

# Commercial Capacity Development of Waste Material Product: Experience from Bangkok, Thailand

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## Abstract

The objective of this research was to study the group operating conditions, consumer's behaviors and needs and approaches for the development of product potential towards community product standards of community products in the category of commercial waste materials. The data was collected from the sample group consisting of 2 entrepreneurs and 442 consumers in Bang Khen area, Bangkok, Thailand. The research result revealed that the group was formed by the local government organization for business activities. Most of the group members are elderly people who use waste materials, namely fabric scraps from factories and garment shops, to make products. The problems in the group's operation were the lack of effective group management, uncertain production capacity, no financial planning for investment, selling price set according to the market price, non-attractive packaging, without brand. The product distribution channels include shopping malls near houses and places provided by local governments. A survey on consumer's behaviors and needs found that 71% of consumers had purchased a community product in the form of waste materials. Most of them buy key chains. The purchase frequency is about once a month from local shops/community. The main reason to buy is to help the community. The customers decide to buy from online media. The consumers have a high level of opinion about the deciding factor for purchasing a product in every aspect while entrepreneurs see price factor as the main factor in the purchasing decision of consumers. From the analysis of the business environment, the approaches were found in developing product potential to meet community product standards, totaling 11 things consisting of group integration and group management with the marketing aspect, 2 of each aspect, and the product aspect with the production process, 3 of each aspect.

**Keywords:** Commercial Capacity Development, Waste Material Product, Thailand.

## Introduction

One way to build strength especially in the economy for the community is the development of what is known as "Community Products" (Pianjud, Samappito, Watcharapothikorn & Makaew, 2021). The research of Sasong (2017) indicated that the role of entrepreneurs with the product innovation is an important factor that will increase the economic value of the

community. From the following reasons, the studies on these have received great attention from researchers around the world until now, such as Sirisack, Sirivanh, Sengchanh & Bounpathaph (2016), Jensen, Christensen, Denver, Ditlevsen, Lassen & Teuber (2019), Ragasa, Andam, Asante & Amewu (2020), Hasan, Shen & Yuan (2021), Marques, Mauad, Domingues, Borges & Silva (2022) and Nourira,

Hammami, Arias, Gondran & Frein (2022). For Thailand, studies on these subjects have also received widespread attention, such as Thongkaew, Sodhibhan & Saribut (2015), Rattanapan & Rattanapan (2017), Kringern, Suwannarat, Narkwiboonwong (2018), Somchan (2019) Harnvanich, Wanichwecharungruang, Chandrachai. & Asawanonda (2020) and Jaimuk, Saithong-in, Chaisalee & Sribunnak (2021).

Japan is regarded as a model of community product development. It started with the objective of solving Oita Prefecture's economic stagnation and recession known as One Village, One Product (OVOC) (Jaiborisudhi, 2019). This concept later spread to countries such as Kenya, Tanzania, Malawi (Kurokawa, 2011), Nigeria (Issa & Lawal, 2014), China (Xujin & Li, 2013; Yang & Zhang, 2021), Vietnam (Thanh, Nhat, Dang, Ho & Lebailly), Indonesia (Miagina, Biso & Kembauw, 2021), including Thailand (Jaiborisudhi, 2019). It can be used as a guideline for community development. The Thai government has revised and renamed it in accordance with the context of the prefecture called "One Tambon [Sub-district], One Product" (OTOP) (Kurokawa, 2011) used to increase occupation and income for grassroots community until it is recognized as one of the best forms of income distribution to the community. The government sector assists in modern knowledge extension of local wisdom and management to promote and support local development processes. The communities can be built to be strong and self-reliant allowing people to participate in generating income by using resources and local wisdom to develop into products. The community products can be connected to markets both domestically and internationally with network and internet shop systems.

One Tambon One Product was first established in 2001 until present. It could be partly developed and some collapsed. However, overall, almost 20 years ago, the OTOP sales including in 2016 grew averagely 12% per year. The Community Development Department aims that from now on, it will increase by 2%

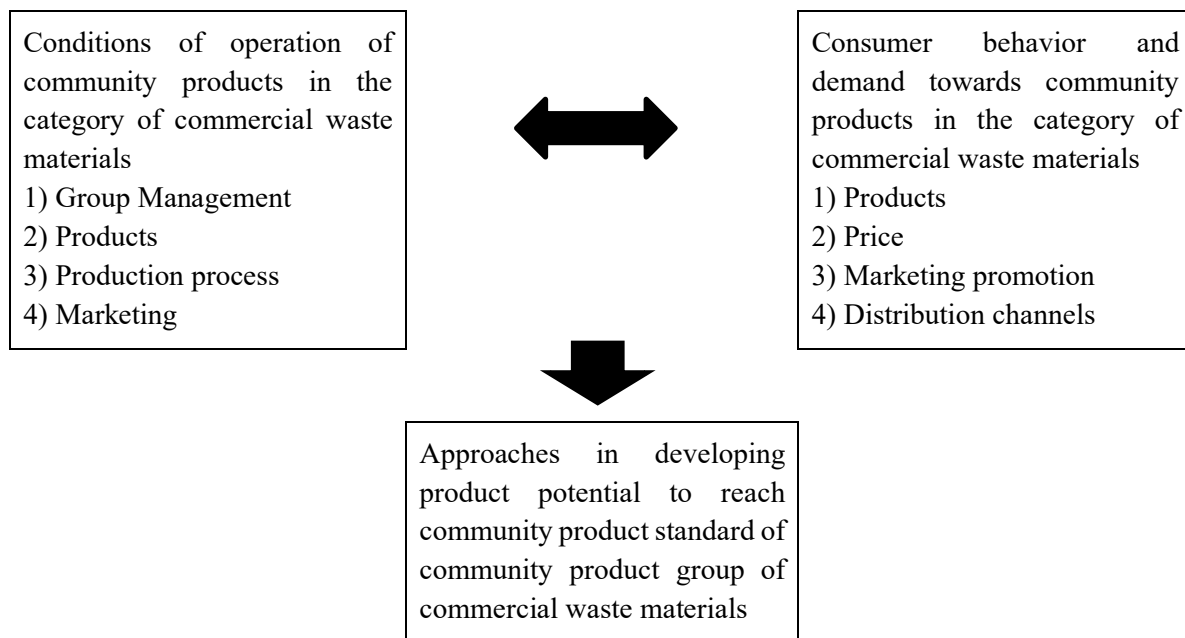
per year, starting from 2017 with sales of 2,165 million baht. There are 48,000 groups in the country. Nakhon Pathom Province is the province with the most sales for the first year after Chiang Mai has always been the leader. For Bangkok which is the capital city of Thailand, there are as interesting and diverse OTOP products as other provinces in all 50 districts. Only special products are selected. At the first stage, 378 items were selected. The selection criteria for OTOP products are divided into 6 categories; food, beverage, fabric and garments, appliances and decorations, crafts and souvenirs, and herbs that are not food and drugs. It was found that herbs that are not food and drugs of 5-star level in Bang Khen area are yellow oil and water balm. For the 4-star food category, it can be seen that in Bang Khen, there are only 2 selected product categories. From the study of community development data of Bang Khen District Office, it was found that there were 43 entrepreneurs of OTOP products in 2015 who came to register and get certified.

By dividing the potential development of OTOP products, they can be classified into 4 categories according to the quality and quantity that can be produced; (A) having high quality and high productivity as unique value creation, (B) having high quality but low productivity as competitive development group, (C) having medium quality and high productivity as the group adapted to development, (D) having small number of easy-to-produce products (Chalida Poma, 2010). It was found that most of OTOP products in Bangkok area was in the adaptation-to-development group. Being categorized by product types, it was found that in this group, most of the products are crafts and souvenirs made from natural and recycled materials. From the study on the problems of OTOP products of Thanyamai Jiarakul (2014), it was found that most of them were related to the cost of raw materials and energy. The funding sources to support is lacked. There are also market constraints. The products are often of low quality with high production costs. When considering the types of products of

decorative ornaments and souvenirs, it was found that there is a production problem. The raw materials are expensive. There are no production skills, lack of technology to produce, marketing problems, lack of product development, no brand, non-standard packaging, lack of good publicity. There are no fixed markets both domestically and internationally, financial problems, and insufficient working capital.

From such information, the researchers were interested in studying the problem of OTOP products in Bang Khen District to study only in natural products and waste materials in order to develop higher product potential. The research questions consisted of 1) how is the operation condition of community products in the category of commercial waste materials of the people in Bang Khen District, Bangkok, 2) how

is the behavior and demands of consumers towards the community products in the category of commercial waste materials, and 3) what should be the guidelines for developing product potential towards community product standards of community products in the category of commercial waste materials for people in Bang Khen District, Bangkok. The research objective was to study 1) operating conditions of community products in the category of commercial waste materials of people in Bang Khen District, Bangkok 2) behaviors and consumer demands towards community products in the category of commercial waste materials, and 3) approaches in developing product potential to reach community product standard of community product group of commercial waste materials of people in Bang Khen District, Bangkok.



**Figure 1** Research Conceptual Framework

### Research Method

This research is the mixed-method research. The population and samples of this research were divided into 2 groups; entrepreneurs producing and selling products from waste materials who registered One Tambon One Product in 2017 with the Bang Khen District Office, Bangkok, and has been assessed by the

Bang Khen District Office to be products in the D level (adjustment to development group) totaling 7 persons and 442 consumers who came to visit the exhibition in the Bangkok District Office to find information on the needs of consumers of community products. In terms of qualitative research, the data classification was conducted to compare,

explain correlation, and analyze the content obtained from the interview with an open-ended questionnaire and conversations with stakeholders. In quantitative research, the study was conducted on the behavior of purchasing community products in the category of waste materials. The obtained information was analyzed with frequency distribution and the percentage was found leading to the presentation of approaches in developing product potential to the community product standard for waste materials with business environment analysis (SWOT Analysis).

## Research Results

### Conditions of operation of community products in the category of commercial waste materials

**Group management and assistance from government agencies or other sectors:** Most entrepreneurs are elderly people who started business from having attended a vocational training course with a lecturer who came from non-formal education. They liked it because they can use their free time beneficially to create extra income and then develop into a business later. They spent their own funds to purchase materials production equipment which initially were commercially merged produce and sell by themselves. When the members find that the income from the production and sale of waste products is not enough to meet the demand, the production will be discontinued. They partially resigned from the group until there are currently 2 groups left. Group was formed among the community members. At the first time, each group had about 10 members who attended vocational training sessions with speakers from non-formal education. The members liked it because they used their free time beneficially and continue to the production for sales.

Group management does not have any formal principles or rules. There will be discussions about purchasing raw materials for production from where or where to go to sell products. Group members will be notified in advance to prepare products for sale. However, there are

members who are unable to produce products as they wish. The products are not beautiful as handicrafts and do not have quality as intended. Therefore, the production was discontinued, leaving only skilled members.

Starting a business for the first time, the government agencies provided assistance by supporting the establishment of business groups in the early stages. The government provided advice on business development, for example, providing community development officers and non-formal education teachers to give advice on product development, planning to sell products, and community development. The Social Welfare of Bang Khen District has provided assistance in the form of providing a space to sell products without charging space rent. This allows the group to bring products to sell to visitors who use the service at the district office.

**Production:** The key informants purchase the main raw materials for production from garment shops and garment factories. They purchase raw materials in sufficient quantities for production and according to customer orders. The group products in Bang Khen area made from waste materials are such as waste fabrics from sewing from a tailor shop and garment factory. The members go to buy it from time to time, bring it separately, choose a pattern to create things. There are currently two groups that are sewn from scrap fabrics, namely the group of Aunt Aed and Aunt Add producing the key holders, coin purses, hair ties, and the group of Aunt Pen and Aunt Noi often choosing to use Japanese fabric scraps as they are more popular than Thai fabrics. They go to buy at a shop that sews bags in the Japanese style. They select the patterns and sew them to be in harmony with the work. The features of Aunt Pen and Aunt Noi's works are coin purses, earrings, handbags, key chains in the shape of animals and flowers, etc.

The production quantity depends on the idle time. They will collect enough products to be sold which is uncertain and cannot be identified. For the group of Aunt Aed and Aunt

Add, 2 people will be doing it and will bring the materials to sit and demonstrate when sitting and selling the products. If anyone is interested in doing it yourself, there are materials to do it. They teach but let the customer pay for the materials. For Aunt Pen and Aunt Noi, they will rely on the strangeness of the product form and the quantity of production is uncertain. Aunt Noi will mainly focus on teaching the elderly group. There are non-school education centers regularly organizing handicraft training at the Laksi Public Library. Aunt Noi will design a piece of fabric made from both Thai and Japanese fabric scraps. Aunt Pen and Aunt Noi are therefore responsible for preparing materials and designing work pieces to teach every week. The amount of each time depends on the enrolled person and also make some pieces to sell.

For the highlight of the products that differentiate them from competitors' products from an entrepreneur's point of view, it is the handicraft product. Based on the expertise of the manufacturers, each product is not the same depending on the choice of fabric pattern and the design of each manufacturer make each product not the same. There may be only one piece with unique designs.

**Marketing:** Regarding the price, the manufacturers set selling price based on market price by looking at competitors or similar products that are on the market. They set the selling price that is close to or cheaper. For the sales channel, the manufacturers go on sale at trade shows which is organized by the Community Development and Social Welfare Department, Bang Khen District, for 2 weeks per month and in occasional fairs such as shops in front of Bang Khen District Office, Central Ramintra and Big C Ramintra. At the agencies where the manufacturers are speakers, the products can also be brought to be sold. Regarding the promotion, it focuses mostly on the discount or giving free gift. The will product will be used as a free gift. There are also some free giveaways where products to be sold will be put in a plastic bag without logo or label

showing the manufacturer and distributor. This will be the same for both groups.

**Environmental factors affecting business operations:** The environmental factors affecting business sales the most are economic problems resulting in the significantly decreasing sales. Due to the COVID-19 situation, the materials used in production have a higher price causing the increasing production costs and inability to bring products to be sold in different areas.

**Competitive environment factors:** All 5 product groups are luxury goods which are durable in use for a long time resulting in a low repurchase rate. There are also replacement products manufactured from the factory or imported from China that is cheaper. Therefore, the manufacturers must differentiate their products by focusing on uniqueness or identity to make customers satisfied. Even if the price is higher, they are willing to buy it because they can design it or make it themselves.

#### **Behaviors and purchase demand for community products in the category of waste materials**

Most of the respondents had purchased waste community products accounted for 71%. Most of them bought keychains. They buy about once a month and are usually bought in local/community stores. The main reason to buy is to help the community. They tend to decide to buy from using online media mostly. When asked for opinions on the deciding factors for purchasing products, the order is product aspect, price aspect, marketing promotion aspect, and distribution channels (mean = 4.06, 3.97, 3.92 and 3.85) which were at a high level for all items (Table 1). Those who have never bought view that access to the source of distribution is easy (mean = 4.05) is the most important factor followed by being able to order online (average = 3.97). In the view of operators, price (average = 4.25) is the main factor in purchasing decision. The

distribution channel (mean = 3.94) is the final purchase factor. Regarding the deciding factor in purchasing waste material community products, they were overall considered to be at a high level (mean = 4.08). When considered

each aspect, it was found that the aspect with the highest mean was the price (mean = 4.25), followed by the product (mean = 4.09), and the least of distribution channels (average = 3.94) (Table 2).

**Table 1** Consumer opinion about the factors in deciding to buy community products in the type of waste materials

	Factors in purchasing products	Mean	S.D.	Interpretation
1.	Products	4.06	0.77	High
2.	Price	3.97	0.84	High
3.	Distribution channels	3.85	0.86	High
4.	Marketing promotion	3.92	0.85	High

**Table 2** Operator' s opinion about the factors in deciding to buy community products in the type of waste materials

	Factors in deciding to buy products	Mean	S.D.	Interpretation
1.	Products	4.09	0.77	High
2.	Price	4.25	0.59	Highest
3.	Distribution channels	3.94	0.76	High
4.	Marketing promotion	4.05	0.67	High

### Approaches in developing product potential towards community product standards

The results of analysis on the internal and external business environment of the community products business group in the category of commercial waste materials of people in Bang Khen District, Bangkok, revealed that:

**Strengths:** There are 7 issues of community products business group of commercial waste materials, Bang Khen District, Bangkok, comprising, 1) the objective of the members to combine the waste material community product business group arises from preferences, interests and the need to spend free time productively. This is because most of the

members are elderly people in the community who have free time to do activities and want to earn money for themselves. 2) The main waste materials used to make products of that community can be found easily. There is a variety (characteristics, kinds, types, patterns) and the quantity is sufficient for production. 3) The production methods of community products are about the job that requires skill. They rely on skill to make the workpiece or product stand out with its exquisite detail. 4) The product is unique and unlike the competition. All community products are handmade in the form of handicrafts. 5) The products are of various forms. It is a daily use item that meets the needs of consumers. It is also durable and can be used for a long time. 6) The consumers can design products according

to their needs. The material can be selected so that the manufacturer can make it according to their needs. In addition, consumers can also produce the products manually. Various materials can be provided by the manufacturer with teaching and demonstrating to make consumers proud of themselves. 7) There is a variety of distribution channels. There are both a storefront that goes to set up a shop at various trade shows, flea markets, etc., and online via social media channels such as Facebook and Line Applications.

**Weaknesses:** There are 9 issues in the community product business group of commercial waste materials, Bang Khen District, Bangkok, comprising; 1). As this waste community product grouping is informal, there is no clear management structure resulting in unformed and not continuous operations. 2) The funds for the operation are low and sometimes are unable to support the purchase of materials (not the main waste material). Some has high prices in each period. 3) The production capacity is small due to the small number of members. The products that are handcrafted take a long time to produce. This makes the product insufficient to meet the needs of consumers. 4) The product quality depends on the skill of each manufacturer. 5) As the product is not branded, there is no information about the community product business group. 6) The packaging is not attractive as it is a normal plastic bag without added value to the product. 7) The promotion is not diversified causing not to stimulate the purchase decision for consumers. 8) As there is lack of advertising or public relations, the business group and community-made products are not widely known. 9) The product has not been certified for product standards.

**Opportunities:** In the operation of the community products business group of commercial waste materials, there are 4 issues in Bang Khen District, Bangkok, comprising; 1) Government agencies provide support for the

establishment of professional groups. There is support in the knowledge of the people about the management of occupational groups, vocational skill training, product development, use of various technologies in production and distribution. 2) The public and private agencies support distribution channels by providing a space for the community to sell products free of charge or have a low cost. 3) For the consumer behavior, they are interested in buying community products. The products are interesting to represent the identity of the community and to help the community in another way. and 4) The environmental values are in using waste materials to create new useful products.

**Threats:** The operation of the community products business group of commercial waste materials. Bang Khen District, Bangkok, has a total of 3 issues; 1) From the epidemic situation of COVID-19, some materials become more expensive resulting in higher production costs. 2) The substitute products manufactured from the factory or imported from abroad is cheaper and the quantity is sufficient to meet the needs of consumers. 3) The current economic situation is in recession affecting the purchasing power and purchasing decision of the community products of consumers.

When analyzing the business environment of community products in the category of commercial waste materials of people, Bang Khen District, Bangkok, on strengths, weaknesses, opportunities and obstacles, an analysis was conducted to determine the approaches for developing product potential to the community product standard for commercial waste materials of entrepreneurs in Bang Khen District, Bangkok, divided into Strengths and Opportunities (SO Strategy), Weaknesses and Opportunities (WO Strategy), Strengths and Threats (ST Strategy), and Weaknesses and Threats (WT Strategy) which have been analyzed for these approaches as shown in Table 3.

**Table 3** Approaches for developing the potential of community products in the type of commercial waste materials of entrepreneurs in Bang Khen District, Bangkok, with TOWS Matrix technique

<b>Internal environment External environment</b>	<b>Strength</b>	<b>Weakness</b>
<b>Opportunity</b>	<b>SO (Strengths and Opportunities)</b>	<b>WO (Weaknesses and Opportunities)</b>
	(S1 O1) Seek cooperation from government agencies in requesting support for the group formation and group management (S2 O4,2) Creating attractive product values (S7 O3) Expand the market by increasing the target audience and distribution channels.	(W1 O1) Develop the potential of group members in relation to effective group management. (W1,3,4,9 O1) Create cooperation in product quality development to meet standards from government agencies and educational institutes. (W3 O1,2) Building a production network from within and outside the community (W5,6 O1,2,4) Develop a brand and packaging that reflects the identity of the community.
<b>Threat</b>	<b>ST (Strengths and Threats)</b>	<b>WT (Weaknesses and Threats)</b>
	(S2,4,5,6,7 T1,2,3) Develop products to meet the needs of consumers in various situations. (S4,5,6 T2) Develop products to be unique and distinctive.	(W4 T2) Develop the skills of manufacturers to ensure quality to get products with the same standard. (W7,8 T3) Organize promotional activities, advertisements or public relations to stimulate consumers' purchasing decisions

From such approaches, the researchers considered all strategies in line with the quality assessment standards from the D-level business group, the Adaptation to Development group to the business group at C level. The group develops into the competition of the Bang Khen District Office. It has been summarized as the approaches for developing product potential to the community product standard in the category of commercial waste materials for entrepreneurs in Bang Khen District, Bangkok, in 4 aspects; grouping and group management in 2 approaches, products in 4 approaches,

production processes in 3 approaches, and marketing in 2 approaches, totaling 11 approaches as follows:

**Approaches for developing the potential of group integration and group management consist of** 1) seeking cooperation from government agencies in requesting support for group formation and group management so that the operations of the group occur concretely and continuously as well as being a network to participate in the development of professional skills in various fields to be used to improve and



develop products to strengthen the operation of the group. 2) The potential of group members is developed in relation to effective group management to allow members to be responsible and have roles in various functions appropriate to the abilities of each member. The main duties are divided into production, responsible for the operation of production, such as capacity planning. Product quality control is to apply useful knowledge and technology skill development for members, etc. In marketing, taking responsibility for marketing operations such as seeking distribution channels and promotion include advertising and public relations and product development responsible for operating the design and development of products that are attractive and responsive to the needs of consumers.

**Approaches for developing product potential consist of** 1) developing products to meet the needs of consumers in various situations by focusing on being unique and making a difference in product design and using waste materials to create new products that are useful. The product story telling can be created in order to add value to the product. 2) The packaging can be improved to have product details and reflect the identity of the community or the highlight of the product (from waste material and environmentally friendly) such as having a packaging where the product inside can be seen. The consumers can see the product inside. This is to build confidence and credibility of the product. 3) The brand can be developed to reflect the identity of the community and create awareness among consumers about the production source that is produced in any area, such as eco-friendly products of Bang Khen. 4) The community product standard certification can be requested to certify product quality in order to ensure and influence consumers' purchasing decisions.

**Approaches for developing the potential of production processes consist of** 1) building cooperation from government agencies and educational institute to improve product quality

to meet standards and certifications as well as the introduction of various technologies to help in the production process to reduce production time which resulted in higher production volumes. 2) The production network from inside and outside the community must be built. As community products are unique in that they are handcrafted, handmade, making each step or piece takes quite a long time, creating a network in this production is to divide some steps or some parts to people in the community or outside the community to produce and send them into the group and then be assembled into the next product. This will distribute income to people both inside and outside the community. 3) The skills of members must be developed to have quality to get products with the same standard. However, limitations in handmade work or craftsmanship are quality depending on the skill of the maker. Therefore, there should be skill development for members to have quality and standards as required in making a particular product in order to reduce the weakness in this matter of the product.

**Approaches for developing marketing potential consist of** 1) Increasing target groups and distribution channels by going to the shop at the trade show held by government agencies / department stores and selling through online channels such as Facebook and Line Applications to allow continuous product distribution. This is to increase and expand distribution channels to help increasing sales as well as creating social network of the community to increase distribution channels to other communities. 2) The promotional activities can be organized for advertising or public relations through social network to allow customers and prospects to receive more information about the product. It is a stimulus for consumers' purchasing decisions as well as providing a variety of product distribution formats such as producing products for souvenirs at various events or wholesale.

## **Conclusion and Discussion**

The research results revealed that the consumers have a behavior to buy community products in the form of waste materials. They mostly buy key chains and wallets and buy about once a month. They usually buy in local community stores. The main reason for purchasing products is to help the community and the handmade uniqueness. In the form of invention, craftsmanship makes it different and unique. Most of the media affecting purchasing decisions are online media (Facebook, Line, YouTube, etc.) consistent with the research of Ketthip Kreengern, Somphop Suwannarat and Suwanna Nakwibulwong (2018).

For the purchase needs, factors in the decision to purchase community products in the category of waste materials are overall at a high level; product, price, promotion and distribution channels. For the opinions of consumers who have never bought the product, they consider easy access to the source of sales as the most important factor followed by being able to order online. This is consistent with the opinions of consumers who have bought the product. They usually bought in local/community stores and at government-owned/department displays which are convenient sources to buy. In the view of entrepreneurs, the factors in deciding to buy community products of waste material are overall at a high level; price, product marketing promotion and distribution channels. It can be seen both from the point of view of consumers and entrepreneurs. There will be opinions on the factors in the purchase decision that focus on the product and the price the most and the least important distribution channel. This is consistent with research of Ketthip Kreengern et al (2018), research of Thongkhot, Wongsaita & Soontornchai (2016) and research of Piyaporn Kamyinyong (2015).

Approaches for group capacity development were presented by analyzing the business environment using the TOWS Matrix technique. The study was divided into 4 areas, namely group management, product, production process and marketing. This is consistent with the study of Warintorn

Tharasarnsombat (2017) and Lamai Hokhua (2016). When being used to formulate product potential development approaches in this study, the strategies can be divided as follows. The proactive strategy consists of 3 approaches; seeking cooperation from support agencies for group management, creating product values by creating stories and being environmentally friendly. The market can be expanded by increasing the target audience and distribution channels. The remedial strategy consists of 4 approaches; group capacity development in relation to management, building of cooperation in product quality development, creation of production network from within and outside the community and brand development. The passive strategy consists of 2 approaches, namely, skill development of manufacturers to ensure quality and organization of promotional activities for advertising and public relations in line with Kritsana Dararuang (2017) and Chonthicha Diphen (2014).

The above research results can be used as the recommendations as follows. 1) The focus should be on educating entrepreneurs in the waste material community products apart from focusing on product development including knowledge of business operations, knowledge of marketing management and knowledge in adapting to the New Normal. 2) The government agency should be established to support research and development in order to be used as a source of information and advice to product operators for continuously developing their own products such as the development of packaging designs which requires a high cost to improve and develop causing manufacturers to not be able to improve on their own or brand design that can clearly position the product and create a brand image. This will be able to create modernity and variety in the product to compete in the market. 3) More distribution channels should be expanded such as promoting the increase of online marketing channels, establishing a product distribution area or leading department stores as a distribution channel source presentation. The community product story telling can make consumers

aware and confident in the product. An agency should be established as a medium for coordination and cooperation between manufacturers and intermediaries in procuring distribution channels for products. 4) There should be the promotion on advertising and public relations. Products should be attractive, attractive, modern to sell beautiful ideas and use real community waste materials. It will create a lot of selling points. The customers want community products to be different, interesting, easy to use, suitable for all ages. If people are interested in community products, they must make a difference using a mechanism to constantly gimmick the brand and image in order for consumers to recognize that it is a high quality and standard product and also to encourage Thai people to turn to consume Thai quality products with reasonable prices.

## References

1. Dararuang, K. (2017). Product Development and Marketing Strategies of Ban Khao Laem Community Enterprise, Nakhon Sawan Province. *Suthiparita Journal*, 31(100), 130-143.
2. Deephen, C. (2016). The Mae Win Group's wooden handicraft business management strategy: Model boats in Mae Win Sub-district, Mae Wang District, Chiang Mai Province. Master of Science Thesis, Chiang Mai University.
3. Harnvanich, E., Wanichwecharungruang, S., Chandrachai, A., & Asawanonda, P. (2020). Market Potential Evaluation for Local Herbal Extracts Used in Skincare Through the New Product Development Process. *PSAKU International Journal of Interdisciplinary Research*, 9(2), 31-40.
4. Hasan, I., Shen, Y., & Yuan, X. (2021). Local product market competition and bank loans. *Journal of Corporate Finance*, 70, 102054.
5. Hokhua, L. (2016). Study of the development guidelines of the Rubber Community Enterprise Group of Non Din Daeng District, Buriram Province. Master of Business Administration Thesis, Burapha University.
6. Issa, F., & Lawal, A. (2014). One-Village One-Product (OVOP): A Tool for Sustainable Rural transformation in Nigeria. *Nigerian Journal of Rural Sociology*, 14(2), 48-63.
7. Jaimuk, P., Saithong-in, S., Chaisalee, A., & Sribunnak, A. (2021). The Product Cost Calculation and Setting Product Sales Prices: A Case Study of Noen Kham Community Products, Noen Kham Subdistrict, Chainat Province. *Journal of Legal Entity Management and Local Innovation*, 7(7), 233-243.
8. Jensen, J., Christensen, T., Denver, S., Ditlevsen, K., Lassen, J., & Teuber, R. (2019). Heterogeneity in consumers' perceptions and demand for local (organic) food products. *Food Quality and Preference*, 73, 255-265.
9. Jiarakul, T. (2014). Problems and guidelines for the adjustment of OTOP in preparation for the AEC. *Journal of Executives*, 3(1), 177-191.
10. Kamyinyong, P. (2015). Creating added value to waste materials to new environmentally friendly products: Case study of home decoration products from wood waste. Master of Business Administration Thesis, Bangkok University.
11. Kreengern, K., Suwannarat, S., & Nakwibulwong, S. (2018). Factors affecting the purchase of community products, fabrics, apparel of consumers. *Dusit Thani College Journal*, 12(1), 183-198.
12. Kringern, K., Suwannarat, S., & Narkwiboonwong, S. (2018). Factors Affecting Purchase Towards Community Product of

- Consumers. Dusit Thani College Journal, 12(1), 183-198.
13. Kurokawa, K. (2011). A Provincial Comparative Study on One Village One Product (OTOP), Movement in Northeast Thailand: Implications for Japanese OVOP Cooperation toward Africa. *Studies in Regional Science*, 41(3), 585-597.
  14. Marques, S., Mauad, J., Domingues, C., Borges, J., & Silva, J. (2022). The importance of local food products attributes in Brazil consumer's preferences. *Future Foods*, 5, 100125.
  15. Miagina, A., Biso, H., & Kembauw, E. (2021). Sustainable Development Through the One Village One Product (OVOP) Approach for Local Commodities. *IOP Conf. Series: Earth and Environmental Science*, 755, 012071.
  16. Noguer-Juncà, E., Crespi-Vallbona, M., & Fusté-Forné, F. (2021). Sociocultural and gastronomic revaluation of local products: trumfa in the Vall de Camprodon (Catalonia, Spain). *International Journal of Gastronomy and Food Science*, 26, 100425.
  17. Nouria, I., Hammami, R., Arias, A., Gondran, N., & Frein, Y. (2022). Olive oil supply chain design with organic and conventional market segments and consumers' preference to local products. *International Journal of Production Economics*, 247, 108456
  18. Pianjud, S., Samappito, J., Watcharapothikorn, J., & Makaew, J. (2021). Community Economic Uplift Model through Integrated Development of Khao Mao Local Identity Products for Nang Rong District, Buri Ram Province. *Academic MCU Buriram Journal*, 6(1), 105-119.
  19. Poma, C. (2010). A Study of the Potential of OTOP Product Group in Production and Distribution Channels. Master of Science Thesis, Burapha University.
  20. Ragasa, C., Andam, K., Asante, S., & Amewu, S. (2020). Can local products compete against imports in West Africa? Supply- and demand-side perspectives on chicken, rice, and tilapia in Ghana. *Global Food Security*, 26, 100448,
  21. Rattanapan, T., & Rattanapan, C. (2017). SouvenirDesign: Applyof Local Wisdomto Local Products. *Narkbhutparitat Journal*, 9(1), 1-14.
  22. Sasong, C. (2017). The role of OTOP producers in Mae Hong Son province in building economic value, with the participation of other stakeholders, in communities through the use of production innovation. *Academic Journal Bangkokthonburi University*, 6(1), 24-36.
  23. Sirisack, D., Sirivanh, T., Sengchanh, S., & Bounpathaph, L. (2016). The Potential and Preparedness of Local Products in the Brand Building for Tourist Souvenirs, Luang Prabang, Laos PDR. *PSAKU International Journal of Interdisciplinary Research*, 5(2), 51-62.
  24. Somchan, S. (2019). The Guideline for Shopping Tourism Development to Promote Tourism in Phayao, Thailand. *PSAKU International Journal of Interdisciplinary Research*, 8(1), 163-178.
  25. Thanh, L., Nhat, L., Dang, H., Ho, T., & Lebailly, P. (2018). One Village One Product (OVOP)—A Rural Development Strategy and the Early Adaption in Vietnam, the Case of Quang Ninh Province. *Sustainability*, 10, 4485.
  26. Tharasansombat, W. (2017). Community Enterprise Product Strategies of Entrepreneurs in Amphawa District, Samut Songkhram Province. *Public and Private Sector*

- Management Innovation Journal, 5 (2), 27-44.
27. Thongkaew, S., Sodbhiban, P., & Saribut, U. (2015). A Study of local wisdom to product development the community promote tourism of Chachoengsao province. *Art and Architecture Journal Naresuan University*, 6(2), 133-147.
  28. Thongkhot, Y., Wongsaita, D., & Soontornchai, A. (2016). Marketing factors affecting the Decision to Purchase OTOP of Salt Spa Kunnapat in Ban Dung District, Udonthani Province. Paper presented at the 7<sup>th</sup> Hatyai National and International Conference, June 23, 2016, Hatyai University, Thailand.
  29. Xujin, P., & Li, J. (2013). The Analysis of Peasant Households' Collective Brand Maintenance Behavior in the "One Village, One Product" Program of China. *Procedia Computer Science*, 17, 770-780.
  30. Yang, Q., & Zhang, D. (2021). The influence of agricultural industrial policy on non-grain production of cultivated land: A case study of the "one village, one product" strategy implemented in Guanzhong Plain of China. *Land Use Policy*, 108, 105579.