Guidelines for Production and Marketing Management of Peanut Total-Processing by Community Enterprise: A Case Study of Ban Ton Phueng, Maepong Sub-District, Doi Saket District, Chiang Mai Province

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Abstract

This research aimed to review the guideline for production and marketing management of peanut total-processing by community enterprise at Ban Ton Phueng, Maepong Sub-district, Doi Saket District, Chiang Mai province. The Participatory Action Research (PAR) approach with integrative mechanisms which included external academics and all relevant inside and outside area/community agencies was applied to implement the certain production and marketing management in relation to establish income and economic securities as gained from peanut productions to most of local people in the studied area. Research findings suggested that with the proper physical geography, climate and soil conditions, Ban Ton Phueng had potentials in producing traditional peanut breeding that the villagers cultivated and selected by themselves. It was found that, with the extensive knowledge and experience in peanut productions (in and off seasons) for over 10 years, the villagers had adequate bodies of knowledge in producing high quality peanuts. When the production and marketing management of peanut total-processing by community enterprise was implemented, it brought the great impact to a large number of people and paved the ways for the community enterprise to post-harvest and boiled-peanut processing management and marketing total-management: production distribution at Rimping Supermarket. The practices also brought a greater amount of income to the community/area each year. The study suggested that, if the community followed the plan, the cultivated land for qualified peanuts should be expanded to more than 60 rais, and the benefits would reach thru more than 30 farmer households. The community yearly income would also be increased from 300,000 baht as gained from fresh peanut distributions to 2,400,000 Baht from the boiled-peanut processing.

Keywords: Production and Marketing Management, Peanut Total-Processing, Community Enterprise, Participatory Action Research

Introduction

Ban Ton Phueng, Moo 7, Maepong Sub-district, Doi Saket District, Chiang Mai Province separated from Ban Huay Ang, Moo 6, Maepong Sub-district, Doi Saket District, Chiang Mai Province. The current number of households in this village are 98 in total. More than 54 households, which regarded as the majority, work in agriculture as their main occupation. Significant cash crops grown in this area include rice, peanut, corn, chili, longan, etc. Besides crop farming, the villagers also carried other occupations, such as animal husbandry and general labor jobs offered either in or outside the village. The research team of Chiang Mai University in collaboration with the representatives of Huai Hongkhrai Royal Development Study Center worked on the research report entitled, "Data and Knowledge Analyses of Huai Hongkhrai Royal Development Study Center for Collaborative Development in Communities" (Prabudhanitisarn, 2017) with the aim to completely construct and make a good use of sets of data and knowledge as gained from a number of research studies for the benefits of the studied communities and targeted area. The team applied the "implosion" method to understand problems; form research questions; and design the guidelines for the full circle of production and marketing management on

the basis of existing problems and real needs of the community in order to lead the communities to achieve the sufficiency economy's way of life. The report demonstrates results of the analysis on community's problems, potentials, and limitation towards the holistic area-based development practice; answers to the high impact questions on community development; and proposed development guidelines that can eradicate problems and respond to the real needs of community/area. Then, all obtained data enabled the research team to identify or "trigger" the development guidelines to resolve important problems of both agricultural and non-agricultural sectors in the studied communities/area. It is observed that all proposed guidelines were designed, in particular, for the full circle of production and marketing managements of the major cash crops and animals. According to the report, although the proposed guidelines were vary depending on contexts and conditions, all of them served the main principle – to establish income security for the majority in the studied area through the increase of production capacity (in other words, to bring the great impact to a large number of households/communities). It was expected that if the proposed guidelines worked well, they should bring the great and positive impact to the ecological balance as well as the way of life of people in the communities and the area.

The report suggests that one of the proposed development guidelines that can respond well to the existing problems and the real needs of Ban Ton Phueng community is "the guideline of production and marketing managements of peanut total-processing by community enterprise". If we take an effort to study further on this guideline in deeper dimension, it can be developed into a research project. In so doing, work plans and activities should be defined in a form of detailed action plan. Important contents in three phases of management: point-of-origin, midway, and endpoint, must be clearly specified, in order to gain recognition and confidence among people in the communities and the studied area, other agents related, and Huai Hongkhrai Royal Development Study Center in a sense that this project is really practical. According to the report, it is believed that this project can get the concrete supports in forms of knowledge sharing; allocation of essential resources and manpower; and financial support from those mentioned agents because they all know that this project will bring the power of stable and sustainable development to its people as well as to community's productivity and economy (Prabudhanitisarn, 2017). Local wisdom and traditional cultural capital should be regarded as the basement of sustainable development and strong local community concepts in the globalized world. Both of them should be adapted for the suitability to current situations in order to enable the community to achieve self-development and self-reliance. The proper linkage between rural development and urban development, in support with an integration of existing local knowledge of the group of agriculturalists and the modern development management of "community enterprise" approach, should be initiated. This includes processes to strengthen community's socio-economy in the way that the community resources must be used for the most valuable means to lead the community to obtain the balance between economic strength, self-reliance, and increase of marketing competitive capacity. Such a practice seems to be able to bring along the significant career alternatives to people, especially those in the rural area, as it totally merged productivities of all sectors: agriculture, commerce, industry, and service to local productions. Therefore, it can be said that this practice can truly lead the communities to meet with sustainable development and balance of lives. People of the communities will be able to handle with local knowledge management and new knowledge acquisition, both of which are regarded as the key concepts of community enterprise development. It is believed that these concepts will enable the communities to recognize their own potentials and discover the capitals that have been existed in the

communities, resulting the people of the communities having better living conditions; and positive shift of paradigm as well as attitude change towards lives and society (Chamnanphon, 2015).

In connection with the suggestion of the abovementioned report, this study is conducted to extend the guideline of production and marketing management of peanut total-processing of Ban Ton Phueng Community Enterprise. The work plan and list of activities, together with full details of action plan and full-circle management, are clearly determined to get the guideline implemented concretely.

Research Methodology

The study identified its research population, samples and instruments as follows.

1. Research population and samples are 30 farmer households in Ban Ton Phueng that produce and distribute peanut production in the area of Ban Ton Phueng, Maepong Sub-district, Doi Saket District, Chiang Mai Province. The workshop forum which requires the participation of people in communities is arranged in order to seek for qualified households that have production and processing capacities for community enterprise and interest in joining the project.

2. Research tools consist of:

a) Participatory Action Research (PAR) is applied to integrate four main groups as the area's key mechanisms: a group of academics; a local government/local organization supporting group; a group of communities; and the Huai Hongkhrai Royal Development Study Center to create knowledge sets and implement them with the farmers in Ban Ton Phueng, who live around the Huai Hongkhrai Royal Development Study Center (Prabudhanitisarn, 2017).

b) "Implosion" method is used to integrate the minimum of four important sets of database: natural resources and ecology; land use; production system and economy of the community; and demography-society-and administration. Data from development related agents in government and private sectors and from the PAR are also used to identify the guidelines of production and marketing managements of peanut total-processing by the community enterprise (Buddharaksa, 2018; Keawtip et al., 2013).

3. SWOT and Tows Matrix Analyses are applied to assess capacities and production and marketing opportunities. Information of business system and marketing channels in agricultural and non-agricultural chains, as well as costs and returns or revenues are analyzed in order to set up the sensible practices for 3 phases of production and marketing managements in full circle as follows.

a) Point-of-Origin Phase: The implementation in this phase supports an increase of farmer's capacity to produce good quality of peanut. The implementation in this phase begins with the management of essential production factors i.e. to increase soil fertility, to improve water resources, and to handle with agricultural machines, along with the acquisition of supports: knowledge and important technologies for productions from the Huai Hongkrai Royal Development Study and other related agents (Chinsopholpan, 2011; Setthajit, 2015).

b) Midway Phase: The implementation in this phase supports an increase of effectiveness and efficiency of peanut production through management practices such as Farm Practice Management. In this phase, the standard control of production process in terms of product's quality and quantity; the control of pests and diseases, the post-harvest management, the study on trend of marketing capacities and opportunities, the agricultural product processing, the non-agricultural career management, and etc. are discussed and implemented (Suwaenadchariya, 2006).

c) Endpoint Phase: The implementation in this phase supports an increase of capacities to handle with enterprise and marketing managements in agricultural and non-agricultural chains as well as production costs and returns; and to analyze marketing and distribution channels in demand and supply chains, in which manufacturers, community and external markets/central markets for agricultural products/agri-product processing markets/niche market, users or end-users (Chinsopholpan, 2011) are involved, as shown in the Research Framework diagram (Figure 1).

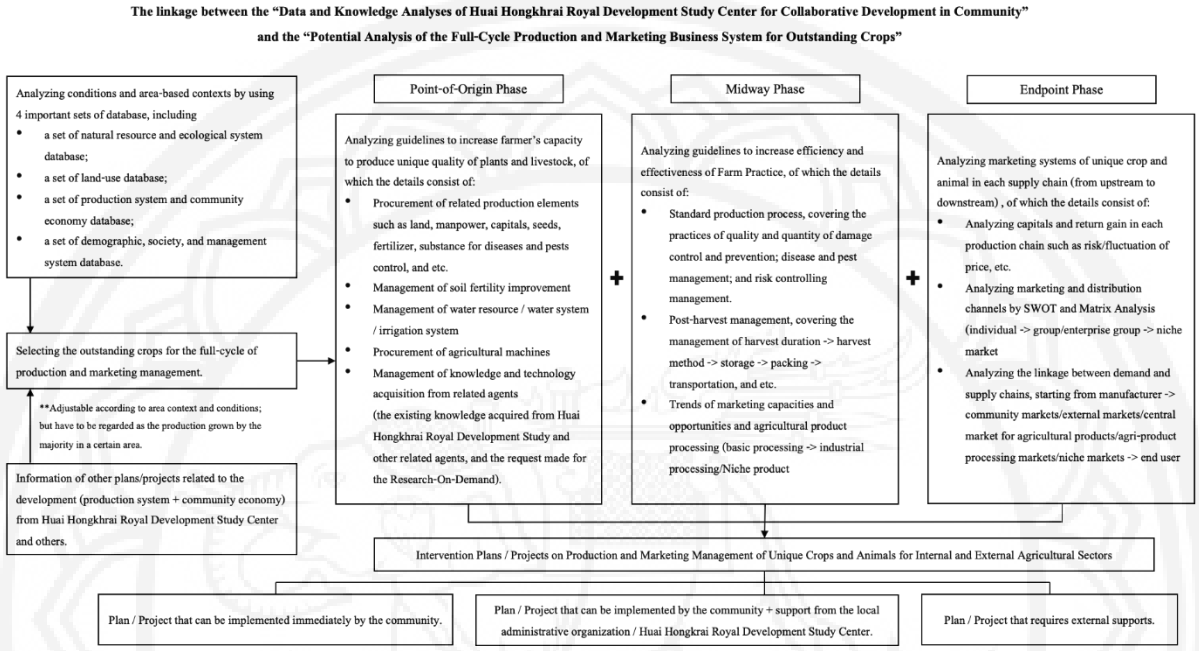

Figure 1 Research Framework

Results

The concrete success for the guideline of production and marketing managements of peanut total-processing by Ban Ton Phueng Community Enterprise relies on the cooperation of four major mechanisms: (1) the group of farmers who produce and turn their production to processed products; (2) the experts or the academics in related fields from outside; (3) the group of marketing enterprises such as Rimping Supermarket; and (4) the group of academics and production enhancement team from Huai Hongkhrai Royal Development Study Center. These mechanisms are considered as the core to push, coordinate and support the drive of project's total implementation, especially in a stage of integrating relevant knowledge obtained from Huai Hongkhrai Royal Development Study Center and from other sources together with knowledge of the communities: local wisdom, knowledge and experiences of the villagers, to ensure that each step of project is implemented elaborately and properly. In addition, when the project encounters with the shortage of essential knowledge: for example, the knowledge on how to improve the peanut variety being grown at Ban Ton Phueng, which regarded as the unique variety, to have high quality with resistance and strength qualifications, the extension and the development of studies and experiments in a form of Research On-Demand will be respectively initiated by the Huai Hongkhrai Royal Development Study Center for the future benefits of the majority of farmers.

In this light, the mechanisms, tools, knowledge and implementation that had been elaborately and concretely developed since the stage of preparation (in the first year), as well as the conclusions that are neatly drawn through the processes of thinking and implementation, will pass to the next step: the step of implementation (in the second and the third years). In addition, the handling of problems and obstacles that occurred during the implementation of the project, evaluation and knowledge sharing will be consistently discussed in each phase of management: point-of-origin -> midway -> and endpoint (Figure 2).

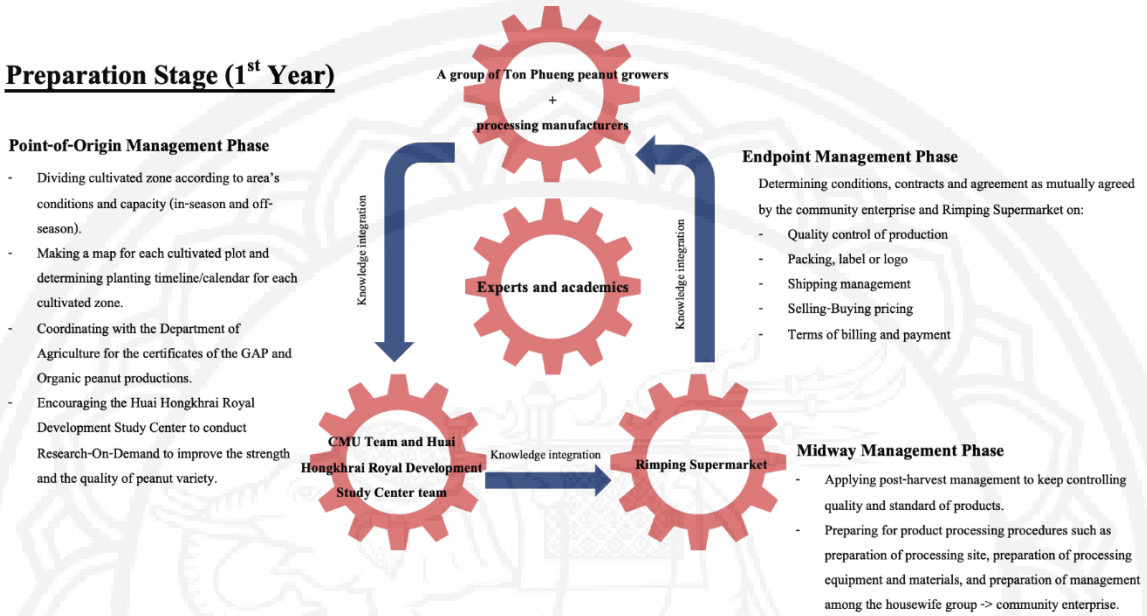

Figure 2 Action Plan in Detail and Persons Responsible in Each Management Phase

According to the study on the guideline of production and marketing management of peanut total-processing by Ban Ton Phueng Community Enterprise, the significant practices in each phase of management are proposed below.

1. Point-of-Origin Phase: In this phase, besides the good cooperation of all involved parties, the project success relies on the key condition – the farmers, who own production capability in suitability with the resource conditions and ecological systems, such as fertile soil, abundant water, and good seeds. The findings presented that Ban Ton Phueng has the total area around 2,200 rais. The village situated on the plain area, of which the main agricultural water system depends on water from Mae Kuang Dam which allocated water to two water routes: right irrigation canal (Phataek) and left irrigation canal. In addition to the main water system, the village has an extra water system from the natural water resource in community forest. According to the study, there are four sets of soils, but the best soil for planting is the soil set no. 22. This set of soil is suitable for rice farming and field crops, such as soybean, peanut, corn, and garlic.

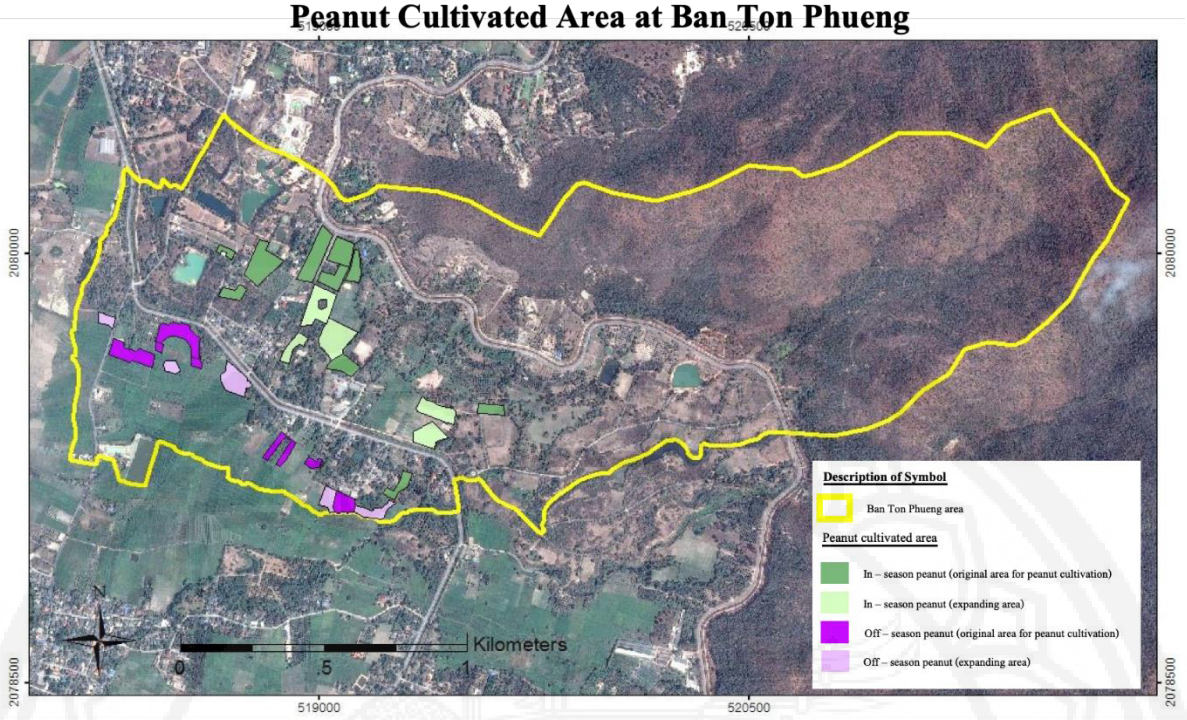

Figure 3 Potential Area for Peanut Productions (in-season and off-season peanuts) in Ban Ton Phueng, Maepong Sub-district, Doi Saket District, Chiang Mai Province

In light of community's production and economic systems, Ban Ton Phueng is the community where peanuts can be grown all year round. The main cash crops of the village are Sanpatong1 sticky rice and peanut. The village has 3 major production systems: (1) growing in-season rice in sequence with off-season rice, (2) growing in-season rice in sequence with in-season and off-season peanuts in the way that after harvesting the in-season rice, the off-season peanut is accordingly grown, and (3) growing in-season rice in sequence with off-season rice and in-season peanut. It is observed that there are 10 farmer households growing the peanut; the total peanut cultivated area is 30 Rais, each of which can provide around 500 kilograms of peanut productivity. For the entire community, the total peanut productivity is approximately 15 tons/year. In the point-of-origin management phase, the classification of peanut cultivated zones is based upon land conditions; while its production capability is mutually determined through coordination and collaboration between academics and the 10 farmers who participated in the project. Data obtained from each cultivated zone are recorded separately in a map chart; then, seasonal/production year period planting timeline or calendar for a certain cultivated zone is specified.

2. Midway Phase: The actions in this phase rely on significant goals: setting up effective plans for the highest value-added products, which refer to (1) organic peanut (growing in-season and off-season peanuts on upland area), and (2) Good Agricultural Practices: GAP peanut (growing peanuts after harvesting rice in paddy field area); increasing efficiency and effectiveness of production in each cultivated zone where land conditions and land capability are varied; and developing production plans to ensure that the village can continually deliver the certain demanded product volumes to processing factories in proper time periods (rather than letting every farmer grow and harvest crops in the same period of time). In this phase, the coordination with the Department of Agriculture to get the products certified as GAP and organic products in accordance with the standards as defined by the National Bureau of Agricultural Commodity and Food Standards (ACFS), Ministry of Agriculture

and Cooperatives is performed. Guidelines and main principles of improving the products to meet with organic and GAP standards are presented as follows.

Organic Peanut Production: According to Thai standards for organic crop production, the organic crop production must meet with the following key requirements: 1) cultivated area must not be located at the place with lower environmental standards; 2) synthetic chemicals must not be found in the cultivated area; 3) no synthetic chemicals used in production process; 4) no synthetic chemical coated seeds being planted, 5) no genetically modified organisms material being used, 6) no use of feces of livestock raised with wrong standards, 7) external production factors must be certified for standards, 8) production process must be free from synthetic chemical contaminant, 9) production practice must be done in the way to promote biodiversity and environment, and 10) the production must be officially certified. Therefore, the guideline and important procedures of organic peanut production must include the planning for following activities: selection of cultivated area for organic crops; selection of crop varieties; soil quality improvement; crop pest control, product storage and transportation, forest crop harvest and conservation of biodiversity and environment, certification issuance procedure, and post-harvest and product processing managements.

Good Agricultural Practices (GAP) Peanut Production: According to the Good Agricultural Practices (GAP) for crops in Thailand, the concerned conditions and principles in the production process to make the products safe with plant pest free and with quality that can satisfy the customers are about sources of water, cultivated area, the use of hazardous agricultural materials, product storage and transportation within a cultivated plot, data record, plant pest free production, production process management for qualified products, and harvest and post-harvest practices.

In addition, the project put an effort into increasing efficiency of peanut production through the improvement of peanut varieties. Initially, the action guideline of the selection of fertile seeds has been discussed since the first year of project implementation. At that time, the knowledge gained from experiences and wisdoms of the farmers together with academic advises of peanut varieties experts from Huai Hongkhrai Royal Development Study Center were adopted to improve quality and fertility of peanut seeds. In the future, researches, experiments, and improvement of peanut varieties with resistance and strength qualifications may be assigned, so that the improved peanut varieties can be distributed to the farmers to continually and sustainably grow. The improvement of unique peanut variety like Ban Ton Phuong variety by maintaining its resistance and strength qualification is considered as the important supporting factor that can create quantitative and qualitative impacts to a large number of farmers. It can well respond to the significant strategy of Huai Hongkhrai Royal Development Study Center in producing research, experiments and improvement to serve the real needs of communities and area. Thus, the related staff who are responsible for this matter at Huai Hongkhrai Royal Development Study Center should be encouraged to develop and implement the Research-On-Demand concurrently with the action-stage implementation of this project at the first year in order to obtain the concrete results in the 3rd or 4th year of project.

With regard to the Post-harvest management, it is necessary to get together all related people, especially the farmers who can share their experiences and knowledge; and the external experts who can provide academic advices, to develop plans for controlling production management, handling with plant caring and nourishing for peanut quality; and arranging harvest procedures and methods in order to gain efficiency and effectiveness of peanut production in terms of its quality and quantity. In the meanwhile, it is mentioned that peanut growing will

be beneficial to the improvement of soil fertility because it can increase nitrogen to soil. Peanut can fix nitrogen gas in the air with Rhizobium – a bacteria attached to the root nodules of peanut. The interaction between Rhizobium and peanut is on the basis of mutualism (peanut delivers carbohydrate nutrient to Rhizobium; while the latter delivers nitrogen to the peanut plant). Nitrogen contained in the peanut plant originated from 2 main sources: soil and air. The peanut can nourish soil only when it fixes enough nitrogen gas in the air for plant growth; then generates the nitrogen for soil. However, the concentration on method to harvest those nitrogen-fixed peanut plants: whether those nitrogen-fixed peanut plants are removed from the plot or are left there after harvesting must be considered. If the peanut plants, of which the root, stalk, leaf, and seed are fixed with nitrogen, were removed from the plot, the fertility of soil would not be gained. Thus, two significant approaches that can indicate whether the peanut plants can nourish soil fertility include 1) factors influencing the efficiency of nitrogen fixation, and 2) factors on time period and harvest method.

The planning of post-harvest management to ship products to processing factories is necessary to be discussed with each farmer in order to find appropriate procedures, techniques and methods to make the harvest productive. Moreover, guidelines and procedures of quality grading for organic peanut and GAP peanut: Grade A and General Grade and on-site purchase at the certain plot should be also discussed for the sake of motivating the farmers to develop their products in the future.

Regarding the preparation of product processing and management for the housewife group, which can later be developed to community enterprise, some essential conditions and components that must be prepared include:

- Processing site preparation: Building and surrounding area may need to be renovated to make the site complying with preferred standards. Water system for cleaning peanuts must be arranged.
- Preparation of necessary equipment and materials to be used in processing process i.e. peanut cleaning machine, peanut boiling pots, gas stoves, iron shelves and stainless steel colanders for peanut drying before packing, industrial fans, and etc.
- Preparation of necessary materials to be used in packing and storing processes: containers for boiled peanuts (size 0.25/1/5 kg.), digital scale, product label/logo/brand, refrigerator to freeze the products, and etc.
- Preparation for the establishment of enterprise group through the formation of the housewife group: The organizational structure of the housewife group should include 1) chairman, 2) vice-chairman, 3) financial and accounting division, 4) raw material management division, 5) processing and packing division, 6) business and marketing division, and 7) shareholders. All members must mutually agree to involve in this structure. The allocation of tasks and responsibilities for members in each division should be done on the basis of individual proficiency or skills. Then, the final step is to draft regulations or rules for the entire group such as objectives; sources of revolving funds; member qualifications; membership subscription; absent membership or membership termination policy; determination of initial fee-stock, price-and dividends; and tasks and responsibilities of the boards of administrative committee and members in each division, for the standard practices to all members.

3. Endpoint Phase: In this phase, the focuses are given to the determination of mutual conditions and agreement between the enterprise group and the significant markets such as Rimping Supermarket; the supervision on the standard of production quality; the packing; the product label or logo; the transportation; the determination of fair selling and buying prices for all involved parties (farmers who grow crops and conduct product processing, Rimping Supermarket, and consumers); and the billing and payment terms. Prior to distributing the products to a certain market, a meeting between farmers and members of the enterprise must be

organized to find the way to upgrade the products to the highest value added products; to consider whether the products should be distributed as wholesale distribution or retail distribution for small merchants to buy and process the products by boiling them by themselves; to consider whether the selling at auction should be proposed; and to identify product distribution and marketing channels.

4. Planning of the Guideline to Concretely Construct the Potential Driving Mechanism for the enterprise group must rely on the collaboration between 4 parties. Academics from educational institute – Chiang Mai University and production enhancement team from Huai Hongkhrai Royal Development Study Center play a key role in elaborately coordinate, push, and support the operations of every step of the project with the farmers who grow, produce, and process the products and the experts or academics regarding agriculture, agricultural production and processing, as well as to build business connection with Rimping Supermarket or other buyers. The key procedures for potential enhancement include:

4.1 The Potential Enhancement for Peanut Farmers: Academic team and production enhancement team of Huai Hongkhrai Royal Development Study Center, in collaboration with officers from the Department of Agriculture organize workshops on the matters of procedures and processes to produce quality peanuts and systems to modify productions to be in line with the GAP and the organic plant production systems as defined by the National Bureau of Agricultural Commodity and Food Standards (ACFS) in order to build the confidence in producing products among the farmers and to gain product values in response to the needs of markets and consumers.

4.2 The Potential Enhancement for Housewife Group, as manufacturer and processing agent: All group members have to work together to designate individuals to participate in the group; to form the structure; and to define roles, tasks, and responsibilities of all members in each division as follows.

4.2.1 Raw Material Management Division is responsible for product purchasing, grading, and cleaning.

4.2.2 Processing and Packing Division is responsible for boiling, packing, and storing peanut products.

4.2.3 Business and Marketing Management Division is responsible for accounting, coordinating and contacting with markets, sustaining relationships among members/enterprises, and raising share capital management (Start Up).

4.3 The Potential Enhancement of Skills and Operating Capacity in Each Division (as mentioned in No. 4.2): The potential enhancement is performed through the arrangement of trainings, study visits, and intensive experimental practices to gain manufacturing and processing knowledge, skills, and expertise for excellent products, such as selection of raw materials; tips for each production process: cleaning, boiling, flavoring, temperature or heating controlling, time controlling, and etc. Skills and expertise enhancement can be acquired from the collaboration and knowledge integration between 3 main sources: a group of peanut manufacturing and processing housewife; experts and academics engaged in food industries and food processing; and a group of consumers. Market validation must also be applied in order to provide the certain products in response to real need of customers.

However, based upon the prediction study on advantages that the farmers in Ban Ton Phueng will gain if they follow the guideline of production and marketing managements of peanut total-processing of the community enterprise, as conducted through the comparison between raw peanut production practice (the old practice) and practice of peanut production and processing in full circle of the community enterprise, the results are presented as follows.

Table 1 Comparison of the Raw Peanut Production Practice (the Old Practice) and the Practice of Peanut Production and Processing in Full Circle of the Community Enterprise

Raw Peanut Production Practice (the Old Practice)	Full Cycle of Peanut Production and Processing of the Community Enterprise
In the total cultivated area of 30 rais where 10 farmer households grow the peanuts for commercial purposes, it is found that each Rai can produce peanuts around 500 kilograms. If the farmers sell the products at 20 Baht per kilogram, they will gain average income at the average amount of 10,000 Baht. In a year, the average product quantity that the entire village can produce is 15 tons. The average annual income for the 10 farmer households, thus, equals to 300,000 Baht.	In the total cultivated area of 60 rais where 30 farmer households grow the peanuts for commercial purposes, it is found that each Rai can produce peanuts around 500 kilograms. If they sell the products to the processing group at 30 Bath per a kilogram, they will earn income at the average amount of 15,000 Baht per Rai. In a year, the average product quantity that all 30 households can produce is 30 tons. The average annual income for these 30 households, thus, equals to 900,000 Baht. Considering on the calculation of processing cost, the cost for 30 tons of product processing in a year equals to 524,800 Baht. As of the time when the study is conducted, the wholesale price offered to Rimping Supermarket is 80 Baht/kilogram. Thus, the average annual income of all farmers is 2,400,000 Baht; and the annual profit that the community gains are 975,200 Baht.

Discussion

The study on the guideline of production and marketing managements of peanut total-processing for the community enterprise was conducted by the use of PAR approach to integrating research mechanisms in the studied area in order to set up the full circle of knowledge construction and knowledge used for the farmers in Ban Ton Phueng village. Then, the "implosion" method, in which at least four significant sets of database were integrated, was applied to identify the possible guidelines for production and marketing managements of peanut total-processing for the community enterprise. Research synopsis and data were presented as follows.

The analytical studies on production and marketing potentials and opportunities, business system and marketing channels in agricultural and non-agricultural chains, and capitals and returns were conducted to determine the best practice of the full circle of production and marketing managements: point-of-origin, midway, and endpoint phases for the community enterprise. It is observed that the systematic integration of collaborative and knowledge mechanisms for the full circle of agricultural business management causes the efficient and effective results, especially in terms of value and value-added construction throughout the agricultural value chain, on the basis of the existing resources in each area. The project demonstrates that the old practice of farmers in producing raw peanut productions was rather considered as individual production. By this practice, though the production was unique and full of quality, the farmers could not determine the product prices by themselves; the product pricing would depend on marketing mechanism and middleman. Thus, if the peanut farmers agreed to bound together to form the enterprise group, they would be able to gain more benefits for themselves. In so doing, they would be required to follow all practices described in each phase of production and marketing management.

In the point-of-origin phase, all practices would lead to the increase of the farmers' potential in producing good quality of peanut through the management of essential production factors, including the practices to increase soil fertility; the improvement of water resources; the arrangement of agricultural machines; and the knowledge and technology support from relevant units. Practices in this phase would make a significant link to the practices in the midway phase. In the midway phase, all practices emphasize to the increase of efficiency and

effectiveness of peanut production management. For example, the Farm Practice is introduced to this phase to keep controlling production standards in terms of quantity and quality; crop disease and pests, and etc. Lastly, practices in the endpoint phase are about the processing of raw peanuts to boiled peanuts by the enterprise group and the delivery of the processed peanuts to Rimping Supermarket, as an agent connecting the group to markets. In this phase, the systematic management planning for product distribution brings the positive result to four-fold increase of product value in comparison with the value gained from the distribution of raw peanuts.

In the light of these management practices, it can be summarized that on the basis of group formation, the local community would be strengthened through the balanced and sustainable development. Findings of this project are in line with the conclusion of Keawtip et al. (2013); Setthajit (2015); Prabudhanitisarn (2010; 2015; 2017) in a sense that the development of local economy in community level must rely on the collaborative integration between university researchers and consortium network in the certain area. Capacity enhancement of the farmers to work together as enterprise group on product processing should be in focus. In this regard, the knowledge acquired from internal and external sources as presented in research studies can be used as supportive elements to gain product value and make a linkage between production and marketing processes throughout business circle chain: starting from production process, product distribution, and product processing process. In addition, these systematic managements can bring many positive impacts on: expanding marketing opportunities; increasing farmers' income; decreasing problems related to the low price of products; eradicating inequality of local economies, as well as sustainably strengthening the self-reliance capacity of the community.

Conclusion

The study on the guideline of the production and marketing managements of peanut total-processing of Ban Ton Phueng Community Enterprise can be developed as the integrative and powerful plan/project. The intervention study in this area should rely on collaborative integration mechanisms, including data and knowledge management. The integrative knowledge should be acquired from different partners: Ban Ton Phueng farmers; external experts and academics; representatives from Product Enhancement Division of Huai Hongkhrai Royal Development Study Center; and external markets such as Rimping Supermarket to prepare the community and the area to be ready for the series of development. This means quality development of peanut productions to achieve organic and GAP standards as defined by the Department of Agriculture. The success can be gained through improvement on the uniqueness of Ban Ton Phueng peanut variety to maintain its resistance and strength qualifications, development of effective post-harvest management, and development of product processing enterprise group-based management to add values for the processed products by turning them to Premium Product or Grade Product in response to the market need.

The guideline of community enterprise management in full circle requires the specification of mechanisms, tools, knowledge, and actions that are applicable for the concrete achievement. This includes the conclusions that have finely and carefully been drawn from the processes of thinking and implementation in the preparation stage being conducted in the first year of project and the action stage (in the 2nd and the 3rd year of project). The management of problems and obstacles that possibly occur during project implementation, as well as the monitoring and knowledge shared among people who involved in each step of implementation, are also required. If the implementation is concretely performed according to the plan, the farmers of Ban Ton Phueng will

certainly reach to the "sufficiency economy's way of life" which will enable them to achieve sustainable self-reliance in the future.

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