



UNIVERSITI PUTRA MALAYSIA

***FARM MANAGEMENT SUCCESSION AND PARTICIPATION IN CATTLE
FARMING AMONG FELDA SMALLHOLDERS AT BENTONG, PAHANG***

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REPORT'S DECLARATION FORM

This project report entitled "Farm Management Succession and Participation in Cattle Farming among FELDA Smallholders at Bentong, Pahang" was prepared by Nur Syarina Farhana Binti Darus and was submitted to the Faculty of Agriculture in fulfillment of the requirement of PRT 4999 (Final Year Project) for the award of the degree of Bachelor of Agriculture Science is based on my own original works.

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DEDICATION BY ME

I am grateful after 4 years I strive and study hard in UPM, I successfully completed my thesis and my study in Bachelor of Agriculture Science. During my study I have a lot of sweet memories and bitter that I went through. My experience during my study in the matrix and UPM much taught me the meaning of determination, patience, hard work and friendship. The impulse and spirit from my family, especially my father and my mom helped me for me to continue learning in UPM. Thank you both for giving me strength to reach the stars and chase my dream. I proud because I have been the given opportunity to further my studies in UPM and be a good example for my family. I hope after I graduated from UPM, my success is continuous and can make my family happy.



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ABSTRACT

Demand in meat production in Malaysia is increasing from year to year, especially during festive seasons. Despite growing meat demand, but the supply of beef products still cannot meet the demand of the people in Malaysia. This is because the self-sufficiency level (SSL) for beef only 27.5 % in 2014. This situation has led the government to import 72.5% beef products from other countries to be marketed in the country of Malaysia. However, there are many problems that faced in farm management among ranchers which are: 1) the land for cattle farming is limited; 2) less interest and participation among youth; 3) less support from their families; 4) the rancher is less knowledge; 5) financial problems; and 6) less veterinary extension services given. During this time, various ways have been made by the government to increase the level of beef production in Malaysia, for example, the government provides loan scheme for livestock farmers. The program has been implemented to encourage more Malaysians, especially those in rural areas to get involved in cattle farming and become a successful entrepreneur. In addition, the government should also provide a variety of programs to draw many people involved in cattle farming. Malaysia can also increase the self-sufficiency level (SSL) for meat.

The objectives of this study are: 1) to identify the respondents' profile; 2) to identify perception of respondents towards the practices and farm management succession of cattle farming among FELDA smallholders in Bentong, Pahang; 3) to identify the perception level of successors; 4) to identify the level of respondents' views on the role of the agencies, officers and veterinary extension activities; and 5) to clarify the relationships between socio-demographic factors and decision making to continue the cattle farming. 150 ranchers were selected as respondents who were in the vicinity of Bentong, Pahang.

They are interviewed via structured questionnaire to determine the socio-demographic profile, farm profile, respondents' perception towards the practice and farm, perception toward the agencies, officers and activities of veterinary extension, problem facing by cattle farming and other factor to continue cattle farming. All the collected data were in a raw form and statistical analysis with SPSS version 23.0 software was carried out to analyze these data using descriptive analysis, chi-square analysis and logit regression analysis techniques.

Besides, the descriptive analysis shows the majority of the respondents were Malay males in the age between 31 to 40 years old. Most of the respondents were educated up to secondary school. Mostly, respondent earns only about below RM 10 000 per year for their income. Then, the number of respondents that have experience above 15 years is higher. The higher number of families involved in the cattle family is 3-4 members. The breed of cattle that are usually used by rancher is Kedah-Kelantan at the total area 10-20 acre of land. Mostly, the ranchers have 10-50 heads of cattle with category female cow less than 2 years. Most respondents using their own land in the oil palm area that using integration system for cattle farming. Usually, many of respondents buy and sell their cattle from another rancher. Besides, they need at least less than RM 10,000.00 for initial capital and get less than RM 10,000.00 from their sale of cattle per year. The perception level toward practice of cattle farming have mean 4.38 and percentage 97.4%. Other than that, for perception toward successors of cattle farming, it's also show the higher level perception that has total average mean at 4.55 and percentage 99.3%. For perception level of farm management and operation, the total average mean is 4.58 and percentage 99.3%, which is considered as high level. While, the total average mean for food security is 4.56 and percentage 99.3%. It is considered as high level. Besides, perception level toward

socio-economic, well-being and environment of cattle farming has the total average mean at 4.56 and percentage 99.3% which is considered as high level. Then, perception toward the agencies, officers and activities of Veterinary Extension also consider as high level with total average mean 4.19 (82.0%), 4.19 (82.7%), and 4.27(90.7%) respectively. For the role of Veterinary Extension, the total average mean is 4.47 and its considered as high level at 97.3%. Furthermore, the total average mean for services of Veterinary Officer to the ranchers is 2.97 which considered as high level at 98.7%.

The chi-square analysis result shows that the socio demographic with perception level toward practice of cattle farming are no significant relationship. Then for the relationship between socio demographic with the perception level of successors, that have a significant relationship which is education level (0.000 significant level) and initial capital (0.000 significant level). For the relationship between socio demographic with the perception level toward the management and operation, the factor that shows significant relationship which is education level (0.000 significant level), initial capital (0.000 significant level) and sale of cattle per year (0.020 significant level). For perception level of food security, the factor that shows the significant value are education level (0.000 significant level) and initial capital (0.000 significant level). Lastly, for perception level toward the socio-economic, well-being and environment that one variable is significant, which is main occupation (0.004 significant level). Besides, the logistic regression analysis result shows that, the estimated logit model for dependent variable (continuity of cattle farming) indicate that there were only one variable found to be significant that is starting capital that have 0.05 significant value that can affected their decision making process. The lower starting capital, it would be more respondents' to continue cattle farming in their farm.

As an overall conclusion, the farm management succession and participation among the respondents in cattle farming at Bentong do not affect significantly high toward their decision making process to continue cattle farming. Besides, majority of them decide that cattle farming in Bentong is important and must be to continue as their perception levels are high for cattle farming. The encouragement from various parties is important to ensure that young generation involved in cattle farming. In addition, various programs and activities need to be organized for disclosing information relating to cattle farming in more detail. Cattle farming can be inherited from one generation to the next generation if they follow the good management system. When many of younger generation involve in cattle farming and it's become their main occupation indirectly our country does not depend on the meat production from another country because the supply can meet the demand of the consumer. For future study, research that is crucial to be concern is a specific idea need to be made up and voice out to overcome the presence of the problem of successors in cattle farming. After that, other research need to be taken is to surveys young generation acceptance on the continuity of cattle farming. To be contend, low level perception toward cattle farming has affected the younger generation to not involve in this cattle farming industry.

ABSTRAK

Permintaan daging di Malaysia semakin meningkat dari tahun ke tahun, terutamanya semasa musim perayaan. Walaupun permintaan daging semakin meningkat, tetapi bekalan produk daging lembu masih tidak dapat memenuhi permintaan rakyat di Malaysia. Ini adalah kerana tahap sara diri (SSL) untuk daging lembu hanya 27.5% pada tahun 2014. Keadaan ini telah menyebabkan kerajaan terpaksa mengimport 72.5% produk daging lembu dari negara-negara lain untuk dipasarkan di negara Malaysia. Walau bagaimanapun, terdapat banyak masalah yang dihadapi dalam pengurusan ladang antaranya ialah: 1) tanah untuk penternakan lembu adalah terhad; 2) kurang minat dan kurang penyertaan dikalangan belia; 3) kurang sokongan daripada keluarga mereka; 4) penternak kurang pengetahuan; 5) masalah kewangan; dan 6) kurang perkhidmatan pembangunan veterinar yang diberikan. Pada masa ini, pelbagai cara telah dibuat oleh kerajaan untuk meningkatkan tahap pengeluaran daging lembu di Malaysia, sebagai contoh kerajaan menyediakan skim pinjaman ternakan untuk penternak. Program ini telah dilaksanakan untuk menggalakkan lebih ramai rakyat Malaysia, terutama di kawasan luar bandar untuk terlibat dalam penternakan lembu dan menjadi usahawan yang berjaya. Selain itu, kerajaan juga perlu menyediakan pelbagai program untuk menarik ramai pengganti yang terlibat dalam penternakan lembu. Malaysia juga boleh meningkatkan tahap sara diri (SSL) untuk daging.

Objektif kajian ini adalah: 1) untuk mengenal pasti profil responden; 2) mengkaji pandangan responden terhadap amalan dan pewarisan pengurusan ternakan lembu dikalangan warga FELDA di Bentong, Pahang; 3) untuk mengkaji tahap persepsi pengganti; 4) untuk mengenalpasti tahap pandangan responden terhadap peranan agensi,

pegawai dan aktiviti pengembangan veterinar; dan 5) untuk menganalisis masalah penternakan lembu di kawasan kajian dan untuk menjelaskan hubungan antara faktor-faktor sosio-demografi dan proses membuat keputusan untuk meneruskan penternakan lembu. 150 orang penternak telah dipilih sebagai responden yang mana mereka tinggal di kawasan Bentong, Pahang.

Mereka ditemubual melalui soal selidik berstruktur untuk menentukan profil sosio-demografik, profil ladang, pandangan terhadap amalan dan pewarisan pengurusan ternakan lembu, pandangan terhadap agensi, pegawai dan aktiviti pengembangan veterinar, masalah yang dihadapi terhadap penternakan lembu, faktor lain untuk meneruskan penternakan lembu. Semua data yang dikumpul adalah dalam bentuk mentah dan analisis statistik dengan menggunakan perisian SPSS versi 23.0 telah dijalankan untuk menganalisis data menggunakan analisis deskriptif, analisis chi-square dan logistik regresi analisis teknik.

Selain itu, analisis deskriptif menunjukkan majoriti daripada responden adalah lelaki Melayu di antara usia 31 hingga 40 tahun. Kebanyakan responden mendapat pendidikan sehingga sekolah menengah. Kebanyakan, responden mendapat hanya kira-kira bawah RM 10 000 setahun bagi pendapatan mereka. Kemudian, bilangan responden yang mempunyai pengalaman melebihi 15 tahun adalah lebih tinggi. Bilangan tertinggi ahli keluarga yang terlibat dalam penternakan lembu adalah 3-4 orang ahli. Baka lembu yang biasanya digunakan oleh penternak ialah Kedah-Kelantan pada keluasan 10-20 ekar tanah. Kebanyakan para penternak mempunyai 10-50 ekor lembu dengan kategori lembu betina kurang daripada 2 tahun. Kebanyakan responden menggunakan tanah mereka sendiri di kawasan kelapa sawit yang mana menggunakan sistem integrasi untuk penternakan

lembu. kebiasaannya, ramai daripada responden membeli dan menjual ternakan mereka daripada pengusaha lain. Selain itu, mereka memerlukan sekurang-kurangnya kurang daripada RM 10,000.00 bagi modal awal dan mendapat kurang daripada RM 10,000.00 daripada jualan mereka lembu setiap tahun. Tahap persepsi terhadap amalan penternakan lembu mempunyai min 4.38 dan peratusan 97.4%. Selain itu, untuk persepsi ke arah pengganti penternakan lembu, ia juga menunjukkan tahap persepsi yang lebih tinggi yang mana mempunyai jumlah min purata pada 4.55 dan peratusan 99.3%. Untuk tahap persepsi pengurusan dan operasi, min keseluruhan ialah 4.58 dan peratusan 99.3%, yang dianggap sebagai tahap yang tinggi. Manakala, jumlah min purata bagi keselamatan makanan adalah 4.56 dan peratusan 99.3%. Ia dianggap sebagai peringkat tinggi. Selain itu, paras persepsi terhadap sosio-ekonomi, kesejahteraan dan persekitaran penternakan lembu mempunyai min jumlah purata pada 4.56 dan peratusan 99.3% yang dianggap sebagai peringkat tinggi. Kemudian, persepsi terhadap agensi-agensi, pegawai dan aktiviti pembangunan veterinar juga mempunyai tahap persepsi yang tinggi iaitu purata min 4.19 (82.0%), 4.19 (82.7%) dan 4.27 (90.7%) masing-masing. Untuk peranan agen pembangunan veterinar, min keseluruhan ialah 4.47 dan dianggap tahap yang tinggi pada 97.3%. Tambahan pula, jumlah min purata bagi perkhidmatan pegawai veterinar kepada pelanggan ialah 2.97 dan dianggap tahap yang tinggi iaitu pada 98.7%.

Hasil analisis chi-square menunjukkan bahawa demografik sosio dengan tahap persepsi terhadap amalan penternakan lembu mempunyai hubungan yang tidak signifikan. Kemudian untuk hubungan antara demografi sosio dengan tahap persepsi pengganti, yang mempunyai hubungan yang signifikan adalah tahap pendidikan (0.000 tahap signifikan) dan modal permulaan (0.000 tahap signifikan). Bagi hubungan antara demografi sosio dengan tahap persepsi terhadap pengurusan dan operasi, faktor yang menunjukkan

hubungan yang signifikan adalah tahap pendidikan (0.000 tahap signifikan), modal permulaan (0.000 tahap signifikan) dan penjualan lembu setahun (0.020 tahap signifikan). Untuk tahap persepsi keselamatan makanan, faktor yang menunjukkan nilai yang signifikan adalah tahap pendidikan (0.000 tahap signifikan) dan modal permulaan (0.000 tahap signifikan). Akhir sekali, untuk tahap persepsi terhadap sosio-ekonomi, kesejahteraan dan persekitaran hanya ada satu pembolehubah yang signifikan, iaitu pekerjaan utama (0.004 tahap signifikan). Selain itu, hasil keputusan logistic menunjukkan, model logit bergantung kepada pembolehubah (kesinambungan penternakan lembu) dan ia menunjukkan bahawa hanya terdapat satu pembolehubah yang didapati ketara iaitu modal permulaan yang mana nilainya ialah 0.05 signifikan yang akan memberi kesan ketara kepada proses membuat keputusan mereka. Semakin rendah modal permulaan, ia akan menjadi lebih ramai responden untuk meneruskan penternakan lembu.

Secara keseluruhan kesimpulannya, kajian mengenai pewarisan dan penyertaan dalam pengurusan penternakan lembu di kalangan warga FELDA di Bentong tidak memberi kesan yang signifikan tinggi kepada proses membuat keputusan mereka untuk meneruskan penternakan lembu. Disamping itu, kebanyakan mereka memutuskan bahawa penternakan lembu di Bentong adalah sangat penting dan mesti diteruskan kerana tahap persepsi mereka yang tinggi terhadap penternakan lembu. Galakan daripada pelbagai pihak adalah penting untuk memastikan bahawa generasi muda terlibat dalam penternakan lembu. Di samping itu, pelbagai program dan aktiviti perlu diadakan untuk mendedahkan maklumat yang berkaitan dengan penternakan dengan lebih terperinci. Penternakan lembu boleh diwarisi daripada satu generasi kepada generasi akan datang jika mereka mengikut sistem pengurusan yang baik. Apabila banyak generasi muda melibatkan diri dalam penternakan lembu dan ia telah menjadi pekerjaan utama mereka secara tidak langsung

negara kita tidak bergantung kepada pengeluaran daging dari negara lain kerana bekalan yang ada boleh memenuhi permintaan pengguna. Untuk kajian masa depan, penyelidikan yang sememangnya menjadi satu kebimbangan adalah idea tertentu perlu dibuat dan disuarakan untuk mengatasi kewujudan masalah pengganti dalam penternakan lembu. Selepas itu, penyelidikan lain perlu dilakukan untuk membuat kaji selidik tentang penerimaan generasi muda mengenai kesinambungan penternakan lembu. Sebagai alasan rawak, tahap persepsi yang rendah terhadap penternakan lembu telah menjejaskan generasi muda untuk melibatkan diri mereka dalam industri penternakan lembu.



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CHAPTER 1

INTRODUCTION

1.0 Introduction

This chapter reviewed the background, the role and importance of agriculture in Malaysia. In addition, this chapter also explains about the policies in agriculture from past until now. Besides, this chapter explain about patterns, production and status of the livestock industry in Malaysia and the importance of cattle farming in agriculture in Malaysia. Then, this chapter covers the introduction of farm management succession and role of extension agent in promoting development in livestock. Although it covers the issues, objectives and significance of the study.

1.1 Agriculture in Malaysia

Agriculture is the important sector in Malaysia. This is because, from the agriculture sector, we can improve Malaysia economy. Generally, agriculture can also provide food, fiber and nutrients needed by the community regardless of age. For many years, this sector has been the backbone of Malaysian economy by producing agricultural products for domestic consumption and abroad. Additionally, it also is a source of income due to the occurrence of foreign exchange during the process of import and export.

1.1.1 Malaysian Agriculture Policy

Malaysia is a country with an equatorial climate and temperature is normally 21-32 ° C. Furthermore, Malaysia has its own uniqueness which is rich in flora and fauna. In addition, the population in Malaysia is made up of various races and religions as well as a variety of language used as a language for their conversation. This makes Malaysia unique and interesting (EPU, 2013). The number of population in Malaysia has also raised drastically in which it almost 29.9 million and an increase for each year (DOSM, 2014). The food production in Malaysia is very important to ensure enough food for the Malaysia population. A country is influenced by economic growth, because when the economy is affected it will cause food supply at that time is blocked (DOSM, 2010).

The beginning of commercial agriculture in Malaysia is starting in the early 19th century through foreign capital investment by companies of European farming. At that time, agriculture is to meet the needs of industry in Western countries. Furthermore, a crop that was introduced at that time was rubber, oil palm, pineapple, tea, and black pepper. In addition, the crop introduced by using a farming system at which farm is an important commodity and have a potential for export and meet the needs of the market. The commercial crops are successful cultivated by foreign capital investment companies such as Sime Darby, Socfin, Guthrie, Golden Hope Plantation and Cameronian (KPIAT Malaysia, 2006).

Today, Malaysia is a country that's moving towards improvement and consistent with other developed countries such as Japan and America. The most important difference which can be compared Malaysia and various other developed countries may be the

agricultural sector. Malaysia also has areas suited to agricultural activities. There is currently a shortage of labor resulting in high employment of immigrant worker in agriculture and forestry sectors. Therefore, Malaysia had to take labor from a different country such as Indonesia and Bangladesh.

In addition, another problem often encountered is an uneconomic land size that triggers the lower productivity and large costs. The smallholder sector continues to experience problems of low productivity. Labor shortages and low commodity prices cause idle agricultural land and abandoned. It is estimated that there are about 400,000 hectares of idle agricultural land. In addition, land for agricultural activities becomes limited because it must converted for other uses such as industrial, residential and urban use (PMR, 2016).

According KPIAT Malaysia (2006), during the period of implementation of the Five-Year Economic Development Plan, there are various government agencies that have established and it starts with the First Malaya Plan. Where it was the efforts undertaken by the Malayan government to improve the standard of living the rural population and eliminate the gap with the city population.

During the implementation New Economic Policy (NEP), there are several agencies that have been established to stimulate economic growth of country. Through the agricultural sector, the Federal Land Development Authority or FELDA (Federal Land Development Authority), they were assigned to open land for crop commodities that have the potential to plant in the fields. After that, the Board of Land Consolidation and Rehabilitation Authority or FELCRA (Federal Land Consolidation and Rehabilitation Authority), it can

restore and consolidate the land that not productive to cultivated commercially and provide economic returns to the landlord. Then, the other agency is Smallholders Development Authority rubber Company or RISDA (rubber Industry smallholders Development Authority), which established the intended that can help smallholders. The subsequent establishment of the Malaysian Palm Oil Board, or MPOB (Malaysian Palm Oil Board), which is tasked with developing the country's palm oil industry and Federal Agricultural Marketing Authority or FAMA (Federal Agricultural and Marketing Authority) was responsible for the marketing of agricultural products. The agency that most important for the Malaysia is Paddy Rice Nasional Berhad (Bernas), at which it works to monitor and help to increase rice production quality in Malaysia and the last is Institute of Agricultural Research and Development Malaysia or Mardi (Malaysian Agricultural Research and Development Institute), which works in the development of research in the field of agriculture (KPIAT Malaysia, 2006).

According to Abiddin, Anuar and Abdullah (2016), through the establishment of various agencies in Malaysia clearly showed concern and concrete measures taken by the government to introduce a roadmap, and a new way of managing the country's agriculture that has potential for production in large scale and help farmers increase their income. Additionally, the name of "Ministry of Agriculture" has been changed to "Ministry of Agriculture and Agro-based Industry". It clearly shows the commitment by the government to make agriculture as an industry and a profitable business and it is no longer tainted village work that synonymous with poverty. Now, jobs based on agriculture is no longer looked down by local community, even though agriculture, the successful entrepreneur can be born.

Agriculture is an important sector in Malaysia. From the first until now, the agriculture sector has been the backbone of Malaysian economy by producing agricultural products for domestic consumption. Agriculture also contributes to the national Gross Domestic Products (GDP). Gross domestic product (GDP) is the monetary value of all the finished goods and services produced within a country's borders in a specific time period. Though GDP is usually calculated on an annual basis, it can also be calculated on a quarterly basis. GDP includes all private and public consumption, government outlays, investments and exports minus imports that occur within a defined territory. Put simply, GDP is a broad measurement of a nation's overall economic activity.

The agricultural sector plays a significant role in Malaysia because it can increase the economy and provide rural employment. Besides, agriculture can also create many job opportunities for the city. Moreover, agriculture can be very important since it can produce good and high-quality food which is necessary for humans and ensuring national food security. The sector can be a significant supplier of food in our country. Agriculture sector also a major supplier of food as well as raw materials to resource based industries.

Agricultural policy is an official document drawn up by the government as a set of strategic directions of the agricultural sector in Malaysia. Typically agricultural policy will be formulated for a specific time. Agricultural policy has established two time periods, before independence (1948-1957) and after independence (1957-2020).

At the pre-independence, the agricultural policies enacted in the interests of the colonial British. Their focus and emphasis on the plantations such as rubber, palm oil and cocoa.

Then, the rural areas remain largely in subsistence and smallholder agriculture. Generally, agricultural policy before independence was split into two strategic directions of the rubber plantation area owned by the rich and rewarding foreign investors while subsistence farming of rice manipulated by the farmers themselves. Furthermore, agricultural policy, that was created by the British led to an identification of competition in occupation as the task because rice for Malay, Indian rubber plantations and fruit and vegetables for China.

In the event of independence, the policy is to deal with the problem poverty among farmers. Policies implemented to focus on ways to reduce poverty in the agricultural sector, increase of agricultural incomes and reduce inequality between agricultural and non-agricultural sectors. Besides, after independence (1957), the agricultural sector to start functioning in full force as a result of a comprehensive policy to develop the full potential of this sector. Policy documents and strategies necessary for the purpose of agriculture, food security and the economy. There are four basic enacted the National Agricultural Policy which is 1, 2, 3 (NAP1-3) and Agro-food Policy Countries (NAM).

National Agriculture Policy was launched to develop the agricultural sector as a whole in 1984. National Agricultural policies typically will be formulated within five years. This policy is aimed at ensuring that established the growth rate of the agricultural sector is balanced and coordinated with the other sectors. The objective of the NAP specifically is to maximize income from agriculture through efficient utilization of the country's resources and the revitalization of the sector's contribution to the overall economic development of the country (Government of Malaysia, 1984). Furthermore, this policy

was enacted as a response to the inability of the base- Previous policies to eradicate poverty and slow performance of the agricultural sector as the engine of economic growth. Unfortunately NAP cannot be permanent and enduring in the agricultural sector. By the 1990s, the economy is focused on the industrial sector. This situation leads to a percentage of the agricultural sector decreased Contribution.

Through the National Agricultural Policy (NAP-1), the government has developed the necessary infrastructure, implementing development in-situ, namely restoring agricultural land available that is not productive to become more productive, and the opening of new lands by agency of land opening and development territory, in particular the Federal Land Development Authority or FELDA (Federal Land Development Authority), Johor Tenggara Development (KEJORA), Central Terengganu Development (KETENGAH), Muda Irrigation Area (KADA), and South Kelantan Development Authority (KESEDAR).

Besides, a new National Agriculture Policy (NAP-2) was implemented to replace the NAP. This policy was introduced from 1992 until 1996 and NAP-2 were introduced aimed at repairing the old base of weakness by focusing on increasing productivity, efficiency and competitiveness of the agricultural sector to deal with relations with other economic sectors in order to develop sustainable development. Establishment of the world trade organization (WTO), the Asia-Pacific Economic Cooperation (APEC) and the ASEAN Free Trade Area (AFTA) and the rapid growth of global agricultural trade has the potential for competition and open up opportunities for new markets for Malaysia at the international level. Additionally, the agricultural sector is also experiencing internal

problems such as competition for land resources, labor shortages and an increase in cost. In 1997, there has been an inflation that led to the collapse of money and he gave a change to the economy. NAP-2 should be modified according to circumstances.

After that, National Agricultural Policy (NAP-2) is implemented that give an emphasis on improving productivity, efficiency, and competition. Then, field crops such as oil palm is cultivated on a large scale with the opening of more new land areas. NDP-2 also takes into account a number of issues raised about vastness of land, the age of settlers who getting older, and declining the productivity. Therefore, the approach taken in NDP-2 is leads to the production of agricultural products with added value and meet the needs of the market (Abiddin, Anuar & Abdullah, 2016).

Next, the basic National Agricultural Policy (NAP-3) is introduced in the year 1998 to 2010. The main purpose of this policy is to focus on improving the competitiveness of the agricultural sector to ensure the ability to cope with the new era of globalization. The main objective of this policy is to increase revenue by using resources optimally in the agricultural sector. In addition, this policy is intended to overcome the shortage of farm techniques and machinery, technology, production, storage, distribution network and marketing expertise.

In addition, through the Third National Agriculture Policy (NAP-3) introduced the country's leadership and vision have led to a new approach was introduced for the agricultural industrialization sparked the country's agricultural sector. Through this revolution, it led to the activation of the development of the agricultural sector and the

various transformations that have been designed to develop the country. For the success of this mission, the government implementation of the Ninth Malaysia Plan where it involves matters below:

- 1) Increasing agricultural production including new sources of growth to private sector participation is greater.
- 2) Develop agro-based processing activities and product diversification
- 3) Strengthening marketing and global networks
- 4) Improve the income of smallholders, farmers and fishermen
- 5) Improving the service delivery system.

After the Third National Agricultural Policy (NAP-3) is created, there is variety of program that created such as integrated agricultural program which involves the concept of maximizing land use involving cattle in oil palm plantations area. In this way, can help increase the production of beef and also increase the production of palm oil. This system is named as system integration of livestock and crops.

Lastly, National Agro-food Policy (NAFP) introduced in 2011-2020 was to address an ongoing problem in the agricultural sector such as competition for land use with other sectors, labor and increased production costs. Competition in the use of land for food production and bioenergy is expected to increase from 8% in 2008 to 20% in 2020. Climate change will have a major impact on the production of food commodities. Challenges faced by the agricultural sector are a necessary quality of food produced.

1.1.2 National Key Economic Area (NKEA)

Nowadays, there are a range of policies and programs in place to ensure a strong economic fundamental. Furthermore, to ensure the economic development was a strong and stable, the single program has been conducted namely the Economic Transformation Program called ETP. The purpose of this program was to make Malaysia a high-income economy by the year 2020. For the success of this program, the Performance and Delivery Unit (DRIVER) has identified 12 National Key Economic Areas called NKEA. NKEA is a driver for economic activities for which they have the potential to contribute directly to economic growth, with the value that can be measured by indicators of gross national income (GNI) and can create jobs and attract the best talent. There are twelve NKEA which is core to the Economic Transformation Program. Among the sectors that are important in contributing to the national economy is the agricultural sector. Agriculture sector is a sector that plays an important role in the economic development of Malaysia. This is because the agricultural sector can create jobs and increase the income of the rural population and the most important is to ensure national food security.

There are 12 NKEA has identified as a key driver towards economic development include:

NKEA 1	Oil, Gas and Energy	NKEA 7	Wholesale and Retail
NKEA 2	Palm oil	NKEA 8	Education
NKEA 3	Financial Services	NKEA 9	Health care
NKEA 4	Tourism	NKEA 10	Composition and Communication Infrastructure
NKEA 5	Business Services	NKEA 11	Agriculture
NKEA 6	Electronics and Electrical	NKEA 12	Greater Kuala Lumpur/Klang Valley

Agriculture NKEA focuses on the sub-sector, which has high growth potential, namely aquaculture, seaweed farming, swiftlet nests, herbal products, fruits and vegetables and

processed foods premium. Agriculture NKEA is also very committed to the production and national food security. This is because the sub-sectors selected are rice and livestock.

There are the three (3) entry point projects (EPP) had been guidelines. There are:

- 1) EPP 5: Integration of cattle in oil palm plantations
- 2) EPP 12: Adding a feedlot farm
- 3) EPP 13: Cluster dairy

1.2 Livestock Industry

The livestock industry is one of the most important sectors in agriculture in Malaysia. The livestock sector can provide one of the main sources of protein for the people in Malaysia. Nowadays, the demand for livestock products will be increasing with the increasing standard of living of the population, increase in population and per capita consumption increased.

In 2005, the livestock industry alone contributed 0.8% to the GDP and around 9.6 % to the value added in agriculture. Even though the contribution of the livestock sector to the economy is rather small, the sector has grown steadily over the years, and has earned a place in the national economy. The sector value added grew steadily at an annual average 4-6% over the period between the year of 2005 to 2010 (Fatimah, Raja Abdullah, Kaur & Abdullah, 2007).

Fatimah, Raja Abdullah, Kaur & Abdullah, (2007) stated that the livestock industry in Malaysia consists of two main sectors, that is the ruminant and non-ruminant sectors. The non-ruminant sector which consists of swine and poultry (boiler and egg). This sector is well developed and heavily commercialized with modern technology and the involvement of the private sector. Both swine and poultry are produced in excess of domestic consumption. Then, for the ruminant sector it consists of beef cattle, dairy cattle, beef buffaloes, sheep and goat. Unfortunately, our country is still not able to produce the amount of meat and milk that insufficient to domestic consumption. This is because our country lagging behind in terms of technology and production.

The non-ruminant sector which is made up of poultry and swine sub-sectors has been showing a steady growth over the years. The excellent growth in the non-ruminant sector is attributed mainly to the active participation of the private sector, particularly in the broiler sub- sector. Poultry and swine farming represent the major population of the livestock industry in terms of output value. These sub-sectors are operated largely in a commercially oriented manner and are increasingly managed as private or public limited companies.

Malaysia also should not be too dependent on other countries in terms of food. The country is capable to achieve its own supplies for the meat of pork, poultry meat and eggs while still need to bring milk, beef and mutton from other countries (Refer to Table 1.1).

Table 1.1: The livestock Production in Peninsular Malaysia (2004-2013)

Year	Beef	Mutton	Pork Meat	Poultry	Chicken/Duck Egg	Milk
	------(Metric ton) -----				(million)	(Million liters)
2004	27.0	1.3	200.2	927.5	434.0	38.8
2005	29.4	1.5	218.3	980.1	443.0	41.1
2006	32.0	1.6	216.7	1035.4	465.0	45.5
2007	35.0	1.8	200.1	1,100.0	492.0	51.1
2008	38.3	2.0	195.1	1,162.6	523.0	56.5
2009	42.2	2.2	206.0	1,202.0	556.0	62.3
2010	46.5	2.4	234.0	1,295.6	590.0	67.0
2011	48.8	2.7	231.0	1,334.5	621.5	70.9
2012	51.2	3.2	233.2	1,374.5	642.6	75.0
2013	53.8	3.6	231.0	1415.7	664.4	79.4

* Estimated average weight of chicken/duck egg = 60gm/egg

In world production for last three decades there has been rapid growth in livestock production. According to Delgado et al. (1999), the consensus of economist is that the growth in livestock production was tempted by increased demand, which was driven by increasing populations and rising per capita incomes.

Among the livestock sub-sector, Malaysia is self-sufficient in poultry, pork and eggs, but imports about 80% of its beef and mutton requirements. Malaysia is the third largest producer of poultry meat in the Asia Pacific region. However, trend of imported the dairy products is increase from year by year. Besides, the poultry production also has achieved the self-sufficient level which is 120 %. Although the growth for meat production (beef and mutton) still fulfill only 29.77 % and 13.45 % of the total requirements for the country domestic demand in 2013. But for year 2014, the self-sufficient level for beef production only 27.5%.

Self-sufficiency level (SSL) can be defined as the ability of someone to supply his own needs without any aid from others. In the context of the livestock industry in Malaysia, SSL refers to the ability of the local production to supply the demand by localized consumers.

Table 1.2: Self-Sufficiency in Livestock Products (%) in Malaysia, 2004-2013

Year	Beef	Mutton	Pork Meat	Poultry	Poultry Egg	Milk
2004	17.95	8.76	99.56	107.80	111.70	2.98
2005	21.15	8.60	98.85	124.74	108.70	4.59
2006	21.78	8.99	98.85	124.94	109.06	4.66
2007	24.17	10.17	98.73	104.90	114.58	5.74
2008	28.22	10.30	98.35	104.00	119.38	8.68
2009	28.26	11.20	97.20	104.72	117.53	8.79
2010	30.12	12.13	95.36	105.55	114.63	8.49
2011	29.17	11.73	94.57	105.36	115.35	13.17
2012	29.50	12.87	93.87	101.92	114.50	9.29
2013	29.77	13.45	101.95	103.06	117.77	9.30

Source: Department of Veterinary Services, 2014c

1.3 Ruminant Industry in Malaysia

Ruminant have the two categories which are small ruminant and larger ruminant. The larger ruminant consists of beef cattle, dairy cattle and buffaloes. Then the small ruminant consists of sheep and goat. The sub-sectors plays an important role in providing high quality protein to Malaysia population and raw material for the meat processing industry. Ruminants are generally classified based on stomach divided into four compartments (called the rumen, reticulum, omasum and abomasum), and chew the cud containing from regurgitated, partially digested food.

Although, this sector has been given priority in the livestock development plans over the years, yet it is unable to meet the local demand. The production of ruminant is decreasing from year 2010 until 2013 (Table 1.3). The production of ruminant in 2014 is estimation of Department of Veterinary Services (DVS). Ruminant industry in Malaysia still remains in small scale and has high potential to develop for food security and reduce imports from the other country.

Table 1.3: Ruminant Productions for the year (2010-2014)

Type of Livestock	2010	2011	2012	2013	2014 ^E
Cattle	836 859	768 710	744 377	751 497	760 997
Buffalo	129 878	128 205	124 985	123 646	122 943
Goat	498 385	479 444	462 510	434 202	455 737
Sheep	123 475	126 412	131 923	141 918	139 670
Total	1 588 597	1 502 771	1 463 795	1 451 263	1 479 347

Source: Department of Veterinary Services (DVS), 2014^E

The small ruminant sub-sector consisting of goat and sheep and it plays a minor role in the livestock sector. Small ruminant belonging to the Family: Bovidae and Subfamily: Caprinidae. In general, small ruminants consist to sheep (*Ovis aries*), goats (*Capra aegagrus hircus*), and their exotic relatives of the genus *ovis* and *capra*. Goat meat refers to the domestic goat called meat goat. Mostly it is called Chevon from 5 to 18 months of age and Cabrito is the young once (Bisant, 2010).

Normally, from two species the goats are the more common stock kept by farmers in a mixed in farming system. The goat population has been on the decline from 2010 until

2012 and in 2013 the number of goat population is increase but in small quantity (Refer to Table 1.4). Traditionally, goat and sheep are reared in a semi-extensive or free range system and are mainly confined to rural household. Currently, the semi-intensive system of production is becoming popular, especially in the smallholder plantation schemes such as FELDA, FELCRA and RISDA. The integration of sheep with primary crop in plantation has also gained the interest of the estate sector and may help to increase the number of sheep and goats in the near future.

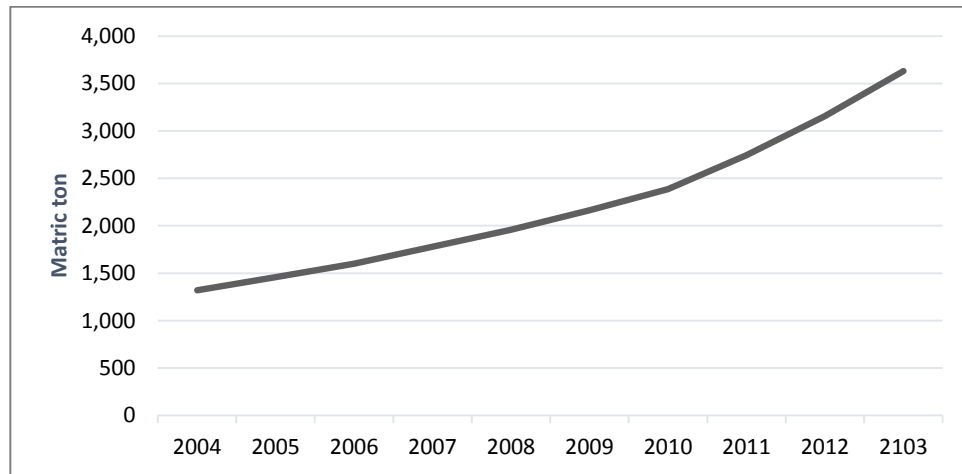
Table 1.4: Small Ruminant Population in Malaysia ('000 Heads)

Year	2007	2008	2009	2010	2011	2012	2013
Goat	428.3	477.5	514.2	496.2	476.4	458.6	482.3
Sheep	126.0	131.3	136.4	123.5	126.4	131.9	129.9
Total	554.3	608.8	650.5	619.7	602.8	590.6	612.1

Source: Department of Veterinary Services, 2014

Now, the production of small ruminants is growing rapidly in Malaysia but the self-sufficiency level of small ruminant meat still cannot achieve the target. Even, the production is high from one year to another year but is not sufficient for people consumption in Malaysia. So, our country must import the small ruminant meat to meet the demand. From Figure 1.1 we can see the trend production of small ruminant from the year 2004-2013.

Figure 1.1: Output of Small Ruminant Products in Malaysia, 2004-2013



Source: Department of Veterinary Services, 2014

In addition, a small local meat production also contributed by dairy cattle population was 36,000 heads. The amount contributed to the large domestic ruminant meat production which is 180,835 tons. This contribution represents only 27.5% of the beef and buffalo nation consumption while per capita consumption rate is 6.29 kg in 2014 (DVS, 2014). Remaining 72.5% meat imports from the USA, Australia and New Zealand and frozen buffalo meat imported from India. Production of processed meat products will be encouraged and add value to existing products market (DVS, 2014).

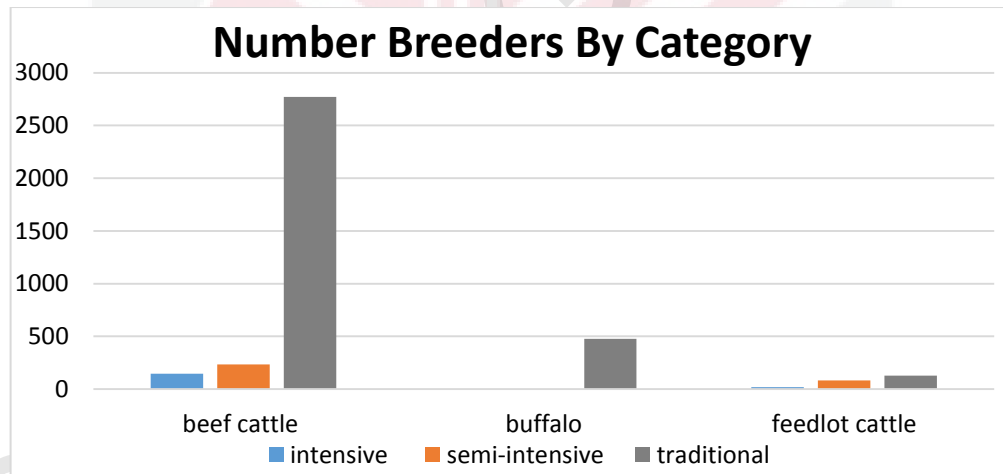
Nowadays, the population of large ruminants such as cattle and buffalo is uncertainty with total of this animal about 751, 497 and 123, 646 heads respectively in 2013 (Table 1.3).

From Figure 1.2 we can know that the number of breeders is categorized based on commercial, semi-intensive and traditional (extensive). Each of the categories has their own range, which is commercial (>100), semi-intensive (50-99) and traditional (<50). In beef cattle, buffalo and feedlot cattle the highest category is using traditional systems.

Most breeders in Malaysia have depended on the traditional system than the commercial system.

In addition, many of the ruminant industry in Malaysia pioneered by smallholders. This is because most of the breeders in Malaysia are more likely to work individually than the group. There are many factors that influence the decision of farmers to choose how farming is done. The factors that influence is to reproduce on a large scale, farmers need high capital and high maintenance costs so they are more likely to breed individually.

Figure 1.2: The of Number Breeder by Three Category (Commercial, Semi-Intensive and Traditional)



Source: Department of Veterinary Services, 2014

The Table 1.5 shows the number of livestock population in Pahang. The highest livestock population is 15,669 at Muadzam and the lowest number of livestock population is 2,500 at Bentong, Pahang. The livestock population is highest due to the systematic management. There are many factors of lowest production such as poor management and

disease. Besides, the other factors that cause the lowest livestock production have been discussed in the problem statement.

Table 1.5: Livestock Production in Pahang

No.	Area	Livestock Population
1.	Muadzam, Pahang	15 669
2.	Bera, Pahang	5 697
3.	Jengka, Pahang	14 500
4.	Lipis, Pahang	12 052
5.	Kuantan, Pahang	6 120
6.	Raub, Pahang	2 800
7.	Bentong, Pahang	2 500
8.	Chini, Pahang	7 017

Source: Department of Veterinary Services (DVS, 2015)

1.4 Farm Management Succession

1.4.1 Definition of Succession

Succession is the process of transitioning the family operation to the next generation. The measure of success, in the discussion stage, is a clear vision of what you want to accomplish. It may include naming a management successor, specifying the years until retirement, and identifying a method (including funding options) for transitioning ownership.

Farm succession is a process that involves all members of the family or current successors and next successor to be transferred effectively on terms and conditions that has to be satisfied for the sake of the farm operation and business profit.

1.4.2 Pattern

In Malaysia, very few studies have been conducted to investigate the pattern of inheritance among cattle breeder. Nowadays, most of the company or any business conducted will transfer ownership of the majority of shareholders or through inheritance in the family. For cattle breeders, they are not suitable to use replacement livestock through the majority shareholder. This is because, most of the cattle breeding on a small scale and in a more suitable replacement is done by them is through family ties.

1.5 Extension Agencies' Role in Promoting Participation and Farm Succession in Livestock Rearing

Extension agencies play an important role in delivered and disseminating information resources to the people in the agriculture sector. After that, they also transfer the new technology and important information to the cattle breeder. Then, they always became the source of reference for the farmers if the farmer is confusing about the management of cattle farming and production of cattle. Next, extension agency responsible to improve the knowledge and skill of a cattle breeder about the technology of cattle production. This is because, from that the cattle productivity will be increased. Moreover, it also can increase the income, and quality of life the cattle breeder. They also must use the simplest method for the deliver information, so that the cattle breeder can easily understand and practice it.

Furthermore, the extension agency also can attract the new generation to involve in cattle farming. This is because they can use the interesting method to deliver the information. Then, they also can give advice to the cattle breeder to solve the problem about the cattle

farming. According to FOA (1999), whatever the strategies that are adopted, regardless of the system used they must be suited to local conditions which are involved the incorporate producer participation at all levels in order to ensure sustainability in both in the long and short-term.

1.6 Problem Statement

Large ruminants such as cattle farming is the most important source of protein. It also can contribute to increased economic and ecological position in agriculture throughout the developing countries including Malaysia. At present, Malaysia is experiencing a shortage of resources for large ruminants and meat causing Malaysian government should increase the rate of production to achieve self-sufficiency level and also need import more meat to meet the needs of the country.

In general, the self-sufficiency level (SSL) can be defined as a person's capacity to supply its own needs without any help from others. SSL also is very important to know the level of food production in our country. Whereas in the context of the livestock industry in Malaysia, SSL refers to the ability of local production to supply local demand by consumers and it is measured by the percentage. Self-sufficient level for local beef presently only able to accommodate 27.5 % of the market and the remaining 72.5 % is imported beef from countries such as Australia and India (DVS, 2014). Then when the human population is increasing dramatically, it causes an increase in demand as meat and other livestock products such as milk. A problem often encountered in the beef industry

is less focused on this sector because certain people think this sector is not important in their life.

Today, agriculture is facing problems that affect everyone. This is because; at this time the rise in input costs and also the cost of capital for agricultural products (Rozhan, 2015). In the livestock production, the problems that faced by farmers is in terms of feed. Because it contributes more than 50% of the cost of production. If the problem persists, it will cause the production problems and also affect the price. Additionally, this problem will lead to a decline in livestock production in Malaysia and also can decrease the number of cattle breeders.

One of the reasons the lack of involvement of young people in the cattle farming is due to lack of interest in this field. This happens because they are more likely to be a teacher or a doctor. Besides, decreasing the total ranchers in cattle farming gave highly loss to beef production (Norzilah, 2015). This is mainly due to low of interest amongst young generation to inherit agriculture activities or cattle farming as their preferably main occupation. Most of young generation has educated since childhood to be involved in other professional job such as doctor, lawyers, engineers or any other employment in urbanized areas. Young generation from cattle farming villages is migrating to urban areas seeking for better employment opportunities. While, elder generation is left to rural areas for working on their farm with low productivity due to health problems. This may contribute to declining of beef production.

Nowadays, most people in Malaysia, especially in the fields of higher education, they are still willing to wait for work or look for work in the public and private sectors from venturing into the agricultural sector. In addition, they always have the negative perception toward the agriculture sector especially in cattle farming. This is because some of them think that engaging in agriculture is complicated because of their traditional agriculture are essential, unprofitable, villagers' work, dirty, and less potential to succeed.

All youth and young people, in particular, should be aware that their response is to become the entrepreneurs because someone can make money easily. However, these people must think positive and mature in line with the level of education (Aidit and Husnizam, 2005; Shucksmith, 2012; and Bezu and Holden, 2014). For young people who are involved in agriculture, particularly in the fields of culture, they are categorized as special because they are very brave and willing to take risks to succeed. Groups like this are very encouraged by the government to help increase the country's food production. Nowadays, the government's ambition is to develop agriculture sectors, among youths and to make them join the sectors in full time. In this era, many youths had success in the agriculture industry and proved that agriculture is a business that gives but unfortunately, the number of youths that contributed in this industry is small in number.

Besides, the problem often encountered for young people to venture into agriculture is less support from their families. Most of the young people have family backgrounds that are not involved in agriculture, so their family does not know more about the agriculture. There are also a handful of parents who do not allow their children involved with cattle farming because they do not want their families who live in difficult conditions.

Making the decision to get involved in agriculture sector career was in dire need of support from various parties, especially the family because the support of the family can give spirit to succeed and advance in the field of career of endeavor (Brian and Peterson, 2012; Burke et al., 2012; and Sun and Shek, 2012). The parents in Malaysia who were once managed cattle farming were not educated their children to follow their main job as cattle breeder. Malaysian parents were mistaken in handling their children to have a good job as a cattle breeder that responsible for national food security. Actually, this method of handling their children to have a better opportunity in an urban area for child occupation has negative impacts for cattle farming. This trend was affected not only to the cattle production but it also can decrease of national food security.

According to Knapp and Griffieon (1999), the farmer perception is differing from those of non-farmers. Both groups held similar perceptions about what constitutes quality of life and that the least attractive part of farming was risky. Normally, in agriculture, non-farmers considered risks to be those resulting from the use of chemicals and fertilizers, while farmers were more concerned about outside influences, those over which they did not feel they had any control (e.g., Prices, weather, and government influence). After that, non-farmers noticed that farmers did not always realize that their production practices impact suburban life and that urban dwellers are concerned about soil erosion and water quality.

Then, in short, succession planning among breeder cattle is very low since independence. Due to this, many of the successors are changing to another sector. This may cause a reduction of cattle farming and consequently, will continue to lower the beef self-

sufficiency level and it can give impact to the beef production in our country. Then, this problem will affect the Malaysia economy that led setbacks to the country.

Besides, the problem often encountered is the lack of knowledge in terms of management and how to manage the business. Skills to manage livestock are very important, although it seems simple, but the way that management does not systematically cause cattle farmers suffered losses. To succeed in business, science in business is very important. Expertise in animal nutrition is less involved in farm management system (Norzilah, 2015).

Farmers still a lack of understanding and expertise in farm management technologies, especially in food and nutrition. The maturity of production is very low with less profit on a small investment (issues of economies of scale and efficiency). Knowledge is very important because it can build and enhance manipulative skills in modern livestock production systems management that is efficient and productive. Furthermore, through the exercise, it can be trained the breeder to plan, manage and implement programs for the production and control of livestock diseases, so that the resulting product such as meat quality and safe to eat.

Nowadays, large ruminants such as cattle production are a major problem for the country of Malaysia. This situation occurs due to the financial problems faced by the farmers. Norzilah (2015) stated that for livestock such as cattle, it requires a large capital to start a business. Many big farming, including government farms were failure due to the financial crises. This also creates a critical object for the financial firm to confirm loans for the farm

holders. After that, this problem also led to the lowest number of cattle breeders in Malaysia.

Another problems that has to face is does not have the characteristics of entrepreneurship. Among many young people who do not want to get involved in cattle ranching because they do not know how to manage livestock with good. For successful, one must be open-minded and farsighted. Besides, they are also afraid to take risks in business. Most of the young people assume that being an entrepreneur is a simple matter. To actually become a successful entrepreneur, one must have the confidence, Optimistic, Creative and Innovative. Entrepreneurs must have self-confidence in their ability to achieve success. This tendency makes them optimistic about the success they would have. With confidence is high, it is not surprising that many entrepreneurs have failed many times ended up being a successful entrepreneur. The other features to become successful entrepreneurs are creative and innovative. Through a creative mind, innovative and imaginative, entrepreneurs can manage their business successfully and solve the problems encountered with ease. Normally Entrepreneurs enjoy what they do.

As mentioned before, there are people who still involving and continuing the cattle farming even many risks. However, the number of people who involved is lower than before. The first reason is because the need high cost for became breeder. Next, most of the breeders are in the late age while their children live in the city. Besides that, the knowledge about cattle farming is not being inherited by others. Generally, there are fewer people who are capable of managing the cattle production.

In this study, the research questions are:

- 1) What are the problems of cattle farming in the study area?
- 2) What is the perception level of farmers toward farming practices and farm management succession of cattle farming in Bentong, Pahang?
- 3) What is the relationship between socio-demographic factors and perception level of respondents?
- 4) What is the extent to which selected socio-demographic characteristics and selected independent variables influence the respondents' attitude towards continuing cattle farming?

1.7 Objectives of the Study

1.7.1 General Objective

The main objective of this study was to identify the farm management succession and participation in cattle farming among smallholders in Bentong, Pahang.

1.7.2 Specific Objectives

Specifically, the objectives of this study are:

- 1) To identify perception level of respondents towards the practice and farm management succession of cattle among FELDA smallholders in Bentong, Pahang.
- 2) To identify perception level of successors.
- 3) To identify the level of respondents' views on the role of the agencies, officers and veterinary extension activities.

- 4) To clarify the relationships between socio-demographic factors and decision making to continue the cattle farming.

1.8 Significant of Study

This study is done on the breeder in the areas in Bentong, Pahang. Bentong once was very significant with cattle farming. Most of the area in Bentong is composed of FELDA area at which suitable for use as cattle farming area. This is because in FELDA areas, most of the main crop that has been planted is oil palm and it is suitable to be integrated with cattle. The beef production also has contributed to the nation food self-sufficiency level. From this study, we will reveal about the socio-economic and perception of the breeder towards cattle farming and farm management.

From this study we could identify what are the difficulties faced by farm succession, and ultimately find the best solution to improve their adaptation towards cattle farming and farm management. The most important is this study could help increase their adaptability and change their mindset toward cattle farming. The results also can be used by policy makers and agricultural agencies to formulate plans and strategies to ensure the development of cattle breeder in Bentong, Pahang and generally in Malaysia to stabilize and support food security.

1.9 Thesis of Organization

Chapter 1 provides the introduction about background of Malaysia Agriculture, livestock industry in Malaysia, and ruminant industry in Malaysia with suitable statistic. This chapter also contain about the project of knowledge; attitude and practice of cattle farming among cattle breeder in Bentong, Pahang. Each of information is explain very well.

Chapters 2 provide the purpose of a literature review is to describe the work that has been reported on a subject or field. In this literature review the term that are explain about cattle farming, farm succession, farm management and extension agency role in promoting participation and farm succession in livestock rearing. It also can determined the significant information, express the knowledge and justification for the study.

Chapter 3 explains about methodology of the study. It also explain about the location of the project, sampling techniques, sources of data, and the questionnaire form structure, pre-test, and statistical analyses of the data were explained on the Chapter 3. In this chapter we also use simple equations that describe the data analysis techniques that we are use.

Chapter 4 is discussion about the results. The result is analysis using different method.

For this chapter, data analysis uses descriptive analysis result, chi square analysis, and logistic regression analysis.

Chapter 5 is about summary, conclusion and recommendation solution for the problem.

This last chapter begins with introduction and summary of main finding of study. This

chapter is important part for the thesis because we can improve the problem and can achieve the best solution. After that, the suitable conclusion of this study is made.



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