

Community Enterprise in Processed Agricultural Products after the COVID-19: Problems and Adaptation for the Development of Grassroots Economy

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Abstract: - Community entrepreneurs in a processed agricultural product are the foundation of the economy which links the agricultural sector of the nation. They play an important role in driving the grassroots economy of Thailand after the COVID-19 pandemic. This study reflected the usage of major ingredients grown locally in the processing of agricultural products, which provide the advantage of unique local ingredients while also preventing the waste of oversupply. Meanwhile, entrepreneurs have conventional wisdom in processing raw materials into products. Additionally, the challenging issues for small community enterprises are administration and fundraising to expand their production. The lack of labours in rural areas also poses a challenge to the administration of community enterprises. The findings also reveal that there should be a sustainable extension of other activities, such as integrating agritourism activities and the development of a sustainable ecosystem. There should also be the utilization of online channel in the sales and communication of products and communities' identities. It was also found that the supporting mechanism for community enterprises is still limited in some ways due to the requirement to follow central policies in development. Finally, the new generation should be motivated to join community enterprises in processed agricultural products as they could help in the long-term development of the community.

Key-Words: - Processed agricultural product, Cultural capital, Community product, COVID-19

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1 Introduction

The COVID-19 pandemic has impacted agricultural markets, and its effects will most likely vibrate over the next decade. The fall in demand for agricultural commodities and subsequent decline in prices will lead to a reduction in agricultural production, [1]. The Organisation for Economic Co-operation and Development – OECD, [2], predicted the impact on overall production that was expected to be relatively small in the short term as it takes time for agricultural producers to respond to lower consumer demand. In the medium term, more significant declines in total agricultural production are forecast. By 2029, total production is projected to be 0.9% and 1.2% below baseline levels under the upside and downside scenarios. The production reaction is more pronounced in the downside scenario, as

demand will be more affected if the economic recovery is slower. Furthermore, COVID-19 also has impacted the agricultural sector in Asia and the Pacific in country-level perspectives, [3]. The pandemic induced disruption affects agriculture and the entire food system –production, transportation, marketing, distribution and consumption.

Likewise, the agricultural sector is an important producer and exporter of Thailand. However, the factors such as the COVID19 pandemic, the swiftly changing technology, the lack of agricultural labours, urbanization, and climate changes became problematic for the production sector, as the world's food crisis is affected by the increasing demand for food and agricultural products, [4]. Previously, most Thai agricultural production and exports are limited in the terms of primary processed products,

for which the added-value is not as high. Therefore, the economic value of these products is small for the country. It is evident from the constant ratio of agricultural products' value per GDP which is limited between 8-12% over the period of twenty years. Furthermore, the agricultural sector is often challenged by the rather-high fluctuation of prices, [5]. In the past, Thailand's exports of processed agricultural products also face challenges from access to processing technology of farmers, incentive measures for investment in processed agricultural products, and the extension of product processing technology to commercial production.

However, there are rather few community entrepreneurs within the value chains of processed agricultural products of Thailand, due to the limitations in the high production technological cost. Moreover, the intellectual property laws and regulations in Thailand do not encourage investment yet. Meanwhile, the processed agricultural sector of Thailand has a high potential for new producers who will enter the economic system. The growth in this sector will increase employment and income for many local people, as evident in the policy to promote bio-economy which is connected in the same direction with the national strategic plan for 20 years, master plan following the national strategic plan, national reformation plan, national social and economic development plan, and many other important policies of related agencies.

Within these contexts, the agricultural sector is also another mechanism to promote the economy. And community entrepreneurs in processed agricultural products are required to adjust the form of social and economic development, by promoting the development of Bio-Circular-Green Economy as the model towards sustainable development. Hence, the researcher is interested in studying the potential and approaches for adaptation of the community entrepreneurs in the processed agricultural product after the COVID-19, as they could be the mechanism to improve grassroots economy, promote and increase the opportunity to generate income within local area or community. As a result, the agricultural sector and economic sector will be developed together in a sustainable way.

2 Literature Review

As the community enterprise's stakeholders come from the whole community, entrepreneurs should have a role in strategic planning in order to deal with increasing competition. Community entrepreneur's development is part of the local development plan of the local government and

private development enterprise as well as the community members. Fabeil, Pazim, & Langgat, [6], study the impact of Covid-19 pandemic crisis on micro-enterprises during the fifth phase of movement control order amid Covid-19 outbreaks in Malaysia. Entrepreneurs seemed to demonstrate their ability to survive in their business by undertaking several business continuity approaches and recovery strategies, especially in terms of product delivery and marketing. Business knowledge like online marketing techniques, product delivery procedures, new product development, costing and pricing strategy during crisis and customer database management could serve as a basis for crisis management plan for micro-enterprises. Additionally, Sridhar et al., [7], deemed that innovations like developing new products, services, and introducing new financial schemes which address challenges faced in agricultural sectors would be the key to achieve sustainability. Family farming and community farming make households and individuals more self-sustainable. The drastic changes in human behaviourism with respect to eating and purchasing habits tending to more nutritious and plant-based food may grow in the future.

Furthermore, Apostolopoulos et al., [8], stated that COVID-19 provided a boost to short supply chains in the agri-food sector and agri-food enterprises with new technologies and digital aspects in their core were privileged in competition. Simultaneously, there was a forced change from fresh to dried agri-food products affecting agri-food entrepreneurial activities. Many of the sector's contemporary problems are not new, and in many countries, the agri-food sector and agri-food supply networks are fragile and unsustainable.

Regarding an adaptation of agri-food sector, Rowan & Galanakis, [9], highlighted an anti-fragile influence from pandemics that create both challenges and new opportunities including emergent or disruptive innovations in service and business processes. A review of the recent 43 projects funded by the Irish government showed the trends in the innovation ecosystem and the potential for both cross-cutting and future ground-breaking disruption in the agri-food, health, ICT, manufacturing and circular economy sectors with a global orientation. Understanding where the potential food technology disruptions are likely to occur will be aided by having a holistic perspective and appreciation of the complex socio-technological innovation ecosystem. Besides, Kumar, Padhee, & Kumar, [10], pointed that the vulnerabilities in agricultural supply chains and depleted workforces

caused by the COVID-19 crisis have hurt farms of all sizes in India, especially high-value farm enterprises. The crisis has shed light on weaknesses in India's Agri-food system. Consequently, key among the needed changes is agricultural market reforms and digital solutions to connect farmers to markets, creation of safety nets and provision of reasonable working conditions, and decentralized food systems, especially for vulnerable communities.

Likewise, Phillipson et al., [11], suggested about pandemic and its implications for rural economies that COVID-19 will stimulate many examples of innovative community and business responses and adaptation across rural areas. Necessity is an important driving force for rural business innovation. For instance, some creative and digital businesses are taking advantage of opportunities afforded by people working from home. Some businesses are also likely to face additional demand or identify complementary or alternative products and markets, and in turn these will require innovation in their processes, goods and services.

3 Research Methodology

This is a qualitative study which began with the literature review about the community enterprise in processed agricultural product sector, and the strengthen of grassroots economy. Then the researcher conducted the in-depth interviews with stakeholders and representatives from community enterprises in the processed agricultural product sector. There were total 18 participants from all six regions of Thailand. Sample group was selected purposively, by recruiting the directors and members of community enterprises which have been processing agricultural products and registered with the Department of Agricultural Promotion for at least five years. The enterprises must originate from the local members. Participants also include agricultural scholars, community developer, and scholars in the related field. The research instrument is the structured focus-group questions form which is approved by the Ethic Committees for the Research Project in Human Subject of Srinakharinwirot University, with clearance number SWUEC-425/2564E. The questions content is related to the approaches for potential development of community enterprises in processed agricultural products, problems, and adaptation towards grassroots community development. The researcher gathered information from the field study from November 2021 to May 2022. The information is further synthesised into the conclusion of

approaches for development which can become policy suggestion in the future.

4 Research Results

Due to the COVID-19 pandemic, production and consumption had been slowed down. As a result, employment in the production sector decreased especially in the small-and-medium-size enterprises. Freelancers and labours received harsher impact in comparison to large enterprise. On the other hand, the importance of the community economy increases as it is the source of employment in each area for the labours who return home. It is thus expected that in the future there will be increasing collaborations in various ways among communities, such as joint production, distribution, and marketing which will benefit all the parties. Community enterprises therefore play the roles as the foundation of community economy, from the household to the local scales. According to the study, the researcher found the following results regarding the problems and adaptation of community enterprises in processed agricultural product sector after the COVID-19.

4.1 Locally-available Raw Materials

Thailand possess high level of agricultural resources capital, which is the strength of the local community enterprises who could process locally-available agricultural produced into products. According to the in-depth interview, small community entrepreneurs in Thailand deemed that the fresh locally-grown raw materials are their strengths. Moreover, the encouragement towards organic farming by agricultural policy of the government. And there are various forms of agricultural standardization system available. For example, entrepreneurs from the North-eastern region (personal communication, November 21, 2021) who focus on the production resources from local farmers who attempt to enact the participatory guarantee systems in the form of "Loei Safety Food". This group later expands into the provincial network of raw material, which includes members from all 14 districts of Loei province in Thailand.

According to the interview with farmers from many regions, it was found that most entrepreneurs' main career is farming. And the produced were sold mainly while fresh. The remaining produced after sale and consumption would be processed into products. For example, community entrepreneurs of rice farmers from the Southern region (personal communication, April 4, 2022) explained that from

the 100% of produced, 50% would be sold as grain, while 40% would be reserved for household consumption. Only the rest 10% would be processed into milled rice, rice cookie, and rice-milk ice cream for sale. It could be reflected as the attempt not to waste any produced from their labour. Another example is the group of pineapple farmers from the North-eastern region (personal communication, November 21, 2021) who explained that the community enterprise aims to find various products which can be processed from a pineapple, such as juice, jam, multipurpose stir-fried sauce, and rambutan with pineapple filling, etc.

In using local materials, products from each region could express their uniqueness. As the entrepreneurs were aware of their small size and the limit in competing with large agricultural business or entrepreneurs from other region, they shifted their focus towards the market and consumption trends, especially the non-toxic farming approaches and the target customers who are health-concerned. Focusing on the unique raw material could be their new strength.

Most members of the community members are farmers with know-how in farming and planting, as their ancestors had been farmers too. But they are adapting and adjusting their non-toxic farming process, harvesting and storage of raw materials, as well as the utilization of wisdom to process their raw materials. For example, entrepreneurs from the Central and Eastern regions (personal communication, May 11, 2022) explained their know-how in the production of sun-dried herbs, the preservation of colour and fragrance of the herbs, the process of streaming before sun-drying which could intensify the herbal fragrance, etc. These know-hows have been passed through the local wisdom of their ancestor. Furthermore, the community entrepreneurs deemed that the knowledge of raw materials is specific. An example is that garlic requires a specific period of time to dry by hanging, in order to ensure enough active ingredients from the garlic for consumption. It is therefore both the matter of wisdom and technology.

Nevertheless, the problem in an agriculture-related product is the fluctuation of amount, as the raw materials depend on the season and the productivity level of each batch. Sometimes it might not be possible to manufacture the products throughout the year, as some agricultural produced could not be stored for a long period of time. Especially in the case of herbal essence, the scent would disappear naturally without preservative. The shelf-life of the products may be rather short. And there could be obstructions in the growing process

which might affect agriculture at the national level, such as natural disaster, amount of rain, and pest problems. According to the interview with community entrepreneurs from the Eastern region (personal communication, May 10, 2022), there should be the utilization of knowledge and technology in farming and processing raw materials. This viewpoint is also reflected by the community entrepreneurs from the Northern region (personal communication, February 15, 2022) who pointed out that the agricultural sector is facing a major problem from drought and non-seasonal rain due to climate change which impacts the Thai farmers. Hence the entrepreneurs should adapt their perspective and prepare the solution with the help of technology in farming, harvesting, storing, and planning for the consistent production schedule.

In addition, there is also the low-price problem for agricultural products. As the community entrepreneur from the Northern region (personal communication, February 15, 2022) stated that community enterprise must seek the differentiation strategy for processing, as when the prices are low or when there is an over-supply situation, processing will be required for produces such as mango, longan, and garlic. This vision could be good in the long term as “farmers can do less with more results”. Conventionally, most processing approaches involve dehydration or dehydration with peels. But the entrepreneurs should experiment or utilize new knowledge in processing which can add value to the raw materials. This way the farmers will become entrepreneurs who could offer local products and brand values. As a result, local employment will increase as well as the new business concepts.

4.2 Community Enterprise Administration

Overall, the internal factors of operation is highly important in the community enterprise administration as community enterprise is not a sole business operation but rather a joint operation by the community members. Therefore, the administration process which ensures collaboration is required. According to the interview with the community entrepreneurs from the Eastern region, (personal communication, May 10, 2022) the important elements in administration consist of capital, discipline in the leader's management, and transparency. Many community entrepreneurs faced the financial problems due to the conflict in benefit distribution. Hence, the transparency in finance, accounting, and financial transactions should be required in the meeting or informal consulting, as it could help ensure the success of administration. The

entrepreneurs from the Northern region (personal communication, February 15, 2022) reflected that their community enterprise used technology to inform their members through Line application, with the sub-groups which preserved longan, mango, tea, banana, and Mushroom Nham (a type of Thai fermented sausage). There are about 20 members in the group, who would respond quickly to the call for training or other activities such as production or meeting. This utilization of technology enhances the administrative agility, and ensures that all actions come with evidence.

Sharing the same viewpoint, the community entrepreneurs from the Southern region (personal communication, April 4, 2022) deemed that administration requires 1) fairness and transparency, especially in terms of budget and profit must be deposited in the central account which is constantly updated for the members to check. 2) All members of the enterprise should have the right to express their opinion towards the direction of administration or other issues of the enterprise, so everyone shares the sense of belonging, and 3) the leader of the enterprise must be eager to seek new opportunities or knowledge for the groups while also fostering the external connection which may benefit the development of the enterprise.

However, this study found that capital and administration are the challenging issues for the community enterprises which are based on the small community. Multiple enterprises could not expand their operation capacity enough to invest and therefore have to be concerned about fundraising, especially when the villagers could not guarantee if the investment will pay off. Although the government policy aims to encourage high quality products, but fundraising by the villagers is still required due to the limited budget from the government. It was also found that most entrepreneurs could not accept the risk of joint-loan from the government's financial institution. For example, the entrepreneurs from the Eastern region (personal communication, May 10, 2022) deemed that their group avoid the loan which could later become burden of debt, but rather seek the approach to raise capital for production and then distribute profit to their members, so that the members could participate in the operation and be responsible as the owners and salespersons.

Additionally, there is an overall problem in the operation to increase the value of processed agricultural products, especially the obstruction towards the high-level of processing or the development towards commercial competition. As the local community enterprises in Thailand are

generally small, while the important factors in processed agricultural products are the quality and standard of products, many enterprises could not be certified for ingredients and production process. Standardization is important as it could open up both local and international marketing opportunities. For example, in order to be selected as the OTOP products, the processed food products must be approved from the Food and Drug Administration (FDA). And according to the interview with villagers who manufacture processed agricultural products, it was found that most products which are selected as OTOP are all kinds of products other than food. On the other hand, the single entrepreneur generally has capital and capacity to manufacture processed agricultural products while swiftly applying for the product standard certification. But in the case of small community enterprises, they must invest the stock in order to prepare the standardized factory. Furthermore, lots of documents are required for approval. Therefore, many potential community entrepreneurs still struggle with the FDA standard.

Moreover, the interview reveals that community entrepreneurs from many regions are aware of their small size. Even if they are able to provide unique products and services, but there are times when the production capacity reaches the limits. As a result of lacking the plan to cope with large amount of orders, community entrepreneurs often lose such business opportunities.

Regarding the context of future expansion, many community enterprises increase their production capacity by requesting members to farm in each member's land, and the enterprises simply process the raw materials. Although the administration of human resources will be increasingly problematic for the community enterprises, as there is the lack of labours in the local area. This issue is in the line with Elbehri et al., [12], pointed out that there are particularly vulnerable to pandemic shocks with a small-scale economy and limited access to factors of production (land, labour etc.) and focused on services and tourism. The informal sector predominates in the Asia-Pacific and was also badly hit. Informal labour demand in Asia-Pacific is mainly concentrated on downstream end of agri-food. However, the interview with entrepreneurs reveal that most of them would hire the enterprises' members for the daily processing. And generally, the production scale is based on the household capacity and the small equipment. Nevertheless, labour management and ensuring hygiene in the production process must come together. As the entrepreneurs from the

Western region (personal communication, May 31, 2022) pointed out that the labours must prepare the raw ingredient with care. They must wear caps and gloves during the processing and packing procedures and thus some levels of training are required. However, the local members and labours still lack the tenacity for the meticulous process designed by the group. And many community entrepreneurs often struggle with the standard control of production labour in the small-scale production from the preparation, processing, to packing procedure.

The aforementioned issues could reflect the importance of promoting business knowledge in administration, standardized manufacturing process, marketing, finance and accounting system of community entrepreneurs. The enterprises should understand the modern concept of administration which might not have to be complicated but should at least be updated. There should be the application of technology such as online system, market access for selling products, capital access, and business plan writing of the group in order to expand towards the national-level commerce. Furthermore, community enterprise should employ the administration approaches which do not exclusively depend on the operation by a single leader. Although leader could be an important resource for the development of business and community, but the improvement of product development level and administration should be in the form of committees with participation in good governance of the enterprise itself.

It is obvious that good administration of community enterprise will not only generate circulating income at the most founding community, but will also develop human resources who will be able to operate community enterprise with good governance. People could develop their capacities in administration. And as a result, the community will be strong and self-dependent from the community economy and qualified human resources.

4.3 Development and Extension of Activities

The development of community enterprises in processed agricultural sector should encourage utilization of local resources and wisdom together with modern knowledge in order to differentiate the product and raise the quality standard. Furthermore, it could be expanded towards the creation of tourism promotion activity which could boost the grassroots economy. There should be a focus on the community tourism area development, with connected tourism routes in each region. And the activity itself could later develop into community

enterprise in agricultural or cultural tourism, with the community products from local ways of agricultural life, local wisdom, and connecting arts and cultural activities which could boost the community economy.

In the cultural tourism which travellers could learn from local gurus and join the processing activities, the interesting point of the community would be the unique activities which are woven together into a tour program. For example, entrepreneurs from the Eastern region (personal communication, May 10, 2022) extended their cultural tourism activities which include learning about palm sugar processing, sustainable economy, dessert making, cooking local food, and other activities such as trail running in the community, and woven them into a tour program. They also provided local food and products for sale to the tourists. Another example came from entrepreneurs from the Southern region (personal communication, April 4, 2022) who deemed that the origin of the community enterprise does not only focus on rice processing, as there is a variety of raw materials available within the community. Therefore, they attempted to increase the form of production activities so that the group members may not depend solely on selling agricultural products but could also earn income sustainably from other activities throughout the year. They also focus on the community enterprise's vision to preserve rice farming knowledge for further generation, by farming rice, processing rice products, and organizing agricultural tourism in the name "Rak Jang Nakorn" (Love Narkorn so much) in order to increase external awareness of their knowledge.

Despite the fact that the government's project such as OTOP Inno-life Tourism-Based Community could bring forth the trend of tourism area development to boots grassroots economy at the community level, but the in-depth interview with community enterprises revealed that the promotion of activities did not conform to the objectives of community. For example, some activities were transformed in order to host the tourists. In some cases, there was the promotion of tourism route without considering the local community's ways of life. As entrepreneurs from the Eastern region (personal communication, May 10, 2022) deemed that agricultural tourism is specific to some groups only. Some farmers do not pay attention to organic farming or tourism which requires content that represents the unique side of the agricultural area. So, it is obvious that the promotion of activities requires the concern of natural capacity, community's ways of life, and culture. And such

promotion should be based on the environment and resources of the community tourism area.

Meanwhile, there is the possibility to promote conservational activities and sustainable development, by following the approaches in conserving natural resources based on community's capital. This approach could encourage sustainable ecosystem for the agriculture through activities such as growing mangrove forest, building habitat for fish, creating learning centre for mangrove forest ecosystem, including the promotion of other community's activity for sustainable development. The development should be holistic and concerned about consequence towards other context within the area. For example, entrepreneurs from the Eastern region (personal communication, May 10, 2022) deducted 5% of their profit to return to their society through activities such as educational funds, field trip in other area, conservation of community's legacy, or improve the green public space, etc.

4.4 Promoting Unique Identity of Community Agricultural Products Online

The online channel is one of the marketing innovations which the community utilized as their marketing strategy in order to follow the changing trends of the society and increase efficiency by reducing operation process. There could also be the online sales and promotion of community products through social media, while giving public relation about the identity and story of the local community and groups of agricultural entrepreneurs. And, Yueh, and Zheng, [13], stated that are various forms of communication via message, image, and video which becomes increasingly popular nowadays.

In an in-depth interview, community entrepreneur from the North-eastern region (personal communication, November 21, 2021) explained that they apply the online channel in promoting the strength of handmade agricultural product, by showing the growing and manufacturing process of agricultural products, especially when they are grown organically. Because it is hard for small community enterprise to compete with industrial production, while the consumption trend after the COVID-19 pandemic is increasingly focusing on natural resources and local wisdom. A group of consumers are returning to the natural products so there is the potential for organic agricultural product's market to grow, especially among the market of customers who would return regularly to buy from online channel. The customer based could be further expanded. So, the entrepreneurs aim to produce premium-quality products to target the customers through the

storytelling in the entrepreneurs' Facebook page, which could be about the annually-available raw material, selection of special ingredients, and utilization of local or traditional wisdom in the production, etc.

The in-depth interview with entrepreneurs from many regions reveals the adaptation towards the situation after COVID-19 pandemic, that some entrepreneurs are beginning to develop online marketing channel. For example, entrepreneurs from the Northern region created a Facebook page of their community enterprises and promote the quality and standard of their products such as black garlic, as well as promote the sales of other community's product. Information from the Local Act, [14], revealed that the online channels such as Facebook and Line are the top two channels during the COVID-19 pandemic which the farmers could learn and access their customers more easily than other channels.

Nevertheless, the continuous administration of online channel and other public relation activities is still a challenge for small community enterprises who might not be so agile in their creation of attractiveness and stories of products. They are also struggling with transportation problem from remote area in some provinces. Additionally, some of the entrepreneurs still prefer the easiness of selling through the physical shop. In this case, the local government's scholars deemed that it is necessary to provide both the onsite and online distribution channel, and the future online marketing channel should not be neglected as it is the opportunity for the entrepreneurs to reach their customers directly. As a result, they could price their products without depending on the middleman. However, entrepreneurs must be concerned about the quality and the target customers in order to achieve a suitable price. Similarly, entrepreneurs from the Southern region deemed that there are quite a few on-site distribution channels in processed agricultural products which target the health-concerned customers. Although the online channel is expanding nowadays, but the entrepreneurs believe that the physical shop is still necessary to ensure confidence for buyer and consumers.

It is obvious that the creation of various marketing channel could distribute the risk as well as adapt to the current situation. The continuous development of products will be an important approach for the secure administration of community enterprise in the post-pandemic society.

4.5 Mechanism of Community Enterprise Development in Rural Area

External supports, networking, and acceptance of good interactions are the external factors which could promote success for community enterprise, as the local community enterprises could receive supports and promotion by government agencies such as the Office of Community Development, District Agriculture, Provincial Industry, Department of Community Development, and local universities, etc.

Many community entrepreneurs focus on self-reliance and close themselves from the external agencies' support, as the groups were concerned that the agencies might dominate the direction of the community enterprises. However, community entrepreneurs from the Eastern region (personal communication, May 10, 2022) deemed that entrepreneurs should not overlook the support from government and other agencies, as mutual supports are required in some context. There should be mutual dependence based on the acceptable collaboration, as the community entrepreneurs would know that the existing products must be further developed in terms of knowledge, production, product standard improvement, and distribution. Therefore, the entrepreneurs in processed agricultural products should develop their understandings in communicating with local government or private agencies.

However, the in-depth interview with community entrepreneurs from all six regions reveal that in most of the case, they are well-supported by the local government agencies. Entrepreneurs explained that there are many agencies who work together to promote community enterprises' products. Nevertheless, entrepreneurs from the Central region (personal communication, May 11, 2022) reflected that the government agencies who support community enterprises could not integrate the operation among the related agencies. All department would receive the central policies from their ministry and implemented the annual issues encouraged by the central administration. And most of the activities are similar. Despite the fact that the government's action in providing training, discussion, and updated information of projects and policies with the villagers, but sometimes the entrepreneurs saw that the actions are redundant as all agencies must fulfilled the goals of their own central administrator, who might work separately.

Even if the Community Enterprise Promotion Act, 2005 was expected to be the law which integrate agencies with missions related to community enterprises, so that they could work

together in supporting the community enterprises systematically with unity, but agencies with budgets related to community development still lack the understanding in the principle of community enterprises. They therefore turned towards using the "instant formula" to educate villagers about career. As a result, the promotion activities followed the same pattern, such as the form in promotion of planting and processing agricultural product and community tourism, etc. Actually, they should begin by understanding the various contexts of community enterprises, regarding their readiness to operate each type of activity. Small communities in many regions lack the unique local wisdom for products and services. Therefore, it is necessary to consider the characteristics of community, their needs, and raw material resources which could be processed into value-added products with differentiation, in the evaluation of community enterprise's readiness. Furthermore, the developmental goals should originate from the community enterprises in processed agricultural product. Meanwhile, the enterprises must have some previous operation or idea of themselves, according to the needs and objectives of local villagers. Community should initiate the operation without waiting for agencies to set them up. And there could be the collaboration with local university networks in the development with technology and new knowledge, as the villagers in small communities may be able to process and manufacture in the basic level according to their conventional wisdom. But the external mechanism will help promoting strength from knowledge and researches which could further improve the community products.

Therefore, the integrated administration system development approach should include mutual planning of operation among the local government agencies, in order to solve the problem of redundancy among agencies. There should be the clear system of integrated administration in the development of community enterprises according to the type and cluster of the entrepreneurs. In addition, the mutual agreement in planning and projects could help create the network of community enterprises and government agencies which will advance the career development for local citizens.

4.6 Promoting the New Generation to Continue the Community Enterprises

The roles of the new generation or the heirs of the community enterprises are crucial in the development of know-how from their parents. They could combine the conventional knowledge and the

modern knowledge they have learned, and new innovation could emerge, such as knowledges in agriculture, processing, modern administration. They could update the enterprises and utilize technology in the operation, such as online system, access to capital resources, and business plan writing.

Having the new generation to continue the community enterprises will not only develop the rural area by encouraging potential and skillful candidates to stay with the community, reducing unemployment problem in community, but will also preserve conventional career and wisdoms which could be standardized to motivate the next generation. For example, entrepreneurs in the Eastern region (personal communication, May 10, 2022) who also lead the community attempted to preserve the career in palm sugar making within the area by initiating the sugar palm sprouts bank project in the community school. As a result, children would learn how to plant sugar palm and they could sell sugar palm sprouts as well.

Nevertheless, data collection from community enterprises in processed agricultural products revealed the struggle to find new generation to continue the business in many areas. Community entrepreneurs from the Western region deemed that most operation of community enterprises are responsible by the seniors who know how to operate. Meanwhile there are few members of the new generation who participate in learning and continuing the business as the income is not attractive enough for the new generation. They might not continue the business as it could not be their main income.

Hence, the future operation of community business should also motivate the new generation to return to community and continue the business from the existing capitals. In this way, the new generation will have career and income, while the existing community members from the parent generation who built the foundation for them could be the supporting wheels to drive the grassroots economy of the community. Afterwards, the rural area will become the area for exchanging knowledge between villages, communities, and the network of the new generation who return to develop both the economic and social dimensions of their own hometown. The existing resources and capital in community would be cared for while the new generation make their own careers and solve the community's problems.

5 Discussion

This article demonstrates that using the locally-available raw materials could give advantages to the community enterprises who processed products from what they grew and produced. As a result, their processed agricultural products are unique according to each area. Entrepreneurs would process the harvested raw material to avoid wasting them and also add value to those raw materials. They are increasingly connected to the health-concerned consumers by adapting towards non-toxic farming and using unique ingredients. The finding conforms to the view of Born and Bachmann, [15], that apart from the increased profit, adding value to the agricultural products could open up the new market, bring acceptance to farmers, expand the market season, and benefit the community. Nevertheless, in the fast-growing industry of entrepreneurs in food sector, an interesting alternative is to seek the growth within just the niche market, where entrepreneurs could add value by offering specialty. They could present the quality characteristics, such as organic certification or the position of health products. Moreover, this study found that community entrepreneurs utilize wisdom in the processing of raw material which requires specific knowledge, by combining the traditional wisdom to the simple technology. Similarly, Bragdon and Smith, [16], stated that individual farmers are able to integrate variety and technology in their administration, combine knowledge system, and decide base on the cultural flexibility and local context. However, this study also reveals the problem which the major ingredients for processed agricultural products must depend on the season. So, the irregular amount of raw materials impacted the production. It is obvious that the agricultural sector is sensitive to the weather conditions and the impacts of climate change, which do not only come with long-term changes in general context, but also change the annual season, the frequency, and the severity of weather, [17]. Other factors which impact the productivity in the agricultural sector include public policies, society, economy, and technology, [18].

For the administration of community enterprises, many elements are required to ensure the survival of small community enterprises. Administration process of community enterprises require the willingness and skills of entrepreneurs in coping with risks. Other requirements include enough capital, administration skills, and personal skills such as the ability to connect with external market successfully, [19]. The in-depth interview revealed that capital, administration by the leader of

community enterprise, and transparency are the important factors. Currently the capital and administration are the challenges for the enterprises which base on small community. They struggled in fundraising to expand production or development of processing in order to compete commercially. The finding is similar to the view of Naipinit, Na Sakolnakorn & Kroeksakul, [20], that Thai community enterprises struggle with finance and accounting. Additionally, it is hard for them to loan from financial institution to invest in business expansion, as most entrepreneurs lack financial qualifications and assets or savings which could be the personal guarantee. As the members of community enterprises would avoid providing guarantee for other people's loan, the community enterprises therefore lack enough investment. As a result, they could not buy new technology and create new things for business expansion. Furthermore, the context of future growth also involves the struggle to find labour in the rural area, as currently they are based on the household labours or daily employment of community enterprises members. It is also hard to control production labour in the small-scale processing in order to ensure standardized production. This finding is similar to Mongkhonchairoek and Raksamueng's study, [21], that the low level of productivity in community enterprises reflects the challenge in human resources and administration, as people prefer to work with factories rather than community enterprises. And young adults rarely participate in community enterprises. Therefore, most labours are senior. Many community enterprises struggle with high cost of production and administration, as the hand-made operation requires long period of time to complete. However, the administration of community enterprise should base on the participation of all members, as it could develop the members in terms of administration knowledge and their other capacities. When the community members participate, it will also increase efficiency and the quality of enterprise, as well as good attitude in assisting with work and willingness of the members to join community activities, [22].

Regarding the development and extension of activities, community enterprises should utilize local resources and wisdom to promote community-based tourism or agritourism, by creating unique activities in tour program. A such extension could progress towards other activities throughout the year, which will sustainably promote local economic development and product demands, [23]. However, there are many times when the attempt to promote activities did not match the community's objectives,

as the study by Lak and Khairabadi, [24], revealed that the problem of agritourism activities in the rural area of a developing country consists of the incompatibility of tour schedule with highly conservative community economy and cultural contexts. On the other hand, the change in lifestyle welcomes the trend in unique tourism based on small groups and the trend of living close to nature. Therefore, the promotion of sustainable preservation and development activities could be increasingly popular while also helping to conserve the agricultural ecosystem. Similarly, Ammirato et al., [25], deemed that alternative tourism managed creatively by the community could bring forth learning, sustainability of the local environment, culture, and well-beings. Such initiation not only benefits the region economically, but also ensures the continued existence of natural, historical, and cultural legacy.

In the promotion of unique identity, community agricultural products could utilize online channel to communicate the stories of product and community identity while also creating marketing strategy through online media. According to this study, it was found that the community enterprises in processed agricultural product could adapt to the situation after COVID-19 pandemic. Several community entrepreneurs begin to develop online marketing channel. Nevertheless, the continuous administration of online channel and other public relation channels remain challenging for small community entrepreneurs. And Maikansarn and Chantharat, [26], pointed out that farmers must prepare to access the online market through the learning of processes and activities. Moreover, they are required to prepare for online business, by increasing skills and knowledge in branding, marketing, and customers behaviours. Farmers must utilize the business knowledge to access online channel other than just being the farmer.

Regarding the mechanism to promote local community enterprises, entrepreneurs should not ignore the support from government and other external agencies, as sometimes it could be necessary to depend on such support in order to be successful. According to this study, it was found that many local government agencies worked together in promoting community enterprises in the agriculture sector. However, there might be some limitations for the local government agencies who must follow the central policies of their ministries. As a result, some activities might be redundant or lack the consideration of community enterprises' various dimensions of readiness. Similarly, Raungpaka and Savetpanuvong, [27], deemed that a

low level of collaboration and integration among government agencies and industry could cause the island of database, inequality, and non-conformity. Furthermore, data could be redundant due to different methods of prediction. Likewise, the study of Naipinit, Na Sakolnakorn & Kroeksakul, [28], deemed that operational and supporting units still lack collaboration to integrate their work. Government should rethink how to coordinate with community enterprise, and there should be just a single agency that operate and promote community entrepreneurs. Moreover, the goal of development should come from the group of community entrepreneurs in processed agricultural product sector. Community enterprises should have idea originated from the community's operation and need not wait for any agency to set up or promote them into enterprise.

Regarding the promotion of new generation to continue the business, during the COVID-19 pandemic, the new generation is increasingly returning to their communities. Bringing in the energy of new generation would develop the community by attracting potential and skillful candidates to stay. According to this study, the community enterprises in processed agricultural products still struggle with the lack of new generation to continue the business. Most young adults lack the motivation to participate in agricultural community enterprises. And they regard farming as a career which requires hardworking while the return is low. Similarly, Rado, Lu, Lin, & Aoo, [29], also pointed out that young adults exist the agricultural sector towards higher incomes in other regions in Thailand. Few young farmers would follow the trace of their parents. Therefore, the new generation should be taught the attitude to believe in the biological diversity of rural area, which is not only important in terms of life sustenance but also worth financially. Agricultural sector should be deemed as a graceful business which does not just feed people but could also generate wealth and well-beings for the new generation. And the technological advancement could bring forth a lot of opportunities for the young adults to update the agricultural sector to suit the era and the swift and convenient administration, [30]. Therefore, government's policy should focus on motivating the new generation to join the community enterprises to continue the business which could drive and support the foundational economy of the community. They could become the network of new generation who return to develop their community, and there should be the necessary financial support for them to continue the business.

Regarding the research recommendations, the research team suggests that development of local products or services should depend on the resources and unique wisdom in harvesting specific natural ingredients, as well as the area's identity, as the main raw material for business operation as community enterprises. The transferred knowledge should be utilized as the local capital which could lead the community to rely on themselves sustainably. In addition, the government's mechanism should encourage community entrepreneurs or local small business to utilize knowledge, technology, and modern administrative principles in their operation. Community enterprises should adapt towards the modern business which response increasingly to the trend of the consumer market. Enterprises should focus on modern administration and increasing capacity of the entrepreneurs and new generation. Meanwhile, the support and promotion from the government could help generate new income base and employment opportunities to attract labours for the local community enterprises.

The suggestion in increasing activities, community and its enterprise should extend the processing of agricultural products towards cultural-tourism or agritourism which is suitable to the geographical, historical, cultural, and potential context of local people. As a result, business and employment will expand in the community while community products will be publicized externally. Besides, community entrepreneurs should utilize digital technology in all business operations in order to increase efficiency in their administration while also increasing marketing channels for the wider consumers to access the enterprise's products and stories. Meanwhile, the government should provide knowledge support in online distribution channels which does not have to be complex but should be up-to-date. There should be the fair and clear online marketing policy for agricultural products on online platform, as they have higher risks in terms of shelf life, damages, and active ingredients.

Recommendations on collaborating network among government and private sectors, there should be the mechanism to integrate local coordination which will support the expansion of community business. Such network could follow the context of local administrative committee, in terms of capital access, application for standard approval, and other supports, as a one-stop service centre of the community which could suitably help entrepreneurs to plan and manage their business. And also, the Government sector should present the awareness of youth participation in modern agriculture which

could help to nurture positive attitude and perspective towards agricultural career and entrepreneurs, motivate the development of new-generation entrepreneurs in rural area, and create the network of new-generation entrepreneurs. Local university students could also be prepared and encouraged towards being the next generation of creative entrepreneurs.

6 Conclusion

The study discussed various issues and adaptation of community enterprises in the processed agricultural sector. The results demonstrate the need to sustainably scale up activities in processed agricultural products after COVID-19.

Applying locally sourced key ingredients in the processing of agricultural products, providing unique local ingredient benefits while preventing oversupply the waste, and also adding local conventional wisdom have significantly improved the production process in agribusiness. In addition, the administration should give consideration by joint venture challenge and procuring funds to expand production. However, labour shortages in rural areas also pose significant challenges for community enterprise operations. Besides, encouraging agritourism activities and sustainable ecosystems should be applied to produce different undertakings in the context of extension in agricultural activities. In order to convey the identity of products and the community of producers, it is indispensable to implement online distribution channels shifting through the customer experiences. Finally, it is about drawing in the younger generation to expand the business of agricultural processing community enterprises for supporting long-term community development.

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Conflict of Interest

The author has no conflict of interest to declare that is relevant to the content of this article.

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