IMPLEMENTATION OF HALAL MANAGEMENT SYSTEM IN A SMALL FOOD MANUFACTURING ENTERPRISE FOR HALAL CERTIFICATION: A CASE STUDY

BY

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A dissertation submitted in fulfilment of requirement for the degree of Masters of Art in Halal Industry Management

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ABSTRACT

The Malaysian government has been supportive of the development and expansion of small enterprises. Unfortunately, small enterprises are still plagued by low competition due to poor performance, inability to adapt to change, high cost and low productivity. Therefore, they failed to capture potentially lucrative halal food market opportunities. Hence, halal certification will be one of the strategies to help the SMEs to expand their business, without it, the industry faces challenges ahead. This study has designed and developed a management system to assist small enterprises in implementing standard requirements toward halal certification, which is the primary purpose of this study. The methods used in this thesis are qualitative and quantitative as a research strategy. Preliminary data was collected via initial assessment of the organization and participant observation where the researcher took part in the activities. The researcher assumed the role of the trainee consultant. The result of the initial assessment was used to determine strategic action plans that permit the extensive improvements, controls, training, documentation to be integrated into the operation activities such as production, purchasing, maintenance and others activities required by the halal assurance of food safety system management. This study has also shown that significant improvements especially on the new modified premise infrastructure and documentation development. Not to mention, an innovation of prototype mold was designed and developed to replace the previous mold that improves the quality and productivity of the product. The quantitative analysis results on conformance to the system implementation showed successful implementation and finally, human-related factors are also discussed in this thesis, which contributes to the effectiveness of system implementation. The major contribution of this study serves as a valuable guideline and strategic tool for new applicants pursuing halal certification and a reference to halal service providers. Finally, it provides operational guidelines for introducing halal certification standard to a wider base of SMEs food industry.

ملخص البحث

كانت الحكومة الماليزية داعمة لتوسيع وتطوير المشاريع الصغيرة. ولكن للأسف لا تزال المشاريع الصغيرة تعانى من المنافسة المنخفضة بسبب ضعف الأداء وعدم القدرة على التَكيُّف مع التغيير بالإضافة إلى إرتفاع التكلفة وإنخفاض الإنتاجية. فشلت هذه المشاريع في إلتقاط فرص سوق الطعام الحلال ذات الربحية العالية المضمونة. شهادة الحلال سوف تكون أحد الإستراتيجيات لمساعدة المشاريع الصغيرة لتوسيع عملِها، والتي بدونها تواجه صناعة الطعام الحلال تحديات المنافسة. هذه الدراسة أعَدّت وطَوّرت إطاراً لمساعدة المشاريع الصغيرة لتطبيق متطلبات قياسية تجاه شهادة الحلال والتي هي الهدف الرئيسي من هذه الدراسة. الأساليب المستخدمة في هذه الأطروحة هي النوعي والكمي كإستراتيجية بحث، لقد تم جمع البيانات عن طريق التقييم الأولي للمؤسسة ومراقبة المشارك حيث أن الباحث شارك في الأنشطة، إفترض الباحث دور المستشار المتدرب، واستُخدِمت نتيجة التقييم الأولى لتحديد خطط العمل الإستراتيجية التي تُجيز التحسينات الشاملة والضوابط والدورات التدريبية والتوثيق لتكون مُدمجة داخل أنشطة التشغيل مثل الإنتاج والشراء والصيانة والأنشطة الأخرى المطلوبة لتأمين إدارة نظام سلامة الطعام الحلال. أظهرت هذه الدراسة أيضاً الكثير من التحسينات الملحوظة خاصة على تطوير التوثيق ومقدمة البنية التحتية الجديدة المعدّلة. تم تصميم وتطوير اختراع قالب النموذج لاستبدال القالب السابق الذي يُحسِّن نوعية وإنتاجية المنتج، وكذلك نتائج التحليل الكمى المطابقة لنظام التنفيذ أظهرت تنفيذ ناجح. وأخيراً ناقشت هذه الأطروحة عوامل متعلقة بالإنسان والتي أيضاً تساهم في فعالية تنفيذ النظام. المساهمة الرئيسية لهذه الدراسة بمثابة مبدأ توجيهي ذو قيمة وأداة إستراتيجية للمتقدمين الجدد الساعين إلى الحصول على شهادة الحلال ومرجع لمزودي خدمة الحلال. وأيضاً توفر هذه الدراسة الدعم لتقديم معايير شهادة الحلال لقاعدة عريضة من العاملين في المشاريع الصغيرة لصناعة وخدمات الطعام.

APPROVAL PAGE

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I certify that I have read this study and that in standards of scholarly presentation and is fully dissertation for the degree of Master of Halal Inc	adequate, in scope and quality, as a
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Alhamdulillah.

To my husband who constantly gave me strength that no one had given me. May Allah always rewards you of your patience.

To my late sister, Azyatie Syazmeen (28 March 1994 – 1 February 2017), I love you.

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TABLE OF CONTENTS

Abstract	ii
Abstract in Arabic	iii
Approval Page	iv
Declaration	
Copyright	vi
Dedication	
Acknowledgements	viii
List of Tables.	
List of Figures	
List of Abbreviations	
CHAPTER ONE: INTRODUCTION	1
1.1 Background of Study	1
1.2 Problem Statement	
1.3 Objectives of the Study	
1.4 Scope of the Study	
1.5 Methodology	
1.6 Contributions of the Study	
1.7 Thesis Outline	
CHAPTER TWO: LITERATURE REVIEW	13
2.1 Introduction	
2.2 Concept of Halal and Its Evolution	
2.3 An Overview of the Global Halal Market	
2.4 Halal Certification in Malaysia	
2.5 Agencies Involved to Escalate Halal Certification	
2.6 Food Safety	
2.6.1 Halal Quality Assurance System	
2.6.2 GMP, HACCP and MeSTI	
2.7 Enforcement of Protection Laws on Halal Products	
2.8 The Roles of Ministry of Health in Halal Food Industry	
2.9 Swot Analysis	
2.10 The Theory and Concept of PDSA	
2.11 Chapter Summary	
2.11 Chapter Builmary	
CHAPTER THREE: RESEARCH METHODOLOGY	33
3.1 Introduction	
3.2 Strategy and Planning	
3.2.1 Gap Assessment	
3.2.2 SWOT Analysis	
3.2.3 Planning for Learning and Improvement	
3.2.4 Scheduling Activities and Action Plans	
3.2.4.1 Pre-requisite Training	
3.2.4.2 Documentation Training	
3.3 Implementation of the System	

3.3.1 Company profile	41
3.3.2 Premise and facilities	42
3.3.3 Food handlers and visitors	
3.3.4 Training	42
3.3.5 Maintenance and sanitation	43
3.3.6 Operation control	43
3.3.7 Control of transportation and distribution	43
3.3.8 Traceability	
3.3.9 Cleaning detergent	
3.3.10 Mould Innovation and Design	44
3.3.10.1 Performance Testing on Prototype Mould	51
3.3.11 Pre-Audit and Fine Tuning	
3.3.12 Design of Questionnaire	52
3.3.13 Mock Audit by Internal Auditor and Corrective Action	
3.3.14 Final Audit by MOH and JAIN	53
3.4 Chapter Summary	54
CHAPTER FOUR: RESULTS AND DISCUSSIONS	55
4.1 Introduction	55
4.2 Preliminary Data	55
4.2.1 Gap Analysis	56
4.2.1.1 Management Responsibility	56
4.2.1.2 Premise Surrounding	
4.2.1.3 Facilities and Welfare	
4.2.1.4 Hygiene, Sanitation and Food Safety	59
4.2.1.5 Pest Control Programme	59
4.2.1.6 Equipment, Tools, Machinery and Processing	
Equipment	59
4.2.1.7 Handling Production	60
4.2.2 SWOT Analysis	62
4.2.2.1 Strengths	
4.2.2.2 Weaknesses	63
4.2.2.3 Opportunities	64
4.2.2.4 Opportunities	
4.2.2.5 Opportunities versus Strengths	65
4.2.2.6 Opportunities versus Weaknesses	
4.2.2.7 Strengths versus Threats	
4.3 Improvement and Innovation	
4.3.1 Premise Infrastructure and Improvement	
4.3.2 Documentation Development	
4.4 Performance of Prototype Mould	
4.5 Quantitative Analysis of System Implementation	
4.6 Human Success Factors	
4.6.1 Commitment	
4.6.2 Leadership	
4.6.3 Communication	
4.6.4 Organisational Culture	
4.7 Halal Certification Recognition by Jakim	
4.8 Chapter Summary	117

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS	119
5.1 Conclusion	119
5.2 Recommendation	
REFERENCES	124
APPENDICES	133

LIST OF TABLES

Table 2.1	Halal Certified Company by State in 2014	19
Table 4.1	SWOT Analysis of the Enterprise	63
Table 4.2	Analysis' Results of The Enterprise	67
Table 4.3	Management Element Before and After System Implementation	92
Table 4.4	Premise Element Before and After System Implementation	94
Table 4.5	Facilities and Welfare Element Before and After System Implementation	96
Table 4.6	Equipment, Tools, Machinery and Processing Equipment Element Before and After System Implementation	98
Table 4.7	Hygiene, Sanitation and Food Safety Element Before and After System Implementation.	99
Table 4.8	Handling and Distribution Before and After System Implementation.	102
Table 4.9	Packaging and Labelling Element Before and After System Implementation.	105

LIST OF FIGURES

Figure 1.1	Halal Certified Company by Category of Halal. Reprinted from <i>Halal Certified Statistics</i> , by Halal Industry Development Corporation, retrieved from http://www.hdcglobal.com/publisher/gwm_industry_statistics Copyright 2008 - 2013 by Halal Industry Development Corporation.	4
Figure 1.2	Halal Certified Product by Category of Industry. Reprinted from <i>Halal Certified Statistics</i> , by Halal Industry Development Corporation, retrieved from http://www.hdcglobal.com/publisher/gwm_industry_statistics Copyright 2008 - 2013 by Halal Industry Development Corporation.	5
Figure 2.1	Halal Certified Company by State. Reprinted from <i>Halal Certified Statistics</i> , by Halal Industry Development Corporation, retrieved from http://www.hdcglobal.com/publisher/gwm_industry_statistics Copyright 2008 - 2013 by Halal Industry Development Corporation.	18
Figure 3.1	Methodology of the Study	35
Figure 3.2	System According to PDSA Cycle	38
Figure 3.3	Side View of Aluminium Prototype Mould	46
Figure 3.4	Left View of Aluminium Prototype Mould	47
Figure 3.5	Front View of Aluminium Prototype Mould	48
Figure 3.6	Right View of Aluminium Prototype Mould	49
Figure 3.7	Isometric View of Aluminium Prototype Mould	50
Figure 4.1	Photos of Some Essential Features of the Building. From top to bottom: 1. Floor, 2. Wall, 3. Ceiling, 4. Window, and 5. Door.	58
Figure 4.2	Equipment and Mould Used in the Production.	60
Figure 4.3	Food Handler	61
Figure 4.4	Building after Construction	68
Figure 4.5	Drainage System in the Production Area after Reconstruction	69
Figure 4.6	Modified Plant Layout of the Enterprise	70
Figure 4.7	Employee Flow	71

Figure 4.8	Epoxy Floor and Wall in the Processing Area	73
Figure 4.9	Tiled Floors and Walls in the Packaging Area	74
Figure 4.10	Drain and Septic Tank under Construction	74
Figure 4.11	Ceiling	75
Figure 4.12	Storages: 1 Finished Product, 2 Sugar and Gas Tank, and 3 Cartons	76
Figure 4.13	Elbow Operate Pipe	77
Figure 4.14	Food Handlers Attire	81
Figure 4.15	Documentation Pyramid	83
Figure 4.16	From the Left is Aluminium Mould, and the Right is Wooden Mould	86
Figure 4.17	Melted Palm Sugar Poured into the Mould	87
Figure 4.18	Solid Palm Sugar using Aluminium Mould (left) and Wooden Mould (right)	90
Figure 4.19	Management Element Before and After System Implementation.	92
Figure 4.20	Premise Element Before and After System Implementation	95
Figure 4.21	Facilities and Welfare Element Before and After System Implementation.	97
Figure 4.22	Equipment, Tools, Machinery and Processing Equipment Element Before and After System Implementation	98
Figure 4.23	Hygiene, Sanitation and Food Safety Element Before and After System Implementation.	100
Figure 4.24	Handling and Distribution Before and After System Implementation.	103
Figure 4.25	Packaging and Labelling Element Before and After System Implementation.	106

LIST OF ABBREVIATIONS

FIFO First-In-First-Out

FoSIM Food Safety Information System of Malaysia

GHP Good Hygiene Practice

GMP Good Manufacturing Practice GST Goods and Services Tax

HACCP Hazard Analysis and Critical Control Points
HDC Halal Industry Development Corporation
IIUM International Islamic University Malaysia

IKIM Institut Kefahaman Islam Malaysia

ISO International Organization for Standardization

ITA Investment Tax Allowance

JAIN State Islamic Religious Department

JAKIM Research Centre for the Islamic Affairs Division

KTP Knowledge Transfer Programme LPP Lembaga Pertubuhan Peladang

MARA Majlis Amanah Rakyat

MARDI Malaysian Agricultural research and development Institute

MATRADE Malaysia External Trade Development Corporation

MDTCC Ministry of Domestic Trade, Co-operatives and Consumerism

MeSTI Makanan Selamat Tanggungjawab Industri
MIDA Malaysian Investment Development Authority
MITI Ministry of International Trade and Industry

MNC Multi-National Company MOH Ministry of Health MS Malaysian Standard

OIC Organization of Islamic Cooperation

PDSA Plan, Do, Study and Act

PJKM Program Jaminan Keselamatan Makanan

PPE Personal Protective Equipment
QAS Quality Assurance System

SIRIM Standards and Industrial Research Institute of Malaysia

SME Small and Medium Enterprise SMI Small and Medium Industry SOP Standard Operating Procedure

SWOT Strength, Weakness, Opportunity and Threat

UiTM University Teknologi MARA

UK United Kingdom UN United Nation

UPM University Putra Malaysia USA United State of America

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF STUDY

The demand for the halal product has been increasing, partly due to the rising of the Muslim population, which made up 23 per cent of the world population. The existing Muslim halal market in the global economy is worth approximately USD 2.3 trillion, and the halal food industry earned an estimation of USD 700 billion per year. Other significant contributions to the halal food demand are due to religious duty, food quality and food safety reasons.

The Malaysian government is committing to developing the country's halal industry and the high demand for halal products has catalysed the development of the halal industry. Consequently, the demand for halal certification has begun to increase strongly. Malaysian Halal Standards has adopted the international food safety programme regulations, Good Manufacturing Practices (GMP) and Hazard Analysis Critical Control Point (HACCP) and has been recognised by the United Nation (UN) as a benchmark of International Halal Standard (Bohari et al., 2013).

The Malaysian Prime Minister envisions that Malaysia will become the global halal hub in the Vision 2020. The government has initiated a broad range of manufacturing export incentives to facilitate the process of becoming the global halal hub. The halal certification scheme has added value among the businesses and gives benefit to the Malaysian economy. As proven, since 2011, halal exports performance in Malaysia has increased by 33 per cent from RM 23.9 billion to RM 37.7 billion in 2015. In 2016, it is expected to boost to RM 50 billion of exporting food and

beverages, and halal ingredients ("Malaysia sasar eksport RM50 billion", 8 January 2016).

The main exported halal products are ingredients, palm oil derivatives, food and beverages, cosmetics and personal care products, industrial chemical and pharmaceutical. Among the key export destinations from Malaysia are China, Singapore, the United States, Indonesia and Japan ("Status of the Halal Industry", 10 March 2015). This is due to the continuous halal awareness programmes, the support of the Malaysian government toward achieving global halal hub, the advanced processing technology that Malaysia has adopted which has widened the usage of raw materials and thus, expand the demand in the halal industry.

In the process of promoting halal certification, the government has developed halal park. Omar (2013) stated that the Ministry of Entrepreneur and Cooperative Development has given allocation to build these Halal Park. According to HDC (http://www.hdcglobal.com), Halal Park is a group of manufacturers and businesses located in one property. Each of the organization in the in Halal Park seeks assistance in enhancing their environmental, economical, and social performance. Halal Park contributed to these organization by helping them in managing Halal products and resources. As a result, today halal food is demand-driven and resulted to and estimation of RM205.1 bil in exports since 2011 to September 2016 (http://www.thestar.com.my/).

Since 2007, numerous database technologies were initiated to assist and update consumers the status of halal certification of halal producers. To name a few applications: e-Halal Malaysia, JAKIM My SMS 15888, HaFYS Technology, MyMobiHalal 2.0, HDC Halal Widget, HDC i-Kiosk, HDC Nokia Apps, and HDC

iPhone (Husny et al., 2013). Now, through phone or computer, these technologies are easily accessed, and consumers are using it while shopping.

These applications also act as the guide for the market, increase the spreading of information about halal products globally, and increase the awareness of the halal concept in the western Muslim markets, such as the United States of America (USA), the United Kingdom (UK), Germany and France.

While demand for halal food has remained high, concerns over the current issues have cropped up. Among the many examples, one of the issues is the majority of animal origin ingredients, and additives products are not halal certified. Thus, suppliers of halal certified ingredients and additives products take this to their advantage by rating at a higher price the producers (Tieman, 2012).

Besides, there was illegal use of the halal logo and the use of expired halal certificate by some manufacturers (Hayati et al., 2008). Sometimes manufacturers are unaware of the expiry date of their halal certification. Another issue is hard to get halal certification by food producers due to complicated procedures (Ahmad and Nordin, 2015).

To apply for the halal certification industries have to abide by the requirements of the halal certification. This means additional money to fulfil the requirements. Numerous issues on the poor practice of proper hygiene by halal certified manufacturer (Hayati et al., 2008), were also exposed by Jabatan Kemajuan Islam Malaysia (JAKIM). As an example, in the case of Secret Recipe that failed to comply with the requirement in the Halal Certificate requirement and GMP, it involved offences of serious hygiene in compliance ("Penarikan sijil halal Secret Recipe", 26 May 2015). This is one of many examples, in which manufacturers became

inconsistent in complying with halal certificate requirements after their certifications were approved.

Another issue is about the halal status of product packaging, processing aids, and the glove worn by food handlers (Ab Talib and Johan, 2012). From the issues derived, it becomes a duty of each food entrepreneur to be sensitive in producing halal products according to strict regulations and halal quality standards, and also to understand the concept of halal in all scopes of production, from farm to table (Awang et al., 2014).

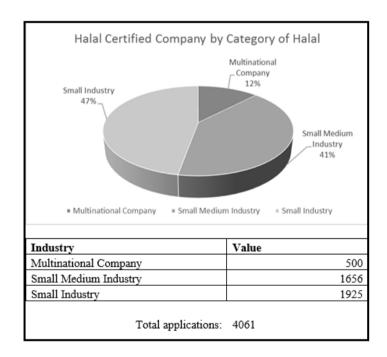


Figure 1.1 Halal Certified Company by Category of Halal. Reprinted from *Halal Certified Statistics*, by Halal Industry Development Corporation, retrieved from http://www.hdcglobal.com/publisher/gwm_industry_statistics Copyright 2008 - 2013 by Halal Industry Development Corporation.

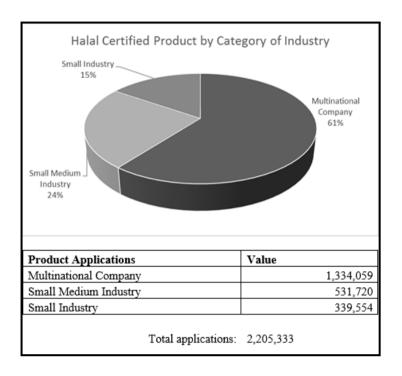


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In Figure 1.1, the halal certified statistics released in May 2014 showed that 47.2 per cent of the total applicants made up of small-scale industry, were certified with halal certificate. This indicates that entrepreneurs from small-scale industry were aware and eager to fulfill the halal compliance demand. Figure 1.2 indicates that 15 per cent of the applications are product based application by the small-scale industry. Many small-scale industries have limited technology and small infrastructure to create more products. Thus, the quantity of products produced by small industry is smaller than Multi-National Company (MNC).

The need for high quality of health and sanitary requirements are in demand worldwide, regardless of religious belief, and halal, as a symbol of quality and assurance, is well recognised. Realising the tremendous potential of halal market, the author believes, there is a need to focus and assist the small-scale enterprises to

actively participate in this growing and competitive market in order to widen and sustain their markets.

For a micro and small-scale industry to develop a halal quality assurance system and implementation based on MS 1500:2009 is not an easy task. The process usually requires the assistance of a consultant to help the company to set up the activities that would allow the enterprise to achieve halal certification. The actual implementation of the halal system in small business has rarely been studied and discussed. Therefore, this study mainly deals with small enterprises' implementation of the halal certification requirements.

1.2 PROBLEM STATEMENT

The small and medium enterprise (SME) plays a major role in the Malaysia's economic development. They represent more than 95 per cent of the total business establishments, contribute more than 40 per cent of the total output, provide over 60 per cent of total employment and add more than 45 per cent of total value-added since year 2000 (Bank Negara Malaysia, 2010). This data suggests that SMEs have a very significant impact on the whole economy of the country.

Today, Malaysia is a leading halal hub and there is about USD 500 billion worth to be tapped of halal business opportunities. In fact, the government has been supportive of the development and expansion of SMEs. Given the prospects of the halal food industry to become the engine of natural economic development, Malaysian companies, particularly micro and small enterprises, are still unfortunately played by low competition. The lack of competition mainly attributes to this poor performance and inability to adapt to change, high cost and low productivity. These challenges and constraints have resulted in many small enterprises fail to capture potentially lucrative

halal food market opportunities due to their incapability of attaining higher levels of performances.

A study by Sarwoko, Surachman, and Hadiwidjojo (2013) emphasised that the performance of small industries depends on the trait of the owner or manager. While, a study conducted by Ahmad and Seet (2009) revealed that business failure is the impact of negative entrepreneur traits. In other words, the weakness of the Malaysian food industry has a lot to do with the food producers, a conspicuous lack of professionalism.

They have poor management skill (Tunggak et al., 2015; Bakar et al., 2005; Kader et al., 2009), and lack of management education (Bakar et al., 2005). In addition, lack of entrepreneurial quality, poor marketing, lack of market accessibility (Kader et al., 2009; Munoz et al., 2014), and lack of skilled employees (Munoz et al., 2014). They also require the Islamic mind (Tunggak, 2015). They were hampered by high production costs. Besides, the small industries are weak in market *niche* researches and development activities because of capital shortage. It also causes them to lag in adopting technology to increase their production and venture to export market.

Halal certification is one of the strategies to help the SMEs to expand their business, without it, the industry faces challenges ahead. Firstly, without halal certificate, an enterprise will encounter difficulty in marketing the product. This problem is due to customers' awareness of halal goods and healthy food. Next, the company cannot enter supermarkets quickly due to halal requirements. Apart from that, they would also face difficulties in exporting their products internationally.

Furthermore, companies that: i) do not have halal certificate and violate regulations set by the authority for using halal logo or other indications of halal

product without the permission of JAKIM; ii) do not keep the cleanliness of their premises at a satisfactory level; iii) use raw materials that are not safe for consumption; and iv) any other offences, will face action from acts, such as Food Act 1983, Food Regulation 1985, Trademark Act 2012, Trade Description Act 2011, and more.

Most Bumiputera entrepreneurs own small-scale industries, in the food production. They are common to the industry for long, and yet little improvement, in quality and safety has been achieved. Out of 75 per cent of small enterprise, only 15 per cent has applied for halal certificate. This problem is because Bumiputera enterprises lack of knowledge, professionalism and leadership as an entrepreneur.

They are unfamiliar with the incentives given by the government in producing halal food, and agencies assisting for halal certificate. They are not sufficiently well-versed in the hygiene, education, GMP and quality aspects governing food manufacturing. Therefore, lack of commitment issues, such as cleanliness, food protection, personal hygiene practices and sanitation facilities at processing premises. Therefore, there is an urgent need to increase the number of Bumiputera enterprise with halal certificate.

This study is designed to develop an operational guideline to assist the enterprises to implement the requirements stipulated by the Malaysian Standard, MS 1500: 2009 (Halal Food: Production, Preparation, Handling and Storage - General Guide) to obtain the halal certification by the end of the programme. The study has been conducted in collaboration with *Lembaga Persatuan Peladang* (LPP), where by the entrepreneur is screened by the LPP to be potential candidates for the above programme. LPP will provide some incentives to its members and bear some of the expenditures, to indicate its commitment to this project.

1.3 OBJECTIVES OF THE STUDY

The primary research objective is to develop halal management system. to fulfil the main objective, the following goals are met:

- To provide a better understanding on the basic GMP, Good Hygiene Practice (GHP) and halal concept.
- 2. To develop a documented system for "Makanan Selamat Tanggungjawab Industri" (MeSTI) certification and halal certification.
- 3. To examine the human factor that influences effective implementation system certificate.
- 4. To develop a stainless steel prototype mould for production of palm sugar.

1.4 SCOPE OF THE STUDY

The scope of this study is specific to food manufacturing of small enterprises that aimed to obtain halal certificate. This study emphasised on the implementation of concept application and excluded the in-depth study on halal jurisprudence.

1.5 METHODOLOGY

This study was conducted using the following methodology:

- (1) Gap analysis assessment was performed, by performing an initial evaluation to the company to assess the level of compliance to MeSTI and halal requirements.
- (2) Trainings on GMP, Good Hygiene Practice (GHP), MeSTI requirements by food safety assurance programme (PJKM-*Program Jaminan Keselamatan Makanan*), and halal requirements (MS 1500:2009) would be conducted continuously.