their performance and how they should be measured. In order to investigate and have a better understanding of these farmers' organization's performance, this research has adopted qualitative and in-depth convergent interview techniques. This paper reports the findings of the study relating to the financial and non-financial indicators of performance measurements of the Farmers' Organization in MADA.

2. Justification of the Study

According to Neely, Gregory and Platts (1995) performance measurement (PM) is a topic which is often discussed but rarely defined. Literally it is the process of quantifying action, where measurement is the process of quantification and action leads to performance. In other words, performance measure means to measure costs, quality, quantity, cycle time, efficiency, productivity of products and services. Measurement of performance is normally based on quantitative reports in which targets and objectives are established and accessed. Measurement is an organization-wide phenomenon and such measures are interdependent and their aggregate contribution will reflect the effectiveness of the total company's effort (Zairi 1993).

Thus, performance measurement is not simply concerned with collecting data but is also associated with a predefined performance goal or standard (Jensen 2003). In addition, performance measurement is better thought of as an overall management system involving prevention and detection aimed at achieving conformance of the work product or service (Webster 1992). Even with these definitions performance measurements remains a broad topic.

Studies on performance measurement are usually conducted on business entities commonly in the form of companies, SMEs and other profitable business enterprises. Not many studies about performance measurement have been conducted on business entities organized under farmers' organization. Such a situation is also true in Malaysia. Nevertheless, the agriculture sector in Malaysia has been identified as the third most important component of the Gross Domestic Product (GDP) and hence, the performance and productivity of these farmers' organization in the agriculture sector need to be investigated in order to further enhance their contribution to the country's GDP. With this in mind, the aim of this study is to explore in depth the performance measurement of the farmers' organizations in the agriculture sector.

3. Literature Review

3.1 Company Performance Measurement

According to Sun and Scott (2003), the critical success factors in current dynamic and competitive business environment are vastly different from those of the past. Askenas, Ulrich, Jick and Herr (1995) argued that today's critical success factors are governed by speed, flexibility, integration and innovation. This represents a paradigm shift from the old success factors such as size, role, clarity, specialisation and control. The use of quantitative measurement tools that have been found to be effective for a low to moderate rate of change are incapable and insufficient to measure the rapid change that characterised the external environment of today. Sun and Scott (2003) further advocated the need of an effective measurement system via the use of both quantitative and qualitative approaches. Hence, taking the cue from Sun and Scott, this research investigates performance measurement using both the quantitative and qualitative approach.

The performance measurement is fundamental to companies' improvement. Performance measurements are used to control and keep track of how the company is performing and whether it is meeting its objectives. The importance of performance measurement has increased with the realization that in order to be successful in the long-term, business organizations have to fulfil the expectations and needs of stakeholders' which include their customers, consumers, employees, suppliers, local community stakeholders, and shareholders. While the importance of the performance measurement is difficult to quantify it is evident that in virtually all texts, research, and case studies on company improvement the performance measurement plays a central role.

According to Neely (1999), the business performance can be measured by the financial and non-financial indicators. Financial indicators are the traditional performance measurement techniques used by companies which include profit, return on investment, sales and so on. Normally, it can be measured through the figures provided in the company financial statement. In addition to his study, Neely (ibid) said that in today's business environment where companies compete on the basis of non-financial indicators, they need information on how they are performing across a broader spectrum of dimensions, not only financially but also factors on the customers, employees, supplier and the wider community. The combination of both financial and non-financial indicators can lead to a balanced performance measurement in the business environment (Kaplan and Norton 2000). Thus, for this study the review of literature on financial and non-financial indicators will be discussed in depth in the next section for companies' measurement performance.

3.1.1 Company Performance Measurement: Financial Indicators

The review of the literature has identified five financial indicators for the performance measurement used in the companies' environment: profitability, cash flow position, return on investment, inventory turnover and budget versus the actual performance (Nelly 2002;

Luther et al. 2005; Chen and Shimerda, 1981; Matsumoto et al. 1995; Sun and Li 2006). These five financial indicators synthesized from the literature are shown in table 3.1

Table 3.1: Financial indicators for companies' performance measurement

No.	Financial Indicators	A	B	C	D	E	Total	Selected For This Study
1.	Profitability	√	√	√	√	√	**5**	√
2.	Cash Flow Position	√	√	√	√	√	**5**	√
3.	Return on investment			√	√		**2**	√
4.	Inventory Turnover			√	√		**2**	√
5.	Budget vs. Actual	√	√			√	**3**	√
	Total	**3**	**3**	**4**	**4**	**3**		**5**

Key to table:
A = Nelly (2002)
B = Luther et al. (2005)
C = Chen and Shimerda (1981)
D = Matsumoto et al. (1995)
E = Sun and Li (2006)

From the table 3.1, five of the authors had agreed that profitability and cash flow position are tools to measure the performance of companies. Two authors agreed that return on investment and inventory turnover as financial indicators for companies' performance measurement (Chen and Shimerda 1981; Matsumoto et al. 1995). The fifth indicator was agreed by Neely (2000; Luther et al. (2005) and Sun and Li (2006) who claim that budget as compared to the actual performance indicate whether all planning is on the track or not. These five financial indicators are selected and will be discussed in this study. For the best result, financial indicators need to be supported by non-financial indicators which are discussed in the next section.

3.1.2 Company Performance Measurement: Nonfinancial Indicators

A reconciliation of the literature showed that there are four non-financial indicators that can be used as a performance measurement for companies: customer satisfaction, product or service quality, market shares and employee efficiency (Zaman 2004; CIMA 1993; Fitzgerald et al. 1991; Haskett et al. 1994; Cho and Pucik 2005). These four non-financial indicators are identified from the literature are shown in table 3.2.

Table 3.2: Non-financial indicator for companies' performance measurement.

No.	Non-Financial Indicator	A	B	C	D	E	Total	Selected For This Study
1.	Customer satisfaction	√	√	√	√		**4**	√
2.	Product/service quality	√	√	√	√	√	**5**	√
3.	Market share					√	**1**	√
4.	Employee efficiency	√	√				**2**	√
	Total	**3**	**3**	**2**	**2**	**2**		**4**

Key to table:
A = Zaman (2004)
B = CIMA (1993)

C = Fitzgerald et al. (1991)
D = Haskett et al. (1994)
E = Cho and Pucik (2005)

The table 3.2 showed that four authors had agreed that customer satisfaction is an indicator to measure companies' performance (Zaman 2004; CIMA 1993; Fitzgerald et al. 1991; Hasket et al. 1994). All four authors in their research had stated that the quality of product or services provided by companies are tools used to measure performance of the companies. The third indicator as studied by Cho and Pucik (2005) illustrates the relationship between quality, profitability and market shares; and how these three indicators are related to the companies' performance. They found that market shares can be used as a benchmark to measure companies' performance. Employee efficiency was seen important by all the companies (Zaman 2004 and CIMA 1993). These four non-financial indicators are selected and will be discussed further in the section below.

From the above discussion, all the financial and non-financial indicators for the companies' performance measurement are selected to evaluate the performance measures that can be used by small medium enterprises (SMEs) as well as the farmers' organization.

3.2 Small Medium Enterprises (SMEs) Performance Measurement

In the previous section, five elements of financial and four elements of non-financial indicators have been determined for the performance measures of the companies which are namely; profitability, cash flow position, return on investment, inventory turnover and budget versus actual performance, customer satisfaction, product or service quality, market shares and employee efficiency. The indicators identified will be evaluated to see whether they are suitable to be used in performance measurement. In order to facilitate discussion on the indicators, it will be beneficial to define what constitutes a SME and to compare the definition of SMEs in Malaysia with those in other countries.

3.2.1 Definition of SMEs in Other Countries

The term SMEs covers a wide range of definitions and measures, varying from country to country and between the sources reporting SMEs statistics. Some of the commonly used criteria are the number of employees, total net assets, sales and annual sales level. However, the most common definitional basis used is the number of employees employed by the business organization. Here again, there is variation in defining the upper and lower size limit of SMEs. Some examples of SME definitions of the South-East Asian countries are shown in table 3.3. As the table illustrates, there is significant variation in the definitions.

Table 3.3: SMEs definitions in selected South-East Asia

	A		B		C	
Country	**Employee**		**Total Assets (RM 000,000)**		**Annual Sales (RM 000,000)**	
	Small	**Medium**	**Small**	**Medium**	**Small**	**Medium**
Cambodia	11 – 50	51 – 200	< 0.250	< 0.500		
Indonesia	5 – 19	20 – 99	< 0.688	< 3.440	< 0.344	< 17.200
Laos	< 19	< 99				
Philippines	< 99	100 – 199				
Thailand	< 50	51 – 200	< 2.305	< 11.524		
Vietnam	< 30	31 – 200				
Average used in this study	**< 30**	**< 150**	**< 2.00**	**< 7.000**	**< 1.00**	**< 15.00**

Source: Small and Medium Enterprise Development Authority (Pakistan) website (www.smeda.org.pk/main.php)

As illustrated in table 1.3 above, some countries only use the number of employees as the sole criteria for determining whether a business is an SME or not. Other countries use this same criterion plus an additional criterion based on either the value of the firm's assets or the size of revenues, typically denominated in the local currency. Therefore, it can be concluded that there has been no universally accepted definition of what an SME is (Hashim 2005).

3.2.2 Definition of SMEs in Malaysia

Previous discussions have determined the definition of SMEs in South-East Asia (SEA) countries. In Malaysia, there are different definitions of SMEs by various government agencies and organizations in Malaysia. These definitions of government and organizations in Malaysia will be compared with the SEA definition in order to get the definition of SMEs in Malaysia as presented in table 2.4. In terms of employees, there is no significant differences definition of SMEs between SEA and Malaysia. For small and medium enterprise, SEA defines less than 30 and less than 150 employees respectively. In Malaysia as defined by the National SME Development Council (NSDC) the number of employees is between 5 and 50 the number of employees for small enterprise and between 51 and 150 employees for medium enterprise. As compared to Small and Medium-sized Industry Development Corporation (SMIDEC) stated that for small and medium enterprise is less than 50 and 51 to 75 the number of employees respectively. Bank Negara Malaysia used shareholder funds in defining the business is SMEs are not. The amount of shareholder funds for classified SMEs is less than RM 500,000 for small enterprise and between RM 500,000 to RM 2.5 million for medium enterprise. SEA and NSDC used annual sales turnover to define the business is SMEs are not where the differences are significant between SEA and NSDC because in Malaysia the volume of business is higher than SEA countries. The highest body of SMEs in Malaysia is NSDC, thus the NSDC definition to be used as the SMEs definition in Malaysia.

Table 3.4: Definitions of SMEs in Malaysia

Criteria	SEA Definition	BNM	NSDC	SMIDEC
No. of employees (full time)	< 30 (Small) < 150 (Medium)		Between 5 and 50 (Small), Between 51 and 150 (Medium)	< 50 (small) 51 – 75 Medium)
Annual sales turnover	<RM1m (Small) < RM 15m (Medium)		Between RM250,000 and <RM10 m (Small), Between RM10 m and RM25 m (Medium)	
Annual total assets	< RM 2m (Small) < RM 7m (Medium)			
Shareholders fund		<RM500,000 (Small), Between RM500,000 and RM2.5 m (Medium)		
Paid-up capital				<RM500,000 (Small) RM501,000 – RM2.5m (Medium)

Key to table:
SEA = South-East Asia
BNM = Bank Negara Malaysia
NSDC = National SME Development Council
SMIDEC = Small and Medium-sized Industry Development Corporation

3.3 SME Performance Measurement: Financial Indicators

Based on the findings of the six researchers, three of them concluded that the profitability and cash flow position are tools that can be used to measure SMEs performances. (Perera and Baker 2007; Hudson et al. 2001; Jarvis et al. 2000; Webb et al. 1999). No literature could be found on return on investment and inventory turnover in SMEs performance measures. Therefore, these two indicators were not included in this study. For the budget versus actual performance only one author recommended that this indicator in SMEs context enables managers to control their expenses and minimize organization failure (Langfield-Smith et al. 2003). These financial indicators for SMEs are shown in table 3.5.

Table 3.5: Financial indicators for SMEs Performance Measurement

No.	Financial Indicators	A	B	C	D	E	F	Total	Selected For This Study
1.	Profitability	√				√	√	**3**	√
2.	Cash Flow Position	√	√	√				**3**	√
3.	Return On Investment	√						**1**	
4.	Inventory Turnover	√						**1**	
5.	Budget vs. Actual	√			√			**2**	√
	Total	**5**	**1**	**1**	**1**	**1**	**1**		**3**

Key to table:
A = Financial indicator for companies' performance measurement
B = Jarvis et al. (2000)
C = Webb et al. (1999)
D = Langfield-Smith et al. (2003)
E = Perera and Baker (2007)
F = Hudson et al. (2001)

From the above discussion, the three indicators namely, profitability, cash flow position and budget verses actual performance of SMEs were identified to be applicable for this study. These three indicators will be matched to the SMEs non-financial indicators.

3.4 SME Performance Measurement: Non-Financial Indicators

From the above discussion, four elements of non-financial indicators have been identified in the company's performance measurement. These elements will be used to identify the non-financial indicators for SME in order to measure its performances. The formulation of the literature showed that there are two indicators have been selected for SMEs non-financial indicator, as shown in table 3.6.

Table 3.6: Non-financial Indicators for SMEs Performance Measurement

No.	Non-Financial Indicators	A	B	C	D	Total	Selected For This Study
1.	Customer satisfaction	√	√	√		**3**	√
2.	Product/service quality	√		√	√	**3**	√
3.	Market share	√				**1**	
4.	Employee efficiency	√				**1**	
	Total	**4**	**1**	**2**	**1**		**2**

Key to table:
A = nonfinancial indicators for companies' performance measurement
B = Parker (2000)
C = Perera and Baker (2007)
D = Hudson et al. (2001)

From table 3.6, the researchers found that the three authors in their researches on SMEs performance measures did not include market shares and employee efficiency as indicators in SMEs because both indicators are suitable for companies and SMEs need to be concerned about a number of other critical success factors like customer and quality of product and services (Parker 2000; Perera and Baker 2007; Hudson et al. 2001). From the above discussion, all the financial and non-financial indicators for SMEs performance measurement were found to be the critical indicators in order to evaluate the performance measures that can be used by the farmers' organization.

3.5 Farmers Organization Performance Measurement

Before proceeding to discuss further about the performance measurement indicators for Farmers Organization, it would be useful to have an understanding on the concept of this organization. Farmers Organization, like all agricultural businesses, has the same concept of agricultural cooperatives whereby their main goal is to make sure the credit

worthiness of the members is conserved. In order to achieve the goal, Farmers Organizations are involved other profitable firms. In Malaysia, Farmers' Organizations are governed by Farmers Organizations Act 1973 (Act 109). If we look at the previous section on the definition of SMEs, in terms of number of employees and annual sales turnover it is shown that Farmers Organization has business features such as SMEs. Thus from this fact, we can conclude that Farmers Organization is a part of SMEs.

Therefore, the selected performance measurement indicators in SMEs in section 3.3 and 3.4 will be used and investigated further in this research in order to determine performance measurement indicators for Farmers Organization. In conclusion, five factors: profitability, cash flow position, budget versus actual, customer satisfaction and product or service quality, have been identified and could be used as the basis to evaluate the Farmers Organization performance measurement.

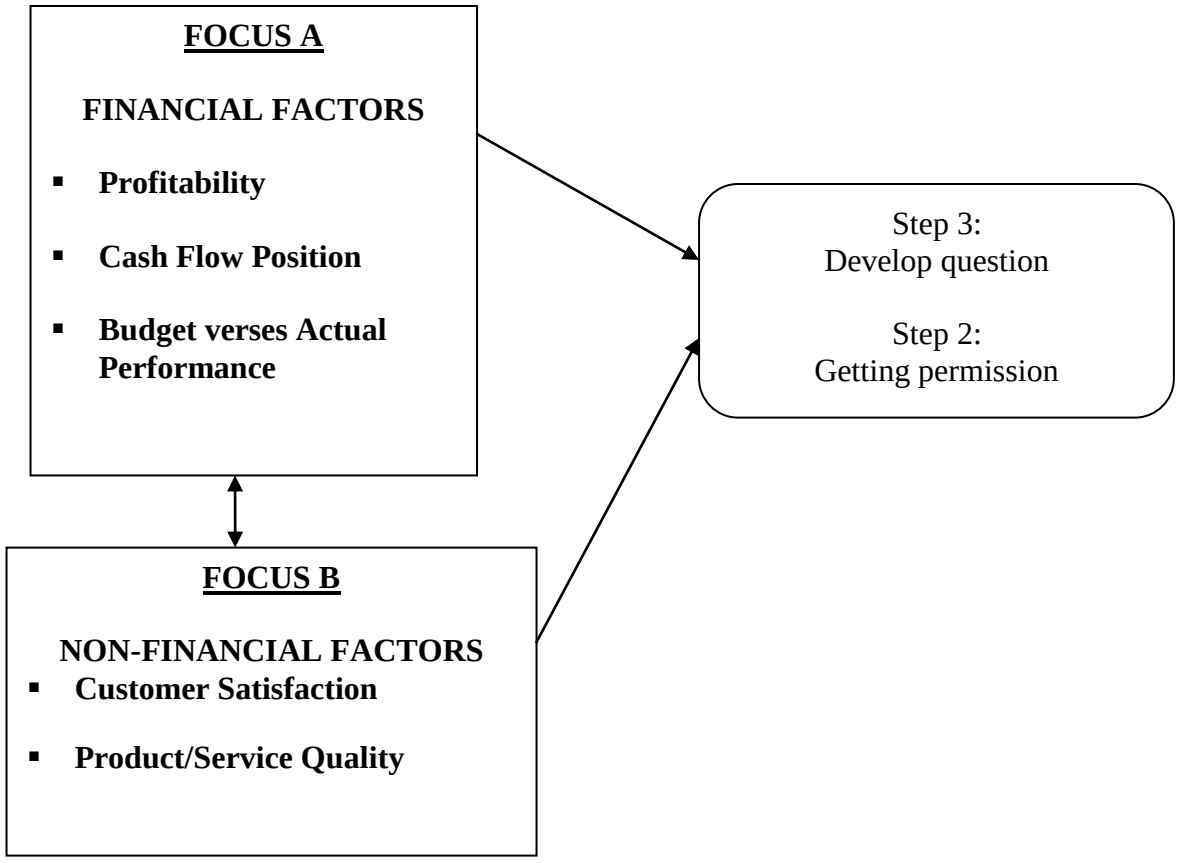
3.6 Conceptual Framework

Based on the evidence from existing literature and the discussions on the performance measurement for companies and SMEs, three distinguishing financial indicators have been identified namely, profitability, cash flow position and budget versus actual performance. With regard to the non-financial category, two indicators, namely customer satisfaction and product or service quality have been identified.

Figure 1 shows that two categories have been identified to determine the performance measurement indicators for Farmers Organization. They are the financial factors and non-financial factors. Both categories will be used as the basis for this study on the performance measurement for Farmer Organization.

The arrows that connect the financial factors and non-financial factors show that each element under both groups is related to one another and therefore they build a strong relationship. This relationship will determine the performance measurement indicators for Farmers Organization.

Figure 1: Performance measurement indicators for Farmers Organization



4. The Methodology and Research Design

4.1 The Qualitative Research

The qualitative research method was used for this study. Lincoln and Guba (2000) advocated that qualitative research is used to gain insight into people's attitudes, behaviours, value systems, concerns, motivations, aspirations, culture or lifestyles. It's used to inform business decisions, policy formation, communication and research. They also stated that focus groups, in-depth interviews, content analysis, ethnography, evaluation and semiotics are among the many formal approaches that are used, but qualitative research also involves the analysis of any unstructured material, including customer feedback forms, reports or media clips.

According to Denzin and Lincoln (2000) qualitative research is also a type of scientific research. In general terms, scientific research consists of an investigation that: seeks answers to a question, systematically uses a predefined set of procedures to answer the question, collects evidence, produces findings that were not determined in advance, produces findings that are applicable beyond the immediate boundaries of the study (Denzin and Lincoln 2000).

Qualitative research is concerned with subjective assessment of attitudes, opinions and behaviour (Holme and Solvang 1997). Research in such a situation is a function of researcher's insights and impressions. Such an approach to research generates results either in non-quantitative form or in the form which are not subjected to rigorous quantitative analysis (Holme and Solvang 1997). In general, qualitative research is more likely to take place in a natural setting. Furthermore, Qualitative research is said to be exploratory which is the collection, analysis and interpretation of data from the respondents.

4.2 Justification of Using Qualitative Research

During the past decade, there has been an increasing use of qualitative research in organizations. Due to the subjective nature of this method of research, it can be argued that quantitative research provides better findings (Brown et al. 2005). However, qualitative research can be used to explore several areas such as human behaviour which cannot be quantified but yet important to an organization. According to Jean Lee (2004), there are many reasons or advantages of using qualitative research in organizations and the main ones are: qualitative research provides a more realistic feel of the world that cannot be experienced in the numerical data and statistical analysis used in quantitative research, it provides flexible ways of collecting, analysing, and interpreting data and information and the use of primary and unstructured data gives qualitative research a descriptive capability.

This research has used a qualitative approach based on the discussion above and the fact that the reason of qualitative approaches is to interpret and understand the phenomenon. Furthermore, performance measurement is a broad topic and need a depth understanding to measure it. Since the research questions demand description and explanation, this approach has been well suited to answer the research questions and qualitative approach aims to measure and explain it (Holme and Solvang 1997).

4.3 Research Design

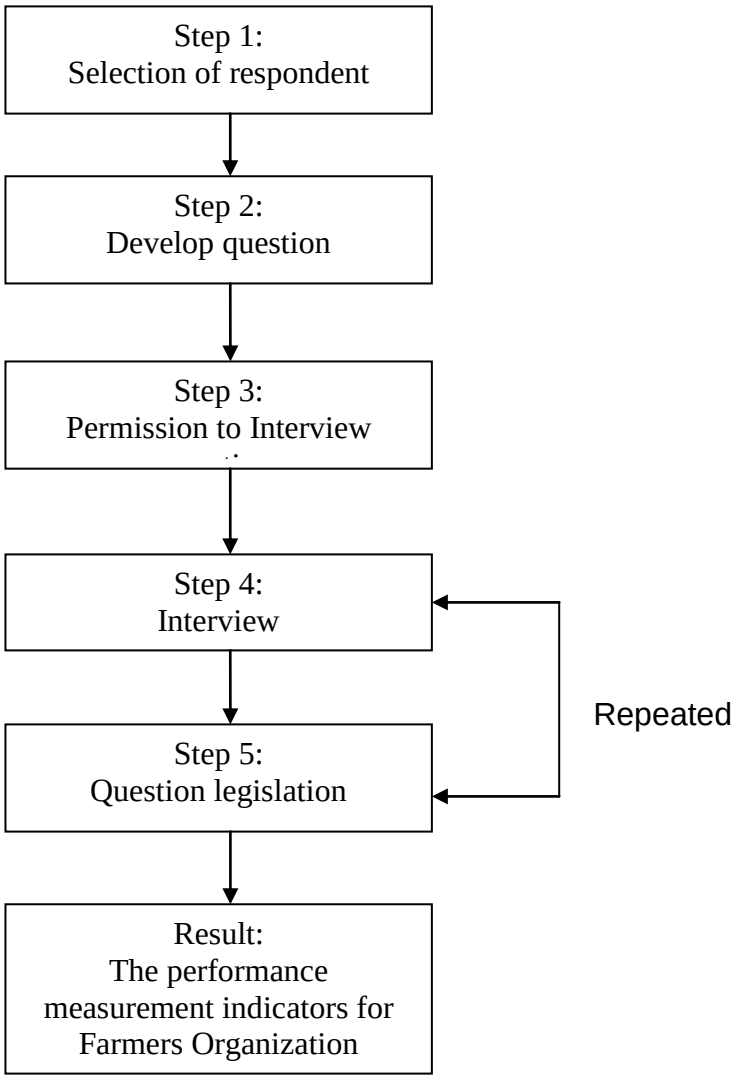
In order to obtain better results, these researchers have to identify the appropriate data collection method to be used, the sampling selection and on how to analyse the data gathered from the respondents.

4.3.1 Data Collection Method

For this study, the convergent interview was used during the process of collecting data. According to Carson et al. (2001), the convergent interview is a methodology that allows a relatively structured approach to sorting out what needed to be done in a research project in the early stages. It's also a technique for collecting, analysing and interpreting qualitative information about people's attitudes, beliefs, knowledge and opinions through the use of a limited number of interviews with experts that converge on the most important issues within a topic area.
Figure 2 showed that there are five steps to conduct convergent interview in getting the information or data about the indicators that can be used for measure a performance by

Farmers Organization. Starting with selection of respondents, the next step is getting permission to conduct the interview, and then researchers developed questions and consequently conducted the interview to get the result.

Figure 2: Steps in conducting convergent interview



Step 1: Selection of Respondents

This study was conducted in 2012 and the selection of respondents was based on the people who are directly involved in the management of Farmers Organization and people who would be able to give a clear picture of the operational and financial situation of Farmers Organization in order to identify the indicators of performance measurement. For this reason, the General Manager of Farmers Organization has been as the appropriate person to be the interviewed for this research. For this research, all the 27 General Managers of Farmers Organization in MADA Region have been selected for the convergent interview.

Step 2: Getting Permission
Before proceeding with the interview, the researcher has to obtain permission from the management of MADA. The researcher has discussed with the Farmers Institution Management Division at MADA headquarters in getting permission to do the research and was agreed by the management of MADA.

Step 3: Develop Interview question
The interview question was designed as shown in the Appendix 1.

Step 4: Interview
The respondents were interviewed face to face at the Farmers Organization based on the question designed.

Step 5: Question Legislation
If there is a legislation in question, the interview will be repeated to each different respondent. The results from the interviews can then be viewed.

4.3.2 Sample Selection

Since this is a qualitative study there is no reason to make a random selection of subjects (Svenning 2003), and the study subjects have been chosen selectively based on the following criteria: Firstly, the study focuses on indicators that contribute to the performance of the Farmers Organization in Malaysia. The Farmers Organizations in Malaysia are: those registered under the Cooperative Act 1993 which replaced the Cooperative Ordinance 1948 and the Farmers Organization Act 1973 / Fishermen's Association Act 1973. The agricultural cooperatives that were registered under the Cooperative Act 1993 consisted of those cooperatives that fall under the jurisdiction of the Farmers' Organization Authority (FOA) and Fisheries Development Authority (FDA). The FOA was set up in 1973 to look after the agricultural cooperatives while the FDA took control of fishermen's cooperatives in 1974.

Therefore, in the context of agriculture, the cooperatives under the jurisdiction of the Farmers Organization Authority (FOA) were selected by the researcher. There are 243 Farmers Organization under the FOA. However, out of 243 Farmers Organization, 27 of them are under the administrative jurisdiction of the Muda Agriculture Development Authority (MADA). All of the 27 Farmers Organization located within MADA were selected as sample for the study. A semi-structured interview was conducted on this sample of 27 Farmers Organizations.

The MADA Farmers Organization was selected because MADA is the agency that manages the biggest area of paddy cultivation in Malaysia as shown in table 4.1, and gives more contribution to the national rice supplies in Malaysia as compared to other agencies within the industry. In addition, through its Farmers Organization, MADA contribution is not only in a paddy cultivation but also in the agricultural- based industries in Malaysia. In each of the 27 Farmers Organization in MADA areas, each is led by a General Manager. Furthermore, these Farmers Organizations were divided and managed according to the territory office. To be able to collect the qualitative data, this

study was conducted by the MADA Farmers Organization in each territory (Refer Appendix 2). There are four territorial offices in MADA area where in each territory has several Farmers Organization under its administration. The MADA Farmers Organization is headed by a General Manager who has more than 10 years on average of experience in Farmers Organization management.

Table 4.1: MADA Farmers Organization Information

	Total MADA	Average/Farmers Organization
Total Area (Hectares)	96,558	3,576
Target Group (People)	55,130	2,042
Number of Members (People)	50,247	1,861

Source: Farmers Institution Management Division, MADA

4.3.3 Data Analysis

The procedure used for analysing and interpreting the convergent interviewing data is such that, after each individual interview, the taped interview was listened to in order to clarify and expand the key issues into summary notes. The researchers then analysed the data obtained through the interviews. The information gathered from the interviewees was recorded using audio recording devices and all the recordings were then transcribed as interview notes. After that, the data and information were matched with the selected indicators in the theoretical framework in order to identify which indicators are suitable as performance measurement for Farmers Organization.

4.4 Research Questions

From the previous discussion on performance measurement for companies and SMEs, this research had decided to use the SMEs performance measurement indicators to be investigated in Farmers Organization. The two research questions for this study are as follows;

1. What are the financial indicators that could be used as a performance measurement by the Farmers Organization?
2. What are the non-financial indicators that could be used as a performance measurement by the Farmers Organization?

The financial indicators that have been identified from the literatures are: profitability, cash flows position, budget versus actual and the non-financial indicators are: customer satisfaction and product or service quality.

5. Results and Analysis of Data

5.1 Results for Financial and Non-Financial Indicators

This study was designed to address the research question: What are the financial indicators that could be used as a performance measurement by the Farmers

Organization? In the convergent interview, the probing questions were developed, so that an assessment could be made in a framework of performance measurement indicators for Farmers Organization. This research aimed to confirm the conceptual framework developed. Appendix 1 constitutes all the questions and also answers gathered from the respondents in the convergent interview conducted.

The first question asked of each interviewee (Question 1) was a broad and general question developed to establish rapport, as shown in appendix 1. The question probed the respondent to tell the interviewer about their experiences in Farmers Organization. This question was asked to find out the interviewees duration of involvement in the management of Farmers Organization. The responses from the respondents showed that most of the respondents were involved in management of Farmers Organization since they first started working in MADA. Most of the General Manager of Farmers Organization started their careers since they entered MADA which indicated that they have a lot of experience in the management of Farmers Organization. The 27 respondents in MADA Farmers Organization have about 15 years working experience in Farmer Organization. This indicates that the respondents are knowledgeable enough in determining the performance measurement indicators.

Then, question 2 was asked: 'What are financial indicators that can be used to measure the performance of Farmers Organization? This question is the first research issue that has to be investigated through the interview conducted. The reconciliation of the answers given by the respondents, the researcher found that, most of the Farmers Organization prefers profitability and cash flows position as their financial indicators with the result of 21 respondents and 20 respondents respectively and followed by budget versus actual performance with 12 respondents agreeing to use these financial indicators to measure the performance of Farmers Organization.

In addition, from the convergent interview, there are several respondents who have other answers or additional indicators other than the indicators specified in the conceptual framework. Two of the respondents, respondent 8 and respondent 25, added that debt collection as the financial indicator for Farmers Organization. Moreover, return on investment was mentioned by 3 respondents as the indicator that could be used as a performance measurement by Farmers Organization. With the findings of another two indicators, it shows that the financial indicators that can be used to measure the performance of Farmers Organization are: profitability, cash flows position, budget versus actual performance, debt collection and return on investment, as shown in table 5.1.

Table 5.1: Result of financial and non-financial indicators from the convergent interview

R	Indicators of the conceptual framework					Indicators added by respondent
	Financial			Non-Financial		
	Profitability	Cash Flow Position	Budget versus Actual	Customer Satisfaction	Product/Service Quality	
R 1	√	√			√	
R 2		√	√	√		
R 3	√		√		√	
R 4	√	√			√	
R 5	√	√	√	√		
R 6	√		√	√		
R 7	√	√		√		
R 8	√			√		
R 9	√		√			Culture of work
R 10	√	√			√	
R 11		√			√	
R 12	√	√			√	
R 13	√	√			√	
R 14			√			Employee management
R 15	√	√			√	
R 16		√		√		
R 17	√	√	√	√	√	
R 18	√	√	√			Employee management
R 19	√	√			√	
R 20	√		√		√	Return on investment
R 21		√		√		
R 22	√	√	√		√	
R 23	√	√	√		√	
R 24	√	√			√	
R 25	√		√		√	Debt collection
R 26	√	√			√	
R 27		√			√	Return on investment
	21	20	12	8	17	

Key to table:
R = Respondents

In question 3, the respondent was asked: 'What are non-financial indicators that can be used to measure the performance of Farmers Organization? This question is the second research issue that has to be investigated through the interview conducted. Of the 27 respondents, only 8 respondents prefer customer satisfaction as non-financial indicator followed by product or service quality with the 17 respondents agreed to be used as financial indicator to measure the performance of Farmers Organization. Other than that, there are two additional indicators agreed by 3 respondents to be included as non-financial indicators to measure performance of Farmers Organization which are culture of work and employee management in the Farmers Organization.

With the findings of another two indicators, it showed that the non-financial indicators that can be used to measure the performance of Farmers Organization are: customer

satisfaction, product or service quality, culture of work and employee management, as shown in table 5.1.

Question 4 was asked to find out why the respondents stated their indicators in Farmers Organization performance measurement? This question was asked to identify the justification for their answer in question 2 and question 3. Based on the convergent interview, the researcher found that each respondent gave a different justification based on their experience in management of Farmers Organization in MADA region.

Through reconciliation of the answers given by the respondents, the researchers found that members of Farmers Organization were relying on profit and each year they look at this indicator to measure the performance of Farmers Organization. Profit is the main goal that Farmers Organizations have to achieve every year. If Farmers Organization has losses it might give some bad reputation to that Farmers Organization and losing the trust of the members.

For the indicator of cash flow position, the justification from the respondent is quite similar that is Farmers Organizations need the cash to be secured in any circumstances in order to survive in the long term. Some respondents are concerned with the debt collection because it is related to the cash flow position in Farmers Organization. On the other hand, Farmers Organization will have their own budget planning to monitor expenses and to improve their income. This budget is used as a tool to monitor Farmers Organization expenses and compare it with the actual performance.

For non-financial indicators, the respondents' justifications were quite similar among them. In terms of customer satisfaction, most of the respondents said that when the members of Farmers Organization are satisfied with the services and product quality of the Farmers Organization, these fulfil and meet the performance measurement of Farmers Organization. About employee management and work culture they depend on the internal management of Farmers Organization from the low level to high level staffs. This means that the cooperation among staff can influence the management style in order to measure the performance of Famers Organization.

6. Conclusion and Limitation

6.1 Discussion of Findings

From the analysis of the convergent interview data of the 27 respondents, 9 indicators have been identified as performance measurement for Farmers Organization. These 9 indicators are: profitable, cash flow position, customer satisfaction, product/service quality, budget planning versus actual, employee management, debt collection, return on investment and culture of work. To discuss details on the findings of the convergent interview, the researcher had divided according to the research question which is discussed next.

6.1.1 Research Question 1: What are financial indicators that could be used as a performance measurement by the Farmers Organization?

From the literature that have been cited, there are three financial indicators were selected as a conceptual framework for this research: profitability, cash flows position and budget versus actual that could be used as a performance measurement in Farmers Organization. These financial indicators have been tested through the convergent interview to get the confirmation by the selected respondents. By reconciliation of the answers given by the respondents, the researcher was able to confirm that these three financial indicators could be used as a performance measurement by the Farmers Organization.

In addition, there are another two indicators: debt collection and return on investment have been agreed with respondents as additional indicators and need consideration to be included in performance measurement of Farmers Organization.

6.1.2 Research Question 2: What are non-financial indicators that could be used as a performance measurement by the Farmers Organization?

Based on the literature that have been cited, there are two non-financial indicators were selected as a conceptual framework for this research: customer satisfaction and product or service quality that could be used as a performance measurement in Farmers Organization. These non-financial indicators have been tested through the convergent interview to get the confirmation by the selected respondents. From the reconciliation of the answers given by the respondents, the researcher had confirmed that these two non-financial indicators could be used as a performance measurement by the Farmers Organization.

In addition, there are another two indicators: culture of work and employee management have been agreed with respondents as additional indicators and need consideration to be included in performance measurement of Farmers Organization.

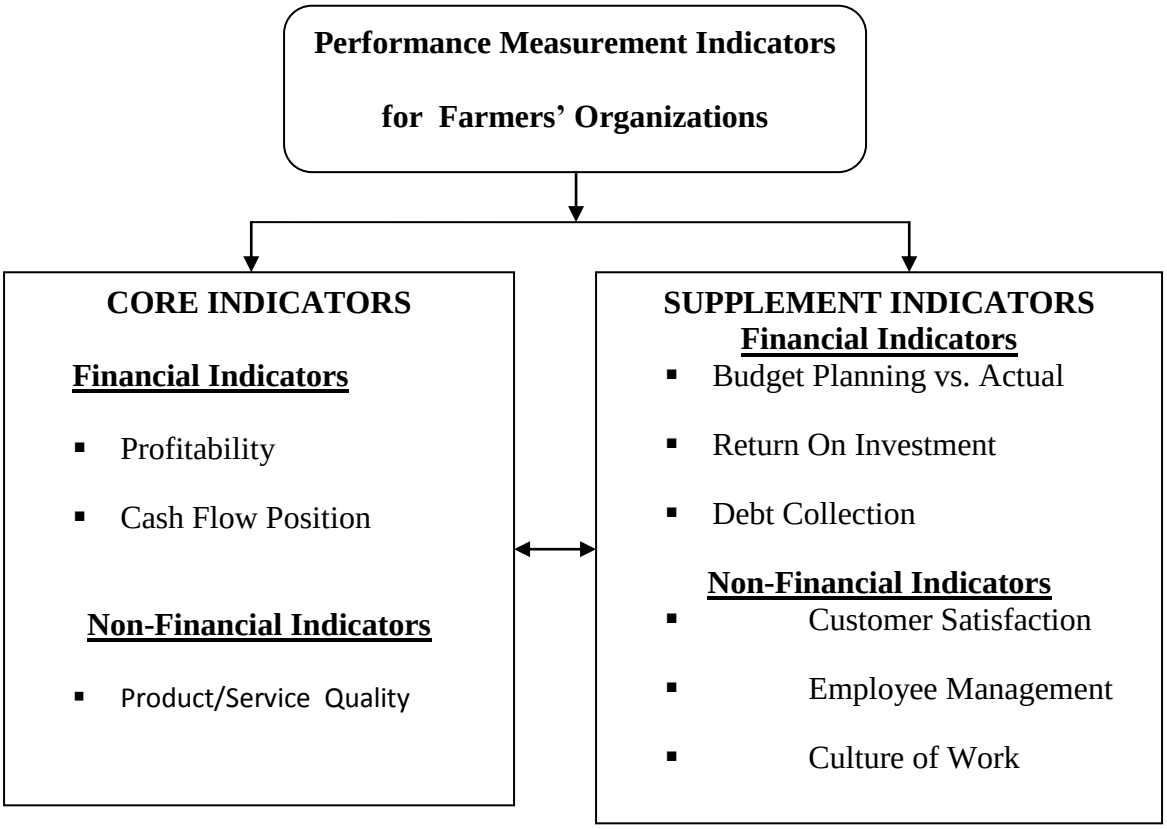
6.2 Models Developed from this Study

This research analyses the findings of the convergent interview in order to develop a comprehensive model for this research. From the analysis, we found the following:

- Only 9 indicators are considered as indicators that can be used by Farmers Organization to measure its performance. From 9 indicators, 4 indicators were cited from the literature review section, and the rest was added by respondents during the convergent interview.
- 3 indicators were identified under the core indicators based on the number of responses by the respondents during the convergent interview.
- In addition, 9 indicators were identified under the supplement indicators based on the number of responses by the respondents during the convergent interview.

This analysis and result answered the research question: 'what are financial and non-financial indicators that could be used as a performance measurement by Farmers Organization?' Otherwise, to achieve the research objective which is to develop a performance measurement model for Farmers Organization, two models have been designed. Model 1 as depicted in table 5.1, was developed by listing the 9 indicators used by the Farmers Organization to measure its performance. In order to provide in-depth findings from this research, model 2 as depicted in figure 3 has been designed to list the performance measurement indicators for Farmers Organization. This model lists the 9 indicators comprised of 5 financial indicators and 4 non-financial indicators. Moreover, these factors are divided into two categories: core and supplement indicators. From the 9 indicators listed, 3 were grouped under the core indicators and 6 were grouped under the supplement indicators.

Figure 3: Performance Measurement Model for Farmers Organization



6.3 Contribution of the Study

The findings of this study could serve as useful inputs to MADA which is the largest and most important rice producing region in Malaysia. The researchers of this study have contributed certain important inputs in terms of performance measurement. To begin with, such a study has never been conducted out before in MADA. Hence, this initial study can be a catalyst for more of such studies in the main rice bowl of Malaysia. Secondly, most of previous performance measurement studies were mainly based on the quantitative approach. The qualitative methodology approach would be able to provide

useful and more realistic insights into the 'soft issues and factors that both affect and contribute to the performance of business entities. Thirdly, the findings of this study could be useful inputs to government agencies as MADA, Economic Development Unit of Malaysia, Kedah State Economic Planning Unit and other relevant agencies. These agencies will be able to have a better monitoring and understanding of the performances of the Farmers' Organizations and to design and develop the appropriate strategies and development plans in order to further improve their performances. In addition, the findings could be useful to those agencies which are concerned with conducting training and workshops towards further improvement and development of the farmers' organizations.

6.4 Limitation of the Study

Among some of the limitations of this research may be viewed in terms of the relatively small number of respondents. Out of the total of 243 farmers' organizations, only 27 took part in the interview process. Nevertheless, in terms of percentage, it must be emphasized that the 27 framers' organizations represent the whole population of paddy farmers' organization found in the MADA region. Another limitation is the unwillingness of the farmers' organization respondents to talk freely in response to the interview questions. The respondents at times do not want to divulge too much information especially sensitive information related to finance, such as profits and debts and operational issues. However, through the use of qualitative interview techniques which permitted the use of the researchers‟ skill and probing techniques, the information required by the bankers were ably teased out by them.

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