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Development of OTOP Entrepreneurs: Non-Food Herbal Products Group of Pattani Province

Saifon Chaisri¹

Puttitron Tuktean²

Nattapong Yeewhangcharoen³

¹Faculty of Management Sciences, Songkhla Rajabhat University

Email: y_saiphon@hotmail.com

²Faculty of Industrial Technology, Songkhla Rajabhat University

³Institute of Research and Development, Songkhla Rajabhat University

Abstract

The study was to set guidelines for the development of OTOP entrepreneurs in non-food herbal products. Data were collected through SWOT analysis, Thai Community Product Standards (TCPS) testing and marketing test by in-depth interviews, a questionnaire, and record form. The samples was 30 groups in level D entrepreneurs totaling 309 persons were selected by Department of Science Service. The statistics used average, percentage, t-test, one-way ANOVA with a statistical significance of 0.05. The study found that the guidelines for development consist of 3 facets: production process, product quality, and marketing. The highest average was marketing ($\bar{x} = 4.70$) in the branding and labeling ($\bar{x} = 4.80$), followed by product quality (4.64) in the preparation for TCPS testing ($\bar{x} = 4.98$), and production process (4.19) in science, technology and innovation to production standards ($\bar{x} = 4.89$). When classified by income, there were different average of development needs significant at 0.05 level.

Keywords: Development, OTOP Entrepreneurs, Non-Food Herbal Products Group

Introduction

OTOP entrepreneurs in level Dare adaptive to development (low Quality/low price/low production) who focus on subcontracting with consideration to previous skills and add options to have a career with prospect. It needs to be developed to upgrade to C, B, A level respectively, which is necessary to develop the efficiency of entrepreneurs by strengthening the basic capacity to strengthen the group, using marketing to lead production and producing products with quality that meets community product standards. Therefore, it is necessary to strengthen knowledge that will help increase production efficiency and will increase market



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opportunities (Department of Community Development, 2014) especially for the entrepreneurs in Pattani which is an area at risk from the unrest situation in the southern border provinces. It is also ranked as 1 of the top 10 poorest provinces in Thailand (Office of the National Economic and Social Development Board, 2018). People have problems of poverty, debt and inequality among rich and the poor. Lack of economic security and overall security of lives and properties affecting OTOP operators in areas that are circled with many problems and obstacles in operating OTOP businesses both in production and distribution (Pattani Provincial Community Development Office, 2017). They would like to receive required support for development from relevant government agencies. Therefore, a study was conducted on the development of entrepreneurs in the D level of non-food herbal products which is the largest number of products distributed in almost all districts of Pattani. This is to be a guideline for development in future. It will enable OTOP entrepreneurs to produce quality products, to have distribution channels accordingly and to be able to apply the gained knowledge to develop, create and add values and to upgrade the product to meet the standards, to build confidence for customers. Other objectives are consisted of job creation and making money at the foundation level leading to sustainable economic and social development in Pattani.

Objective

To define the guidelines for development of OTOP entrepreneurs level D, non-food herbal products group In Pattani Province.

Research Scope

The population was OTOP entrepreneurs Level D of Non-Food Herbal Product Group in Pattani Province. (Pattani Provincial Community Development Office, 2017). The samples was 30 groups totaling number of 309 persons were selected by Department of Science Service (Department of Science Service, 2018). Accordingly to these products side effects and how they may affect people's health, these products are categorized into 4 sub-groups (Community Development Department, 2015). 1) Medicinal herbs 2) Cosmetics herbs 3) Hazardous substances used in the household 4) Herbal products used in agriculture.) The independent variables: general information of the group and the dependent variables: development needs consist of 3 facets: production process, product quality, and marketing. Data collection 1 year during June 2018-May 2019.



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Methodology

Data analysis qualitative and quantitative data analysis method: SWOT analysis, Thai Community Product Standards (TCPS) testing and marketing test by in-depth interviews, a questionnaire, and record form. using descriptive statistics such as mean, percentage, and t-test, one-way ANOVA at the statistical significance level 0.05, with 5 rating scale levels such as, 5 = highest, 4 = high, 3 = Medium, 2 = Low and 1 = Lowest. Average Mean Define Average of 1.00 - 1.80 as 'Lowest', 1.81 - 2.60 as 'Low', 2.61 - 3.40 as 'Medium', 3.41 - 4.20 as 'High' and 4.21 - 5.00 as 'Highest'. **Finding quality tools:** Have brought the tools that were built in order to check and give value points then make corrections and appropriateness before using.

Method data collection by OTOP operators who still exist by cooperating with the provincial or district community development get the target group operators and proceed as shown in Table 1.

Table 1: Method

Activity	Tools	Method	Result
1. analyze SWOT	-In-depth interview	In-depth interview o Graft the interview results to analyze the strengths - crises	Development guidelines to: production process
2. Product analysis	- Test results of community product standards	Bring the group products to the test of community product standards (CPS). o Test results were analyzed for the product quality.	Development guidelines to: product quality
3. Market analysis	- Sales record - Observation form for buying-selling behavior	Open OTOP market for operators to bring products to sell. o Sales Analysis and buying-selling behavior	Development guidelines to: marketing
4. Analyze the development	- questionnaire	Data were collected from a sample group of entrepreneurs. o Analyze development needs from various fields.	Summary of development guidelines to: operator

Findings/Results

The general information of OTOP entrepreneurs level D, non-food herb Group consists of 30 groups, consisting of 309 entrepreneurs, distributed highest in Panarea District with 62 people of 7 groups and Khok Pho District with 80 people of 7 groups. There are registered and still exist producing, being distributed in different districts are shown in Figure 1.

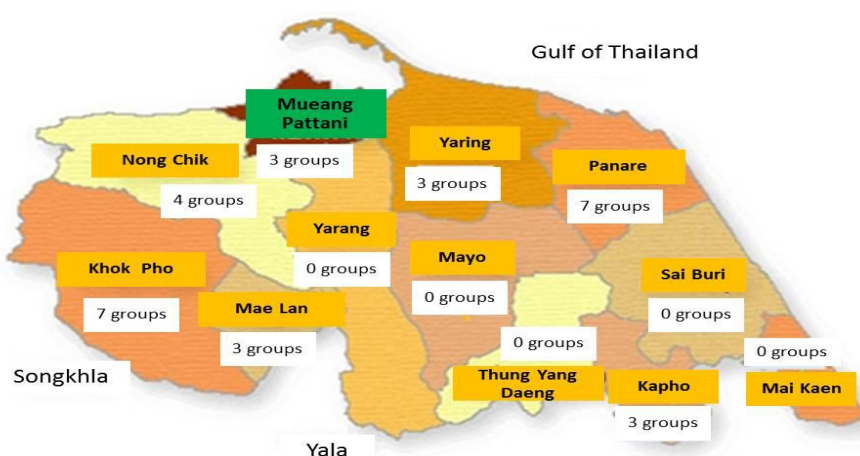


Figure 1: The distribution map of OTOP entrepreneurs in each district in Pattani province.

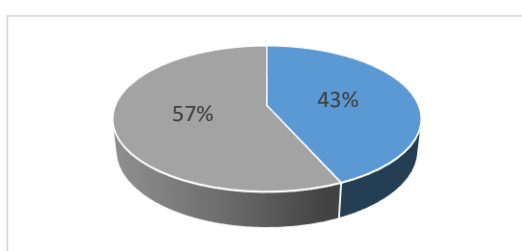
SWOT analysis results: Entrepreneurial potential survey was conducted using in-depth interviews to analyze the potential of OTOP entrepreneurs in the category, the SWOT analysis shows that there are 3 major development approaches for entrepreneurs: Production process. Product quality and Marketing. In terms of production, development issues are production processes based on scientific knowledge which include (reducing rancidity / burns, reducing mold-microbes, reducing bubbles, reducing sedimentation, reducing evaporation, separating layers) drying, baking, kneading, grinding, filtering, stewing, stewing, methods to stabilize and preserving products for a long time, raw material selection techniques. Preparation/extraction of raw materials: herbs, mangosteen, coconut, the properties of chemicals used in the production process, ways of packing in the package are in terms of product quality and development issues include knowledge about community product standards. Testing the products of the group and packaging suitability for the product and marketing. Development issues include knowledge about distribution channels, online marketing and branding the results of the analysis will be used to query the need for further development.



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Product Analysis Results The products were tested in accordance with the Community Product Standards, Office of Industrial Product Standards (TISI), the Ministry of Industry, in 30 groups at the Central Laboratory of Thailand Limited by product type bringing the test results to analyze the product as in Table 2.

Table 2: Test results according to community product standard benchmarks



Test results			
Past Benchmark		Not passed Benchmark	
Number	Percentage	Number	Percentage
13	43.33	17	56.67

Table 2, Results of product analysis revealed that 13 groups were qualified, accounted for 43.33%, while 17 groups were not qualified, accounted for the rest of 56.67% from the standard test results analysis. The group which did not meet the criteria, were found to be involved with product quality problems, such as sediment, rancid odor and moisture. PH value (ph) and number of microbes Ann Aerobic thermoplastics, bacteria, yeast, and mold exceeding the standard, the packaging is not completely closed, causing moisture getting in and damaging the product. The results of the analysis are guidelines for development of production processes and product quality by the implementation of scientific knowledge to get solutions in order to reduce sludge problems, acid-base values, to get rid of mold and bacteria, knowledge about packing and packaging, choosing the right packaging, etc.

Marketing Analysis Results From opening of the OTOP market for bring products to sell on 15-16 December 2018, at Big C Pattani. Results showed buying and selling behavior that the average sales 7,800 baht per group. The highest sales belonged to the groups that have a variety products with modern packaging, brands and labels indicating ingredients. Most of customers are elderly women and are interested in products that are priced not over 100 baht. From the market analysis, the guidelines for market development are as follows: modern, attractive product development, branding, and label development to build consumer confidence and expanding distribution channels to various customer groups.

Results of the analysis of the level of development needs of entrepreneurs used the questionnaire to analyze which data were collected from 175 samples. The general



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information for the entrepreneurs are general information of entrepreneurs found that most of them are female, aged more than 60 years (aged), education level below bachelor degree, the main occupation is agriculture, tapping rubber and fishery, the duration of the business 3-5 years, the average monthly OTOP income is less than 10,000 baht. **Results of the analysis of the level of development needs** in various fields from the SWOT analysis, product analysis and market analysis showed the development guidelines which used to create a questionnaire as shown in Table 3.

Table 3: The level of development needs in various areas of OTOP entrepreneurs

Development issues	Requirement level		
	Average	S.D.	Interpret
1. Production Process			
1.1 Knowledge of science, technology and innovation in production to meet standards.	4.89	.31	Highest
1.2 Properties of chemicals used in production processes.	3.96	.66	High
1.3 The guidelines for herbal development are various OTOP products.	4.41	.63	Highest
1.4 Knowledge about herbs.	3.58	.60	High
1.5 Removal of mold in the product by scientific processes.	4.63	.62	Highest
1.6 Increasing production efficiency.	4.43	.56	Highest
1.7 Specific production techniques: cold pressed coconut, compress, massage oil, soap, and shampoo.	4.78	.47	Highest
1.8 How to stabilize the product and can be stored for a long time.	3.89	.68	High
Summary of production processes	4.19	.27	High
2. Product Quality			
2.1 Preparation for the testing of community product standards	4.98	.13	Highest
2.2 Community Product Benchmark by product type.	4.97	.16	Highest
2.3 Product development and packaging to create value.	3.97	.57	High
Summary of product quality	4.64	.20	Highest



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Development issues	Requirement level		
	Average	S.D.	Interpret
3. Marketing			
3.1 Directions / trends of packaging according to consumer demand.	4.65	.50	Highest
3.2 Online marketing and media marketing.	4.66	.49	Highest
3.3 Branding and product label.	4.80	.47	Highest
Summary of marketing	4.70	.37	Highest

From Table 3, various development needs found that the level of marketing needs had the highest average ($\bar{x} = 4.70$), the highest level, followed by product quality had the second highest mean value ($\bar{x} = 4.64$). As for the production process which had the lowest average ($\bar{x} = 4.19$) The personal factors of entrepreneurs regarding sex, age, education, primary occupation, duration of OTOP operation had no difference in the level of development needs. But when classified by income from OTOP products, the comparison of average values of the 3 levels of development needs are classified by income from OTOP products by testing the One-way ANOVA with 95% confidence level. The results are shown as in Table 4.

Table 4: One-way ANOVA test results for development needs classified by income.

		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	.469	2	.234	4.728	.000
	Within Groups	8.523	172	.050		
	Total	8.992	174			
	Between Groups	.007	2	.004	.089	.915
	Within Groups	7.201	172	.042		
	Total	7.209	174			
	Between Groups	3.175	2	1.588	12.594	.100
	Within Groups	21.682	172	.126		
	Total	24.857	174			



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From Table 4, the comparative analysis of the mean levels of development needs classified by income are different statistically significant at the level of 0.05 (sig. <0.05), which incomes below 10,000 baht have the level of marketing development and product quality ($\bar{x} = 4.64$ highest level) higher than the production process ($\bar{x} = 4.16$ high level).

Conclusion and Discussion

Summary of guidelines for development of OTOP entrepreneurs in the non-food herbal product group Pattani Province, for Level D, aims to develop the basic capability to be stronger by using marketing lead production to quality. The development guidelines of 3 facets: production process, product quality and marketing which sorted from high to low as follows:

Marketing: knowledge of distribution channels, online marketing, development in branding/label and development in order to create consumer confidence corresponding to Noknoi, J., et al. (2015) that 5-star OTOP products must be of varieties, creative and specific for individual customer and product development to be modern interesting enough to match the needs of consumers. This also corresponds to Chiarakul, T. (2014) who specified that development of entrepreneur potential in terms of marketing should aims at creating new products with value and modern styles. Important developmental issues are branding and product labeling in line with Srihiran, N. and Phongmekin, B. (2017) who studied the management factors that affect the success enterprise entrepreneurs is found that in the level of management of marketing operators, the highest level. In branding the product, NaSongkhla, T., et al. (2017) suggested that information technology should be used in order to enter the online market.

Product quality: Product quality includes knowledge about community product standards, preparation for the testing of community product standards, knowledge of packaging and packaging, choice of the right packaging and creation of product value. Important developmental issues include the preparation for the testing of community product standards. Buakhao, S. (2020) suggested that in development of marketing potential for OTOP products, not only creation of new designs and products is important but also product quality that should be standardized and reliable to consumers.

Production process: The production process is the process of using scientific knowledge into production (To solve sedimentation problems reducing rancid / burning odor, reducing air bubbles, reducing evaporation, reducing acid-alkali separation) by increasing production efficiency by modern technology and innovation, modern production methods such as drying, baking, kneading, grinding, filtering Stewing, simmering, fungal and bacterial removal



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techniques, techniques for producing various products such as cold pressed coconut oil, herbal compress ball, soap, shampoo, chemical properties used in production, raw material selection techniques, raw material preparation/extraction: Mangosteen herbs, Gac fruit, knowledge about herbs, how to stabilize and preserve products for a long time, packaging methods in packaging. Important developmental issues here are knowledge of science, technology and innovation in production to meet standards is a new one which is in line with the concept of Wingworn, B. (2013) which said that being a globalized entrepreneur there must be improvements in production techniques, machine improvements to increase productivity, controlling the production process to be up to date at all time, product standard registration to build confidence and make the product as good as the foreign products comparing the quality.

Guidelines for entrepreneur development in accordance with the research of Nakreang, N., et al. (2017) where they studied the factors that influence the performance of community enterprises and it found that driving community enterprises to good performance should pay attention to management. Controlling production costs to be reduced and marketing management intact need giving importance to product development to have quality, unique, creating value of products. and consistent with the research of Sukhonthasing, P. (2013) who studied the factors that influence the success of occupational groups: a case study of fabric product careers in Phetchabun, it found that the factors affecting internal success are quality and beautiful products. Operators must develop production and consistent marketing management. And consistent with the research of Kee-arriya, C., Bunyasophon, T. and Rupsingh, T. (2016) regarding the model of potential development of community enterprise entrepreneurs in the central region of Thailand. Found that effective community enterprises must use of technology to produce products, product and package design, marketing management, etc. through the joint learning process. In the development of product quality and standards to be able to compete, generate income, and strengthen self-reliance. The results of this study are in accordance with those of a study by Inmun, P. (2011) who found that OTOP products should be created with local identities, new designs, unique packaging to add value to the products and standards that help upgrade D-level products to a higher level.



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Suggestion

Propose government agencies to assist in procuring funds and helping to publicize products. Let the customers know at large, such as on the provincial website because in the past they tend to promote products of A and B level.

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