



UNIVERSITI PUTRA MALAYSIA

***INFLUENCE OF LEADERSHIP COMPETENCIES ON LEADERS'
MATURITY IN PADDY FARMING TECHNOLOGY IN THE MUDA AREA,
MALAYSIA***

WISAM YAKO AZIZ MASSO

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By

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**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia,
in Fulfillment of the Requirements for the Degree of Doctor of Philosophy**

August 2017

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment
of the requirement for the degree of Doctor of Philosophy

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Chairman : Associate Professor Norsida Man, PhD
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In developing countries such as Malaysia, rural people have depended on extension workers and farmers leaders for technical advice and information (Tiraieyari, 2009). The farmer leaders should influence others to adopt and practice the best technologies in their farming, so that they can improve their paddy productivity and increase their income. For these reasons, paddy farming leaders in study area play an important role in agricultural process and agricultural extension. The mature leader is the one who sees leadership as responsibility rather than privilege. They have integrity and consistency, they are usually modest, losing no opportunity to stress that real achievement has come from team work and not from inspiration of just one individual (Wang et al., 2005). Hence, maturity is a combination of factors: attitude, skills, learning, education; but it is also a matter of values: honesty, respect, humbleness, loyalty. usually, when a leader lacks of maturity, he / she creates and participates in fraudulent or illegal situations that affect the followers (Goleman, 1998). The best leaders are those who can contribute and achieve the goals, when a leader achieves goals, it may be assumed that he has an acceptable level of maturity (Balsanelli et al., 2008). However, paddy farming leaders in the granary area are facing some problems. Among those is the adoption of the technology that has been transferred to them, about which they are not very knowledgeable. Their knowledge and skills are low because of the lack of training offered to them from agencies, resulting in a lack of competences (Ahmad et al., 2015). Therefore, they do not transfer new information that they have about new technology to other farmers because the relation or the communication between the leaders and farmers is not well conducted. As a result, their maturity level may be regarded as low.

This study was designed to identify the maturity level of paddy farming leaders in paddy farming technologies and to determine the level of knowledge, attitude, skill and practices of paddy farming leaders in paddy farming technologies and to examine the perception levels of respondents toward extension agencies and extension programs and activities. Finally, the study also was aimed to determine the relationship between paddy farming leaders' level of knowledge, attitude, skill and practices in paddy farming technologies and the level of maturity of paddy farming leaders in paddy farming technologies in Muda area.

A total of 260 respondents were selected using a random sampling technique. The study employed a questionnaire consisting of two sections: Section 1, socio-demographic factors of respondents in the area of study, and Section 2, statements about the maturity, knowledge, attitude skill and practices, of paddy farming leaders towards paddy farming technologies. A five-point Likert scale was used to examine the dependent variable. This study used SPSS software to analyse the data for frequencies, percentages, means, standard deviations, correlations and linear regression.

The results revealed that maturity level of respondents in paddy farming technologies was moderate and the level of knowledge, attitude, skill and practices of respondents in paddy farming technologies was moderate. Based on results Pearson correlation shows there was a significant relationship between level of knowledge, attitude, skill and practices of respondents in paddy farming technologies and respondents' level of maturity in paddy farming technologies. The results shows also the most contributing factors to paddy farming leaders' maturity level in paddy farming technologies is attitude which had a strong power in predicting of maturity level of respondents. The respondents in study area had moderate level of maturity in paddy farming technologies.

Hence, this study recommends MADA to carry out proper and efficient training needs analysis to ensure the effectiveness of training for respondents in the near future to improve their productivity in paddy farming and proper training needs for the paddy farming leaders that is found with to have training gap needs as depicted by their moderate level of maturity. Specific courses and workshops could be created such as organizational communication, leadership foundations, group dynamics, grassroots programming, and capacity building and empowerment of communities to improve their ability to lead others then to reach to high level of maturity.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

**PENGARUH KECEKAPAN KEPIMPINAN KEATAS KEMATANGAN
KETUA DALAM TEKNOLOGI PERTANIAN PADI KAWASAN MUDA,
MALAYSIA**

Oleh

WISAM YAKO AZIZ MASSO

Ogos 2017

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Masyarakat luar bandar di negara-negara membangun seperti Malaysia masih mengharapkan pegawai pengembangan dan ketua peladang dalam menyalurkan khidmat nasihat teknikal dan maklumat (Tiraieyari, 2009). Pemimpin ladang berperanan untuk mempengaruhi petani-petani untuk menerima pakai dan mempraktikkan teknologi yang terbaik dalam mengelola aktiviti pertanian mereka supaya produktiviti penanaman padi dapat diperbaiki justeru meningkatkan pendapatan mereka. Dengan ini, pemimpin tanaman padi di kawasan kajian ini perlu memainkan peranan penting dalam penglibatan diri terhadap sesebuah proses pertanian dan pengembangan pertanian. Seorang pemimpin yang matang ialah pemimpin yang melihat kepimpinan sebagai sebuah tanggungjawab dan bukannya keistimewaan. Mereka mempunyai nilai integriti dan konsistensi, bersederhana, tidak mudah stres dan percaya bahawa sesebuah pencapaian adalah daripada usaha sama dan bukannya daripada inspirasi perseorangan (Wang et al., 2005). Kematangan pula adalah kombinasi faktor: sikap, kemahiran, pembelajaran, pendidikan; dan juga merupakan nilai-nilai; kejujuran, penghormatan, rendah diri, kesetiaan, kebarangkalian apabila seorang pemimpin kurang matang, beliau terjebak dengan penipuan atau melanggar undang-undang (Goleman, 1998). Pemimpin yang terbaik adalah mereka yang boleh menyumbang dalam mencapai matlamat, ia boleh dianggap bahawa pemimpin tersebut telah mencapai tahap kematangan yang boleh diterima (Balsanelli et al., 2008). Walau bagaimanapun, pemimpin tanaman padi di kawasan jelapang padi menghadapi beberapa masalah. Antaranya adalah penerapan teknologi yang telah dipindahkan kepada mereka, yang mana mereka tidak begitu berpengetahuan. Pengetahuan dan kemahiran mereka adalah rendah disebabkan kekurangan latihan yang ditawarkan kepada mereka dari agensi, mengakibatkan kekurangan kompetensi (Ahmad et al., 2015). Oleh itu, mereka tidak memindahkan maklumat baru tentang teknologi baru kepada petani lain kerana perhubungan atau

komunikasi antara pemimpin dan petani tidak dijalankan dengan baik. Akibatnya, tahap kematangan mereka mungkin dianggap rendah.

Kajian ini bertujuan untuk mengenalpasti tahap kematangan pemimpin ladang padi dalam teknologi pertanian padi dan untuk menentukan tahap pengetahuan, sikap, kemahiran dan amalan pemimpin ladang padi dalam teknologi pertanian padi dan untuk mengkaji tahap persepsi responden terhadap agensi pengembangan dan program pengembangan dan aktiviti. Akhirnya, kajian ini juga bertujuan untuk menentukan hubungan antara tahap pengetahuan, sikap, kemahiran dan praktik pemimpin ladang padi dalam teknologi pertanian padi dan tahap kematangan pemimpin petani padi dalam teknologi pertanian padi di kawasan Muda.

Seramai 260 responden telah dipilih menggunakan teknik pensampelan rawak. Kajian ini menggunakan soal selidik yang terdiri daripada dua bahagian: Seksyen 1, faktor sosio-demografi responden dalam bidang kajian, dan Seksyen 2, kenyataan mengenai kematangan, pengetahuan, kemahiran sikap dan amalan, pemimpin petani padi ke arah teknologi pertanian padi. Skala Likert lima mata digunakan untuk memeriksa pembolehubah yang bergantung. Kajian ini menggunakan perisian SPSS untuk menganalisis data untuk frekuensi, peratusan, min, sisihan piawai, korelasi dan regresi linier.

Hasil kajian menunjukkan bahawa tahap kematangan responden dalam teknologi pertanian padi adalah sederhana dan tahap pengetahuan, sikap, kemahiran dan amalan responden dalam teknologi pertanian padi adalah sederhana. Berdasarkan hasil kajian, korelasi Pearson menunjukkan hubungan yang signifikan antara tahap pengetahuan, sikap, kemahiran dan praktik responden dalam teknologi pertanian padi dan tahap kematangan responden dalam teknologi pertanian padi. Keputusan menunjukkan juga faktor yang paling menyumbang kepada tahap kematangan pemimpin padi dalam teknologi pertanian padi adalah sikap yang mempunyai kuasa yang kuat dalam meramalkan tahap kematangan responden. Responden di kawasan kajian mempunyai tahap kematangan sederhana dalam teknologi pertanian padi.

Oleh itu, kajian ini mencadangkan MADA untuk menjalankan analisis keperluan latihan yang betul dan cekap untuk memastikan keberkesanan latihan bagi responden dalam masa terdekat untuk meningkatkan produktiviti mereka dalam pertanian padi dan keperluan latihan yang sepatutnya bagi para pemimpin tanaman padi yang didapati kekurangan latihan seperti yang dinyatakan iaitu tahap matang mereka yang sederhana. Kursus dan bengkel khusus boleh diwujudkan seperti komunikasi organisasi, yayasan kepimpinan, dinamik kumpulan, program akar umbi, dan pembinaan keupayaan dan memperkasakan masyarakat untuk meningkatkan keupayaan mereka untuk memimpin orang lain untuk sampai ke tahap matang yang tinggi.

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I certify that a Thesis Examination Committee has met on 28 August 2017 to conduct the final examination of Wisam Yako Aziz Masso on his thesis entitled "Influence of Leadership Competencies on Leaders' Maturity in Paddy Farming Technology in the Muda Area, Malaysia" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the Doctor of Philosophy.

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LIST OF ABBREVIATIONS

MADA	Muda Agriculture Development Authority
PPK	Area Farmers Organization
JKKK	Rural Administration
LPP	Farmers Organisation Authority of Malaysia
MP	Malaysia Plan
SLT	Situational Leadership Theories



CHAPTER 1

INTRODUCTION

1.1 Introduction

This introductory chapter provides background information relevant to the study on the maturity level of paddy farming leaders in the Muda area in Peninsular Malaysia. In addition to this, It covers the problem statement, research questions, significance as well as the scope and limitation of the study. Also included are the operational definitions of terms to cast more light on the subtle issues of the study.

1.2 Background to the Study

Over the decades, agriculture is one of the activities more important to human life than just being important to the economic growth of a country, which makes it totally different from other economic activities, the reason being an important means of providing food for life's existence. It does not only impact on the economy of a country but also has several environmental, ethical, cultural and social importance (Murad, Mustapha & Siwar, 2008).

According to Firdaus et al. (2012) Malaysian agriculture can be divided into three (3) sectors which are food, diverse group and agro-industrial. One of the most important crop under the food sub-section is paddy. During the Eight Malaysian Plan (8th MP), the agricultural sector received considerable attention as the government invested about six billion RM into the sector to help boost its various activities. It seems that the main benefit and focus of this attention is on paddy industry. Paddy farming in Malaysia is one of the first irrigated rice production systems reported in Asia, which involves cultivation of rice in irrigated low lands. Rice cultivation in Malaysia is seen as the origin of rice farming all around Asia (Abdullah, 2006; Man & Sadiya, 2009).

Paddy regard as a vital crop in food sub sector in Malaysia. Therefore, Malaysian paddy and rice industry receive massive more attention by government. The annual paddy production is 2.6 million metric tons (Faostat, 2013). There are 300,000 farmers depend on rice farming as the main sources of income and the average age of farmers are more than 60 years (Man, 2009). Yet, Paddy farming in Malaysia required large and suitable area for farm practices. The area of paddy planted throughout the year 2005 to 2011 in Malaysia is fluctuating every year.

As the world grows into a global society, agricultural extension is referred to as a complete organizations required to solve challenges encounter by practitioners in the field of agriculture and also update them in terms of skills, technological innovations and the know-how required to improving their overall living and human capital per individual (Allahyari, Chizari & Homae, 2008)

The main concepts behind agricultural extension are to enable farmers engage in the correct and necessary know-how, overcome the possible boundaries of the village as well as initiate the best practices suitable to them (Kibett, Omunyin & Muchiri, 2005).

Within the discipline of agricultural extension, leadership has crucial long-term significance since it is concerned with directly mentoring farmer leaders in rural communities, improving their knowledge by means of communication in order to achieve predetermined and clear objectives (Khalil, 2008).

In developing economies such as Malaysia, rural people have relied on extension workers and rural leaders for technical advice and expertise. The success of extension schemes is tied to a large degree to the ability of the extension workers to be well versed and competent since the whole extension process is dependent on them to make available new innovations and technical advices to rural farmers (Zivkovic, Jelic, & Rajic, 2009). The same conclusion is given by Radhakrishna et al. (1994) that the leadership role of extension workers and farmers leaders has become an increasingly critical element in the successful performance of extension programmes.

Leadership is crucial in agricultural extension services. Interest in the concept of leadership has been steadily increasing among scholars, public and private organisations since late 20th century (Shriberg et al., 2005). Generally, leadership involves influencing other individuals to act towards the attainment of a goal or goals this is in line with Dubrin (2007) who defined leadership as a process whereby an individual influences a group of individuals to achieve a common goal.

Similar findings were reported by Hitt, et al. (2009) identified four (4) leadership functions of rural leaders, namely, as a catalyst, solution giver, process helper and resource linker. This means farmer leader should raise the awareness of farmers, form functional farmers groups and make decision for solution together with farmers. Farmer leader, who possess the desire to lead, may enhance their skills and abilities required for the leadership role that might influence their performance and success. So, leadership in extension context is indeed a social function which is necessary for the achievement of collective objectives.

Based on this observation, it can be said that the leadership in agricultural extension within a rural community is not just a position in a hierarchy or a chain of commands in extension system, but it involves actions of the extension worker with rural leader, it is a kind of mutual interaction between extension worker and rural leaders with farmers. To conclude this part, it can be said that the explanation about leadership in agricultural extension as discussed above can be helpful in grounding our understanding of maturity level of paddy farming leaders in the study area. Yet, having leaders with sound minds connected with conscious spiritual understanding in demonstrating leadership duties is something that must be addressed.

Good and excellent leadership can offer many benefits, including increased followers ability to resolve the problems and improve their mission and of course, improved the results for any task. Leadership is a rational process between leaders and followers, and is molded by the situation (Fiedler & Chemers, 1974). In other words, as Hitt, et al. (2009) observes three fundamental components of leadership process including the leaders' personality or traits, the followers' perception of leaders and the situations that those interactions take place

The effects of leader on their followers are not fully uncovered yet, but critical to understand (Visser, 2013). For instance, Humphrey's (2002) argument is that leaders should be able to control how they influence their followers as such control is key to the influence that leaders can have on their followers. To add to that, how leaders affect their followers is fundamental; within the context of leadership but sadly, it is still something that needs to be better understood. However, what is indeed accepted is that the effectiveness of a leadership is measured by the performance of the followers (Kaiser, Hogan & Craig, 2008).

In today's dynamic market environment, the significance of leaders cannot be denied. It is the leader who helps translate ideas into action and action into results. A leader utilises his/her skills and experience to predict the situation and optimise the source of alternatives. The effective leadership style is influenced by various factors like experience, age etc. For this previously, intelligence quotient along with emotional intelligence were being credited. Then, gradually spiritual intelligence also came into the frame (Kumar et al., 2013).

In other words, Stimson et al. (2009) identified three pivotal contributors to local leadership. It should involve the sharing of power, it should be flexible, and it should be rooted in entrepreneurialism. Similar findings were reported by Smailes (2002) found that leaders have a pivotal role in providing ideas and a vision for the future. Thus, they provide a focus in which community identity and belonging could be fostered.

Interestingly, leadership development is not about developing one leader at a time or even one leader level at a time. Rather, it is about looking across all leader levels and creating a strategy to build leadership capabilities across that population and often across multiple geographies (Graen & Uhl-Bien, 1995).

Basically, leadership maturity requires the contained focus of leaders on both results expected of them and their team, and relationships with everyone who impacts their success. When a leader concentrates only on results, at the expense of relationships, he may experience short bursts of satisfactory results but will never attain sustainable, acceptable results, let alone exceptional ones, the mature of a leader is the one who sees leadership as responsibility rather than privilege. They have integrity and consistency, they are usually modest, losing no opportunity to stress that real achievement has come from team work and not from inspiration of just one individual

(Wang et al., 2005). May (1997) explain that, a matured and effective leader also must have the ability to relate to a wide range of people and personality types. They need to be able to understand and relate to almost anyone. A matured leader possesses problem-solving skills. They are able to successfully deal with conflict and possess a range of strategies to resolve conflicts. While they have the ability to speak well, they should also be keen listeners.

For the sake of this study, however, the farmer leader plays an important role in ensuring the success of agricultural extension work, whether in helping farmers to transfer and deliver their messages or influencing them to adopt innovations developed and recommended by the agricultural extension agent. They can be regarded as a source of reference for other farmers working in the rural communities. Thus a rural leader is a basis of extension work and the way to achieve its objectives (Kibett et al., 2005). Equally, Ali, Altarawneh and Alhat (2012) emphasized that the leaders of the rural areas and the agents are interested in change and internal development in order to support these leaders to be successful in their programme.

A competence in general can be understood as the ability of an individual to activate, use and connect the acquired knowledge in the complex, diverse and unpredictable situations (May, 1997). Jokinen (2005) defines competencies as the ability to use knowledge and other capabilities, necessary for successful and efficient accomplishment of an appointed task, transaction of work, goal realization, or performance of a certain role in the business process.

Furthermore, competencies is directly associated with extension leaders, because the ability of extension leaders to achieve set program objectives depends solely on the quality of skills, knowledge and attitude they possess (Jokinen, 2005). In other words, the professional and personal characteristics that will lead to successful or high performance in discharge of duties. Mitchell (2002) advised all extension personnel to acquire individual strengths, capabilities as an instructor, expertise in information and communication technology and proficiency in their academic specialty. Moreover, in an extension program, the extension worker is the most essential feature towards success or otherwise. In other words, the most important and valuable personnel in extension programs are the extension workers and farmers leaders. As such, their competencies needs have to be treated with utmost priority in any training activity, the aforementioned can be achieved through designing an evaluation mechanism that will ascertain the competency needs individually, in terms of skills, knowledge and attitudes (May, 1997).

The importance of the leadership competencies has become widely acknowledged as explanations of personnel and organizational performance in the various employment sectors. In the context of agriculture extension organization, leadership competencies are needed to coordinate human, capital and material resources required to accomplish the goals of agriculture extension services, the competencies required of extension leaders are a critically important matter (Jokinen, 2005). Borman and Motowidlo

(1993) stated that knowledge, skills, attitude and abilities are the important human characteristics needed for carrying out task activities.

A competencies needs assessment tool that will identify special and general needs should be employed, so that a holistic competency approach can be used to provide the necessary requirements. The competency of extension leaders is inessential for the survival of the whole extension program, leaders should have competencies to be successful and mature leader, these competences are knowledge, attitude, skill, practices (Karbasioun & Harm, 2007).

In the case of knowledge, there is a strong connection that has to be properly explored between the leaders decisions and the acquiring and use of knowledge (Bryant, 2003; Lakshman, 2005). The process of knowledge saving demands from a leader to have skills for networking, to be a team leader, to be charismatic and to have capability of a transformational leader (Mcdermott & O'dell, 2001).

For attitude, we can relate attitude with human behaviors. Attitude is the mediator between stimuli and responses. Having the right attitude towards life is vital, if we want to see leadership success, the attitude of a leader has a huge impact on the culture and environment of an organization and can make a huge difference. The leader's attitude tends to spread and affect others drastically (Wong and Law, 2002).

Effective leaders must have the skills to achieve the successful coordination of human resources and material resources to be able to achieve the ultimate goal of agricultural extension programmes. The competencies required of farmers leaders are a critically important matter. More so, the skills approach suggests that leadership abilities can be developed, whereas traits are more inherent in an individual. This approach is most prominent in leadership development programs that focus on identifying specific competencies that are important in a leadership setting (Bryman, 2004).

For practices, some research seems to suggest leadership practice should reflect a set of attributes and style that define the leadership practices as various characteristics concerning the way in which one leads. This is the style and beliefs leaders have established for themselves and implemented among their followers (Du Plessis, 2008).

Competencies components for effective and mature extension leadership include a leader's ability to encourage farm leaders, to provide support for fellow farmers, to plan well, to have knowledge of his organisation, to have personal communication skills to be able to solve the conflict among the farming community (Karbasioun & Harm, 2007).

Maturity is the important element to make the extension leaders in performance well especially in Muda area. Lack of knowledge is one of the problem may occurred in low

maturity among farmers leaders. They only depend on the information that they got during previous study. They did not have self-awareness to improve their knowledge through internet, magazine, newspaper or other media. These problems will lead them to have no advance or new information based on their profession (Avant, Rice & Copeland, 2013).

Low in communication skills also make them afraid to give a talk in front of people. Farmers leaders needs better communication skills because most of them are need to give advice or delivered the information to the farmers. Some of the method is through the program or event that invited all the farmers and need extension leaders to give a talk. Without better communication skills the farmers cannot understand very well about the content of talk. Therefore, the new information are failed to be delivered to the farmers (Flora & Flora, 2008).

Lack of training program also can make the maturity level low. Training program is important to help the leaders in planning their method to deliver the information and to make them understand well what their functions in the agency organization. Attending of training program will make them better in their skills and their critical thinking in all situation of problem facing. Other problem is lack of farmers leaders discipline such as absence without permission, work without quality, missing during work time etc. All of these will lead to the negative effect and bad perceptive to the agency by all stakeholders especially farmers(Green & Haines, 2007).

Other than that, according to the FAO (2006), farmers leaders are faced with high and very complex demand because of new trends in agriculture, health, industry and cooperatives that are directly related to other socio-demographic factors, such as; age, population, gender and environmental issues.farmers leaders in greenry area are facing lack of funds was a major challenge faced by community leaders in the course of achieving a successful community development project in spite of this set up, they were not provided with fix financial resources, these have limited their ability to organize social-activities, to be less dependent on the government subsidies. The workshop, training that has been provided for farmers leaders from agiencs still not adequate, not all farmers leaders have chance to attend training or course that come from agensies. Furthermore, farmers leaders face lack of ideas for rural community development the participants discuss inability of farmers leaders to generate ideas for planning and development of their followers. This is due to several factors such as low level educations among their leaders, lack of support from development authorities, and most of the farmers leaders are old.

Therefore,the said development has had important effects for the formulation of this study. maturity level of leader is essential and important in the rural areas. The rural leaders have to know how to apply leadership principles from the point that leads the manpower employed and lead the organization to achieve main goals (Balsanelli, Cunha& Whitaker, 2008).There is still very limited number of researcher focusing on maturity level of leaders coming. Thus, this study seeks to understand the maturity

level among paddy farming leaders on paddy farming technologies in the Muda area in Malaysia, which is the focus of this research. Drawing from the foregoing discussions, the following section highlights the problem statement of the study.

1.3 Problem Statement

In every local society, there are some members who have some authoritative powers. In developing countries such as Malaysia, rural people have been depending on extension workers and rural leaders for technical advice and information. The success of extension programs will be determined to a large degree by the ability of the extension worker and farmers leaders to be qualified and competent since the whole extension process is dependent on them to disseminate innovations and technical advice to the rural people (Tiraieyari, 2009).

In the field of agricultural extension, leadership has critical strategic importance since it deals with developing groups of farmers to be leaders in their respective communities. It guides the extension education activities toward farmers as a group or individuals for the purpose of pursuing set goals and objectives within a particular situation by means of effective and efficient extension communication methodology (Ali et al., 2012).

Leadership is essential when it comes to innovation in the agricultural domain. Increased communication can occur between rural people involved with organizations and groups, which provide these services, results in increased implementation of innovative skills and ideas (Ahmad, Silong & Abbasiyannejad, 2015).

Rural leadership does make a difference to the performance of individuals, groups and organisations. It helps to build teams and generates pride in collective achievements. It brings about changes in people's attitudes and behaviour as a consequence of interaction between leaders and followers. Leadership is widely distributed. It shall not be wrong to say that it is almost impossible to have effective rural programme without involving rural leaders. They have to be involved in the programme from day one at planning stage. They are the one who will tell you how successful you will be in the programme implementation. They will give suggestions about how, where and what to change in the programme. They will be the ones who will explain in their own way to villagers about the benefits of the programme and also about what role they will play in the project (Bhagat, 2008; Malby, 2007)

In field of agriculture, there are two (2) types of leaders: 1) Opinion leaders; and 2) Implementation leaders, opinion leaders in a community, those who usually provide advice and information to other people and maintain a high level of credibility. According to Rogers (1995), opinion leadership is "the degree to which an individual is able to influence other individuals' attitudes or overt behavior informally in a desired way with relative frequency". Hence an opinion leader is the one who deals with the dissemination of ideas and the technical recommendations for the audience,

opinion leaders usually work to enhance the impact of their diffusion activities in a social system, they are typically more innovative than others. It can also be accomplished through implementation leaders in a democratic way, which may involve farmers in policy development, planning, implementation and evaluation of extension programs. Therefore, it is essential to realize the nature of leadership practices done by these leaders and see the ways in which leaders deal with farmers (Rogers, 2010 ; Rogers, 1995).

According to Rogers (2003), local leaders are those who behave in an informal manner which relatively influence others' behaviour and attitude. Since rural leadership plays a role in agricultural extension, the agricultural extension can work as a connection for two-stage processes: 1) The connection of central agricultural extension local with rural leaders; and 2) The connection of local leader with other farmers. Given that, leaders farmers represent key contacts between leaders of officials and their organizations. As they are considered based on the natural and real work extension agent, should be familiar and fully informed about the details of their mission of education.

Because farmers leaders are always vocal, intelligent, cosmopolitan, knowledgeable, and sometimes educated, their role in liaising between agencies of development and their communities stand out clearly, this dearth of extension workers indicate that many farmers are not reached and therefore not exposed to new innovations and technologies in agriculture. Since it will take years to produce the required number of extension workers, and no government can afford to employ the number needed for effective coverage of extension work in the rural communities, the only logical solution will be to utilize the services of farmers leaders to compliment and accomplish the rural development tasks (Tiraieyari, 2009).

It is essential that development agencies develop an instant rapport with rural leaders and show the true picture to them. The good leader tends to share decision making and share responsibility. The mature leader is visionary and is able to develop a shared vision with his followers (Peters et al., 2007).

For the leaders to carry their responsibilities effectively and to be more mature, they need to have certain competencies that can help them achieve success for their communities. Good leaders should be able to effectively perform his role and has to have specific competencies to qualify him perform (Drsquo et al., 2013).

Hence, maturity is a combination of factors: attitude, skills, learning, education; but it is also a matter of values: honesty, respect, humbleness, loyalty. Usually, when a leader lacks of maturity, he creates and participates in fraudulent or illegal situations that affect the followrs (Goleman, 1998).

Successful and mature leaders have positive personalities and strong interpersonal skills. They have a positive outlook and see the world in terms of challenges to be overcome, not obstacles that block their way. In addition, mature leaders are able to clearly communicate their vision, and generate and facilitate a process that helps that vision come to life. In reaching toward that vision, good and mature leaders are able to make decisions and delegate, and to make sure that when tasks or responsibilities are delegated, they are completed in a satisfactory way (Zaccaro, 2001).

Leaders may be involved in many tasks: the development of strategy, the articulation of ideas and philosophy, creation of image, decision making, managing of subordinates, conflict resolution and administration. Thus, leadership capabilities and leaders ability to drive initiatives that eventually are accepted by the community are important. The effective and successful leaders are value driven (Narayan, 1998). Therefore, leaders needed to continuously polish their talents as 'instructional experts', to enable them to guide their in overcoming the issues and making informed decisions that improve learning for all followers (Norazlinda Saad & Surendran Sankaran, 2013).

However, not all studies drew this conclusion as mentioned above. Although researches have been conducted on the effective and successful leader is consistent with previous studies such as (Nilvises, 1988; Mgbada and Agumagu, 2007; Kuponiyi, 2008; Boehm & Staples, 2008; Mohamad & Silong, 2010; Spendlove, 2007), which described roles, behaviors, interactions, characteristics and competencies associated with excellent leadership, There is inadequate knowledge regarding the maturity level of paddy farming leaders in Malaysia. An operational definition of leaders' maturity is the ability of the leader to demonstrate the skills, knowledge and experience to undertake the tasks expected from him, both in terms of the job that is required to be completed, or help and encourages the followers to perform to their optimum all the time. The paddy farming leaders in Muda Area are the person who should assist their local farmers to adopt new technologies, solve the problems, think the strategies and adaptation toward the socio economic changes, and has the potential to change the behavior of most of the members of the community, the leaders should influence them to adopt and practice the best technologies in their farming, so that they can improve their paddy productivity and increase their income. For these reasons, farmers leaders in study area play an important role in agricultural process and agricultural extension.

In this regard, the paddy farming leaders in the granary areas are facing some problems among these are the adoption of the technologies that had been transferred to them their knowledge and skill were perceived low because of lack of training needs from the agencies to leaders and lack of competence respectively. Therefore, their maturity level toward paddy farming technologies was perceived as low. As a result, they do not disseminate new information that they have on technological innovations to other farmers largely due to poor communication between the rural leaders and farmers (Ahmad et al., 2015). If the productivity farmers leaders remains low, then the delivery of information technology to farmers will be hampered, this also means that agricultural productivity will not increase as expected due to dissatisfaction of farmers

over the performance of farmers leaders in the field. Yet, there is a need to find out what the paddy farming leaders' maturity regards to paddy farming technologies in Muda area.

To be the best knowledge of this researcher, no studies have linked the maturity level of paddy farming leaders with level of knowledge, attitude, skill and practices in paddy farming technologies before. There is only level of knowledge or level of practices toward farming technologies related with characteristics of leader. Leadership competencies contribute to leaders professionalism in ensuring successful change in ability of extension leaders to lead others. This study attempt to integrated the situational leadership theory and Model of community capacity building as a theoritical framework to explain the concept of competences dimensions in relation to maturity level of paddy farming leaders. The situational leadership theory indicates that leaders should vary their approach based on the people they are leading, and the circumstances that surround the task at hand. Indeed, the Hersey-Blanchard Situational Leadership Theory is one that is based around variable leadership, depending on a variety of circumstances. based on this theory a leader should be able to adapt to the situation as quickly as possible depend on his ability and competencies that he have, this mean leader is effective and mature. Specifically, this theory has to do with the maturity of those who are being led. To those who have working as leaders, it is no surprise that maturity should be considered when working on finding the right leadership style, and for the community capacity building is planned to achieve effective community development goal. Hence, the change agents such as the farmers leaders can play their part to develop, sharpen and strengthen the community capacities. Therefore, it is interesting to clarify the maturity level of respondents as paddy farming's leader. This research intends to contribute to the existing literature by providing an empirical analysis to detect the possibility of the maturity of paddy farming leaders point of view. The following are the research questions that guide this study:

1.4 Research Questions

This research aims to answer the following research questions:

- 1) What is the level of knowledge, attitude, skill and practices of paddy farming leaders in paddy farming technologies?
- 2) What is the maturity level of paddy farming leaders in paddy farming technologies in Muda Area?
- 3) What is the relationship between level of knowledge, attitude, skill and practices in paddy farming technologies with maturity level of paddy farming leaders in paddy farming technologies?
- 4) What are the most contributing factors to paddy farming leaders' maturity level in paddy farming technologies?

1.5 Objectives of Study

The general objective of this study is determine the level of maturity among the paddy farming leaders' in paddy farming technologies in the Muda Area, Malaysia.

The specific objectives of this research are:

- 1) To examine the maturity level of respondents in paddy farming technologies.
- 2) To identify the respondents' level of knowledge, attitude, skill and practices in paddy farming technologies.
- 3) To determine the relationship between respondents' level of knowledge, attitude, skill and practices in paddy farming technologies with maturity level of respondents in paddy farming technologies.
- 4) To identify the most important contributory factors to paddy farming leaders' maturity level in paddy farming technologies.

1.6 Hypothesis of the Study

Based on the research objectives outline in chapter one the following research hypotheses were proposed:

H1: There is a significant relationship between respondents' level of knowledge, attitude, skill and practices with respondents' maturity level in paddy farming technologies. (Hypothesis 1 is further divided into sub-hypothesis labeled as H1a to H1d) as follows:

H1a. There is a significant relationship between respondents' knowledge towards paddy farming technologies and maturity level in paddy farming technologies of the respondents.

H1b. There is a significant relationship between respondents' attitude towards paddy farming technologies and maturity level in paddy farming technologies of the respondents.

H1c. There is a significant relationship between respondents' skill towards paddy farming technologies and maturity level in paddy farming technologies of the respondents.

H1d. There is a significant relationship between respondents' practices towards paddy farming technologies and maturity level in paddy farming technologies of the respondents.

H2: the independent variables (knowledge, attitude, skill, practices) are significant when regressed against the dependent variable (maturity level of paddy farming leaders in paddy farming technologies). (Hypothesis HA is further divided into sub-hypotheses labeled as HA1 to HA4) as follows:

H2a: knowledge is a significant predictor of maturity in paddy farming technologies among paddy farming leaders.

H2b: attitude is a significant predictor of maturity in paddy farming technologies among paddy farming leaders.

H2c: skill is a significant predictor of maturity in paddy farming technologies among paddy farming leaders.

H2d: practices is a significant predictor of maturity in paddy farming technologies among paddy farming leaders.

1.7 Significance of the Study

Since extension leaders are the middle men, it is important to have a competent and well trained extension leaders in order to ensure the research findings or technical outputs from research agencies like Malaysian Agricultural Research and Development Institute (MARDI) and Department of Agriculture (DOA) reach the target groups. Extension leaders should have competencies to achieve to goals and at the end to be mature leaders. Therefore, the study is done in order to find the influence of leadership competencies on maturity of paddy farming leaders in MADA. Results of this study can be used by the extension agent in MADA as a guide for future planning in order to reach their targets.

In line with the above explanation this study is significant for new knowledge in the field of agricultural extension, policy making and improving implementation of practices as shown below:

1.7.1 Theoretical Significance

As has been shown by many researchers, Situational Leadership Theory (SLT) is the most suitable theory to explain the maturity level of paddy farming leaders, but they have also found a need to adapt SLT to some extent to overcome the gaps and weaknesses with some other theory to relate some of the variables that are considered significant in explaining the maturity level of paddy farming leaders in paddy farming technologies. Along these lines, this current study adopts SLT as the main theory and complements it with the community capacity building to explain the competences as independent variables. Developing community capacity means improving the quality of the individuals, groups, community members and also their organisation. The finding has also encouraged a fresh look at the implementation rural leadership

programmes aimed at successful change in on a personal level leaders and therefore this change affects their performance and through their dealings with followers.

1.7.2 Policy Significance

The most important is this study could help increase their adaptability and change their mindset toward paddy farming. The results also can be used by policy makers and agricultural agencies to formulate plans and strategies to ensure the development of paddy farming leaders in major granary area specifically in Muda Area and generally in Malaysia to stabilize and support food security.

The benefit of study result to:

- 1) The policy makers
- 2) Government agencies relate to paddy farming
- 3) The discipline of knowledge (leadership theory)
- 4) Practical (farmers)

1.7.3 Practical Significance

This study focused on the paddy farming leaders in the major granary areas of Muda Area, which is one of the paddy farming areas contributing to the nation food self-sufficiency level. The result of this study provided valuable information on paddy farming leaders in Muda Area regarding their socio-economic factors and their perception towards maturity level of farmers leaders on paddy farming technologies. From this study, paddy farming leaders are expected to get familiarized with the difficulties that paddy farmers may face while adopting agricultural technologies and the best possible solution towards facilitating their adoption of paddy farming technologies and the necessary farm management techniques. In other words, this study was conducted to fill the gap in knowledge in the field of leadership in agricultural extension in study area. Parallel to this, findings obtained from this study is envisaged to help facilitate and enhance increasing adoption and implementation of paddy farming technologies.

1.8 Scope of the study

This study is concerned on maturity level of paddy farming leaders in muda area in Malaysia. This study has focused on the situational leadership theory for explain the maturity level of respondents as dependent variable, and use community capacity building to explain the competences which is the variables (Knowledge, Attitude Skill and Practices) as independent variables in this study.

This study has pioneered research in the measurement of leadership maturity, the first of its kind, in study area, maturity of leaders is a critical component in leadership. The findings of the maturity of paddy farming leaders will also benefit farmers leaders practitioners in any programme and activities that come from agencies to improve their ability to be rural leaders.

Furthermore, a search of literature revealed that there is not much study about maturity level of paddy farming leaders especially when it comes to the relationship between the influence of competences and maturity level of paddy farming leaders. There has been no reliable evidence concerning the relationship as mentioned above.

1.9 Limitation of the Study

Coherent to the research questions, this section highlights limitations of this study as illustrated below:

Just like every other study, this study is not without limitations, which is similar to other research to experience limitations. The present study is also subjected to a number of limitations. Results may be limited and different from those researches for other extension leaders with different background or agencies. There were some limitations during data collection because this study attempted to capture the relative issues using primary data, which was collected from survey questions. Some of the weaknesses of the data collection were difficulties in respondents to answer, long questionnaire, different interpretations among respondents and their sincerity in answering.

The limitation primarily was related to misinterpretation of the statements in the questionnaire as enumerators faced difficulties in communicating with the respondents. This was probably due to difficulty in comprehending the content of the questionnaires, which may have been due to different competency level in their comprehension. The second limitation was related to the number of the paddy farming leaders, in this study the respondents was just from MADA, due to difficulty to cover all the rural leaders in all Malaysia. The results of this research were limited to the accessible samples in the agricultural extension services only. It could not be generalized to other employees in other community development organizations in the country.

1.10 Definition of Key Terms

Conceptual and operational definition of terms as used in this study are as follows:

1.10.1 Operational Definition

Maturity of Paddy Farming Leaders: The leader has the ability essential to effective leadership in paddy farming technologies and guide other farmers towards the target objectives. The level of maturity was calculated based on total minimum and maximum values score which divided into 3 levels (low, moderate and high).

Leadership Competencies: paddy farming leaders can lead others farmers in paddy farming technologies using their knowledge, values, ability or skills and behavior to deal with community issues; to resolve problems in community; and to be able to communicate effectively with farmers in study area.

Knowledge: paddy farming leaders have fully information to improve agricultural production and setting the direction for knowledge and driving it forward. in paddy farming in Muda Area. The level of knowledge was calculated based on total minimum and maximum values score which divided into 3 levels (low, moderate and high).

Attitude: are a personality, beliefs, values, behaviors, and motivations of paddy farming leaders and is the way they can have great attitude, must constantly be aware of the things that are influencing others in study area. The level of attitude was calculated based on total minimum and maximum values score which divided into 3 levels (low, moderate and high).

Skill: an ability of paddy farming leaders to implement good agriculture practices linking increased production in paddy farming technologies in Muda Area. The level of skill was calculated based on total minimum and maximum values score which divided into 3 levels (low, moderate and high).

Practices: is a formidable collection of patterned actions that draw on a set of skills, knowledge and attitudes that paddy farming leaders must possess to be effective in assigned leadership duties in their field. The level of practices was calculated based on total minimum and maximum values score which divided into 3 levels (low, moderate and high).

Paddy Farming Leader: the person under block or unit in Muda Area he has skills and abilities to guide others and help them if they face any problems in paddy farming technologies and has the potential to change and affect the behavior of most of the farmers in study area.

Leadership: Leadership is the act of influencing people in order to achieve some desirable goals.

1.10.2 Conceptual Definition

Maturity of leader: is a leader's ability to engage consistently with him or herself, others and the world by being it demands the ability to render wise judgments about what is appropriate in different settings and constructive contributions are made, and something meaningful and value adding emerges (Goleman, 1998).

Leadership Competencies: is knowledge, values, ability or skills and behavior to deal with community issues; to resolve problems in community; and to be able to communicate effectively with others and relevant stakeholders (Flowers & Waddell, 2004).

Knowledge: knowledge is basically an understanding of information and their associated patterns is the development of intellectual skills, expertise and skills gained from experience and education (Bierly et al., 2000).

Attitude: is a concept regarding believe by someone on emotional reaction towards predisposition to respond in a favorable and unfavorable manner with respect to a given matter (Oskamp and Schultz, 2005).

Skill: is an encouragement towards knowledge, understanding and skill where it comes from learning experience in order to give the impact towards job performance (Carmeli & Weisberg, 2006).

Practices: are about behavior an observable set of skills and abilities. these Practices uses from leaders to transform values into actions, visions into realities, when they deal with followers in diffrent situations(Owen, Culbertson & Mink, 2011).

Leadership: is "the act of imparting purpose to an organization as well as motivating and sustaining effort in pursuit of that purpose". (Knapp et al., 2003).

1.11 Thesis Organization

This section deals with how the thesis is organized. The thesis consists of five (5) chapters relating to different sections of the research. The introduction in Chapter 1 gives a broad backround of the study. It also provides the problem statement, of the study objectives, research questions and the significance of the study. Chapter 2 is a comprehensive review of the literature relatede to the study, while Chapter 3 discusses the sample and sampling procedures, and the methods used in the data collection and

data analysis. Chapter 4 explains the obtained results followed by analysis and interpretation of the data. Finally, Chapter 5 summarises the main research findings and provides suggestions for further research in this area. This is followed by concluding remarks, and the contributions of the study.



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