



**UNIVERSITI PUTRA MALAYSIA**

**TRAINING NEEDS OF MADA'S ASSISTANT AGRICULTURE OFFICERS  
(AAO)**

**KHALIL ABDULLAH**

**FP 2016 67**

**TRAINING NEEDS OF MADA'S ASSISTANT AGRICULTURE OFFICERS**

**(AAO)**

**By**

**KHALIL BIN ABDULLAH**

**167520**

A project report submitted to Faculty of Agriculture, Universiti Putra Malaysia, in fulfillment of the requirement of PAPER PROJECT (PRT4999) for the award of the degree of BACHELOR of AGRICULTURAL SCIENCE

**Faculty of Agriculture**

**Universiti Putra Malaysia**

**2015/2016**

## REPORT'S DECLARATION FORM

This project paper entitled "Training Needs of MADA's Assistant Agriculture Officers." Prepared by Khalil bin Abdullah and submitted to the Faculty of Agriculture in partial fulfillment of the requirement of PRT4999 which is Final Year Project in purpose to achieve award of the degree of Bachelor of Agricultural Science is based on my own original works.

Student's name:

Khalil bin Abdullah

Student's signature:

Certified by:

Associate Professor Dr. Norsida Man

Department of Agriculture Technology,

Faculty of Agriculture,

Universiti Putra Malaysia

Date: \_\_\_\_\_

## ACKNOWLEDGEMENT

First of all, thanks to Allah SWT and His Messenger, Muhammad SAW, without His will, I could not finish my final year project at last.

The completion of this project paper would not be possible without helps and supports from several people. I would like to thank to my supervisors, Associate Professor Dr. Norsida Man for her time and effort given in ensuring that my project paper was executed as planned. Without her critical feedback, patience, and tireless effort in guiding me throughout this survey, I would not be able to complete this study as schedule. Besides, I am very much appreciative of her time spent in reviewing my works during the process of writing this project paper.

Special thanks to my parents; my father, Abdullah bin Ahmad and my mother, Hajarah binti Yahya for their helps and supports to ensure my study to be completed.

Always to be in my heart, thanks to master's student and Department of Agriculture Technology for their generous help in guiding me towards the completion of this study. Without their assistance, I could not finish my research project.

Last but not least, I want to say thank you to all my friends in the Faculty of Agriculture for their suggestion, helps and sincere friendships.

## ABSTRACT

Rice is a staple food of Malaysia and rice industry is considered as a strategic industry which always gets special attention from the government. The industry is seriously regulated because of its social, political and economic importance. In 2009, apart from being the main source of food, it also provides the livelihood to 172,000 paddy farmers in the country. The rice production in Malaysia still below self-sufficiency level (SSL) which is about 72%. Over decades, a policy after a policy has been introduced by the government to improve the rice production. Because of that, a few authorities like Muda Agricultural Development Authority (MADA) were established just to focus on rice farming development. MADA also responsible as an extension agency which educates Muda's farmers in managing their farm through their agriculture officers and disseminates the technology and information to them. This study was conducted to examine the training needs of Muda Agricultural Development Authority (MADA) officers in increasing their competency. The special objectives of this study were to examine the training need of MADA officers and to identify the relationship between the respondent's demographic profile and training need. The questionnaires were designed and distributed to selected 163 respondents among agriculture officers. The respondents are focused on Assistant Agriculture Officer's (AAO). The data were analyzed using Statistical Package for Social Science (SPSS) for the descriptive, ANOVA data and Borich Need Assessment. The respondents were found to have training needs in rank. The most important was selected and shown by the highest mean and the least important was shown by the lowest mean. Training needs selected from most preferred to the least preferred as follow, technical: non rice (4.40), development (4.23), language (4.23),

farming practical (4.14), ICT (4.11), machinery (4.03), communication (3.92), demonstration method (3.91), motivation (3.91), farm visit (3.89), farm management (3.88), organization management (3.85), technical: non-rice (3.74), agricultural marketing (3.74), leadership (3.71), business (3.71), entrepreneurship (3.56), industry (3.54), drainage and irrigation management (3.54), agribusiness (3.51), civics (3.40) and foundation (3.33). Next, found that some training needs were needed by some AAOs of MADA, and some training needs were needed by some AAOs of MADA, while some training needs were not needed by AAOs. Found that technical: non-rice and machinery have significant difference between genders at 0.05 level of significance. The others 20 training needs there are no significant different between genders. Technical: non-rice is preferred by female with mean of 4.150. Next, machinery is more preferred by male by mean of 4.146. Furthermore, found that there are at least significant difference on demonstration method and agricultural marketing between years of experienced at 0.05 level of significance. The others 20 training needs there are no significant different between years of experienced. Demonstration method and agricultural marketing are more chose by those are have experienced more than 4 years. In conclusion, training needs should be done due to what have been selected by the respondents of AAOs of MADA in ranking from most preferred to the least preferred which are technical: rice, development, language, farming practical, ICT, machinery, communication, demonstration method, motivation, farm visit, farm management, organization management, technical: non-rice, agricultural marketing, leadership, business, entrepreneurship, industry, drainage and irrigation management, agribusiness, civics and foundation. The first listed should give more focus and last should be give less focus. The recommendation is among those 22 training needs 4 of them should be done

separated training based on gender and years of experiences for cut cost and increase efficiency. Training on technical: non-rice and machinery can be separated based on gender which is training of technical: non-rice should be focused on by female and machinery should be focused male. Furthermore, demonstration method and agricultural marketing can be separated based on years of experiences which are demonstration method and agricultural marketing trainings should be focused on AAOs that have experiences more than 4 years working in MADA.



## ABSTRAK

Beras adalah makanan ruji rakyat Malaysia dan industri beras telah dianggap sebagai industri yang penting dan sentiasa mendapat layanan istimewa daripada kerajaan. Industri ini banyak dikawal selia kerana kepentingan politik dan ekonomi sosial. Pada tahun 2009, industri ini telah menyediakan sumber pendapatan untuk 172,000 petani padi dalam negara. Seterusnya, pengeluaran padi Malaysia masih di tahap rendah sara diri (SSL) iaitu kira-kira 72%. Selama beberapa dekad, dasar demi dasar telah diperkenalkan oleh kerajaan untuk meningkatkan pengeluaran beras di Malaysia. Oleh kerana itu, Lembaga Kemajuan Pertanian Muda (MADA) telah ditubuhkan semata-mata untuk memberi tumpuan kepada kemajuan padi negara. MADA juga bertindak sebagai agensi pengembangan dalam mendidik petani Muda dalam menguruskan sawah, menyebarkan teknologi dan maklumat. Kajian ini dijalankan bagi mengkaji keperluan latihan Penolong Pegawai Pertanian (AAO) di Lembaga Kemajuan Pertanian Muda (MADA) dalam meningkatkan kecekapan mereka. Objektif khusus kajian ini adalah mengkaji keperluan latihan pegawai MADA dan mengenal pasti hubungan antara profil demografi dan keperluan latihannya. Soalan kaji selidik dibentuk dan diedarkan kepada 163 responden yang dipilih. Tumpuan kaji selidik adalah kepada Penolong Pegawai Pertanian (AAO). Data kemudiannya dianalisis dengan menggunakan Pakej Statistik untuk Sains Sosial (SPSS). Keperluan latihan yang dipilih ditunjukkan dalam nilai min. Keperluan latihan yang paling penting telah dipilih dan ditunjukkan oleh min yang paling tinggi dan yang kurang penting telah ditunjukkan oleh min yang paling rendah. Keperluan latihan terpilih adalah seperti berikut mengikut daripada pilihan paling banyak sehingga pilihan paling kurang dipilih. Pilihan pertama adalah, teknikal: padi (4.40),



pengembangan (4.23), bahasa (4.23), praktikal ladang (4.14), ict (4.11), kejenteraan (4.03), komunikasi (3.92), demonstrasi kaedah (3.91), motivasi (3.91), lawatan ladang (3.89), pengurusan ladang (3.88), pengurusan organisasi (3.85), teknikal: bukan padi (3.74), pemasaran pertanian (3.74), kepimpinan (3.71), perniagaan (3.71), keusahawanan (3.56), perindustrian (3.54), pengurusan saluran dan pengairan (3.54), perniagaantani (3.51), tatanegara (3.40) dan dasar (3.33). Seterusnya, didapati bahawa sesetengah keperluan latihan diperlukan oleh beberapa AAO MADA, manakala beberapa keperluan latihan tidak diperlukan oleh AAOs. Hasil kajian menunjukkan teknikal: bukan beras dan kejenteraan mempunyai pilihan yang berbeza antara jantina. Manakala 20 keperluan latihan yang lain tidak ada perbezaan yang ketara antara jantina. Teknikal: bukan beras lebih disukai oleh wanita dengan min 4.150. Seterusnya, jentera adalah lebih disukai oleh lelaki dengan min 4.146. Tambahan pula, didapati bahawa terdapat sekurang-kurangnya ada perbezaan pada kaedah demonstrasi dan pemasaran pertanian antara tahun pengalaman. 20 keperluan latihan yang lain tidak mempunyai perbezaan yang ketara di antara tahun pengalaman. Kaedah demonstrasi dan pemasaran pertanian lebih dipilih oleh mereka yang berpengalaman lebih daripada 4 tahun. Kesimpulannya, hasil kajian mendapati bahawa keperluan latihan yang telah dipilih oleh Penolong Pegawai Pertanian adalah seperti dalam susunan berikut. Susunan adalah mengikut dari paling banyak dipilih kepada yang paling kurang dipilih adalah teknikal: padi, pembangunan, bahasa, praktikal pertanian, ICT, jentera, komunikasi, kaedah demonstrasi, motivasi, lawatan ladang, pengurusan ladang, pengurusan organisasi, teknikal: bukan padi, pemasaran pertanian, kepimpinan, perniagaan, keusahawanan, industri, pengurusan parit dan pengairan, perniagaan tani, sivik dan dasar. Keperluan latihan yang tersenarai pertama perlu diberi perhatian lebih manakala keperluan latihan yang keluar terakhir

hanya memerlukan perhatian yang kurang. Cadangannya adalah di antara semua 22 keperluan latihan 4 daripadanya perlu dilakukan latihan yang berasingan berdasarkan jantina dan pengalaman untuk menjimatkan kos dan meningkatkan kecekapan. Iaitu, latihan teknikal: bukan padi dan jentera perlu dipisahkan mengikut jantina iaitu latihan teknikal: bukan padi perlu diberi tumpuan kepada perempuan dan jentera perlu diberi tumpuan kepada lelaki. Tambahan pula, kaedah demonstrasi dan pemasaran pertanian boleh dipisahkan berdasarkan pengalaman iaitu kaedah demonstrasi dan latihan pemasaran pertanian perlu diberi tumpuan kepada Penolong Pegawai Pertanian MADA yang mempunyai pengalaman kerja lebih daripada 4 tahun.

## TABLE OF CONTENT

<b>ACKNOWLEDGMENT</b>	<b>I</b>
<b>ABSTRACT</b>	<b>II</b>
<b>TABLE OF CONTENTS</b>	<b>VI</b>
<b>LIST OF TABLES</b>	<b>IX</b>
<b>LIST OF FIGURES</b>	<b>X</b>
<b>Chapter 1</b>	
<b>1.0 Introduction</b>	<b>1</b>
<b>1.1 Paddy Farming in Malaysia</b>	<b>1</b>
<b>1.2 Paddy Farming in Muda Area</b>	<b>5</b>
<b>1.3 Muda Agriculture Development Authority (MADA)</b>	<b>7</b>
<b>1.4 Agriculture Officers in MADA</b>	<b>8</b>
<b>1.5 Training Needs Assessment</b>	<b>12</b>
<b>1.6 Problem Statement</b>	<b>13</b>
<b>1.7 Study Objective</b>	
<b>1.7.1 General Objective</b>	<b>14</b>
<b>1.7.2 Specific Objectives</b>	<b>14</b>
<b>1.8 Significant of Study</b>	<b>14</b>
<b>1.9 Thesis Organization</b>	<b>15</b>
<b>Chapter 2</b>	
<b>2.0 Introduction</b>	<b>17</b>
<b>2.1 Agricultural Extension</b>	<b>17</b>
<b>2.2 Training Needs and Agriculture Extension</b>	<b>18</b>
<b>2.3 Theory of Training Needs</b>	<b>21</b>
<b>2.4 Summary</b>	<b>23</b>
<b>Chapter 3</b>	
<b>3.0 Introduction</b>	<b>24</b>
<b>3.1 Location of Study</b>	<b>24</b>

<b>3.2 Respondents Selection</b>	<b>25</b>
<b>3.3 Source of Information</b>	<b>26</b>
<b>3.4 Questionnaire Design</b>	<b>26</b>
<b>3.5 Data Analysis Techniques</b>	
<b>3.5.1 Descriptive Analysis</b>	<b>27</b>
<b>3.5.2 Anova Analysis</b>	<b>27</b>
<b>3.5.3 Borich Assessment</b>	<b>28</b>
<b>Chapter 4</b>	
<b>4.0 Introduction</b>	<b>30</b>
<b>4.1 Socio-Economic Profile of the Respondent</b>	
<b>4.1.1 Age, Gender, Religion, Marital Status, Education Level     and Job Position</b>	<b>30</b>
<b>4.1.2 Experiences in Different Disciplines</b>	<b>32</b>
<b>4.1.3 Experience Working in MADA</b>	<b>32</b>
<b>4.1.4 Working Experiences in MADA</b>	<b>33</b>
<b>4.2 Training Needs</b>	<b>33</b>
<b>4.2.1 The Courses That Have Been Attended</b>	<b>34</b>
<b>4.2.2 Training Needs and Effectiveness of Training Needs</b>	<b>35</b>
<b>4.2.3 Level of Training Needs</b>	<b>41</b>
<b>4.2.4 Level of Effectiveness of Training Needs</b>	<b>41</b>
<b>4.2.5 Training Preferences</b>	<b>42</b>
<b>4.2.6 Level of Training Preferences</b>	<b>44</b>
<b>4.3 Opinion on MADA</b>	<b>44</b>
<b>4.3.1 Opinion on the Position, Role, Importance and Needs of     Agricultural Development</b>	<b>45</b>
<b>4.3.2 Level of Currently Ranking of Position, Role, Importance     and Needs of Agricultural Development</b>	<b>50</b>
<b>4.3.3 Level of Ranking should Achieved in the Future on Position,     Role, Importance and Needs of Agricultural Development</b>	<b>50</b>
<b>4.3.4 Problems, Issues and Challenges as Agriculture     Extension Agents</b>	<b>51</b>
<b>4.4 Rank Order of Training Needs of Extension Agents (EA) based on the WDS Score</b>	<b>52</b>
<b>4.4.1 WDS for Ability as an Extension Agent in     Planning Extension Activities</b>	<b>52</b>

4.4.2 WDS for Ability as an Extension Agent in Implementing Extension Activities	53
4.4.3 WDS for Ability as an Extension Agent in Evaluating Extension Activities	54
4.4.4 WDS for Ability as an Extension Agent in Communication	55
4.4.5 WDS for Ability to be a Guidance	56
4.4.6 WDS for Ability as an Extension Agent in Farm Management	58
4.4.7 WDS for Ability of Skills in ICT	59
4.5 Comparison between Training Needs and Demographic Factors	60
4.5.1 Result of ANOVA for Training needs	61
Chapter 5	
5.0 Introduction	64
5.1 Summary and Conclusion	64
5.2 Recommendation	72
5.3 Research Limitation	73
References	74
Biodata of the Author	78

## LIST OF TABLES

<b>TABLE</b>	<b>TITLE</b>	<b>PAGES</b>
1	Table 1.0: Self-sufficiency Level of Rice in Malaysia	2
2	Table 1.1: List of MADA's Regional	7
3	Table 2.0: Training needs of extension agents (N=52)	19
4	Table 4.0: Profile of the Respondents (n=163)	31
5	Table 4.1: Experiences in Different Disciplines	32
6	Table 4.2: Experience Working in MADA	33
7	Table 4.3: Working Experiences in MADA	33
8	Table 4.4: The Courses That Have Been Attended	35
9	Table 4.5: Training Needs and Effectiveness of Training Needs	39
10	Table 4.6: Level of Training Needs	41
11	Table 4.7: Level of Effectiveness of Training Needs	41
12	Table 4.8: Training Preferences	43
13	Table 4.9: Level of Training Preferences	44
14	Table 4.10: Opinion on MADA	45
15	Table 4.11: Opinion on the Position, Role, Importance and Needs of Agricultural Development	48
16	Table 4.12: Level of Currently Ranking	50
17	Table 4.13: Level of Ranking should Achieved in The Future	50
18	Table 4.14: Problems, Issues and Challenges as an Agriculture Extension Agents	51
19	Table 4.15: Rank Order of Training Needs of EA based on the WDS score	52
20	Table 4.16: WDS for Ability as an Extension Agent in Planning Extension Activities	53
21	Table 4.17: WDS for Ability as an Extension Agent in Implementing Extension Activities	54
22	Table 4.18: WDS for Ability as an Extension Agent in Evaluating Extension Activities	55
23	Table 4.19: WDS for Ability as an Extension Agent in Communication	56
24	Table 4.20: WDS for Ability to be a Guidance	57
25	Table 4.21: WDS for Ability as an Extension Agent in Farm Management	59
26	Table 4.22: WDS for Ability of Skills in ICT	60
27	Table 4.23: Training Need based on Gender Perception	62
28	Table 4.24: Training Need based on Years of Experienced Perception	63

## LIST OF FIGURES

<b>FIGURE</b>	<b>TITLE</b>	<b>PAGES</b>
1	Figure 1.0: Granary Area of Rice in Malaysia	3
2	Figure 1.1: Malaysia Rice Production (X 1,000 mt.)	4
3	Figure 1.2: Malaysia Rice Yield per Capita	5
4	Figure 1.3: Locality Areas of MADA	6
5	Figure 1.4: Board of Directors	9
6	Figure 1.5: MADA Organization Chart	11
7	Figure 2.0: Schematic Pattern of Data Flows for Training Needs Assessment and Monitoring	22
8	Figure 3.0: Muda Area	25

# CHAPTER 1

## INTRODUCTION

### 1.0 Introduction

This chapter is used to discuss topics that are related to Muda Agricultural Development Authority (MADA) and rice industry in Malaysia. The problem statements, objective of study, significant of study and thesis organization were discussed in this chapter.

### 1.1 Paddy Farming in Malaysia

Rice is the primary food grain which has been consumed by almost half of the world's population. (Dowling et al., 1998). In Malaysia, it has been a staple food of the Malaysian community and the paddy/rice industry is considered as a strategic industry and always gets special treatment from the government. The industry is heavily regulated because of its social, political and economic importance. In 2009, apart from being the main source of food, it also provides the livelihood to 172,000 paddy farmers in the country (Ramli et al., 2012).

The harvested areas of rice in Malaysia have been fluctuated since 1990 which were 698,702 hectares to 688,207 hectares on 2013. Although, the harvested areas were decreased but average annual yield had consistently increased from 3.064 tons/hectare on 2000 to 3.820 tons/hectare in 2013. Thus self-sufficiency level shown an increased from 70% in 2000 to 73.3% in 2013 and the annual growth rate was



around 0.26%. However, the import of rice has increased from 526,200 tons to 876,100 tons on 2013. Because of due to increase in total consumption which has resulted from an increase in population government need to spend RM1.5 billion in 2013 than RM698.3 million for importing rice (Harun, 2015)

**Table 1.0: Self-sufficiency Level of Rice in Malaysia**

Master Plan/NAP	Period	Self-sufficiency level (SSL) target (%)	SSL achieved (%)
First Malaya plan	1956-1960	-	54.0
Second Malaya plan	1961-1965	-	60.0
First Malaysia plan	1966-1970	-	80.0
Second Malaysia plan	1971-1975	-	87.0
Third Malaysia plan	1976-1980	90	92.0
National agriculture plan I	1984-1991	65	75.9
Fourth Malaysia plan	1981-1985	65	76.5
Fifth Malaysia plan	1986-1990	65	75.0
Sixth Malaysia plan	1991-1995	65	76.3
National agriculture plan II	1992-2010	65	65.0
Seventh Malaysia plan	1996-2000	65	71.0
National agriculture plan III	1998-2010	65	71.0
Eighth Malaysia plan	2001-2005	65	71.0
Ninth Malaysia plan	2006-2010	65	72.0
National food security policy	2008	80 by 2010	72.0
New economic model	2010	85 by 2020	-
National agro-food policy	2011-2020	70 by 2012	-

Source: MOA 2012; (Fatimah *et al.*, 2010)

From the very first plan that have been introduced in First Malaya plan until Third Malaysia plan SSL have been increased from time to time until it reached to 92% SSL. However, SSL have been declining until National agricultural plan II about 65%. This percentage however is equal to SSL targeted on that plan. After new plan had been introduced, there was slightly increased about 6% more than targeted SSL. On 2008, National food security policy have been introduced and it SSL target is 80% but SSL achieved is about 72% on 2010.

There are eight (8) granary areas for production of rice and it is a strategically important commodity for food security in Malaysia. Rice is mainly cultivated by small farmers and is highly regulated and subsidized. As we all know that, rice is the third important crop in Malaysia after oil palm and rubber. Area for cultivation of rice is covering about 205,000 hectares in Peninsular Malaysia.



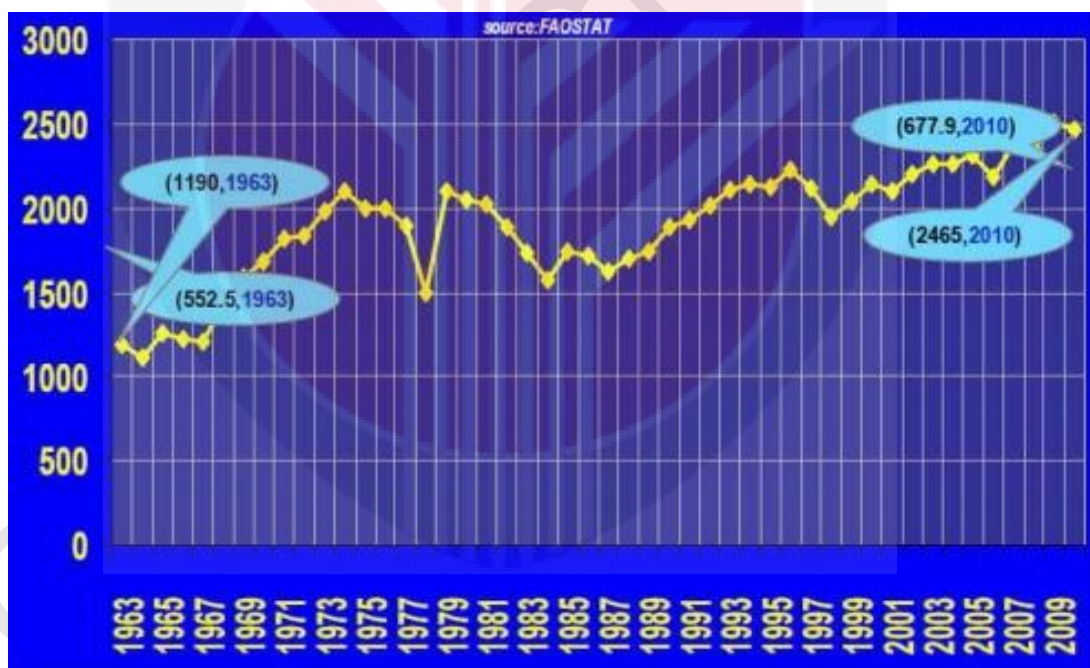
**Figure 1.0: Granary Area of Rice in Malaysia**

There are eight (8) granary areas in Malaysia shown in the picture above. So, the granary areas are follow in order numbers as stated in the picture are:

- 1) Muda Agricultural Development Authority
- 2) IADA Pulau Pinang
- 3) IADA Kerian Sg. Manik
- 4) IADA Seberang Perak
- 5) IADA Barat Laut Selangor

- 6) Kemubu Agricultural Development Authority
- 7) IADA Kemasin Semarak
- 8) IADA Ketara

Figure 1.1 shows that the rice production in Malaysia. In 2009 the production of rice is about 2.51 million metric tons. The rice production in 1963 was about 1.19 million metric ton. The average rice production shows an increasing 1.44% per year about 26,000 per year. Despite the efforts both the government and the farmers to boost the rice yield from year to year, Malaysia still needs to import about a million metric tons in 2010 from Thailand and Vietnam to feed the whole nation.



Source: FAOSTAT, 2009

**Figure 1.1: Malaysia Rice Production (X 1,000 mt.)**

Although Malaysia's rice production and productivity increase every year, but rice yield per capita shows steadily declined every year as shown in the figure 1.1. From

a high of 174.6 kg of rice yield per capita in 1974, it has fallen steadily to around 90 kg of rice yield per capita in 2010 as shown in Figure 1.2.



Source: FAOSTAT, 2009

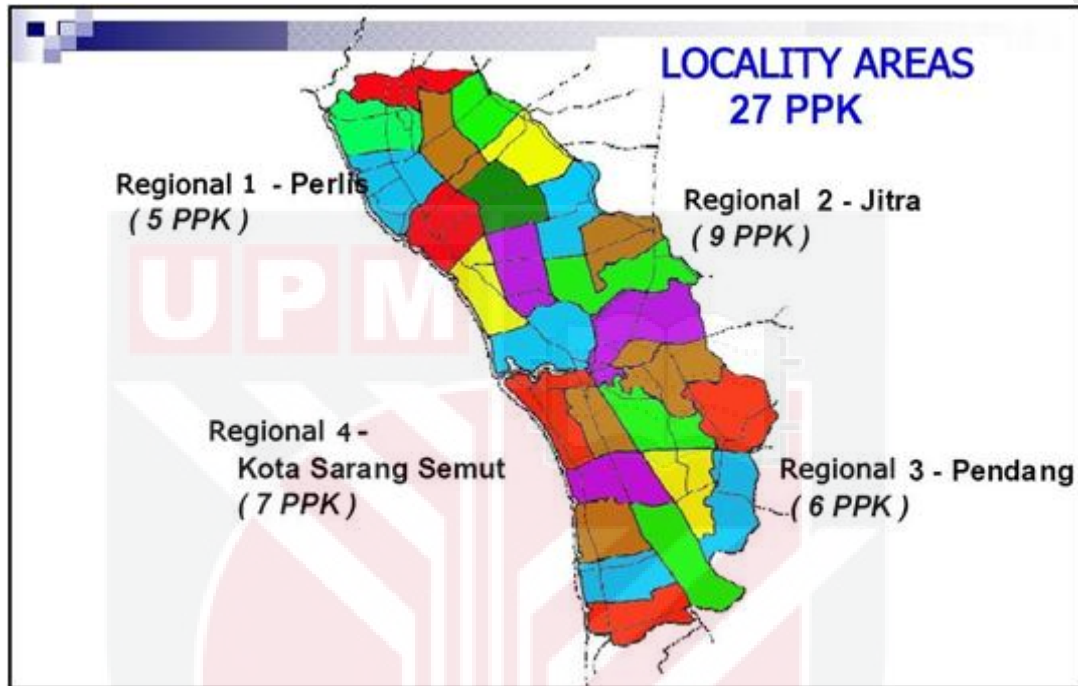
**Figure 1.2: Malaysia Rice Yield per Capita**

One of the issues in rice production is the dominance of small-scale farmers and the lack of industrial scale growers. The average paddy farm size in MADA was 2.12 acres. Besides that, Malaysia also faced with aging farmers where about 54.7% farmers are above than 55 years old is MADA.

## 1.2 Paddy Farming in Muda Area

Muda Agricultural Development Authority (MADA) is located in north Malaysia; where two states was involved which are Kedah and Perlis Indera Kayangan. MADA was established on June 1970 to develop the rice plantation in the Muda area. For

information, Muda area is the largest granary in Malaysia. It covers for 126,155 hectares and nearly 126,155 acres are used for paddy where Kedah is 105,851 acres and Perlis is 20,304 acres.



(Source: MADA 2009)

**Figure 1.3: Locality Areas of MADA**

Figure 1.3 shows that the locality area under the administration of MADA. This MADA covered by 27 Pertubuhan Peladang Kawasan (PPKs). This 27 PPKs then divided into four regions which are Regional 1, Regional 2, Regional 3 and Regional 4. Regional 1 that is located in Perlis is covered for 5 PPKs and Regional 2 that is located in Jitra are covered for 7 PPKs. In the other hand, Regional 3 is located in Pendang are covered for 6 PPKs and last region which is regional 4 is located in Kota Sarang Semut are covered for 7 PPKs. Each PPKs cover by all four region shown in the Table 1.1 below.

**Table 1.1: List of MADA's Regional**

<b>Area</b>	<b>Regional I</b>	<b>Regional II</b>	<b>Regional III</b>	<b>Regional IV</b>
A	Arau	Kokdiang	Hutan Kampong	Batas Paip
B	Kayang	Sanglang	Alor Senibong	Pengkalan Kundur
C	Kangar	Kerpan	Tajar	Kangkong
D	Tambun Tulang	Tunjang	Titi Hj Idris	Permatang Buluh
E	Simpang Empat	Kubang Sepat	Kobah	Bukit Besar
F		Jerlun	Pendang	Sg. Limau Dalam
G		Jitra		Guar Cempedak
F		Kepala Batas		
G		Kuala Sungai		

Source: Adapted from MADA 2015

For a few years, paddy was cultivated traditionally on North of Peninsular Malaysia. After, the establishment of MADA and their improvement in irrigation, paddy was now can be cultivated twice a year. First cultivation is in March until August and second cultivation on September until February the next year. MADA conducting three reservoirs where is Pedu, Muda and Ahning. These three reservoirs are used for irrigation.

### **1.3 Muda Agriculture Development Authority (MADA)**

MADA was established on 30 Jun 1970. MADA was born under an emergency decree with the initial Bahasa Malaysia name “Pihak Berkuasa Kemajuan Pertanian Muda”. Its inauguration was officiated by the late Tun Hj. Abdul Razak Hussien who was the acting Prime Minister of Malaysia as well as being acting Director of Operations in a ceremony at the Balai Besar Building in Alor Star, Kedah Darul Aman.

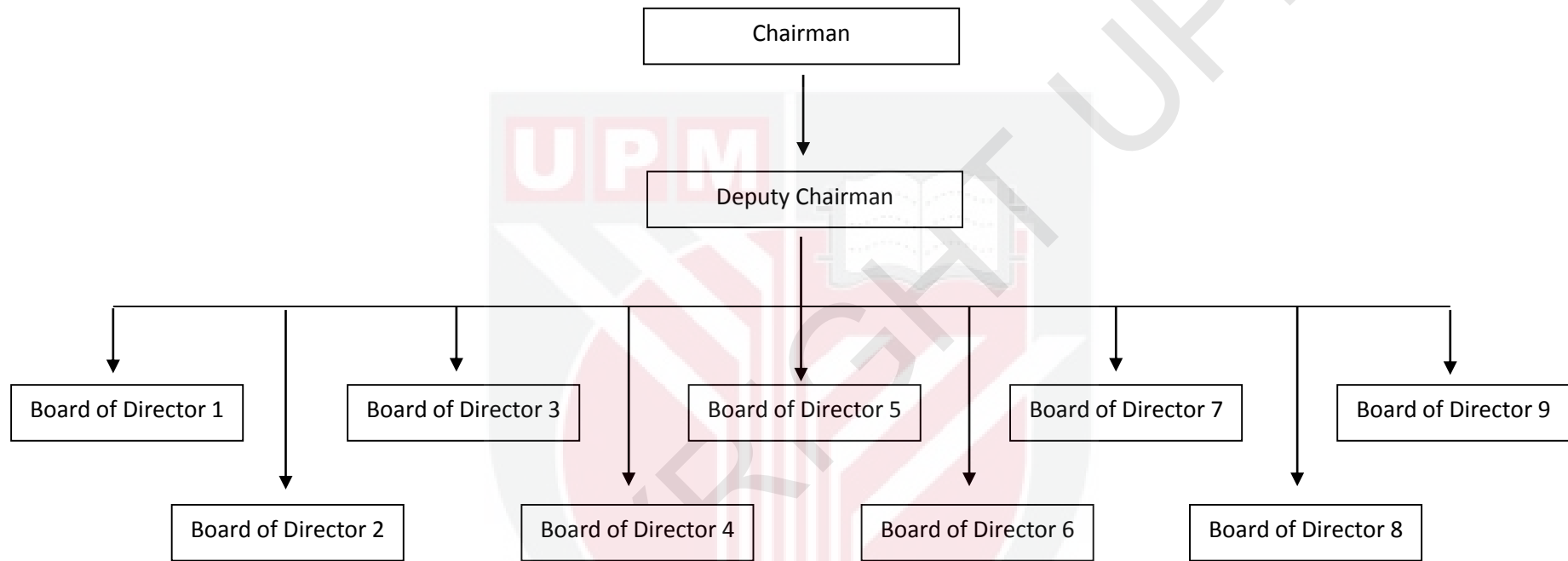
The formation of MADA was approved by parliament under Act No. 70, the Muda Agricultural Development Authority Act, 1972. Under this Act, the duties of MADA were outlined as to improve, encourage, assist and manage within the Muda area, and to plan and manage within the Muda area all agricultural development as assigned to it by the State Governments of Kedah and Perlis.

Two main objectives were set by MADA based on the aspects of human development and commodity. The first objective was to improve the socio-economic well-being of a large portion of the rural population. And the second objective was to increase the rice production for national requirements.

#### **1.4 Agriculture Officers in MADA**

MADA is a semi-autonomous responsible to the minister of Agriculture. It is governed by nine members of Directors. MADA first concern and responsible is to better up the economic and social well-being of the farmers.

Figure 1.4 shows the organization Board of Director of MADA. Based from the figure, the highest level of position is held by the Chairman. Chairman was helped by Deputy Chairman. After that, it is split to nine boards of directors.



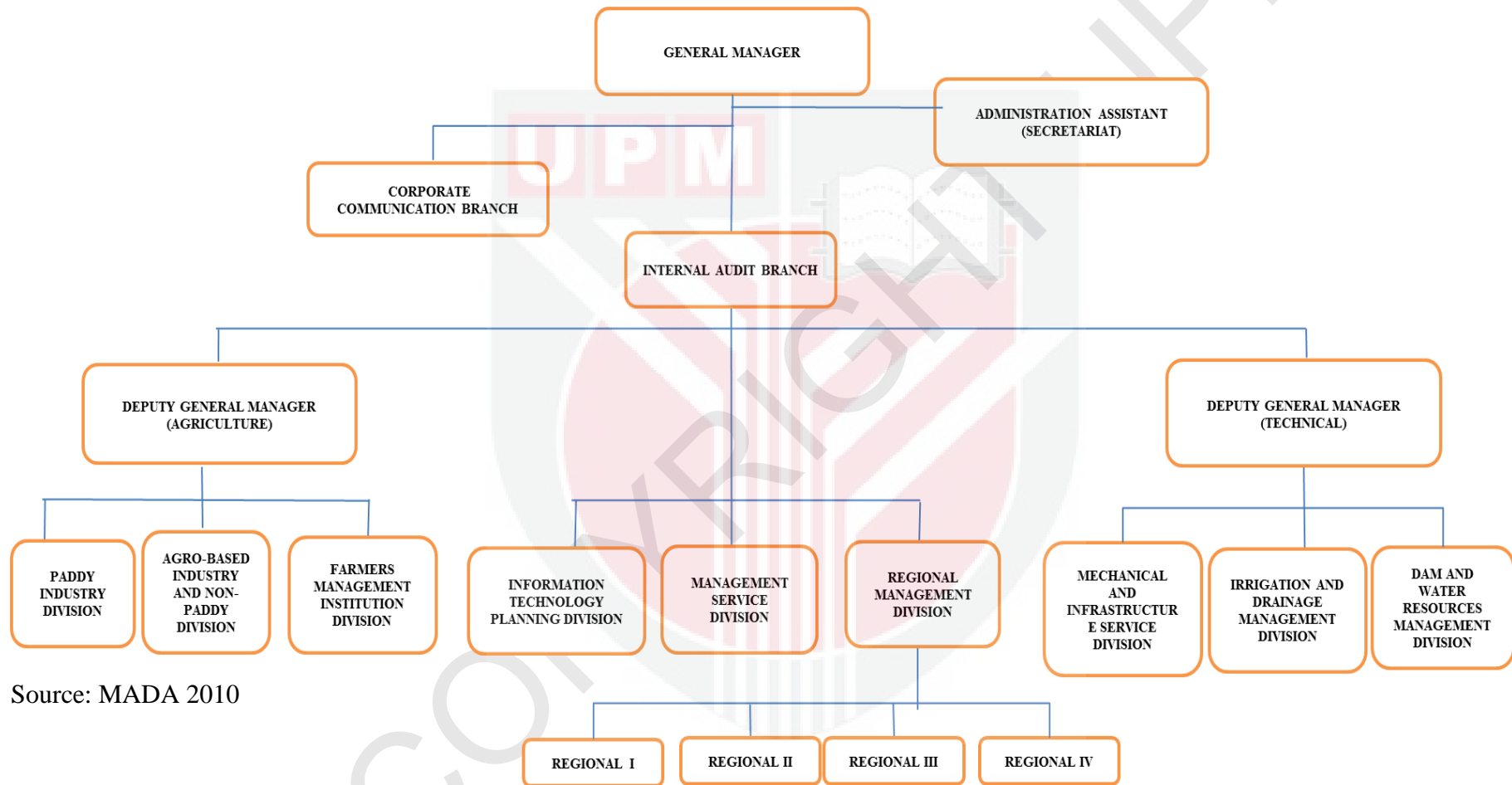
Source: Adapted from MADA 2015

**Figure 1.4: Board of Directors**



Figure 1.5 shows the organization of MADA. Based on the figure, General Manager was held the highest position in the organization. General Manager is then split to three where they are Corporate Communication Branch, Internal Audit and Administration Assistant. After that, under division of Internal Audit Branch they are split again into five branches and they are Information Technology Planning, Service Management Division, Regional Management Division, Deputy General Manager (Agriculture), and Deputy General Manager (Technical).

Next, under Regional Management Division there are four regionals where are regional I, regional II, regional III, and regional IV. These four regionals are representing the area of rice cultivation. Below the Deputy General Manager has three divisions and they are Paddy Industry Division, Agro-Based Industry and Non-Paddy Division, and lastly is Farmers Management Institution and Division. Meanwhile, Deputy General Manager (technical) is split into and three of them are Mechanical and Infrastructure e-Service Division, Irrigation and Drainage Management Division, and Dam and Water Resources Management Division.



Source: MADA 2010

Figure 1.5: MADA Organization Chart

## 1.5 Training Needs Assessment

Based on James Smith study in 2011, he stated that training is the acquisition of skills, concepts or attitudes that result in improve performance within the job environment. He stated again that the training analysis looks at each aspect of an operational domain so that the initial skills, concept and attitudes of the human elements of a system can be effectively identified and appropriate training can be specified. Somehow, training analysis is a process that often covers review of current training, task analysis of new modified system, identification of training gap, statement of training requirement, assessment of training options and cost benefit analysis of training options.

Next, training needs assessment is the process of determining the needs of qualified manpower that is an important part of vocational training planning. The process includes not only identifying skills in demand by the productive system, but also characterizing variables of the labor force that might be influencing production and, in consequence, also bearing on that demand. (Richter, 1986). On the other side of definition, training needs assessment with identification of training requirements and the most cost effective means of meeting those requirements (Smith, 2011).

The needs of training analysis was stated clear in the definition where is to determine the needs of qualified manpower. This is basically to evaluate the skills of a person in a job and in an organization. How they manage in every situation. Training that being involved to evaluate the skills of a person are psycho-motor skills, procedural

skills, knowledge transfer, communication skills, colossal thinking, attitude learning, and performing training.

## **1.6 Problem Statement**

The main objective of Muda Agricultural Development Authority (MADA) introduced is to help to improve the quality of life for the majority of rural residents and to increase yield to meet nation's requirement. So, MADA agricultural officers must do some efforts in developing rural residents.

MADA agricultural officers need some training on a few aspects that they need to improve such as communication skills or multi-tasking skills. Some officers which still fresh are low in experience lack of confident in some tasks such as public speaking and others.

Next, some of them need some new approaches of training needs that they have to know or to learn more. Some of them do not know a training that they have to know about what an agricultural extension agent should have to be a good extension agent.

The research questions for this study are

- 1) What are the training needs of MADA agricultural extension agents?
- 2) What is the relationship between socio demographics factors training needs?

## **1.7 Study Objective**

### **1.7.1 General Objective**

The objective of the study is to examine the training needs of MADA agriculture officers in agriculture.

### **1.7.2 Specific Objectives**

Specifically, this study was carried out:

- 1) To identify the respondent profile.
- 2) To determine the training needs of MADA agricultural extension agents.
- 3) To examine the relationship between socio demographics factors and training needs.

## **1.8 Significant of Study**

This study gives positive affects to MADA agriculture agents. Through this study we could know their lacks in some aspects that maybe look like a small matter but when it has improved it can boost up the MADA organization positively.

They could learn how to give a good speech to residents and villagers. They can learn how to make a simple speech that can give move on villagers and have a related point on every paragraph to another paragraph and conclude with a best word to attack peoples.

Through this study they could learn on agricultural extension positive aspects such as leadership, multi-tasking and others. Furthermore, they could be able to be a good agricultural extension agent. By this they could give good value to MADA such as give a good image to MADA by good officers and the important is they can attract residents to follow ways to cultivate rice and give good yield and improve resident's economy.

### **1.9 Thesis Organization**

This study is arranged in five chapters. The first chapter is introduction. It consists of introduction, paddy farming in Malaysia, paddy farming in Muda Area, Muda Agriculture Development Authority (MADA), agriculture officers in MADA, training needs assessment, problem statement, study objective, significant study and thesis organization.

Review of related literature, exposed in second chapter. This chapter is arranged to support and direct the researcher in analyzing data of the problem. The chapter are discussed on introduction, agriculture extension, training needs and agriculture extension, theory of training needs and summary.

The third chapter is methodology of the study. This chapter are discussed introduction, location of study, respondent selection, source of information, questionnaire design and analysis technique. However, analysis technique then again elaborates details into three parts which are descriptive analysis, chi-square analysis and Borich needs assessment.

Chapter 4 presents and elaborates on the results of the socio-economic profile of the respondents which were age, gender, race, religion, marital status, education history and level of position. This chapter also used to discuss the training preference of the Agriculture Assistant Officer (AAO) of Muda Agriculture Development Area (MADA). As we can say, this chapter is used to analyze result based on the survey that has been done.

Chapter 5 summarizes major findings, suggestions for future direction of research in MADA, conclusion of the whole study, recommendation and limitations of the study.

## REFERENCES

- Agriculture development authority (MADA), M. (2015). MADA Profile. Retrieved 9 February, 2015, from <http://www.mada.gov.my/>
- Ariffin, T., et al., (2004). *The Review of the Paddy and Rice Industries in Malaysia, report submitted to Economic Planning Unit, Prime Minister's Department, Serdang: Marditech Corporation Sdn. Bhd.*
- Barbazette, J. (2006). *Training needs assessment: methods, tools, and techniques.* San Francisco, CA: Pfeiffer.
- Bartram, S. & Gibson, B. (1997). *Training needs analysis: a resource for identifying training needs, selecting training strategies, and developing training plans.* Aldershot, England Brookfield, Vt., USA: Gower.
- Buckley, R. & Caple, J. (2009). *The theory & practice of training.* London Philadelphia: Kogan Page.
- Deininger, D. & Schwartz, L. (1994). *Public and private agricultural extension beyond traditional frontiers.* Washington, DC: World Bank.
- Ellis, F. (1992). *Agricultural policies in developing countries.* Cambridge New York: Cambridge University Press.



FAO. 2009. FAOSTAT Online Statistical Service, United Nations Food and Agriculture Organization.

Harun, R. (2015). Policies and Economic Development of Rice Production in Malaysia. Retrieved 7 February, 2015, from [http://ap.fftc.agnet.org/ap\\_db.php?id=393&print=1](http://ap.fftc.agnet.org/ap_db.php?id=393&print=1)

Kazbekov, J.: Qureshi, A.S. 2011. Agricultural extension in Central Asia: Existing strategies and future needs. Colombo, Sri Lanka: *International Water Management institute*. 45p. (IWMI Working Paper 145)

Krishna Priya, N & Sivanaryana, G. (2013). Review on Training Need Analysis of Agricultural Officers and Agricultural Extension Officers. *GLOBAL RESEARCH ANALYSIS*, 2(9), 1-2.

Man, N. & Ismaila, S. (2009). Off-Farm Employment Participation among Paddy Farmers in the Muda Agricultural Development Authority and Kemasin Semerak Granary Areas of Malaysia. *Asia-Pacific Development Journal*, 16(2), 141-152.

Nadia Ramli et al., (2012). The Impact of Fertilizer Subsidy on Malaysia Paddy/Rice Industry Using a System Dynamics Approach: *International Journal of Social Science and Humanity*, 2(3), 213-219.

Opmgov. (2015). US Office of Personnel Management. Retrieved 7 December, 2015, from <https://www.opm.gov/policy-data-oversight/training-and-development/planning-evaluating/>

Othman, J. & Jafari, Y. (2014). Selected Research Issues in the Malaysian Agricultural Sector. *Jurnal Ekonomi Malaysia*, 48(2), 127-136.

Ovwoh, B.O. (2011). International Journal of Rural Studies: *Training Needs of Agricultural Extension Agents in the Central Agricultural Zone of Delta State Nigeria*, 18(2), 1-6

Richter, L. (1986). *Training needs: assessment and monitoring*. Geneva: International Labour Office.

Richter, L. (1986). *Training needs: assessment and monitoring*. Geneva: International Labour Office.

Rossett, A. (1987). Training needs assessment. Englewood Cliffs, N.J: *Educational Technology Publications*.

Siwar et al., (2013). Vulnerability and Sustainable Livelihood of Paddy Farmers in *The North Terengganu Integrated Agriculture Development Area (IADA KETARA), Malaysia*. *PROSIDING PERKEM*, 8(2), 778-789.

Smith, J. (2012). *Training Needs Analysis - What You Need to Know Definitions, Best Practices, Benefits and Practical Solutions*. Dayboro: Emereo Publishing.

Sustainability of Rice in the Global Food System. Edited by N. G. Dowling, S. M. Greenfield and K. S. Fischer. Davis, California: *Pacific Basin Study Centre, and Manila, The Philippines: International Rice Research Institute* (1998), pp. 404

Toriyama, K., Heong, K. & Hardy, B. (2005). *Rice is life: scientific perspectives for the 21st century*. Philippines: International Rice Research Institute.

Umali, Dina L.; Schwartz, Lisa. (1994). Public and private agricultural extension: *beyond traditional frontiers*. World Bank discussion papers; no. WDP 236. Washington, D.C.: The World Bank.

Williamson, M. (1993). *Training needs analysis*. London: Library Association Pub

## **BIODATA OF THE AUTHOR**

The author, Khalil bin Abdullah, was born on Jan 19<sup>th</sup>, 1993 in Poko Sena, Kedah, Malaysia. He is sixth after 2 elder sisters and 3 elder brothers and have 2 younger sisters. He attended his primary and secondary school in 2000 and 2006. He started his first degree in 2012 after finished his matriculation study and continued study in agricultural science in Universiti Putra Malaysia.

