

Product Development Strategy of Mangos-teen Products for Agriculturists in Eastern Region, Thailand

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Abstract : The research objectives are (1) To investigate the context and products of the groups (2) To seek the appropriate products for the development and (3) To study guidelines for product development. Researcher using Quality Research method which, main responders are processed mangosteen product distributors, agriculturists, experts and academicians. Collected data from documents analysis, depth interview, creating an open stage for expressing one's opinions, include using Quantitative research method to collect the questionnaires. The questionnaires were provided for those who used to buy or consume the processed mangosteen product from Eastern region agriculturists. The data collected from questionnaires was analyzed by Descriptive Statistic including Frequency, Mean and Percentage. Measurement of influential levels of factors and was validated by triangulation method to interpret the answer of the research objective.

Research Conclusion found that (1) Enterprise groups will integrate shares together under the limited equipment and budget as well as the lack of knowledge in business management. (2) The appropriate products to develop is mangosteen toffee developed by developed branding, packaging, developing form and quality (3) The development can be done by develop the original package and brand to be more creativity, more beautiful and more likely to be accepted by consumer. These can enhance the products standard.

Keywords : Product Development Strategy, Agriculturists in Eastern Region, Mangosteen.

1. INTRODUCTION

Mangosteen, widely known as the queen of fruit by the beautiful shape and color, suitable to transport, delicious. It is also recognized for both domestic and foreign. Currently, mangosteen starts to be more important to the economy of the country respectively. In other words, apart from domestic consumers, it is presently can be exported and enhance much more incomes to the country. Since, Thailand has exported fresh and frozen mangosteen, It is found from years 2003-2008 that, the exportation of mangosteen has been highly changing. On the average the distributions are seemingly decrease for 0.50 percentages per year. However, the numbers of distribution in the same period is more likely to decrease as it is down to 7.7% per year. Whereas, the exportation in years 2003-2008 as it is in the same period of year as stated before, was found that it is likely to increase up to 21.12% per year. Therefore, this has been effected to the volume of the exportation and likely to increase up to 15% per year (Office of Agricultural Economics, 2552)

The information of the exportation amount and value of mangosteen as stated before, Shown that mangosteen is an interesting economic fruit. Besides, The Bureau of Agricultural Development Policy and Planning has ranked mangosteen in the First Group. Which means this group is a bright future and is capable for highly income earning group. In the other word, it is prosperous group with an highly opportunity to be exported to another country (Bureau of Agricultural Development Policy and Planning, 2548; Krisnawati, Perangin-Angin, Zainal & Suardi, 2016; Intan, 2016).

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Thailand has the areas to plant mangosteen of 687,421 Rai in the year of 2003 and was increased to 886,092 Rai in the year of 2008. Since, the area was classified to be the area for perennials or yield plant in 2003-2008. After the separation between the perennials and yield area in 2003-2008 there was found that it has been increase up to 2.66% and 10.11% respectively. It was found in the year of 2008 that Janthaburi province is the area of the most cultivated of mangosteen as the perennial plant. In Janthaburi there are 25% of mangosteens plants from the total of the perennial plant area in the country. After Janthaburi there is Nakornsritammarat province where is the second most cultivated plant of mangosteen of 19% and Chumporn province as the third of 16% Trad province 6% Narathiwat province 6% as same as Trad province. Rayong province of 5% and others provinces of 20% (Office of Agricultural Economics, 2552)

The amount of mangosteen product will distribute to the market in March – June which divided in to mangosteen in the early season, which fructifies fruits in March - May and mangosteen in the late season, which fructifies fruits in May – June. Whereas the high income of mangosteen are from the early season mangosteens, which come from the Eastern region, where include Janthaburi province, Trad province and Rayong province, where are the most cultivated area of mangosteen for exporting

The reason of the mangosteen strategy that has been stated before, is to expand the export and enhance the value of magosteen, due to the vision of Thailand which is, Thailand must preserve to be a leader of the mangosteen distributor and distribute valuable mangosteen to the global market so the mangosteen has been set to be a new product which, has an ability to be exported in the future by forecasting the goal of increasing the amount and enhance the value of the fresh and processed mangosteen product for exporting in the year 2004-2008 to be increase up to 28.94% and increase the value up to 29.39% which, classifies from the form of export which, the goal of fresh mangosteen export is 28% of the increasing and frozen mangosteen increasing 47% which will show that the goal of frozen mangosteen exporting is increase almost twice than the fresh one. Therefore, showing the aim of expanding market to be farer since, the exporting in the form of fresh mangosteen is difficult due to the limited of the expiry and fresh mangostenn also need to be between 25-30 Celsius degree only and can be stored for only 7 days after that it will start to expiry.

Nowadays, processed agricultural products play significant roles in economy and society of the country. They increase employment and maintain traditional professions in Thai society. Thai agriculture produces quality products, creatively produced from a combination of wisdom and local tradition and culture. Development of agricultural products to have marketing potential increases such big amount of the country's income. However, potential of agriculturists should be promoted to equip agriculturists with knowledge necessarily applied in production process. In addition, agriculturists can use the knowledge to increase the product values that meet the standards of domestic and international markets. With this action, agricultural product processing industry can be a tool that stimulates the country's economy in competing with others sustainably and stably in the future.

Agricultural products in families can be exported to earn huge amount of the country's income. Export of processed agricultural products is one of the essential state policies because it is a factor that continually promotes the country's economy. This is because export increases investment and needs of labor, reduces deficit balance of trade and payment, leading to value added to economy of scale and increases production technology advancement. Nevertheless, there are difficulties and limitations including shortage of raw materials, out-of-date production process and lack of quality technology development. Importantly, small and medium enterprise operators lack knowledge and skills in productivity resulting in low productivity. High cost of production is a problem of marketing aspect. This includes wage, lack of physical product development, lack of promotion on product design and deficiency of information system. Shortage of skilled labor and personnel with management technology and marketing abilities is a problem of personnel aspect. In addition, one of the important requirements manufacturers and exporters should understand are regulations and procedures of exporting agricultural products including export control regime, standard products, tax, tax benefits for export and relevant exporting laws and regulations.

The researcher realizes about significance and problems of using mangosteen and is interested in taking part in the research and imparting technology to agriculturists in the eastern region. The researcher would like to develop herbal plants in local community to become mangosteen OTOP products for agriculturists in the eastern region and improve product quality to meet quality standards. This will promote economy and strengthen the community in the future.

2. METHODOLOGY

The researcher collected data from in-depth interview. The collected data was validated by triangulation method. The relevant data was analyzed and synthesized by inductive approach based on causality interview aiming to explain actual phenomenal. This could answer whether it responded to the research objectives, was reliable and contained sufficient details which described the relations or not. After that, it was explored and summarized to create inductive summary.

The data collected from questionnaires was analyzed by Descriptive Statistic including Frequency, Mean and Percentage. Measurement of influential levels of factors in each question was divided into 5 levels consisting of Very high, high, moderate, low and very low.

3. RESEARCH OBJECTIVES

- To investigate the context and products of the groups
- To seek the appropriate products for the development
- To study guidelines for product development

4. FINDINGS / RESULTS

1. Context and products for the group

- Development of the member groups' products was carried out in the aspects of packaging, branding, product standards and suitable prices with selectable sizes. Some enterprise groups would make market surveys to collect data before pricing. This could assist cost calculation in groups. Some groups held meetings to propose prices and distribution channels prior to pricing. Some groups with only one stakeholder would make decision by themselves based on information from the market in general.
- The groups had buildings as offices and production sites. The budget to establish the groups was allocated from Local Administration including Provincial Administrative Organization (PAO), Subdistrict Administrative Organization (SAO) and municipality. Some groups rented the areas of the temples while some used the areas of the heads or the group members.
- Distribution channels included community shops, noodle or food stalls, souvenir shops, department stores and foreign visitors. Small enterprises would open retail shops to sell products on their own. Sellers would come to well-known product groups and took products to sell. However, the enterprise groups lacked various distribution channels which hindered processed mangosteens in the east of Thailand from growing. Medium and large enterprises have different distribution channels. For instance, their products are available at Don Muang Airport for foreigners. Small enterprises would open retail shops to sell their products while famous enterprises would have sellers come and buy products at the factories. Sales promotions would be organized through trade fairs at IMPACT Muang Thong Thani. Additionally, government agencies normally organize OTOP fairs at nearby provinces to let customers taste the products before actual selling. The groups offer souvenir baskets for special occasions which get good responses from customers.
- Publication / marketing promotion included participating in government agencies' events at IMPACT Muang Thong Thani and OTOP fairs at nearby provinces. This allows customers taste the products before actual selling. The groups offer souvenir baskets for special occasions which get good responses from customers.

- The package of processed mangosteens showed that packaging of the old mangosteen toffees were wrapped by cellophane and put them into cellophane bags with a product label on. The label did not contain sufficient information about the product owner. In addition, address and telephone number were too small to read. Therefore, consumers were confused among other processed mangosteen products.
- Product brand names were designed by the product owners with guidance of educational institutions. Their brand names were continually developed to be up-to-date and unique. However, many groups did not have product brand names. They designed their own products. Furthermore, packaging/product brand names unattractive and did not have uniqueness.
- Quality system was not applied in production process. As a result, the production did not meet the same standards. The groups did not use production technology due to the high production cost so they could not produce products to serve needs of the market sufficiently. Additionally, the groups lacked development of physical product and packaging. For raw materials, the processed mangosteen agricultural groups lacked systematic planning on raw materials resulting in material storage. This was because quantity of raw materials was not obviously certain in each season and year. It was difficult to formulate production plan to serve the market need. Quality system was not widely applied in production process so the production did not meet the same standards. Production technology was not employed due to the high production cost so they could not produce products to serve needs of the market sufficiently.

2. Developmental guidelines for mangosteen product markets of agriculturalists in eastern region

Developmental guidelines for mangosteen product market should focus on product quality development. The key elements are as follows.

Products : Physical product should be focused, consisting of ingredients, sizes, weights, colors, taste and quality etc.

Brand names : Brand names should be improved to serve all needs of people with individual identities by assistance of academic and marketing personnel. Logos with foreign languages should be provided.

Products should be publicized online and media such as leaflets should be provided : The products should be provided at OTOP trade fairs in order to create identities of the groups and to enable consumers to access the products when the products are outstanding, beautiful and recognized, expressing product quality.

Requisition of product certification should be processed, leading to quality development of mangosteen products and the most outstanding OTOP products according to the standards of product quality.

Packaging should be developed to meet the standards : The formats should be improved to suit each mangosteen product and to serve different occasions.

3. Guidelines for distribution channels

Guidelines to increase distribution channels process mangosteen products include penetrating the existing markets and focusing on selling processed products in the existing markets through increasing sales promotions and product development.

Market development is carried out by offering processed mangosteen products to new markets in regions inside and outside the country. New demand is created through advertising and publicizing. This will stimulate the markets such as retail shops, convenience stores, wholesale shops, stalls, supermarkets, department stores and malls, corporate chain stores, selling at home and shops inside gas stations.

Product development is carried out through improving mangosteen toffees and bringing them back to the markets again. This includes packaging change, physical product change and increase of benefits and regular development of product quality.

Distribution channels can be increased inside and outside the country. It can be done by participating in seasonal activities organized by government and private agencies, expanding selling points in retail shops under the cooperation of Office of Commercial Affairs and expanding mangosteen products produced from organic materials to ASEAN countries, European countries and Japan etc. This requires various promotional plans for mangosteen products covering advertisement through television, radio, newspapers, magazines and online media. The groups cooperated with the province to organize competition on products and invite media to join. The products should be presented via online media and publication media including leaflet. The product should be presented at OTOP trade fairs to create uniqueness of the groups and enable consumers to access the products. Processed mangosteen business operators should regularly use model of processed mangosteen in order to hold a market and be recognized by consumers.

4. Business feasibility of mangosteen products

Product feasibility : Processing healthy products is increased. Mangosteen drinks are increasingly popular. Business trend will be growing in 3 years, 5 years and 10 years due to the great benefits of mangosteens. Moreover, cosmetic and cleansing products pay attention to mangosteens. Mangosteen extract is used as ingredients due to its plenty benefits including medication and cosmetic properties. The mangosteen extract contains Tannin and Xanthone.

Mangosteen toffees are one of the products which tend to grow very well in the current candy markets. Nowadays, the growth rate of candies is at 7%. If manufacturers of mangosteen toffees focus more on teenager, it will increase prospective target group.

5. DISCUSSION AND CONCLUSION

The research about developmental strategies for mangosteen products produced by agriculturists in eastern region is consistent to a study of Sittiwrongchai & et al. (2013). The researchers investigate agriculturists' potential development in processing mangosteen. Focus group interview was conducted among 10 experts to exchange knowledge about processed mangosteens. The agriculturist needs and knowledge in the community were combined to provide 4 guidelines/methods of processing mangosteens. These include; (1) mangosteen soap; (2) mangosteen drinks; *(3) mangosteen toffees and; (4) mixed mangosteens. The results of research objectives showed that guidelines to increase distribution channels for processed mangosteen products by penetrating the existing markets by focusing on selling more of processed products in the existing markets and offering processed mangosteen products to new markets in regions inside and outside the country. This is consistent to a study of Promchana (2006) showing that the factors influencing marginal marketing consisted of marketing competition and pricing. In imperfectly competitive markets, a business unit has advantage and can set higher price than other, leading to high marginal marketing (Rordwinij, 1994). Additionally, Sahachaiseri (2001) proposed the concept of Peter F. Drucker expressing that "Marketing is an effort of sale expanding with the quickest ways". A concept of Wongmontha (2542: 11) about marketing mix mentions that "There are sufficient products to serve needs of target customers at acceptable prices which customers are willing to pay. This is because they see worth values. Furthermore, product distribution is consistent to buying behavior to provide convenience to customers with an effort to convince them and create proper behaviors". This is similar to a concept of Wiwatthanachart & et al. (1988: 130) expressing that the general principles consist of product, price, place and promotion.

In addition, the results revealed that developing market by offering processed mangosteen products to new markets in regions inside and outside the country is consistent to what Bearden & La Forge (2004) mentioned. That is, market selection is an effort of a corporate to improve and develop products and strategies in order to use as tools to approach and convince target customers. The marketing group is the target group. The ways to increase distribution channels of mangosteen toffees give benefits to business which is consistent to a concept of Siriphocakij (1998). That is, it reduces product shortage and loss of

customers due to lack of products on shelves. It also promotes good relationship between business and customers, reduces cost of product delivery and saves cost. The cost saved can be used as discounts for customers in terms of discounts for product delivery or other forms of marketing promotions. For instance, giving free products will expand the markets and increase customers. If a business can make use of distribution channels effectively, it will promote abilities of product distribution to the markets very quickly with low cost. Additionally, this can be tools to strengthen other marketing mix. Jongsathitwattana (2001) gives the meaning of a product as an object or service offered to attract interests for selling, for consumption and for satisfying customers. It could be called as a product serving customer needs in all aspects including physical product and brand name displaying uniqueness or image, fame and reliability of the product. Moreover, it refers to trademark and logo etc.

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