

Marketing and Production Strategies based on Supply Chain of Ban Pang Moo Healthy Sesame Group in Muang District, Mae Hong Son Province

MANOP CHUM-UN¹, ARDCHAWIN JAIKAEW²

¹Assit. Prof., Faculty of Management Sciences, Marketing Department,
Chiang Mai Rajabhat University, Thailand.

²Dr., Faculty of Management Sciences, Business Administration Department,
Chiang Mai Rajabhat University, Thailand.

Abstract - The objective of this participatory action research aimed to study and analyze sesame production and marketing and to create and develop appropriate sesame product marketing strategies based on the supply chain of Ban Pang Moo Healthy Sesame Group. It was conducted by surveying phenomenon, in-depth interviews as well as focus group. The sample included 30 sesame villager producers of Ban Pang Moo Healthy Sesame Group. The findings revealed that most sesame growing areas belonged to agriculturalists, the cultivated used local black sesame stored from previous years, most of the laborers were from the family, and almost all the products were sold to the middlemen who determine the prices. The study of the appropriate marketing strategies found that the product strategies must build confidence to consumers with the identity of the local sesame seeds, and the competitive position was safe production and had the health benefits under the family brand. Price strategies in the general market segment set a low price, but the prestige pricing was for the niche market. As the distribution channel strategies, the intensive distribution was throughout the general market segment and selective distribution in niche markets through online and offline channels, and formed a cooperative group to create bargaining power in marketing. As marketing promotion strategies, the group applied product storytelling, point-of-purchase, participating in trade fairs to build strategic alliances and networks under fair trade concerning society and environment.

Keywords: Marketing Strategies, Supply Chain, Ban Pang Moo Healthy Sesame Group.

I. Introduction

Mae Hong Son province covers an area of mostly mountains with high complexity and is still a fertile natural forest causing it suitable for crops. The main economic crops are coffee, in-season rice, off-season rice, upland rice, white sesame, black sesame, soy, corn, and garlic. However, at present, the problems of the agricultural needs of Mae Hong Son province in an urgent matter is the development of agriculturalists' potential to be strong in changing agricultural operations towards effective agriculture, creating fairness in many areas, especially the prices of agricultural products and marketing channels that are suitable for the (Mae Hong Son Provincial Agricultural Extension Office, 2560).

According to the study and analysis of economic crops in Muang District, Mae Hong Son province found that the district's main economy is from sesame as the agricultural product is one of the most important economic crops aside from rice, soy and garlic since sesame has high production and marketing potential. It has plenty of nutrition and benefits to the body. Therefore, it has the popularity of planting a lot, specifically in Pang Moo Subdistrict, which is located on the lowland between the valley and the main river, Pai River resulting in an

abundance suitable for agriculture. Nevertheless, agriculturalists in Pang Moo Subdistrict tend to sell post-harvest products to the middlemen who come to purchase the products in the fields and determine the purchase price by themselves. These result in the agriculturalists to gain the produce prices much lower than the market price. When analyzing the research questions, it thereupon explores the question through the supply chain perspective that when the upstream is as soil resources, water, and wisdom, sesame cultivation is ready, and the middle of the water is the processing of sesame into various products If it is developed, and the downstream is as the accessibility of the market, it will be able to generate income and reduce the problem of being pressured by middlemen or not including whether the appropriate marketing strategies can help create stable and sustainable income for the community under fair trade or not.

II. Research Objectives

1. To study and analysis of sesame production and marketing of Ban Pang Moo Healthy Sesame Group;
2. To create and develop appropriate sesame product marketing strategies based on the supply chain of Ban Pang Moo Healthy Sesame Group, Muang District, Mae Hong Son Province.

III. Literature Review

The concept of the Marketing Mix Strategy of Kotler, Armstrong, and Wong (2001) mentions that as the strategic role, marketing aims to change the objectives of the organizations and business strategy to a position in the market competition. As a result, marketing strategies can be classified into the analysis of the business environment and seeking the actual needs of customers, matching between products to serve the market segment, and implementing the marketing program to achieve competitive position goals. In addition, today's business challenges oriented profits creation are no longer possible even the marketing strategy has to change because nowadays, modern consumers do not choose to purchase products and services from price solely. In contrast, they expect business brands have the potential to improve society as well (The Standard, 2020.) The marketing mix strategy jointly utilizes to respond to customer satisfaction includes strategies of product, prices, distribution channels, and marketing promotion.

IV. Research Methodology

This research is participatory action research: PAR), which applies the concept of action and participation conjointly. The population included sesame growers and producers of Pang Moo Subdistrict, Mung District, Mae Hong Son Province. The sample consisted of 30 sesame village producers of Healthy Sesame Group consisting of 1 president, 1 vice president, 4 committee members, and 24 members. The selection of the sample was applied the purposive sampling with the selection criteria as being the group for solving the problem of low agricultural prices. The sample group has been established since 2003 to bring the low price sesame products Pang Moo Subdistrict to create added value by using sesame oil and sesame seeds to be processed into products or used as components in various products such as sesame oil, shampoo, sesame oil, sesame seeds, flavoring sheets, etc.

The research instruments consisted of a phenomenon survey, in-depth interviews, sub-group discussions. Two types of data were collected as primary data and secondary data. The primary data was obtained through in-depth interviews with the leaders of Ban Pang Moo Healthy Sesame Group and subgroup discussions with local government agencies such as the Agricultural Council of Mae Hong Son Province and members sub-group discussions together with practical training activities in order to analyze and create marketing strategies for sesame products. These

strategies can be utilized appropriately to compete on a conceptual basis through the supply chain of sesame. The secondary data were obtained by studying the theory and theories of marketing as well as the supply chain from internet textbooks and related agencies. Data analysis used content analysis by capturing key points, summarizing, composing, and linking integrated content. Data collection was processed by the following methods: (1) Surveying the phenomenon to study the situation of sesame production in the supply chain of Sesame for Ban Pang Moo Healthy Sesame Group ; (2) Studying the operation of marketing and distribution of sesame products of Ban Pang Moo Healthy Sesame Group; (3) Organizing workshops to analyze and create knowledge of marketing strategies; (4) Creating and developing the marketing strategies for sesame products for proper and fair competition in the market; (5) Leading strategic marketing plans to the actual market test; (6) Setting the stage to present the results of research to stakeholders for the further commercial application.

V. Research Findings

1. The findings on the study and analysis of production and marketing of Ban Pang Moo Healthy Sesame Group

1.1 The operation of the sesame production situation, it was found that most of Ban Pang Moo Healthy Sesame Group, 35 growers will grow black sesame in the average planting area of 5 rai each, yielding about 35 buckets per rai. Most of them planted native varieties of black sesame seeds that are complete and small black seeds, easy to grow and care for. Moreover, they were able to squeeze more oil, fragrant, good disease resistance. They also planted white sesame seeds in some parts of the area. Planting black sesame will spend 3 months, which is to prepare the area in May and begin planting in June, then harvest products from September to October. Each cost of planting will include the cost of plowing grass and weeds as 500 baht per rai, sowing seeds as 250 baht per person, and wage for cutting grass or weeding in sesame planting area as 250 baht per person. Weeding in most areas will use their labor and family, and there is a cooperation between members of the group, like ravish traditional harvest without receiving compensation, but they will switch to help each other instead. However, if sesame seeds have to be harvested at the same time, each person must rely on their labors. Sesame harvesting can be shown in Figure 1.



Figure 1 Weeding and Sesame Harvesting of Ban Pang Moo

Source: Research

According to figure 1, the characteristics of the sesame are harvested and then bundled them; each bundle will be about 8-10 plants. Then, they are dried in the sun for another 3-5 days, and then stacked together on plastic. After that, they are beaten with a wooden track or carriage (similar to beating the rice) to get sesame seeds out. Then, using the bamboo fan or a fan blow dust or remnants of sesame residue for keeping the sesame seeds clean. Finally, they are packed in sacks for resale or further processing. When the sesame products are launched, the middlemen are going to purchase the black sesame seeds at the agriculturalists' fields.

However, the sesame products of the group are not equal annually. The production will be in the range of 500 buckets to 840 buckets per rai. The process of sesame oil production is to separate sesame seeds from the soil, dust, or other impurities by putting sesame seeds into the baskets. After that, they are washed with clean water for 4-5 times then put them in the drying room and dry them. They are brought to extract into sesame oil by using mortar and pestle by cold extraction method (as in figure 2). The gaining of sesame oil is chemical-free. Next, the sesame oil is put into a non-rusted metal tank to precipitate and then are filtered on a thin white cloth. After receiving clean oil from the precipitated storage tank for about 1 month, then, contain them into the desired size bottles. Importantly, squeezing 1 kilogram of black sesame oil requires 5 kilograms of black sesame seeds. Thereupon, 1 kilogram (1.66 liters) of sesame oil If they are extracted and packed into a 750cc. bottle, there will be approximately 2 bottles of black sesame. In addition, sesame oil can be processed into a product or a mixture of a variety of products such as wax for cracked heel, sesame oil spa, citronella, mosquito repellent, herbal shower cream, fresh black sesame oil, sesame oil shampoo including sesame oil hair conditioner, etc.



Figure 2 Sesame oil production by using mortar and pestle by cold extraction method of Ban Pang Moo Healthy Sesame Group
Source: Research

1.2 As the marketing operations, more than 80% of the sesame seeds will be sold to middlemen who purchase right away in the fields. The agriculturalists will contain the sesame seeds in a sack or 20-liter barrel and sell for 500 baht per sack or barrel. However, that sale price is usually the price that has been lowered from the middlemen since the price of the sesame in the market is approximately 700 baht per barrel. As for about 10% remaining sesame seeds, the agriculturalists will sell them at the local market,

with the price of the cleaned sesame seeds as 90 baht per kilogram. On the other hand, the unclean sesame seeds are sold at 70 baht per kilogram. The remaining 10% will be processed into sesame oil and sold in the spa market, Thai massage market, health, and wellness market, healthy food market. This can be seen that processing from sesame is still very low, although the processed sesame has extremely more value than sesame seeds collected from the fields.

2. To create and develop appropriate sesame product marketing strategies Based on the study and analysis of the production and marketing of Ban Pang Moo

Healthy Sesame Group can be analyzed and synthesized to create a marketing mix strategy for appropriate competition as follows;

2.1 Product Strategies: the group must build confidence in the sesame products with safe manufacturing, have worthwhile benefits, and worthy price by using the Family brand that has been certified trustworthy with a unique identity. Packaging should be diverse, convenient to use, beautiful, and with descriptions of nutritional information for being beneficial to consumers. The descriptions should include details of components and production sites as well as the quality certification logo from the responsible department. This is to create a utility model for each customer to select products according to the size and volume of applications that are appropriate for him. Moreover, the group should have the product line extension by-product processing and creating new forms of health products to the niche market. This market should be the market that needs high-quality sesame, safe, nutritious, vitamins, taste, and cleanliness as important since today's consumers pay attention to choosing healthier products with safety and high value to the body. Packaging showing details of nutrition information will be like the representative of the manufacturers or silent salesman in providing effective product information.

2.2 Price Strategies

2.2.1 The general market segment utilized reasonable pricing or penetrate pricing together with marketing promotion to encourage consumers to increase their purchase volume because this market will be satisfied with the price that is worthwhile when compared to the quality or health benefits.

2.2.2 Most niche market has purchasing habits that are conscious of quality and have high purchasing power and see that if the product has value and quality, then often do not pay much attention to the price. The price strategy applied the premium pricing strategy, also known as prestige pricing such as spa salons and traditional Thai massage. These groups will utilize sesame products to massage, compress, bake, or use as massage components as the spa or massage is a combination of the art of massage as well as treatment throughout the face and body by using oils or fragrances to help relax or home spa. Consequently, sesame products can be marketed in these groups by flavoring sesame oil with floral scents

such as jasmine, rose and ylang-ylang, and communicating the origin of organic, natural, or premium quality ingredients in health and beauty market. This market has a very high growth rate because of the trend of health consciousness and the desire to have good shape. This market segment is divided into sub-market segments as follows:

(1) Health Conscious Market Segment is the market group with the needs of consuming healthy and suitable food, but cannot consume every meal as required due to having to work;

(2) Shape Conscious Market Segment has the passion of exercising because it is believed that besides being healthy, their shape will be good, slim and charming to people around them and see that a valuable food or benefits will contribute to building a suitable body instead of exercising solely;

(3) Elderly Market is a group needing healthy food to strengthen the body and consume food to prevent illness. The sesame products can reach the market because the sesame seeds contain antioxidants that help reduce wrinkles and slow down aging. They thereupon can develop into skincare products, body products. Significantly, consumers can utilize them from shoulder to toe, including hair products.

(4) Healthy Food Stores, starting from the change of consumer behavior in selecting to purchase or food consumption as well as the technological changes to the digital world, then they affect the behavior of food consumption relentlessly, such as market segments that need convenience will order food from the home delivery business through applications such as Panda, Uber Eats and Grab Food. Choosing for food consumption from any restaurant, often review comments from the review page or food specific websites such as Wongnai and Trip advisor, etc. Sesame products can be marketed with this group in terms of cooking or sprinkling on the food or even using sesame oil for frying, stir-frying, or as a food ingredient.

2.3 Place Strategies: as the market studies showing that consumers prefer products that ease to find and offer ordering via phone or internet. Consequently, it is essential to apply an intensive distribution strategy that the sesame channel to support consumers with a different way of life or lifestyles, then it can present the picture of the flow of products from the production source with ownership to the market as in Figure 3.

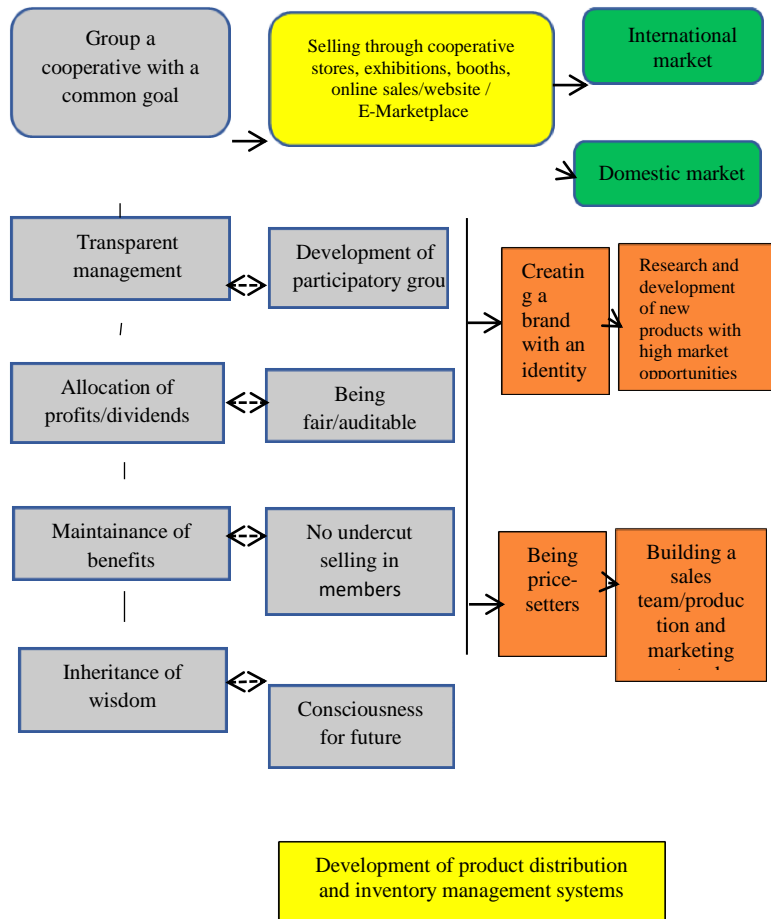


Figure 3 Appropriate sales management model for sesame products of Ban Pang Moo Healthy Sesame Group

Resource: From the analysis and synthesis of the research team

From Figure 3, the appropriate sales management model is a group of cooperatives with the same objectives for generating income and strength of community business and creating bargaining power. The sesame seeds are gathered from members to keep in the house for processing by-products instead of monopolizing the distribution of fresh sesame seeds to middlemen. As the establishing the cooperative, there must be a fair allocation of shares and benefits, not selling within the group with undercut prices, and must inherit the wisdom of production and processing of sesame seeds for future generations. A community learning center will be built or gotten involved with the school to pass on the mentioned wisdom. Additionally, there must have a sales department or a product collection group to sell and distribute products to the market both through the store, exhibition, and booths in various provinces and apply technology to help sell, namely online sales to expand the market to foreign countries under the development of the brand, and packaging. Moreover, they must be

price setters instead of having a monopoly on pricing, serve the market growth rate, have to create production and marketing networks with other communities in order to exchange products, knowledge, and market together to keep up with consumer behavior and the changing competition.

2.4 Promotion Strategies: due to do current marketing, the point of view between manufacturers and consumers is different which can analyze the viewpoint of Sesame Ban Pang Moo Healthy Sesame Group. The marketing mix is 4P and the view of the buyer or consumer is 4C, as in Figure 4.

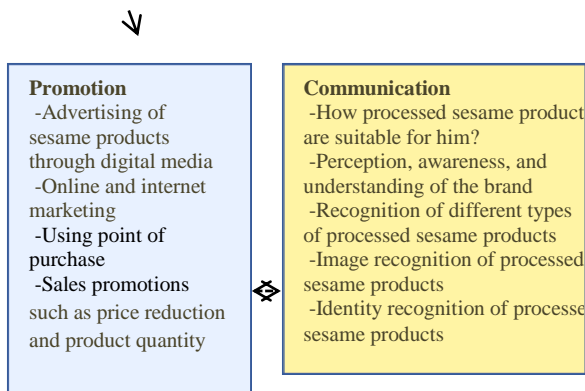
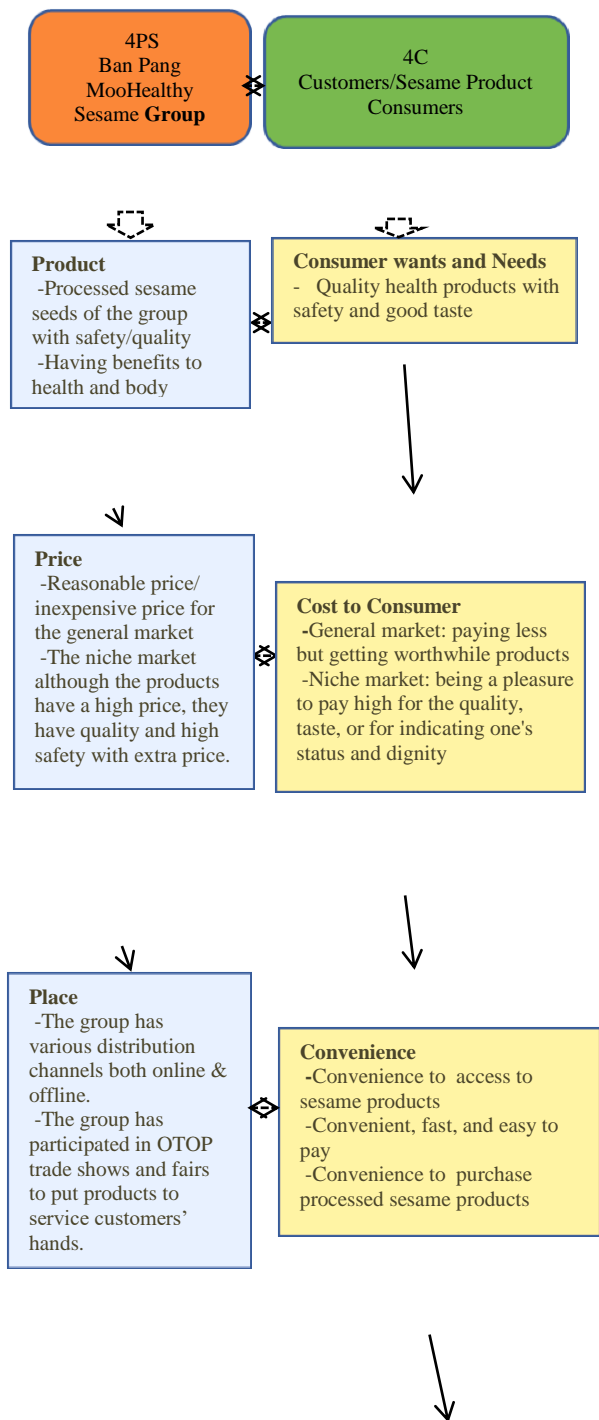


Figure 4 Marketing mix in the point of views of the sesame producers and consumers of sesame products

Resource: From the analysis and synthesis of the research team

According to Figure 4, the marketing promotion strategies must apply the Brand Storytelling Communication strategy by utilizing technology to increase the channels in reaching the customers and reduce the operating costs such as online and internet marketing since regarding to the market study data, it indicated that the person who had the most influence on the purchase decision was himself. Furthermore, the application of communicating at the point of purchase (POP) during trade shows beyond the purpose of selling goods also join to publicize products, study, market acceptance, inquire about consumer demand about the products as well as creating opportunities to meet trade partners leading a network of operators establishment and product exchanging information. In addition, the usage of communication technology in the digital age for technopreneurs is significant. The group must communicate the story and quality of the sesame benefits on health because the reason that consumers decide to buy sesame seeds is to want themselves and their families to be healthy.

As sales promotion, there should use a discount, giveaway, and premium to recommend products together with increasing quantity but not increasing price. Lastly, public relations must be marketing for society by participating in the benefit of the community including personal selling to help boost sales and provide product information to reach the target market.

VI. Research Discussions

Based on the result of creating suitable marketing strategies for competition regarding the product strategies, there must be confidence in the safe production of sesame products, worthwhile benefits,

and worthy price by utilizing family brand to create reliability for customers that is consistent with Jittima Kantanamallakul and Atchara Phodee (2016) who studied product and marketing strategies of the domestic egg business found that the important product and marketing strategies are to improve the production system to meet standards, establish an alarm system, research and develop standardized products. Moreover, the group must divide the market into 2 parts: general market applies low price strategy to penetrate the market together with marketing promotion, and niche market sets high prices and use the high quality of sesame as difference and safe planting as a selling point and create a competitive advantage through online and offline distribution channels for expanding the market. This idea is like Chularat Khankaew (2018) who studied on digital marketing strategies and marketing performance as the empirical evidence from local service businesses, it showed that digital marketing strategies as for the ability to create marketing content and management, online corporate reputation had the relationship and a positive impact on the marketing performance. It is compatible with the study of Sureerak Wongthip (2018) on online social networks: online marketing communication strategies, it was found that technological advances affected consumer behavior. They originally purchased products at a store or department store then they preferred purchasing via online media. Therefore, the organization with social media development should be given importance to be used as a means of communication and knowledge about products or services including be a channel to organize the marketing activities of the organization following the consumers' needs.

Additionally, the group must have salespeople to assist for providing product information to convince and persuade customers together with public relations about participation in environmental conservation along with fair trade, it will be sustainable in the market, which is in line with Chow Rotjanasaeng (2019) that studied the marketing strategies of agricultural products, processed agricultural products and handicrafts resulting from the Sufficiency Economy Project in the northeast region of Thailand, the findings revealed that the products are traditional local wisdom with the clear and fair price without taking advantage of consumers. Moreover, the other support is the study of

Patcharin Suphaphan and team (2017) researched on the appropriate marketing strategies for the distribution channels of organic products in Chiang Mai, found that increasing the opportunity to sell in the safe agricultural products sold together with the organic products in the market groups specifically must focus on product strategies, marketing promotion, and price as well as storage. Furthermore, Phirapha Thaweek (2015) studied the opinions about marketing mix strategies of organic rice entrepreneurs in Thailand, the findings indicated that

the entrepreneurs in the north, northeast and eastern regions paid attention to the importance to products and the products must have quality standards certificates. Consequently, marketing mix strategies must be connected and integrated to meet the highest satisfaction of customers consistent with. These findings are customers consistent with Chattayaporn Samerjai (2015) studied the community enterprise market strategy: a case study of pickled garlic, Bang Krang Sub-district, Nonthaburi Province, it presented that the marketing mix in all aspects, including packaging, products, prices, marketing channel and promotion, advertising marketing, public relations, and promotion correlated with consumer behavior in all aspects with statistical significance at the level of 0.05.

VII. Recommendations for competitive marketing strategies

According to creating a suitable marketing strategy for sesame derived from marketing mix strategy concept combining with identity and market competitive position, the recommendations for marketing strategies in order to create competition causing stable and sustainable income are the group must create production and marketing networks in order to control agricultural products from the upstream in supply chain, seed procurement, and build a bargaining power base in the market. It includes the exchange in product knowledge and experience as well as seeking ways to reduce production costs utilizing innovations and technology to help implement operations such as precision agriculture and block chain to help predict market demand, and then apply it to set the definite production plan. In the future, it is necessary to develop a contract farming to guarantee a certain market, and support agro-processing and manufacturing. It is income and price insurance sesame products in advance. It can reduce income and product fluctuations along with the concept of zero waste that can use the leftover production from the sesame production process to develop into a new product development by using technology and innovation for the future production to accelerate tremendous economic value creation.

References

- Chittima Kantanamallakul and Atchara Phodee. (2016). Product and Marketing Strategies of Chicken Eggs Business in Thailand. King Mongkut Agriculture Journal. 34 (2), 41.
- Chularat Khankaew. (2018). Digital Marketing Strategies and Marketing Performance as the Empirical Evidence from Local Service Businesses. Chulalongkorn Business Review 41 (159), 1.
- Chattayaporn Samerjai. (2015). The Community Enterprise Market Strategy: Case Study of Pickled Garlic, Bang Krang Sub-district,

- Nonthaburi Province. Phranakhon Rajabhat University Academic Journal. 6 (2), 104-105.
- Chow Rotjanasaeng. (2019). The Marketing Strategies of Agricultural Products, Processed Agricultural Products, and Handicrafts Resulting from the Sufficiency Economy Project in the Northeast Region of Thailand. Bangkok Thonburi University Academic Journal. 8 (2), 57.
- The Standard (2020). Philipp Kotler, Father of Modern Marketing Points out that Businesses Must Have the Potential to Create Societies, Not Just "Profits". Retrieved 25 March 2020.From <https://thestandard.co/world-marketing-summit-Asia-2019/>
- Phirapha Thaweek. (2015). The Opinions about Marketing Mix Strategies of Organic Rice entrepreneurs in Thailand. Suthiparithat Journal. 29 (92), 167.
- Patcharin Suphaphan et al. (2017). The Appropriate Marketing Strategies for the Distribution Channels of Organic Products in Chiang Mai. Parichat Journal of Thaksin University (Special), 35.
- Sureerak Wongthip. (2018). Online Social Networks: Online Marketing Communication Strategies to Attract Consumers in the Digital World. Journal of Business Administration of Mahanakorn Technology. 15(1), 21.
- Mae Hong Son Provincial Agricultural Extension Office. (2017). Strengths, Weaknesses, Opportunities, and Obstacles in the Agricultural Sector of Mae Hong Son Province. Retrieved 6 December 2019. From <http://www.maehongson.doe.go.th/>
- Kotler, P., & Armstrong, G., Saunders, J., & Wong, V. (2001). Strategic marketing: planning and control. (2ndrd). Butterworth-Heinemann: Great Britain.