

# Exploratory Analysis of Factors Influencing Strategic Planning for Agribusinesses in Thailand

Khwanchol Kampan

Siam University, Thailand

*khwanchol.kam@siam.edu*

## ABSTRACT

This study explores and analyze the factor influencing strategic planning for agribusiness in Thailand. Thailand relies on agriculture sector for long time ago. Thai government also has launched several policies to support Thai agribusiness. However, there are many factors influencing that the farmer should be consider in order to imply in their business. Therefore, this study will identify the factors influencing then propose the suggestion for the future study regarding this topic.

**Keywords:** Factors influencing, Strategic planning, Thailand, Agribusiness, Thailand, Thai Agribusiness, Agriculture.

## INTRODUCTION

Thailand is well known as one of the top agriculture countries over the decades. Following the geographical, Thailand can be divided into four regions as Central, Northern, Northeastern and Southern. Each region has their specialty and different from others in term of temperature, topography, and the social culture which affects the living of the particular social group in each region. The Northern region has typically cooler temperature than other regions and also consists of the richness of natural resources including high green mountains and a long river connected the Northern with Central region. Whereas, Northeastern region differs from Northern region in term of temperature and social culture. There is some similarity in topography which consists of mountains where in Northeastern region is diverse in environment, culture, and land use (Choenkwan et al, 2016). The Central region consists of large amounts of flat land, good soil, warm weather and rain and a multitude of rivers or canals as specially the most important river in Thailand called Chao Phraya River where has the most influencing toward the agriculture in this region. Lastly, the Southern region are located both on the east side of the country on the Gulf of Thailand and on the west side on the Andaman Sea. As Southern region is influenced by the sea on both sides, which means that it is heavily rained on for most of the year. Most areas are flat, with rolling and mountainous terrain made up of major mountains.

Thailand population is continuing increase every year. Currently in 2018, according to United Nations, the population in Thailand increases to 69,213,716 which Fifty-two percent of population live in urban area (Worldometers, 2018). Another half of population living in rural area which Ninety percent of the rural population is living by farming especially rice cultivation, field crops, fruit, and persistent crop production as their core income (Nualnatna, 2000). The total area is approximately 514,000 square kilometers (Worldometers, 2018). Accordingly,

around Forty percent of the Total land in Thailand is utilized for agricultural purposes, another thirty percent is forest land and twenty percent is unclassified land. As Thailand is overwhelmingly an agricultural country. Recently, in 2017. About nine percent of the gross domestic product is gotten from agricultural products. Although, agricultural products in Thailand have been produced not only for domestic market but also trading with the international market which became the main source of income from exporting. As well as the exporting value in agricultural product sector is increasingly growing every year. Presently agricultural exports establish about 25 percent of the total export value (Suphannachart & Warr, 2010).

## **PROBLEM STATEMENT**

As Thailand depend on agricultural sector for long time, Thai farmers also have to face with a lot of obstacles including from natural disasters and also economic crisis. Thai government became an important organization who supported those farmers and help them pass through those situations. Although especially for ministry of agriculture, always come with the new policies to support Thai farmer including offer a training or expertise's' advise. Thai government also came with the new policies and strategies to support Thailand farmers in many ways.

Recently, Thailand government introduced the new policy in 2016 which called "Thailand 4.0", a new economic model built up to develop and improve the middle-income gap. For agricultural sector, Thailand 4.0 aims to increase farmers' income up from 56,450 baht to 390,000 baht within the next 20 years. From Thailand 4.0 policy, Thailand government needs to come up with the new strategy to support the policy in order to reach the aim of Thailand 4.0. In the past few year, Thai farmer already adopted some technology and innovation to use in their production. In the late 20th century, Thailand had transformed from existence agriculture to agribusiness, and then to an industrializing economy.

However, Thai farmers need to understand the strategic planning in agribusiness in order to gain the competitive advantage from the government supporting. Moreover, Thai farmers must understand the factors influencing strategic planning in agribusiness. So, this study would like to explore the understanding of Thailand crop farmers toward strategic planning, to examine the factors influencing strategic planning among selected crop farmers in Thailand, and finally to explore effectiveness of strategic planning among selected crop farmers in Thailand.

## **STRATEGIC PLANNING IN AGRIBUSINESS**

Strategic planning includes the long-run and short-run strategies that aim to develop the competitiveness and profitability of the firm in order to create the competitive advantage for the firm. In 2010, McNamara defined the strategic planning as the instructive of the overall purpose and objectives of the business and how those objectives will be accomplished. This strategic planning may involve the development of agribusiness firm in term of developing new creativities of the firm such as organic production, on-farm processing, online marketing of your commodities to consumers, or even the efficiency in production for commodities.

The aim of strategic planning process is to design an agribusiness firm that will lead the business to achieve their goal which including personal goals and business goals. There are many literatures that mentioned about Strategic planning or Strategic development of

Agribusiness firm. For instant, the strategic planning from Extension and Outreach, Iowa State University, USA (Hofstand, 2016)., following their processes and information requested, it seem to be suitable with the big firm to follow the process rather than a small or normal firm especially family farming. In order to follow this strategic planning, the management team needs to prepare a lot of information from both internal and external. However, this strategic planning is including both strategy formulation stage and strategy implementation stage.

The second strategic planning from University of Maryland Extension, USA, comparing with the previous strategic planning, this strategic planning is much easier to follow and also has a clear procedure for the farmers to follow (Beale et al, 2008). This Maryland strategic planning also includes both formulation and implementation stage. The analysis model used in this strategic planning is SWOT analysis which is not much complicated and too advance for farmers to follow and implement.

The third strategic planning from the New Zealand Grassland Association, New Zealand, is the only one strategic planning among others that focuses with the timing of the planning rather than step-by-step planning as they separated the plan into three plans from long-term plan; One-to-five year, within one year and short-term plan; Day-by-day plan (Neal et al,1993). However, this strategic planning also including the information required for the analysis from both international and national economics, although selected and focused with validate and verify information.

The fourth strategic planning from Instituto Federal de Maranhão, Brazil, this strategic planning suitable with both big and small firms (Neal et al, 1993). The processes are intensive but easy to follow. Even though, this strategic planning is required a lot of information to do the analysis but it will help the firm to select the fit strategic at the end. This strategic planning includes both strategy formulation and implementation stages. Moreover, the strategic planning implementation stage for this strategy added the implantation policies in order to keep maintain, tracking, and verify the potential and effectiveness of selected strategy.

The fifth strategic planning from Grains Research and Development Corporative, Australia, this strategic planning initiated for family farming (Long, 2017). The procedure is clear and easy to follow. Therefore, this strategic planning only includes formulation stage.

## **FACTORS INFLUENCING STRATEGIC PLANNING IN AGRIBUSINESS**

In the business, there are several factors that could be influencing the strategic planning process or decision in the firm. From the previous literatures, there is a study that found the factors that influence the strategic planning process or decision. The following are some significant factors that influencing strategic planning especially in agribusiness which this study can defined into 8 categories as;

### ***Leadership***

Leadership has a direct effect toward the ability of the business and take an important part to driven the business to able to archives goals and objectives. The previous study states that leadership as giving the accompanying jobs; giving of requests which are clear, total and inside the abilities of the subordinates to achieve the assignments for accomplishing expected targets. This shows authority has a basic task to carry out in key arranging process. Leadership also plays the significant role in implementing strategic plan as leaders must be able to dedicate the

direction of strategic into the final accomplishment. Therefore, we can say that leadership is an important factor influencing strategic planning of business as it is one of the key driven businesses into the successful business further (Kiptoo & Mwirigi, 2014).

### ***Organizational structure and culture***

Organizational structure and culture are also the factors influencing strategic planning processes in organizations. The organizational structure enables the free flow of information inside the organization. This could be state that the organization structure is an essential factor toward how strategic planning can be implemented in business. The organizational structure can be divided into two major categories as 1) mechanistic organization and 2) organic organization

1) Mechanistic organization can be defined as “the organization which hierarchical and bureaucratic (Chantal, 2012)” The organization with this type of structure will be normally hold tight control over processes or workers. The characteristics of mechanistic organization are; Centralization in term of decision making as the most communication is vertical, Standardization in order to strict used of rules and standard in operating production, and workers found to work individually on their own assigned tasks.

2) Organic organization can be defined as the organization structure which very flexible and is able to adapt to change. The characteristics of organic structure are; Decentralization which lead to great deal of formal and informal participation in decision making, Mutual Adjustment in case of face-to-face contact for coordination, and workers found to work together with other or work as a team.

Whereas, organizational culture is defined as “the underlying beliefs, assumptions, values and ways of interacting that contribute to the unique social and psychological environment of an organization (Gothamculture, 2010)”. The organizational culture includes values, vision, symbols, beliefs, norms, habit, and so on. Leading to the successful of strategic planning of business, it’s essential that the organizational culture plays a main role and the planning team should be able to encirclement culture change within the firm or team.

### ***Availability of resources***

Availability of resources is one of the major factors influencing the strategic planning especially for agricultural or agribusiness firm. The resources could be including human resources, financial resources, and input capital for the productions (Odera, 2014). Availability of resources determined the firm capability to develop and support the formulation of strategic planning. As one of the important steps to formulate the strategic planning of the firm as the firm has to consider whether the availability of resources will be able to support or driven the strategic plan or be able to support and be effectiveness during the implementation stage.

### ***Government policy***

Government policy is one of factors influencing strategic planning of the agribusiness form. Government policy can definitely influence the strategic planning in term that the government could be intervene or give subsidies to some commodities in agricultural sector which will be an external influencing which affect the strategic planning of the firm in case that the farmers must try to formulate the strategic to react and corroborate with the policy that government gives to the farm.

Government policy or Agricultural policy that could affect the agricultural sector can be define into two main actions as 1) Government intervention and 2) Subsidies.

1) Government intervention occurs when the government came to control the market or some commodities which mostly occurs with agricultural products. This could be affecting the

strategic planning of agricultural firm as the firm has to formulate and develop the plan that along with the intervention policy.

2) When government lunches subsidies policy to support the farmer, this could also affect the strategic planning of the firm in the same way with the intervention as the firm has to develop their plan in order to be successful in the market or gain much competitiveness of the subsidies as the firm can (Singhapreecha, 2014).

### ***Nature of commodities***

Nature of commodities is one of the factors influencing strategic planning of the firm in term that each commodity has differences in their nature and characteristics of the commodities which the management team or farmers have to involve this factor and consider when formulating the strategic (Hofstand, 2016). Nature of commodities can also affect the elasticity of the commodities. Therefore, nature of commodities became one of the factors influencing strategic planning of firm. For instance, the characteristics or nature of agricultural commodities can define as (Account learning, 2017);

- 1) Agricultural commodities often quickly unpreserved.
- 2) Agricultural commodities always be a bulky in nature.
- 3) Agricultural commodities are difficult to control in both quantity and quality.
- 4) Agricultural commodities are hardly to differentiate from one another.
- 5) Agricultural commodities were affected by natural.
- 6) Agricultural commodities' elasticity of demand often be an inelastic.

### ***Market trends***

Market trends influence the successful of strategic planning in term that the firm has to select the strategic planning that suitable with the market trends to be able to gain the competitiveness in the market (Ng, 2005). Market trend involves in external analysis in strategic formulation stage as in part of industrial trend. Market trend or industrial trend identifies change and trend within the industry or market among the competitors (Hofstand, 2016). It can be identifying the whole market or even niche or specific market segment which depend on the firm and the strategy of each firm. Market trend also affects the market price and market structure. Thus, it is very important for the firm to consider this market trend as one of factors influencing the strategic planning in order to find the fit strategy for the firm and in order to be effective in strategy implementation process.

### ***Competitors' influence***

Competitors' influence is external factor influencing the strategic planning of the firm (Ng, 2005). The degree of competitors' influence affects the strategic planning in the way that the firm must be aware of the competitors' influence to enhance competitive advantage of the firm and formulate the fit strategy for the firm. Normally, the reason why the business has to formulate their strategic not only to gain the competitiveness of the firm but in order to compete with the rivalry or competitors in the market. Competitors' influence could be both opportunities and threats for the firm. It depends on how the management team deals with the competitors. There are the aspects that the firm can identify the level of competitors' influence that could affect the strategic planning of firm (Olsen, 2018).

- 1) The structure of competitors: the competitors seen be high when the market is perfectly competitive rather than having a leader in the market.
- 2) Growth objectives: the competitors seem to be higher when the market is in growth stage as all the firms will focus on the growth of their firm and gain as much consumers as they can. When comparing with other stages such as maturity, the competitors may focus to survive

and maintain their market position rather than the growth.

3) Exit barriers: when the cost of exit the market is high, the number of competitors in the market tend to be high as the new entries came but they do not want to lose their profit from leaving the market which expensive or difficult to go out.

4) Degree of differentiation: the degree of differentiation in the commodities affect the degree of competitors in the market. The competitors seem to be high when there is a high degree of commodities differentiation.

5) The structure of the market/industry cost: when the structure of industry cost is high, it will affect the price in market following that the competitor will cut the price after they already met the economy of scale which will affect another firm in competing in the commodities price.

### ***Farmer behavior***

Farmers behavior could be identified into five types by Dr. Garforth, a researcher from the Farmer behavior could affect the decision making in strategy formulation process. As the farmer University of Reading, UK (Bezuidenhout, 2015) as;

1) Family orientation: this type of farmers behavior is where farmers tend to focus with their family and how to pass on a workable business to the next generation of their family.

2) Business/entrepreneur: the farmers in this type is more strictly with the professional of the business. They tend to maintain to achieve the goal, focus on investment in order to grow their business, and also focus on staffs or workers management.

3) Enthusiast/hobbyist: this type of farmer's main occupation and income sourcing are not from farming business. They have low attention to the profit or financial aspect from farming.

4) Lifestyler: the farmer in this type focuses on family income standard of life which they try to increase family income from farming business. However, the farmers also try to balance to generate the high income with reducing workload and more time spending with their family and friends.

5) Independent/small farmer: These farmers focus on family standard of living, but not much focus on quality of life which they do not focus much on increasing or generating the profit from farming.

Farmer behavior influences the strategic planning as the lifestyle or behavior of farmer could affect the decision making and also how serious the farmers will be focus and give attention to the strategic planning. Also, farmer behaviors are part of farm value or business value which in part of strategic planning (Long, 2017).

## **DISCUSSIONS AND CONCLUSIONS**

### ***Strategies used in Agribusiness in Thailand***

From time to time, the strategic used in agricultural sector in Thailand has been change during the time following the strategic decision in order to driven the farm business to the successful farming and in order to compete within domestic market and also be able to compete internationally. The following are some of strategies that have been used recently by Thai agribusiness or farmers.

### ***Smart Farming***

Smart Farming came along with Thailand 4.0 policy which it supported the agricultural sector moving from 'traditional farming' to 'smart farming'. Although, smart farming became a hope for Thai farmers to increase their income from adapting the new technology into their production. Thai government wishes that when Thai agriculture sector is strong, it will lead to

sustain in Thai economy (Saenpassa, 2017). Moreover, in order to compete with the international competitors, the twenty-first century skills are needed to improve and driven the farm into the future. The farmers nowadays have to be not only a laborer but also a businessman with an updated information and understanding new technologies (Peak Recruitment Consulting, 2017). Thai government by the ministry of agriculture and co-operatives supported ‘Thailand’s Smart Farming policy’ by educated over 182,000 people to help farmers understand the concept and be aware of new technologies and innovations that could help them create a better quality of life and generate greater profit. The agriculture and co-operative minister general Chatchai Sari-Kulya (Saenpassa, 2017) mentioned that “If our smart farming policy achieves its goal, we should be able to help farmers out of the middle-income trap within the next two decades” Smart Farming also aims to increase the annual yield per rai by reducing unproductive, water consumption, fertilizers, insecticides, and other chemicals (Pugnatorius, 2018). Not only Thai government that came to support Thai farmers on this Smart farming but only non-government organizations such as universities, companies, or non-profit organizations came to help Thai farmers by providing a technology to support the farmer while they are doing research to improve the effectiveness of technology and to be able to educate Thai farmers also.

### ***Sustainable Agriculture***

Sustainable agriculture is among the main reform policy from Thai government that aims to overcoming the negative impact of economic which cause to poor farmer economics insecurity in Thai countryside area, and also preventing the chemical pollution from chemical fertilizers which harm both farmers’ health and land (Amekawa, 2010). The sustainable agricultural in Thailand can be defined as 1) changing from monoculture to crop rotation or mixed farming 2) choosing high generated income commodities 3) improving soil quality and 4) reducing chemical fertilizers or we can say that sustainable agriculture could happen when farmers try to improve or develop their production under ecology, economics, and social conditions.

There are five sustainable agriculture practices in Thailand as (Suksri et al., 2008);

1. Integrated farming: having at least two activities in the same field in order to reduce cost as it will meet with economy of scale. This practice is suitable with a small-scale farmer which commonly used in the central area of Thailand as there is an availability of water consumption during the year. The commodities that commonly produce inside this integrated farming are paddy rice, fish, chicken, pig and vegetables.
2. Organic farming: farming system where the farmer will only use non-chemical or organic fertilizers and herb-based insect control. The common commodities for organic farming in Thailand are paddy rice and vegetables.
3. Natural farming: often called ultimate sustainable farming as it is strictly to prevent any kinds of fertilizers. In Thailand, there is no perfectly practicing in natural farming now, but there are few farms in Northeastern area of Thailand that try to implement in practice (Suksri et al., 2008).
4. Agroforestry: combining between agricultural and afforestation as they plant cash crops or raise livestock while planting trees. This aims to increase farmers’ income, decrease deforestation, and improve soil quality and biodiversity. It often used in Northern and Southern parts of Thailand.
5. New Theory farming: proposed by His Majesty the Late King Bhumipol Adulyadej in 1993. The basic of this concept is from self-sufficiency. The New Theory farming is suitable with small farmers who have limited land.

### ***Organic Agriculture***

According to the expanding of demand of organic agricultural product in the world market, Thailand has a great opportunity to be a part in this market as Thai agricultural commodities are highly demanded among the world market including US, European Unions, following by Japan and Australia (The Government Public Relations Department, 2014). However, Thai agricultural commodities still cannot fulfill the world market demand. Thailand also aims to be a leader country in organic agricultural producers among ASEAN countries. Thai agricultural dominant commodities in the world market are rice, black tiger prawn, beef, dairy products, and fish. Thai government established “*National Organic Agriculture Committee*” since 13 March 2012 (The Government Public Relations Department, 2014). It was a cooperating and supporting from three ministries; The Ministry of Agriculture and Cooperatives, The Ministry of Science and Technology, and The Ministry of Commerce. The responsibility of National Organic Agriculture Committee is setting policies and strategies for Thailand’s organic agriculture and integrating all related plans and measures. There are four strategies for developing Thailand’s organic agriculture sector as;

- 1) Thai government aims to support Thailand’s organic agriculture by focusing on knowledge and innovation management, and the initiative of data base for the organic commodities.
- 2) The production of organic agriculture and supply chains will be developed and linked from upstream to downstream processing in the form of production network.
- 3) Thai government seeks to strengthen the marketing and standard of Thailand’s organic market and create a reputation of Thai organic products toward the world market through brand promoting in order to increase the volume and value of Thai agricultural product.
- 4) The Organic agriculture policy encouraged to work in an integrated manner to develop Thailand’s organic agriculture.

### ***New Theory Farming***

New Theory farming is developed from Sufficient economy philosophy purposed by His Majesty the late King Bhumibol. New Theory farming is based on four principles;

- 1) The theory applied to small farmers who holding around 15 rai, or about six acres, which is an average land of Thai farmers.
- 2) Farmers need to realize the need for unity on community to support each other.
- 3) Farmers need to be able to grow rice enough for their consumption for the whole year or approximately around five rai.
- 4) Water must be available even during summer season or average 1,000 cubic meters per rai for the whole year.
- 5)

So, for the New Theory, the ration of those four parts could be 30:30:30:10. The first thirty percent will be for a pond with four meters deep which could hold up around 19,000 cubic meters for crop cultivation for whole year and also can generate another income from aquatic animal or other plants. The second and third thirty percent could be part of crop planning, by thirty percent for rice and other thirty percent for other cash crop. Then, the reminding ten percent uses for living area and livestock rising (Raktamachart, 2015).

The New Theory aims to solve the water consumption problem and limited of the land usage. The Agricultural management or planning for this has three phases as; 1) farmers will have self-sufficiency by producing enough food for their family, living in good environment, and



enjoying a good health. 2) famers encouraged to work as a group within their community which lead to the corporation among them in order to not only benefit the farmers and their family but also strengthen the relationship between family and society and be able to increase their power. 3) this phase involves the processing and adding value to their products in term of agro-industrial development, by supporting from financial sources and energy sources.

### **Conclusion**

From the literature review, this study can identify that the factor influencings found in the literature are also the related to the current strategic used in Thailand. The factors are affecting the decision making of the farm in order to imply the proper strategic. The current strategies used in Thailand as follow have the factors influencing it as; 1) Smart farming: leadership, organizational structure and culture, availability of resources, government policy, nature of commodities, market trends, competitor’s influence, and farmer behavior are the factors influencing the smart farming strategy. 2) Sustainable Agriculture Farming: leadership, organizational structure and culture, availability of resources, nature of commodities, market trends, competitor’s influence, and farmer behavior are the factors influencing the sustainable agriculture farming strategy. The government policy is not influencing the sustainable agriculture farming as it is not mandatory to produce or process the agriculture commodities in the sustainable way. This is just an option for the farmer to choose whether they would like to apply this strategy or not. 3) Organic agriculture: leadership, organizational structure and culture, availability of resources, nature of commodities, market trends, competitor’s influence, and farmer behavior are the factors influencing the organic agriculture strategy. Due to the fact that organic farming is still in the implementation stage in Thailand and due to their production cost and require the special resources. This strategy also not have much support from the government sector comparing with other strategy. 4) New theory farming: leadership, organizational structure and culture, availability of resources, government policy, nature of commodities, and farmer behavior are the factors influencing the new theory farming strategy. Market trends and competitor’s influence are two factors which not influence this strategy as the nature of new theory farming is not used to complete with the competitors as its strategy aims to help the farmer to have their own usage with the farm. So, new theory farming is not focusing on market trends and any competition.

**Table shows factors influencing strategic planning for agribusinesses in Thailand matching with the current strategic used in Thailand.**

<b>Factors influencing Agribusiness / Thailand Agribusiness Strategies</b>	<b>Smart Farming</b>	<b>Sustainable Agriculture Farming</b>	<b>Organic Agriculture</b>	<b>New Theory Farming</b>
Leadership	●	●	●	●
Organizational structure and culture	●	●	●	●
Availability of resources	●	●	●	●
Government policy	●	-	-	●
Nature of commodities	●	●	●	●

<b>Factors influencing Agribusiness / Thailand Agribusiness Strategies</b>	<b>Smart Farming</b>	<b>Sustainable Agriculture Farming</b>	<b>Organic Agriculture</b>	<b>New Theory Farming</b>
Market trends	●	●	●	-
Competitors' influence	●	●	●	-
Farmer behavior	●	●	●	●

## **FUTURE RESEARCH**

Several areas for future research into factor influencing and strategic planning in Agribusiness could further the discussion:

1. can be further study on the Operationalization of Strategic Planning among farmers in Thailand.
2. can explore more on the strategic execution in order to evaluate more on effectiveness of the strategic planning in agribusiness for the next study.
3. can define more specific focus area of factor influencing in Agribusiness – strategic planning in the selected Agribusiness Industry in Thailand.
4. can explore in other ASEAN countries Agribusiness

## **REFERENCES**

- Account learning. (2017). *Agricultural Goods | Characteristics | Problems faced in Production*. Retrieved from Account learning: <https://accountlearning.com/agricultural-goods-characteristics-problems-faced-in-production/>
- Amekawa, Y. (2010). Rethinking Sustainable Agriculture in Thailand: A Governance Perspective. *Journal of Sustainable Agriculture*, 389-416.
- Beale, B., Johnson, D., Dill, S., & Myers, G. S. (2008). *Farm Business Planning*. Maryland, USA: University of Maryland Extension.
- Bezuidenhout, R. (2015, September 8). *Farmer behaviour, what type of farmer are you?* Retrieved from farmer's weekly: <https://www.farmersweekly.co.za/farm-basics/how-to-business/farmer-behaviour-what-type-of-farmer-are-you/>
- Chantal. (2012, July 15). *Mechanistic Organization vs. Organic Organization*. Retrieved from ORDORO BLOG: <http://blog.ordoro.com/2012/07/15/mechanistic-organization/>
- Choenkwan, S., Promkhambut, A., Hayao, F., & Rambo, A. T. (2016). Does agrotourism benefit mountain farmers? a case study in Phu Ruea district, northeast Thailand. *Mountain Research and Development*, 36(2), 162-172. doi:10.1659/mrd-journal-d-15-00111.1.
- Gothamculture. (2010). *Organizational Culture and Leadership*. San Francisco: Jossey-Bass. Retrieved from gothamCulture.
- Hofstand, D. (2016, May 2016). Strategic Planning for Farm Businesses. *Ag Decision Maker*.
- Kiptoo, J. K., & Mwirigi, D. M. (2014, June). Factors That Influence Effective Strategic Planning Process In Organizations. *Journal of Business and Management*, 16(6), 188-195.

- Long, J. (2017, February 6). *GRDC - Grains Research & Development Corporation*. Retrieved from <https://grdc.com.au/resources-and-publications/grdc-update-papers/tab-content/grdc-update-papers/2017/02/developing-a-strategic-plan-for-the-farming-family>
- Neal, D. A., Taki, T., & Whangaehu, R. D. (1993). Strategic Planning: how one successful farmer organises and plans his farming business. *The New Zealand Grassland Association* 55 (pp. 161-163). The New Zealand Grassland Association .
- Ng, E. (2005). An empirical framework developed for selecting B2B e-business models: the case of Australian agribusiness firms. *Journal of Business & Industrial Marketing*, 20(4/5), 218-225.
- Nualnatna, K. (2000). Development of Agribusiness Enterprises: Thailand. *The Asian Productivity Organization* (pp. 166-174). Indonesia: the Asian Productivity Organization
- Odera, P. A. (2014). *Factors Influencing Strategic Planning Process by Major Sugar Producing firms in Kenya*. University of Nairobi, Business Administration. Nairobi: University of Nairobi.
- Olsen, E. (2018). *Competitors in Strategic Plan Development*. Retrieved from On Strategy: <https://onstrategyhq.com/resources/duking-it-out-with-your-competitors/>
- Peak Recruitment Consulting. (2017, December 1). *Thailand's Smart Farmers policy could help to enhance quality of life and boost economy*. Retrieved from Peak Recruitment: <http://peak-recruit.com/thailand-smart-farmers-polict/>
- Raktamachart. (2015). *Theory of Sufficiency Economy*. Retrieved from Raktamachart: <http://raktamachart.org/theory-sufficiency-economy>
- Saenpassa, C. (2017, November 13). *'Smart farmers' face learning curve*. Retrieved from The Nation.
- Singhapreecha, C. (2014, May 9). *FFTC Agriculture Policy Articles*. Retrieved from [http://ap.ffc.agnet.org/ap\\_db.php?id=246](http://ap.ffc.agnet.org/ap_db.php?id=246)
- Suksri, P., Moriizumi, Y., Hondo., & Wake, Y. 2008. *Sustainable Agriculture in Thailand: An evaluation on the sustainability in ethanol production*. Retrieved June 21, 2012 from [http://www.hondo.ynu.ac.jp/hiroki/sustainable\\_agriculture\\_E.pdf](http://www.hondo.ynu.ac.jp/hiroki/sustainable_agriculture_E.pdf)
- Suphannachart, W., & Warr, P. (2010). *Total Factor Productivity in Thai Agriculture: Measurement and Determinants*. Bangkok: Department of Agricultural and Resource Economics, Faculty of Economics, Kasetsart University.
- The Government Public Relations Department. (2014, January 9). *New Strategies for Developing Thailand's Organic Agriculture*. Retrieved from The Government Public Relations Department: [http://thailand.prd.go.th/ewt\\_news.php?nid=1356&filename=index](http://thailand.prd.go.th/ewt_news.php?nid=1356&filename=index)
- Worldometers. (2018, September 16). *Worldometers*. Retrieved September 16, 2018, from <http://www.worldometers.info/world-population/thailand-population/>