



BSAC

Developing Sustainable Educational and Promotional Materials in Learning Center in order to Preserve Traditional Coconut Sugar in Amphawa

An Interactive Social Science Project submitted to the faculty of science of Chulalongkorn University in partial fulfillment of the requirements for the Degree of Bachelor of Science in cooperation with The Chaipattana Foundation.

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This report represents the work of seven Chulalongkorn University undergraduate students submitted to the faculty as evidence of completion of a degree requirement.

Abstract

A long cultural heritage, coconut sugar farming of Amphawa, Samut Songkhram, Thailand, is fading away from Amphawa community, as newer generations do not find the motivation to preserve the tradition after globalization. Amphawa Chaipattananurak Conservation Project has established a learning center to sustain the culture. However, the learning center failed to draw attention from various target groups due to communication barrier and unattractive educational materials. Our goal is to develop sustainable educational and promotional materials in learning center in order to preserve traditional coconut sugar in Amphawa. Observing the learning center and interviewing the staffs, along with conducting surveys on tourists helped us developed the learning center for Amphawa Chaipattananurak Conservation Project.

Executive Summary

The Problem, Goal and Objectives

Not so long after coconut sugar first appearance in Thai market in 1993 (OTOP today, 2017) , coconut sugar's unique scent and novel taste made it to Thai market and dominated among other sugars (OTOP today, 2017). The demand for the products quickly rose up that the product supplies could not serve the market demand. Meanwhile, as Thailand is a tropical country, freshly produced coconut sugar often melts even though they are kept at room temperature. As a result, in order to twice the product supplies and to maintain its shape, many traditional producers decided to add new ingredients - for example: corn syrup, brown sugar- into the manufacturing process. These mixed sugar is somehow half cheaper than the coconut sugar. Many local traditional producers gave up on traditional process and turned to the easier profitable ways. Nowadays, current generations in Amphawa do not have motivation to preserve their traditional knowledge; therefore, those value is fading out from the society. As years are passing, coconut sugar was substituted by other kinds of sugar such as plain white sugar, brown sugar, maple syrup or honey.

Amphawa Chaipatananurak Conservation Project was then established in order to encourage the offsprings whose ancestors ran the business to carry on the tradition by spreading the knowledge about this tradition. The learning center is still underdeveloped due to these followings; information sources are too hard to find due to the lack of proper signs, most of materials are available only in Thai, and the present information lacks nutrition facts to support products' reliability.

The goal of this project is developing sustainable educational and promotional materials in learning center in order to preserve traditional coconut sugar in Amphawa. To achieve the goal, three objectives were established.

1. To identify and understand the core problems of learning center
2. To identify the value of the product and unique traits by using scientific support
3. To develop attractive and easy-to-access promotional media in order to expand product recognition

To achieve these objectives, we created new version of information board in the learning center, brochures, which include the unique value, scientific information, and benefits of coconut sugar over other kind of sugar. We also use QR code that link to further information and websites.

Moreover, to increase awareness, we created two video presentations. One is to promote coconut sugar learning center, the other is to show the organic production process. Furthermore, as many visitors search for the information on the internet, we also made suggestion plan for website improvement.

Methodology

To achieve the objectives, methods are separated into three steps - observation, process of developing materials, and applying materials.

First of all, to understand the core problems of learning center, we first gathered information about coconut sugar in Amphawa through online research. Next, we identified the problem in learning center by using participant observation, semi-structured interview, and survey data analysis. From participant observation, we got first hand experiences about the problems that the visitors have faced from their point of view. Moreover, we also observed Rattanakosin Exhibition Hall and Jim Thompson House since their contents contain history and Thai traditional culture. For more techniques, we observed Bangkok Planetarium, Bangkok Art and Culture Center in order to get ideas how they deliver the information. These museums are famous in the way they deliver the information since they have creativity, ideas, and techniques.

Secondly, we used semi-structured interview since it is the open framework which allows interviewer to create questions during the interview. To know the scope of our project and problems from staffs' point of view, our target population is sponsors and staffs in the learning center.

Finally, we also used surveys to know general information from both Thai and foreign visitors such as their expectation, knowledge about coconut sugar, and their satisfaction toward learning center.

Key Findings and Recommendations

Since specific information about history, and production process of coconut sugar in Amphawa are already existed at learning center in form of materials and scientific papers, the primary focus in this project is create and develop the attractive form of material in terms of educational and promoting.

Educational Materials

We recommend establishing the coconut sugar equipments exhibition in Tao Tan.

When the surveys were conducted on both Thai and foreign visitors in

the learning center, the data suggested that Thai people enjoy taking photo the most while foreign visitors would like to know more about Thai culture and tradition. Creating coconut sugar equipments exhibition would meet both Thai and foreign visitors' satisfaction. The scene will be both educational and enjoyable memory for those who visit. We found that if the visitors have memorable experiences, they are likely to come back again.

We recommend having a coconut sugar demonstration in the afternoon.

The real process is only available in the morning; visitors who come in the afternoon are unable to observe the demonstration. From surveying the tourists, we found out that most of them prefer watching the real one. Expanding the demonstration period would increase the value of the product and number of visitors.

We recommend having simple bi-weekly workshop about the usage of coconut sugar to create interactive experience.

The results from our surveys showed that tourists are interested in Thai culture and they want to have fun with new experiences. In addition, the observation results showed that most visitors are more appreciate to learn if they could join the activities or participate. Currently, the learning center provides workshop for tourists to come and join the easy-to-cook process that use coconut sugar as ingredient. However, they must come in a big group and make reservation before going. As the current workshop is not effective, we recommend to change the setting to be more accessible and universal such as simplify the ingredients, shorten the duration, and set the timetable for the workshop.

We recommend giving out an opportunity for local students to work as staff in learning center

From our participant observation and sponsor interview, we found out that the learning center offers the local students to join the community only when there are special events.

Promoting Materials

We recommend using direction sign in Tao Tan.

Since the learning center is a large space with a road cut through the area, precise direction signs are necessarily needed especially signs that lead to Tao Tan, coconut sugar production area. According to survey on visitors' satisfaction about learning center, data shows that difficulty in finding Tao Tan is one of the main obstacles that visitors have faced with. In addition on interviewing both Thais and foreigners who come by themselves, most of them have given up the visit. Therefore, precise direction sign implement is recommended in order to increase the tourist number in Tao Tan visiting.

We recommend providing multiple languages educational material and staff performance including Thai, English, and Chinese to increase accessibility from different segment of visitors.

Currently, learning center touring program provides one staff per one Thai visitor group, where foreign visitors need to make an extra request before visiting the site. Therefore, walk-in foreign visitors are struggling with language barrier since there is no guide staff and materials are only provided in Thai. From our finding, we concluded that the main obstacle that foreign visitors faced with are language barriers, both communication and educational materials. Thus, providing multiple languages education materials and staff performance are recommended to cope with the communication barrier.

We recommend having a deal with various travel agencies and promoting through online media.

From observing many museums, we found out that tourists usually come to museums via tour program. Having an agreement with tour agencies would assure that people will always visit the learning center. Moreover, we interviewed some of the visitors in the learning center and most of them found out about the place by serving on the internet. So we recommend website development as well; rearranging the website layout and to make it more appealing and adding the recent information or the up-to-dated one.

Conclusion

The Chaipattana Foundation asked us to create awareness of coconut sugar by developing the educational center via attractive educational and promotional materials.

Deliverables and recommendations are provided by our project. We encourage The Chaipattana Foundation to utilize our ideas since they serve as a starting point of a larger sustainable development of the learning center.

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Amphawa locates in Samut Songkhram province and has been flourished with agriculture in Thai history for long time. Amphawa attracts many tourists, both Thai and foreigners, to Samut Songkhram because of its long-established identity which can lead to the specific traditional cultures in community. There are several popular local products in Amphawa such as sea-salt, Mae Klong mackerel, tropical fruits as well as coconut sugar. It is said by many Thais that Mae Klong mackerels are the tastiest mackerels in Thailand due to the sweetness and firmness of the flesh (Maticchon, 2017). Since there are only two large salt pans producers in Thailand: Samut Songkhram and Samut Sakorn, thus, they are the two largest producers (Thongteaw, 2017). However, coconut sugar is the signature product of Amphawa. Since Amphawa is the place where seawater and freshwater mix, the mixture of water which is called “brackish” is so rich in nutrients that it associates with the growth of coconut trees (The Chaipattana Foundation, 2017). Local villagers are farmers who sell their local products to make income. Thus, by making the most of the available resources, coconut sugar is the main income of the society.



Figure. 1.1 Picture of coconut's peduncle

can be used to make coconut sugar (Siriwan Silapacharanan, 2017). This knowledges is passing down from generations to generations thus, coconut sugar is considered to be one of the precious folk wisdom in Thailand.

Coconut sugar is a delightful unrefined sugar made from the peduncle of the coconut tree. It takes about three to four hours to produce but the result is extraordinary. Its taste and scent is complex giving a soothing experience in consuming sweeteners unlike others because of the content of carbohydrate and sucrose. Coconut sugar is healthier and cleaner due to the organic way of production that made this sugar purely from coconut with no chemical preservation used (The Chaipattana Foundation, 2017). Normally, the *pure* coconut sugar exhibits a darker almost earthy color. This sugar can be widely used in several types of recipes including every day drink such as coffee and tea or even Thai dishes and desserts: Somtam, Kanom Tom, Lord Chong, and Tubtim Krob.

Coconut trees have been in Amphawa history for hundred of years. People built their dwellings set against the river backdrop of coconut trees since Ayutthaya era. They made use of coconut trees because every parts of the tree serve many purposes. Their nuts are edible, their leaves can be used to make broom or basket, their coir can be used as compost for plants and their peduncle

Apart from its unique physical characteristics, coconut sugar also gives a lot of benefits for health which is mainly due to its low glycemic index. The glycemic index is a measure of the power of foods to raise blood sugar levels after being eaten on a scale from 0 to 100. Low-GI foods results in slow digestion and absorption, produce gradual rises in blood sugar and insulin levels, and have proven benefits for health.

Not so long after its first appearance in Thai market in 1993 (OTOP today, 2017), coconut sugar's unique scent and novel taste made it to Thai market and dominated among other sugars (OTOP today, 2017). The demand for the products quickly rose up that the product supplies could not serve the market demand. Meanwhile, as Thailand is a tropical country, freshly produced coconut sugar often melts even though they are kept at room temperature. As a result, in order to twice the product supplies and to maintain its shape, many traditional producers decided to add new ingredients - for example: corn syrup, white sugar, brown sugar- into the manufacturing process.



Figure 1.2 The traditional coconut sugar making process

These *mixed* sugars are somehow half cheaper than the coconut sugar. Many local traditional producers gave up on traditional process and turned to the easier profitable ways. Nowadays, current generations in Amphawa don't have motivation to preserve their traditional knowledge, therefore, those value is fading out from the society. As years are passing, coconut sugar was substituted by other kinds of sugar such as plain white sugar, brown sugar, maple syrup or honey.

Chaipattana Foundation has noticed this problem and concerned that valuable tradition will be forever disappeared if nothing was done to preserve it. Amphawa Chaipatananurak learning center was then established in order to encourage the offspring whose ancestors ran the business to carry on the tradition by spreading the knowledge about this tradition. It took three years for the learning center to successfully restore and to promote the traditional culture.

Unfortunately, the learning center is still underdeveloped due to these followings; information sources are too hard to find due to the lack of proper signs, most of materials are available only in Thai, and the present information lacks nutrition facts to support products' reliability.

In order to resolve these circumstances which affect the disappearance of Thai traditional culture, our project goal is developing sustainable educational and promotional materials in learning center in order to preserve traditional coconut sugar in Amphawa. To achieve this goal, three objectives have been established. First, the learning center will be identified and understood by exploring learning center. Second, the value of the product and its specialty will be clarified by using scientific support. Third, attractive and easy-to-access promotional media will be developed

by creating international media, designing new interesting presentation and creating easier ways to access the information.

Indeed, not only promotion and advertisement will be developed but also some local information access will be improved; both Thai and English brochure, directory, and QR code will be introduced as well to make the easier accessed information.

2.1 Importance of traditional coconut sugar

2.2 Chaipattana Foundation and Chaipattananurak Conservation Project

2.3 Current accomplishments of Chaipattananurak Project

2.4 Engaging Promotional Material and Interactive Activity



2.1

Importance of traditional coconut sugar

Coconut sugar is a significant product in Central region in Thailand for decades. The production of coconut sugar mainly concentrated in brackish water area, such as Amphawa; the community in Samut Songkram province. Amphawa is located in a terrain penetrated by sea water as a merger subject of sea and freshwater (Siriwan Silapacharanan, 2017). Because of the suitable conditions, much vegetation that thrives in brackish water such as cock trees and coconut trees appear along the river and canal (Siriwan Silapacharanan, 2017). Coconut trees are one of the important industrial drops in Amphawa due to the versatile in their utility. Every part of the tree can be served including peduncle, which can be used as a raw material of coconut sugar (Pichanang Menawat, 2013).



Figure 2.1 The riverside view of Amphawa



Figure 2.2 This picture shows one of the coconut sugar making process. Staff is foaming up the sugar to add air pocket using device resembled egg beater.

The custom coconut sugar production has been passed on from generation to generation, and has become an integral part of the local culture. Local producers use chemical-free traditional method of coconut sugar production that has been passing on for hundreds years (The Chaipattana Foundation, 2017). Most importantly, coconut sugar was made purely from coconut syrup with eco-friendly process (Wenika Benjapong, 2004).

Amphawa has become a major coconut sugar producer for decades. However, industrially produced sugar has become popular for recent years since it requires lower cost of production. Therefore, traditional coconut sugar has been declined due to globalization.