

# DEVELOPMENT AND CREATION OF VALUE ADDED FOR COMMERCIAL THAO EN ON HERBAL (CRYPTOLEPIS BUCHANANI ROEM) PRODUCTS OF SMALL AND MEDIUM-SIZED COMMUNITY ENTERPRISES

**Kirdmalai, N., Sakon Nakhon Rajabhat University**  
**Vaseenonta, C., Sakon Nakhon Rajabhat University**  
**Vaseenonta, T., Sakon Nakhon Rajabhat University**

## ABSTRACT

*This research is mixed methodology research with participatory action research, collected data from in-depth interviews, observations, and group discussions. The quantitative research was collected using a questionnaire of three groups of members of the Inpang network community enterprise, content analysis, and basic statistics. Besides, this research was approved by the Human Research Review Committee from the Sakon Nakhon Provincial Public Health Office.*

*The research found that: (1) Original herbal products which have been developed packaging to create a new look, namely: incubator herbs, Soak hands, Soak feet, Aloe oil, Wax, and skin compress. (2) Develop herbal recipes according to consumer tastes by medicine doctor who is a folk philosopher, folk healers, recipe development at Ajarn Fan Ajaro Hospital, Spray, Massage oil, Wax, Knee mask, Skin compress, and herbs to nourish the body to the standard which is properly registered and new knowledge is formed from research, creating convenience in the use of innovative hot compress pads from Thao En On Herbal (Cryptolepis buchanani Roem) with a heat-collecting pad made of nichrome wire with a diameter of 0.5 mm, household electrical resistance and 24 volts DC power, which is placed in the heating pad and plugged in for 30-60 seconds, when Hot and can be removed and put on a compress.*

*Building a Facebook Shopee channel has created a new career, has resellers, generating income for group members as well. Consumers were highly satisfied, attractive products average 4.17, attractive/modern features/packaging, average 4.02, and added value. Herbal products from Thao En on Herbal were 72.50% - 233.33%.*

**Keywords:** Product Development, Added-Value, Thao En On Herbal (Cryptolepis Buchanani Roem), Commercial

## INTRODUCTION

Thailand has developed continuously since the 1st Economic Development Plan that focused on infrastructure development and focused on the industrial sector. As a result of the development, Thailand has experienced high people's income growth, along with numerous social and environmental problems. But after the economic crisis of 1997, the manufacturing-focused development approach turned to human-centered development, and in 2017, Thailand set a 20-year strategy (2017-2036) as the framework for the long-term development of the country to achieve the country vision, being a stable, wealthy, sustainable, developed country through the development of the philosophy of sufficiency economy. By establishing strategies for security, building competitiveness, developing and empowering people, creating opportunities, equality, and social equality, is creating growth on environmentally friendly quality of life, and balancing and developing government management systems. Then, every government agency has established a strategy to support the country's development according to the strategy, in particular, the strategy for building competitiveness has set a guideline for

strengthening the country's economic and sustainable competitiveness by creating competition from high-value, safe, and cost-effective agricultural products (Office of the National Economic and Social Development Council, 2018).

Sakon Nakhon Province has established a strategy in line with the said strategy by defining Sakon Nakhon Province as the Mahawet City of Phytochemicals and has established an action committee to promote a comprehensive herbal development with cooperation from all sectors including government, private and public sectors, which undertake herbal management from origin, route, and destination, such as the organic herbs free from chemicals, standardized processing at Panna Nikhom Hospital (Phra Ajahn Fan Ajaro) and systematic distribution, focusing on utilization. From the added value and marketing of herbs in medical treatment and product development in the 4 industry groups, they are utilized as follows supplements, cosmetics, beverages, and animal feed. To expand the use of herbs by creating economic value at the provincial and national levels and meeting the policy of Sakon Nakhon Province to concrete action. Therefore, herbs are used in the health service system to replace the modern drugs used in daily life (Sakon Nakhon Provincial Office, 2016).

The Inpang Network is a group of villagers that have been brought together since 1987, over three decades of continuous development until it has a network membership covering more than 6 provinces: Sakon Nakhon, Udon Thani, Kalasin, Mukdahan, Nakhon Phanom, and Bueng Kan, and network of more than 90 sub-districts. The main strategy of the Inpang network is to raise the Phu Phan forest into the plantation, grow everything that can be eaten, eat everything that is grown until the plantation has become a family forest that can take care of the family. As the members of the Inpang network created their family forests, the forest area increased, and the main consequence was a wide variety of herbs that could be processed to create added value. Hence, the Inpang network has developed community enterprises to perfectly support and expand into small establishments. However, processing various kinds of herbs such as *Ā thālāy cor* (*Andrographis Paniculata*), *Āhmīnchan* (Turmeric), *Rāk sām sī* (Shatavari), *Lūkprakhb* (Herbal Compress Ball), etc. However, in recent years, the development of herbal community enterprises has not yet progressed to a standard that has not been widely accepted and From the exchange of knowledge with the Inpang Network, it was found that there are many different types of herbs in the family forest of the Inpang network members especially, *Thao En On Herbal* is an herb that has medicinal properties popular used was to relieve aching pain, back pain, lumbar pain, is a common symptom of agriculture workers who tend to bend and tilt frequently. The *Thao En On Herbal* has a volume of more than 20,000 to 30,000 rai (Kunwong interviewing, November 22, 2018). Therefore, the Inpang network intends to develop and add value to the said *Thao En On Herbal*. This becomes a development challenge within the limitations of the Inpang network in terms of standardization and building acceptance from the general public (Vaseenonta & Kirdmalai, 2020).

Nowadays, people use more herbs, whether it is medicine, cosmetics, or dietary supplements, which government agencies, the Ministry of Public Health are responsible for overseeing the use of herbs to have safety, quality, and standardization of both production sites, food product standards and medicine (Food and Drug Administration) and products according to the standards stipulated by law (Food Act, 1979), Therefore, it can be produced and sold to the general consumer in the market and to keep the law enacted up to date in the year 2020, The government, therefore, issued a notification of the Food and Drug Administration, subject of Food production license age, License to bring or order food into the Kingdom in Bangkok, Food with toxic residue, Production methods, equipment, utensils for the production and storage of some fresh fruits and vegetables and labeling, and a list of plants that can be used in dietary supplements (Food Act, 1979). All of these must comply with the required law, otherwise, be punishable by law which is considered good for the consumer. However, this turns out to be a limitation for small producers in requesting a production facility to meet the legal standards. For this reason, Sakon Nakhon Rajabhat University, as a local university and has a local network with the knowledge of plant science, has chemical and processing equipment, as well as the knowledge of business management that can raise the value of herbs of the Inpang network to

inherit the use of ancient plants that are used from ancestors, passed from generation to generation and bring the wisdom of the use of herbs in the way of life of the ancients was presented by the development of herbal products for the widespread use of the research results for commercial use to strengthen the small and medium-sized community enterprises of the group Inpang Network. It will also lead to better utilization in the manufacturing and service sectors and community entrepreneurs have been developed to be able to operate in a professional business setting, using medicinal plants as raw materials, which can reduce additional production costs. Management efficiency, yield quality, and quantity create competitiveness with high-value agricultural products, safe and cost-effective use of resources that guide continuous development.

### **RESEARCH OBJECTIVES**

This research aimed to (1) synthesizes approaches to create value-added Sumon Phai Thao En On Herbal. (2) Enhance Value Added Herbal Thao En On Herbal. (3) Assess product satisfaction and contribution to product development. This research was held at the Inpang community enterprise network, Sakon Nakhon Province, Thailand.

### **RESEARCH METHODOLOGY**

1. Target group: The qualitative research target group was members of the Inpang Network with family economic forest and Thao En On Herbal in their garden, which intends to raise the level of value-added Thao En On Herbal products according to the established standards. The samples were selected individually using the Inclusion Criteria and passed the Ethical Review of the Human Research Ethics Standard of the Ministry of Public Health. The selection of volunteers from entrepreneurs with different levels of strength was divided into 3 groups as follows: 1) A strong group of enterprises has a standardized factory was Thepparit group from Amphoe Sawang Daen Din, 2) Medium-strength enterprises that have been converting herbs into growing products including the aunt Kai Group and the father Petchaphan Group, 3. Small groups of enterprises with low growth are (1) Ban Bua Herb Group from Kut Bak District, Sakon Nakhon Province, (2) Father Boonchan's group from Wang Sam Mo district, Udon Thani province, and (3) And the Father Suai group from Ban Thon Subdistrict, Sawang Daen Din District, Sakon Nakhon Province. For the criteria for considering the production potential of products according to the Food and Drug Administration standards. Ethical considerations for the sample were approved for the certification of ethics in humans for research following the official letter at SN.0032.002/3650 dated June 6, 2019, on the subject "Report the result of ethical review of research No. SKN REC 030/2019 from Human Research Ethics Committee, Sakon Nakhon Provincial Public Health Office. Besides, the quantitative research is based on a sample of consumers who use the product and those who are involved in product development.

### **Research Instruments**

The instruments in this research used participatory action, the details are as follows:

#### **2 Sets of Qualitative Research Processes as Follows**

(1) A structured interview form to study the condition and problems of Thao En On Herbal product development, (2) Interview concerning the Thao En On Herbal product appearance that has been developed

#### **The Two Quantitative Research Processes Consist of**

(1) The satisfaction study of the herbal products Inpang by inquiring using the concept of marketing mix consisted of part 1 Personal question is a checklist, part 2 question to measure consumer opinion based on the concept of marketing mix using multiple-choice, and part 3 comment questions using open questions. (2) The measure of participation in product development of the Inpang herbal product by inquiry consists of part 1 Personal questions, use the Checklist, part 2 question to measure satisfaction according to the concept of marketing mix development using multiple-choice, and part 3 the opened questions.

### **To Build and Find Quality Tools as Follows**

(1) Study documents and methods for constructing interviews and questionnaires to measure opinions and satisfaction. (2) Establish a structure to plan interviews with network members of local healers, producers, entrepreneurs who sell Thao En On Herbal. (3) Determine the issues to be interviewed for, problem conditions, and needs for Thao En On Herbal product development and performance according to the development action plan. (4) Create an interview form, problem condition, and need for Thao En On Herbal product development and execute a joint action plan. (5) Create a product satisfaction questionnaire and create a product development engagement questionnaire. (6) The quality of research instruments was examined by five highly qualified academics and experts, and improved and revised the tools according to recommendations. (7) The research tool was approved by the Human Research Ethics Committee from the Office of Public Health Sakon Nakhon Province.

### **Data Collection**

The investigators collected qualitative data using participatory action research from structured in-depth interviews, observations, group discussions. The quantitative data was collected from Inpang network members and consumers, where the quantitative data were collected using questionnaires.

### **Data Analysis**

(1) The quantitative analysis used a satisfaction questionnaire and a measure of participation in product development, analyzed by basic statistics using a package program. (2) The qualitative analysis was done by interviewing and analyzing the content.

## **RESEARCH RESULTS**

### **Synthesis of Value-Added Value Creation Method Thao En on Herbal**

From the study of the problems and needs of the herbal product development, it was found that Members of the Inpang Network have created a family economic forest by awakening a wide variety of herbs, especially Thao En on Herbal. Besides, the Inpang network also has local medical knowledge that can be used in many recipes of medicine related to the use of Thao En On Herbal as an ingredient such as Somnupai Herbal Compress, Hand and foot soak herbs, Incubator herbs, Massage drug, Pain relief drug, which can produce herbal Thao En on Herbal at 3 different levels, which are (1) Strong group with the standardized factory, (2) Medium strength group that has herb into growing range products, and (3) Low-growth segments whose herbal products of each group are still selling a small amount, distribution still has few marketing channels, the product model has not yet been of interest to consumers and has a lack of communication for interested parties.

However, the problems encountered in the development of herbal products, especially the processing of oral medicine are limited by the law, to achieve the quality of food and drug standards which is very difficult. As for the product development needs, it was found that all

members of the Inpang network were interested in developing their herbal products up to the standard to raise their value to a higher level.

Determining the development path for the exchange of knowledge in three groups: (1) The Inpang Folk Healers Network found that it is possible to use Thao En on Herbal to develop into a product, due to the use of herbs, Thao En on Herbal has properties in treating pain in various areas of the body. Using Thao En on Herbal as an ingredient in compress ball making, cream making, massage medicine helps to stretch, loosen the muscles, loosen strands, reduce varicose tendons, loosen stiff muscles, make balsam, make the poultice, and are used in combination with herbs. Academic group, Phanna Nikhom Hospital Pharmacist (Master Fan Ajaro) has jointly consulted to determine the feasibility direction for the development of suitable formulas for developing Sumonprai products from Thao En on Herbal to meet the standard criteria for the registration number, Which brings the recipe of the Inpang network to develop recipes to be suitable and meet the standards of the current consumer tastes by using the new product design concept based on nature and the Inpang network group in 6 provinces found that the limitation of herbal practitioners is that pharmaceutical production sites must meet standards and require large budgets, which is a major obstacle. From the operation condition, it was found that it still did not meet the standard for the herbal production facility, along with this; there is also a lack of cleaning equipment, herb washing and herb drying rack, insufficient drying rack for the number of herbs, and airtight packing material.



**FIGURE 1**  
**MEETING OF INPANG NETWORK OF TRADITIONAL HEALERS**



**FIGURE 2**  
**INTERVIEW WITH HERBAL ENTREPRENEURS INPANG**

## Raising the Value-Added Herbal Thao En on Herbal

Enhancing Value Added Herbs Thao En on Herbal operates in two forms: product development according to the original formula and the development of herbal formulas according to the current tastes of consumers.

Model 1: Product development according to the original formula: the quality inspection of product standards from the existing formula in 5 items are: Incubator herbs, Herbs soaking hands and feet, Aloe oil, balsam, and Herbal compress. Products meet all of the established community product standards, but there are obstacles in the manufacturing site that do not meet the established standards so it is not possible to obtain legalized herbal certification. And the traditional use of herbal products is not popular with modern consumers, only a small number of traditional consumers use the service.

Model 2: Develop herbal recipes according to consumer tastes: at present, there are 6 items: Inpang spray, Inpang massage oil, Inpang beeswax, Inpang knee mask, Inpang compress ball, and herbs to nourish the body according to the recipe that was born from the wisdom of traditional healers that have been told and transcribes the use of both written and told successively to the present day, which is still preserved in the original formulation such as smell, taste, color, texture, etc. which was delivered to Panna Nikom Hospital (Phra Ajahn Fan Ajaro) to develop a prototype product to meet the tastes of consumers. In this regard, the drug recipe has been concluded with academics, experts, and users, which is the final summary of drug formulas and improvements (Final prototype), which will be used as a prototype for the production of Inpang herbal products to meet the legal standards by quality inspection at the Central Laboratory (Thailand), the research team has developed and improved the production process of the Inpang network to provide quality and standardized herbal products, create a reliable product image, providing suitable and sufficient equipment, tools and utensils for the production of herbs. However, non-proportioned herb production sites include herbal washing equipment, herb drying rack, herbal sealer to prolong life, and preserve the herbal aroma in the compress, this includes improving the drying process using an enclosed drying rack, able to retain heat that makes the herbs dry faster, as well as preventing dust that can cause contamination, the herbs are then brought to the development of recipes according to the current consumer tastes.

Besides, the research team has researched and developed a prototype compress product using the concept of product development using heat besides steaming. The development results have resulted in an innovative heat pack that can be used with electricity, components of the heat pack product include: Power adapter, heating pad, herb pad, and cloth bag are packed by heating wire 0.5 mm nichrome wire has 2 patterns. Home electricity and DC power 24 Volts, the battery power or adapter is inserted into a 9 cm wide, 12 cm long hotplate to form a power jack, make a socket out of the heating plate, plug it in, and leave it for 30-60 seconds when it is hot, then pull it out, then apply the compress as needed. The compress bag is ready to use and there are guidelines for applying for a license with Thao En on Herbal in the future.



**FIGURE 3**  
**COMPONENTS OF THE INNOVATIVE HEAT PACK**



**FIGURE 4**  
**THE HEAT PACK INNOVATION**

Traditional branding, labeling, and product packaging uses a product design approach based on the concept of color psychology to create perception and impact on the product. Use blue, light blue, and white for the box packaging, and use black text for a credible, solid look. Use pictures on the packaging using yellow, brown, and green colors for a naturally fresh feeling. Create the image and build confidence in the purchase so that customers perceive the naturalness to build awareness about herbs. For the development of product packaging, improve the recipe according to the tastes of consumers using the brown color as the base of the packaging box and use the black font, with the green tree Inpang brand. For brand design, label, packaging, herbal products Thao En on Herbal according to the recipe that has been developed according to the tastes of consumers. The use of the Inpang herbal brand is based on the original Inpang brand to make the product remember the customer, The Inpang represents nature, is a forest of Phu Phan, Inpang Phuphan, and Phu Phan herbs. Brand registration request Use the brand name on Facebook as an online channel to communicate with customers online. The label design uses the Inpang branding as a green tree and the product named “Inpang Herbs”. The natural brown label and development of a natural concept product label using the above brand, indicating product type, product quantity, along with specifying ingredients, properties, precautions, registration number, place of manufacture, and distributor. In this regard, the label details are following the law to ensure the product meets the standard.

For the commercial production of traditional herbal products, let the Inpang network do their production. Production of Thao En on Herbal according to the formula that has been developed using a product prototype from Panna Nikhom Hospital (Phra Ajahn Fan Ajaro), it has developed product formulas to meet consumer tastes and summarizes thematically with academics, experts, and users for the best fit. The final prototype is then modified to be used as a prototype for the production of herbal products Inpang to meet the legal standards, through a standardized manufacturing plant, consisting of the following products. Spray Inpang, Inpang massage oil, Inpang wax, Knee pads, Inpang Herbs, and herbal compress Inpang.

Requesting Thao En on Herbal product standards according to the tastes of consumers and bringing raw materials to the Inpang herbal product manufacturing company to meet the standard and requesting permission to apply for product standard certification, the registration number from the Ministry of Public Health has 4 products that have been certified as follows; (1) Spray Inpang No. 34-4-6200044592, (2) Inpang Massage Oil No. 34-1-6200043940, (3) Inpang Wax No. 34-1-6200044701, and (4) Inpang Knee Patch Herbs No. 34-1-6200044094. However, the other 2 items are products according to the community product standard as follows: (1) Herbal compress, and (2) Herbs to nourish the body.

Product pricing by calculating the unit price based on the product financial pricing principle, which is calculated as the unit cost of production per run, plus freight, product design cost, profit, and set the price according to the pricing concept ending with an odd number,

causing the selling price to rise 72.50-233.33 percent, along with offering product prices on the Herbal Products website Inpang.

For publicity by issuing brochures and promotional posters according to the product list, along with specifying qualifications and standard certification numbers, to build consumer confidence, assign a QR Code for easier access to purchase channels, along with Create advertising media that reach the modern consumer and produce video media, presenting Inpang products to social media channels. [www.Inpangherb.com](http://www.Inpangherb.com) and Page Face book Inpang herb.



**FIGURE 5**  
**THAO EN ON HERBAL PRODUCTS THAT MEET THE STANDARDS**

Assessing product satisfaction and measuring their participation in product development.

Market test on awareness, acceptance, purchase behavior of new-look Thao En On Herbal product. The 1<sup>st</sup> market test, during 20-22 December 2019 at Robinson Department Store Sakon Nakhon. The 2<sup>nd</sup> market test, during January 10-12, 2020 at Robinson Department Store Sakon Nakhon, offers original products and recipes according to current herbal consumer tastes. The response of the consumer was both the users who bought themselves and the consumers who bought to leave their parents, and the teenage consumer groups are interested but still have no confidence in using the product. The satisfaction assessment results of Thao En On Herbal product development, 205 respondents, found that respondents had a very high level of satisfaction with the product, with an interesting average of 4.17, followed by modern beautiful packaging with an average of 4.10, and the satisfaction with the lowest average in terms of price and the average quality of 3.64.

Evaluation of participation in product development Thao En On Herbal found that the highest average Inpang network participation was product development planning participation, mean 4.89, followed by participation in expressing opinions and improving product development, mean 4.76, and low participation in participation, defined offline and online channels, mean 4.39.

## CONCLUSION

The study of conditions, problems, and needs in the development of herbal products Thao En On Herbal found that Members of the Inpang network have a lot of Thao En On Herbal and have local medical knowledge that can use Thao En On Herbal in many drug recipes, but with the ability to produce processing differently, (1) the strong group had the standard factory, (2) the medium strength group in the growth stage, and (3) low growth groups. However, the problems found were small quantities of herbal products of each group, fewer distribution channels, less product design, and lack of communication to the interested parties. There is also a problem with the limitation of the law, that is, it is very difficult to achieve the standard



quality. Nevertheless, all members of the Inpang network are keen to develop their herbal products to a higher standard to raise their value.

Value-added enhancement, Thao En on Herbal from 3 groups of learning exchanges, Inpang Traditional Healers Network Group, Academic Group, Phanna Nikhom Hospital Pharmacist (Phra Ajahn Fan Ajaro), and the Inpang network in 6 provinces found that it is possible to use Thao En on Herbal to develop into a product by developing a suitable formula to meet the standard criteria for the registration number. But there is a limitation of the herbal practitioner: the pharmaceutical production facility must meet the standards, there is still a lack of equipment for cleaning, and washing herbs, and the herb drying rack, the herb drying rack is not enough for the number of herbs and the product vacuum packing material.

Development of Thao En on Herbal products is carried out in 2 forms, consisting of Product development according to the original recipe and the development of herbal recipes according to the tastes of consumers today. Model 1: Develop products according to the original formula by examining the quality of the product standards from the original formula in the amount of 5 items as follows: Incubator herbs, herbs soaking hands and feet, aloe oil, balsam, and compress which considers the standard inspection criteria from the community product standard. Model 2: 6 products to improve the recipe according to the consumption taste of herbal consumers as follows: Spray Inpang, Inpang massage oil, Inpang wax, Herbal Inpang Knee Patch, Inpang Compress Ball, and herbs to nourish the body.

The brand and label design, the original Thao En on Herbal herbal product, and the recipe for improvement according to the tastes of the consumer use the Herbal Inpang brand that represents nature, forest, nature of Phuphan Inpang, Phuphan herbs. The label design uses the Inpang branding as a green tree, using the product name, brown label, to develop a product label based on the natural concept, use the Inpang brand above and specify the type, product, product quantity, including specifying ingredients, properties, precautions, registered numbers, production sources, distribution, in this regard, the label details are following the law and specify a channel for communicating with customers online [www.Inpangherb.com](http://www.Inpangherb.com) and Page Face book Inpang herb.

The original packaging was developed using blue, blue, and white for packaging boxes, and black fonts. Use pictures for packaging using yellow, brown, and green colors to give customers a natural feeling to create awareness about herbs for the development of product packaging, improve the recipes according to the current herbal consumer tastes. Which uses brown as the base of the box packaging and uses the black font, with the green tree Inpang brand

Requesting Herbal Product Standards Thao En On Herbal sends product recipes according to consumer tastes and brings raw materials to manufacturing companies, produce Inpang herbal products to meet the standard and request for product certification, the number registered by the product has been certified as a standard, there are 4 products: Inpang Spray, Inpang Massage Oil, Inpang Wax, Herbal Inpang Knee Mask. Besides, two other products follow the community product benchmark: Herbal compress and Herbs to nourish the body.

Product pricing, unit price calculation, calculated from unit cost per production time plus freight, the cost of product design, profitability, and pricing according to the pricing concept, ending with odd numbers, customers feel affordable (Kirdmalai, 2014: 418).

Publicity is done by issuing brochures and promotional posters according to the product list, along with their qualifications. And standard certification number, and assign a QR Code for easier access to purchasing channels, along with creating advertising media to reach new consumers and producing video media, presenting Inpang products to social media.

The satisfaction assessment results of Thao En On Herbal product development found that there was a high level of satisfaction in the product field of interest. Assessing participation in product development Thao En On Herbal found that the Inpang network's participation in product development planning was the highest average.

The results of the overall research showed that the development of the Inpang herbal product to be more widely accepted and known by developing the herbal product to be certified as a standard to make the products known in the consumer market in the country and to create

awareness among consumers in the area and expand into more customers. Doing online advertising media and to be an example of the development of Thao En On Herbal products in a concrete way, which leads to further development of other herbal products, based on the involvement of community researchers and the problem comes from the real target audience's needs, it is based on participatory development. Reliance on nature without hurting conservation, along with development to create a sustainable and strong community so that the community can raise the income level for the small and medium-sized community enterprises of the Inpang network. These have affected all members of the Inpang network, from growers to producers, to create stable and sustainable community welfare in the future.

## DISCUSSION

### **Synthesis of Value-added Value Creation Method Thao En on Herbal**

Synthesis of Value-added Value Creations Thao En On Herbal has the process of working from planning consisting of the study of problem conditions and demand for herbal product development was found that the members of the Inpang network have local medical knowledge that can be used to make various recipes related to the use of Thao En On Herbal as an ingredient. Consistent with the study results of Kanjanprangkul, C., Chiyaphan, S., & Srimongkhon, S. (2007), which studies packaging design to add value to local products, arose from the community having local wisdom that can be used to create a group's identity and develop products to meet the standard. In the middle of the way, all members of the Inpang network are interested and need to develop their herbal products to the standards to raise the level of value Consistent with the study results of Suksikarn, Suksikarn, and Chuaykrod, (2011) To study the development of the product model of Nang Talung handicraft, Pak Phun sub-district, Muang district, Nakhon Si Thammarat province, found that the community requires product development and is ready to participate in the operational research process as well.

The existing herbal products of the Inpang network are still selling in small numbers, there are few marketing channels, the product format is not of consumer interest, and there is a lack of communication to the interested audience. This was consistent with the study results of Prasertsuk (2012), it was found that the marketing barriers were few, narrow market channels due to public health care, and nowadays there are many options. Processing into oral drugs is limited by the law itself, it can be very difficult to meet food and drug standards which correspond to the study results of the Prasertsuk (2012), it was found that the product development guidelines for herbal compress with the introduction of technology to achieve standardized products must be well taken care of, from grinding, sterilization, and weighing to be standardized.

### **Raising the Value-Added Herbal Thao En on Herbal**

Enhancing the value-added Thao En on Herbal consists of several steps from the practice process by examining the quality of traditional herbal products. The development of herbal recipes according to the tastes of consumers today. Brand design, label, packaging both formulas. Thao En on Herbal production according to the formula that has been developed according to the product prototype. Requesting Thao En on Herbal Product Standards and Product Pricing, and public relations. Which each step, the community has participated in the development of every step according to the needs of the community, therefore, the community must be dedicated to participating in product development, consistent with the study results of Malivong & Vongshewarat (2011) From the analysis of the potential of the group in product development, the Ban Mae Tha Thai Massage Community Enterprise Group found that the community had co-operation, selflessness, strong determination in product development so that the product can be developed to meet the standard.

The brand design is of paramount importance, where research results have determined the use of the Inpang herbal brand using the original Inpang brand, The Inpang represents

nature, is a forest, and has a Phuphan, Inpang Phuphan, Phu Phan herbs. This is to make the product recognized by customers, which is consistent with the study of Suwannasarn (2013: 41) found that creating brand value must create an impression of consumer loyalty to the product. This increases the value of products, making it easier for consumers to decide to buy products and services, and to develop their business in the future.

When applying for brand registration, use the brand name on Facebook as an online channel for communicating with customers online, which is necessary to develop a variety of distribution channels. This is consistent with the Wasantadilok (2003) study that found that there is marketing model into e-commerce systems for distribution through e-commerce systems, as for the marketing promotion, the website is widely publicized so that interested parties can make informed decisions.

Developing original packaging, using a product design approach based on the concept of color psychology, using blue, blue, and white for packaging boxes, and choosing black fonts. The picture on the packaging using yellow, brown, and green colors for a naturally fresh feeling. Build the image and build confidence in buying, and the development of product packaging, improving the recipe according to the tastes of the current herbal consumers, which use brown as the base of the packaging box and use black text, with the brand of green trees Inpang, which is consistent with the study results of Raksawong (2011) found that the consumers were found to be satisfied with the packaging elements in terms of graphics on the packaging, and the characters of the packaging are illustrated. Artistic and aesthetic design, the font can represent the product, the font size is appropriate, easy to read, the text color is easy to read, the color of the illustration is appropriate and clear, the layout is suitable, easy to read, the use of color can represent the product, the details of the product are complete, and the message can tell the full details. Therefore, developing the right packaging is essential for consumer perception.

## **SUGGESTION**

1. Suggestions for applying the research results: (1) The Inpang network has knowledge of Thao En on Herbal that can be further developed in a variety of recipes. It should be taken to conserve and pass on to offspring so as not to be lost from society. (2) The government agency that is responsible for the herbal products should provide knowledge on upgrading the product to the standard, as well as to support and promote the acceptance of the herbal product. (3) Local educational institutions should act as an academic support unit to enable communities to sustain themselves.

2. Suggestions for the next study: (1) There is a wide range of herbal knowledge of the Inpang network, should study a wide variety of other herbal knowledge to increase the potential of using herbal products. (2) There should be research to develop and raise the level of other herbal products to the standard to lead to the standard according to the ability and community potential.

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