

TRANSFER AND DEVELOPMENT KNOWLEDGE BODY OF COMMUNITY PRODUCT: CASE STUDY ORGANIC RICE ICE-CREAM GROUP, KO KHA SUB-DISTRICT, KO KHA DISTRICT, LAMPANG PROVINCE, THAILAND

¹PORJAI SINGHANATE, ²BANDIT BUSSABA

¹Doctor, Management Curriculum Department, Faculty of Management Science, Lampang Rajabhat University

²Lecturer in the Business Computer Curriculum Department, Faculty of Management Science, Lampang Rajabhat University
E-mail: ¹singhanate.pia@gmail.com, ²bundit_b@yahoo.com

Abstract- This study had the objectives to transfer the knowledge body of organic rice ice-cream making process, develop the knowledge body, increase product value and increase the channel to develop to be the main occupation of the villagers in Ko kha sub-district, Kokha district, Lampang province. The sample group was the ice-cream practitioners totaled 7 persons using a questionnaire and an in-dept interview to collect the data. The findings included the fact that the practitioners were setup by the government through Rajamangkala Lanna University Lampang Campus supported the making and specifying the formula for ice-cream from brown rice. Most of the customers were in Ko kha district and advertising had not quite reached target groups with only one channel of distribution: direct sales to customers. The package was simple and could keep the ice-cream quality for just a short time and the ice-cream melted fast. The only way to transport was by their own trucks and the only way of payment was by cash. The practitioners transferred the knowledge body of germinating organic brown rice ice-cream by training students from the Non-formal and Informal Education Center in Kokha and Laihin sub-districts and they developed knowledge body of production by adding 3 more flavors: taro, pendant-leaf and butterfly pea.

Keywords- Germinated Organic Rice Ice-cream, Knowledge body development, Improvement of Community Product

I. INTRODUCTION

Brown rice (1) is a natural food regarded as long life medicinal food because it has more than 20 kinds of vitamins, minerals and other life supporting nutrients. Brown rice is light brown in color. It is the rice that is polished just once to take off the seed cover or husk leaving the rice germ and rice seed cover which are the sources of food essentials. Eating brown rice regularly gives our body many essential nutrients helping digestion and preventing constipation. White rice that people like to consume is polished many times and left only the white color rice with little value and benefits except tenderness and pure white color and people overlook the tremendous value of brown rice.

Brown rice ice-cream is a new product with identity and can be consumed by any one of any age and sex. It is suitable for this new age that people emphasize looking after their own health and paying attention to the conservation of environment. It coincides with global warming: when it is hot, people think of ice-cream; an ice-cream for health with attractive, sweet smelling taste. Brown rice not only has much more nutrition value than white rice, it also is red in color with distinctive flavor which makes the ice-cream unique. Developing brown rice ice-cream is another way to increase the value of the product and to further develop as an export and promote as a health food.

Apart from the above said, brown rice ice-cream is another choice for business that takes out the full benefits of the brown rice so this research project was created to develop the knowledge body and improve

community products: case study the brown rice ice-cream group of Ko kha sub-district, Ko kha district, Lampang province emphasizing the creation of community economic stability by integrating the production on the base of balanced and sustainable community strength.

II. RESEARCH AIMS

A. To transfer the knowledge body of brown rice ice-cream production of Ko kha sub-district, Ko kha district, Lampang province.

B. To develop knowledge body of brown rice ice-cream of Ko kha sub-district, Ko kha district, Lampang province

III. LITERATURE REVIEW

A. Ice-cream

Wikipedia the Free Encyclopedia (2014) says about ice-cream as a frozen dessert from a pasteurized mixture spun in a very cold place to fill it with air while reducing the temperature using an ice-cream maker. Scooped ice-cream generally goes through a frozen stage before sales or consumption.

Types of ice-creams

Treechada Uthaida (2013) said ice cream could be categorized into many types depending upon the ratios of the ingredients in the ice cream and each ingredient made ice creams different. The announcement of the Ministry of Public Health (No. 222) in 2001 divided ice-creams into 5 types while specifying the standard quality of each type as follows: 1) milk ice cream 2) altered ice cream 3)

mixed ice cream 4) liquid, dried or powdered milk or altered or mixed ice cream and 5) popsicles.

B. Ideas of community product

Meaning of community product

Community products are products from the wisdom and skills of each community in self reliance. People in the community use community resources in balance whether for agricultural production, food and food processing, handicraft including services. It is found that most of the community products are flexible and in line with the people way of life including the resources in the community and people in the community have accumulated wisdom and skills for a long time and they become the wisdom capital of the country.

From the changes in the community products, there are good and bad effects happening to the community. The good effects make the community learn and improve their products in line with the market needs while the bad sides make the community lose its identity and reduce its self reliance.

C. Related Researches

Ganjana Sura and team (2012) conducted a research titled "Development of knowledge body and improvement of local wisdom in community products (OTOP: One Tumbon (sub-district) One Product) and tourism in Chiang Mai" with the objectives to study and develop knowledge body in improving local wisdom in OTOP community products for commercial and public benefits in Chiang Mai province using Participatory Research Method to extract local wisdom knowledge body of 4 types of community enterprises totaled 10 community enterprises then used the participatory action research method to develop and extend the knowledge body of the community enterprises for commercial and public benefits using SWOT analysis coupled with descriptive result discussion from in-dept interviews and focus group to arrive at the development of research capable of actual use.

The research findings of knowledge body development and improvement of local community products and tourism by Chiang Mai community for commercial benefits found the groups could develop the management system covering all parts of the organization efficiently making the work on production and OTOP community product designs by developing and creating quality work with new designs and could create tourism activities from what they had in the community.

The findings also showed that local wisdom and knowledge body in OTOP community products and tourism by the community of Chiang Mai could improve and extend to commercial and public benefits by developing OTOP community product business system including the creation of tourism activities for the community.

IV. CONCEPTUAL FRAMEWORK

Knowledge body transfer

Brown rice Ice cream product Respond to customer's needs
Knowledge body development

V. RESEARCH METHOD

In the research titled "Transfer and development knowledge body of community product: Case study organic rice ice-cream group, Ko kha sub-district, Ko kha district, Lampang province" the author used Mixed Methods Research.

A. Population

The population was the brown rice ice-cream production practitioners group in Ko kha sub-district, Ko kha district totaled 1 group 7 persons.

B. Research Tools

- A questionnaire: a closed ended questions and open ended questions that the author interviewed, observed and recorded various data and divided the contents of the questionnaire as follows: 1) Details of the business operations 2) Formats of sales 3) Product prices 4) Purchasing and factory setup.

- Interview forms for filling in the blanks. The author interviewed to collect data concerning the development of brown rice ice-cream dividing the questionnaire into 2 parts: 1) brown rice ice cream production process and 2) the development of brown rice ice-cream.

C. Data Collection

Collected data from the questionnaire to gather information about opinions or fact by sending to the sample group voluntarily.

Collected information by interview in a group conversation face to face to get the data according to the objectives of the research.

Focus group discussion as an interview and conversation focusing of the issue by inviting the participants in a group around 6-10 persons selected from the specified target group then allowed the participants to talk and exchange their opinions widely in various issues.

Data collection from document review. This study collected data from related documents such as articles, documents and related researches concerning the transfer and development of local product knowledge body.

D. Data Analysis

After data collection, the author checked the questionnaires and the interview forms for correctness and completeness by:

A. Analyzed information from various related documents to synthesize contents

B. Analyzed data from questionnaires

C. Analyzed data from focus group and in-dept interviews using qualitative data analysis using the method of content analysis.

CONCLUSION

A. The questionnaire the brown rice ice-cream product practitioners provided data could be concluded as followed:

The practitioners were all women that might be because it did not require much labor and a good occupation for women, ages between 41-50 years old, ice-cream production occurred only when receiving order, start off of the business was from the support of the production equipment of the government through Rajamangkala Lanna University Lampang Campus helping and providing formula for brown rice ice-cream. The problem found was after the practitioners produced ice-cream for a while, the consumers did not like the taste.

Package of the product of the practitioner was a simple container that could keep good quality for a short while. Because the product was ice-cream so it melted quickly, with no details of the product at the sides of the container such as ingredients of the ice-cream and it could be said that the brown rice ice-cream had not developed package and label very much that might be because it was only a product in a community. The flavors or tastes that received the most like were taro followed by the original flavor, pendant-leaf and butterfly pea respectively while the sample group liked at the medium level that showed the need for improvement of taste so the consumers liked them more.

Development of brown rice ice-cream production

Brown rice ice-cream production started about 5 years ago when Rajamangkala Lanna University Lampang Campus went to teach how to make it and also found some market such as Gaad Gong ta (a local weekend night market). After selling for a while, the formula was adjusted to please the consumers more and there was only one original flavor. One year ago, the Faculty of Management Science, Lampang Rajabhat University by this authors went in and improved the brown rice ice-cream by adding three more formulas: pendant-leaf, butterfly pea and taro with the aim to create economic strength to local community or "economy of the foundation" which was the economy of the majority of the people in the community. After that there was a training of how to make brown rice ice-cream to 30 students in the Non-formal and Informal Education Center of Ko kha and Laihin sub-districts to disseminate the knowledge to the community.

The criteria for material purchasing of the practitioners was to buy raw materials for Ko kha district first. From what has been said, maybe because most of the practitioners did not have cars, they only have motorcycles, so it was inconvenient to go to buy raw materials in Mueang Lampang district where raw materials were far cheaper. But if any raw materials could not be found in Ko kha, they had to go to buy in the city of Lampang. For stocking of the raw materials, the practitioners kept only small

amount of the materials such as condensed milk, sugar, white cheese, stabilizing agent (Gelatin), boxes of coconut fat, salt and emulsifier (lecithin) at the ice-cream production place and these materials are non-perishable so they keep a long time.

DISCUSSION

The research titled "Transfer and development knowledge body of community product: Case study organic rice ice cream group, Ko kha sub-district, Ko kha district, Lampang province" had the following issues that should be discussed:

From the aims 1) To transfer the knowledge body of brown rice inc-cream production of Ko kha sub-district, Ko kha district, Lampang province.

The author invited Mrs. Boonrueng Natasen, president of brown rice ice-cream production group, to be a trainer to train 20 students from Non-formal and Informal Education Center and 10 representatives from Ko kha – Mae Yao Sub-district Municipality on Saturday 11 October 2014 from 9:00-12:00 hrs. at Ban Nonglai School, Ko kha sub-district, Ko kha district, Lampang province. The training was to disseminate knowledge of brown rice ice-cream production and make the community realize the importance of rice. The training atmosphere was fun and filled with knowledge, experience in making ice-cream and the benefits of eating product made from brown rice. The trainees all agreed that when they have opportunity, they would create occupation for their community.

From the 2nd aim that wanted to develop knowledge body and increase the value of brown rice-cream of Ko kha sub-district, Ko kha district, Lampang province.

The author developed the knowledge by together with the practitioners created 3 more flavors consisting of pendant-leaf, butterfly pea and taro from having only one original flavor (brown rice flavor) at the beginning without any other ingredients. There was also a preference quality test by senses with a 9 point-hedonic scale with 87 respondents and they preferred taro flavor and original flavor.

It was in line with Ganjana Sura and team (2012) research titled "Development and improvement of OTOP local wisdom product and tourism, Chiang Mai province" that had the purposes to study and develop the knowledge body of improving OTOP local products and tourism for commercial and public benefits, Chiang Mai province using PAR research method in the extraction of local wisdom knowledge body.

The findings could extract the knowledge of OTOP community product and tourism by community of Chiang Mai province and revealed 4 types of community enterprise i.e. community business type 1: local handicraft; type 2: agricultural processed products; type 3: eco-tourism and the 4th type was agro-tourism.

Knowledge body development and OTOP local wisdom product improvement and community tourism by Chiang Mai province for commercial benefits found the group could develop a management system covering all sectors of organization work efficiently and helped the production and community product design to arrive at good quality and new product designs of OTOP products and could create tourism activities from what they had in the community and could lead to further the work and have commercial and public benefits from the development of community OTOP product business system including the increased creation of community tourism activities when thinking, creating and adjusting suitably according to the capacity of people in the community and with local context. The knowledge bodies obtained were ideas, wisdom and experiences of the people in the community business and were a guideline for living and doing community business in their own home area successfully and truly happy.

RECOMMENDATIONS FOR FURTHER STUDIES

This research is really useful in the part of creating new knowledge body in the local wisdom product operations and it is the creation of knowledge body to apply in the operations efficiently.

The next study should study various factors in details such as logistic and supply chain management so the results could be more complete, correct, comprehensive and clear and it should be coupled with area-based research too.

REFERENCES

- [1] Ganjana Sura and team (2012) Research Report topic Development of knowledge body and extension of OTOP local wisdom and tourism, Chiang Mai province. Chiang Mai. Chiang Mai University.
- [2] Treechada Uthaida (2013) Research Report titled Analysis of nutritional values of mulberry ice-cream product, Petchaboon. Petchaboon Rajabhat niversity.
- [3] Banjob Chunhasawaddikul (2014) Brown rice is healthy. Searched 10 December 2014 from <http://www.thaicam.go.th/>
- [4] Wikipedia Free Encyclopedia (2014) Brown Rice, searched 10 December 2014 from <http://th.wikipedia.org/>

★ ★ ★