Upgrading the Creative Tourism Route through local food promotion in Western Thailand

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Abstract
The research in this study was conducted to focus on the enhancing of capabilities of tourist attractions through local food in the western region of Thailand. The article explores tourism information for food learning in eight provinces in order to design a suitable tourism route with the potential for ‘food learning’. The methodology applied for this research was mixed. The researcher analyzed the local food secondary data and this was followed by interviewing experts about food and lifestyle including surveying tourist attractions potential so as to represent the identity of various food cultures, traditions and indigenous knowledge based on the concepts of ecotourism, agritourism, community-based and sustainable tourism types, respectively. The results of the aforementioned analysis and on-site surveys revealed that each province had its own distinctive identity and characteristics that can be defined as tourist attractions. The identity of food culture in this western region can be divided into two groups namely, a group of coastal provinces and a group of inland provinces. After grouping the provinces based on their unique identities and distinctive characteristics, together with their tourist attractions, opposite tourism routes were designed with itineraries including local food promotion. Further analysis revealed that the potential of tourist attractions could be reduced to include three attractive commercial potential tourism routes. Palmyra palm (Borassus flabellifer L.) belonging to the family Palmae is of special interest. A two-day itinerary was created to be used as a model and as an example for local food learning in the three selected routes. It is expected that the commercial potential of these provinces can be used to create a new tourism model in the western region and then matched with foreign individual tourism (FIT) as well as the tourists preferences for local food learning in the form of a slogan “Tour, Taste & Learn”. The findings may enable working teams in each regional office of the Tourism Authority of Thailand (TAT) to further develop and upgrade their creative tourism route through local food promotion.

Keyword: Creative Tourism Route, jaggery plant, local food, Petchaburi, Thailand.

Introduction - tracking the Jaggery
Plants are very useful for human living in various ways, inter alia being used for nutrition, home building, their medicinal value and insecticide production, use as raw materials for manufacturing, as an energy source and as a provider of fiber and rope (Phaitoon, 1984). More importantly, plants play an important role as the fundamental supports in human living, especially as food, houses, clothes and medicines. Nevertheless, utilization of each type of plant has been varied based on the types of cooking and a quantity of various crops available in each local area where it is found. This article seeks to promote tourism and economic sustainability in Thai provinces by using the Palmyra Palm as a key attraction and source of innovative offerings for tourists.

Methodology
The researcher used a qualitative study to gather information from documents such as government authorities, databases, on-site surveys and interviews with local experts. What was ascertained was the history of the Palmyra Palm plantations, the genus, its uses from its composition such as its seeds and stems that can be transformed into food products and other innovations. This was intended to lead to creative eco- tourism routes stated later in the article, stressing local food and
the importance and history of the Palmyra Palm tree together with the unique culinary aspects of its many Thai food dishes and its many other uses.

The Palmyra Palm

The Palmyra Palm has been used by human beings for a long time and it is mostly found on general farm watercourses from which people living in close proximity use it. People in Thailand consume palmyra palms in many regions and they have become one of the interesting parts of Thailand's living culture. The palmyra palm's root can be boiled to cure the symptoms of malnutrition, leaf stalks can be used as materials for house fencing, its tassels can be used as fuel sources. The timber is often used to make roof rafters, pillars and posts for buildings. The leaves are used in the production fans, umbrellas, baskets, mats and often also for thatching roofs. The seeds can be burned to produce charcoal and its tough fiber can be used as basketry materials and for making fashionable hats and bags.

Medicinally, the leaf extract stops muscular spasm of the respiratory organs and also heals wounds. The powdered root may be used to treat venereal diseases and the milky fluid taken out from the unripe fruit cures muscular contractions of the respiratory system. Palm jaggery is rich in minerals and it also works as a digestive agent. In addition, palm jaggery is rich in iron and its consistent ingesting increases hemoglobin levels and treats anaemia. The pulp of the ripe fruit is an external applicant for skin diseases. The seed with soft gelatinous pulp and little water is eaten during summer. The leaves were used as a writing material in ancient days.

It has also been used as an ingredient for cooking both savory dishes and desserts as well as, as a beverage. For example, savory dishes abound such as Spicy Palm Fruit Salad, Palm Fruit Curry, Palm Fruit Sour Soup, and Stir-Fried Palm Fruit with Shrimp. the desserts suing it include Toddy Palm Cake, Palm in Syrup, Soft Snazzy Snack, Soft Snazzy Snack Stuffed with Bean and White Sesame, etc. As a beverage it is evident in fresh Palm Nectar, Palmyra Palm Wine, Fermented Palm Juice, etc. As an Ingredient to enhance food it manifests as Palmyra Palm Vinegar, Palm Sugar formed into cake, Jaggery (by boiling raw palm juice) etc.

Image 1. Palmyra Palm (Borassus flabellifer Linn.) Source: Ministry of Environment, Forests & Climate Change, Govt of India Available online at http://www.cpreecenvis.nic.in/Database/Palmyra_Palm_988.aspx
As per Phrae Srithong (2001), the botanical characteristics of the Palmyra Palm were described as being dioecious with male and female flowers on separate plants. A flower appears on an inflorescence carried by a big long segment and it is in the form of a cluster. Each inflorescence of the flower grows through and visibly above the trunk between leaf sheaths. The size of palmyra palm fruit during its immature stage is approx. 6-8 inches and it is green with a round shape and becomes black-purple when fully-ripened.

Palmyra is a fruit that grows on Palmyra palm. The fruit measures 9cm - 16cm in diameter and it has a black husk and is borne in clusters. The top part of the fruit must be cut off to divulge the three sweet jelly seed sockets which are a lustrous pale-white, similar to that of a lychee but with no pit. The jelly part of the fruit is covered with a thin, yellowish-brown skin. These are known to contain watery fluid inside the fleshy white body. In each palm fruit, there are 2-3 big hard seeds whereas its external surface is fibrous. Each seed is in a flat-round shape and it can be consumed as the so-called “Jao Tan” (or germinated fruit) which can also be used for further agronomy. The palmyra palm’s stem is around 25m in height and it can be over 1.5 m in diameter. The old stems are usually black with very hard coarse surfaces. Each leaf is about 2.5m wide and has a grey-green color and each tree has 20-40 leaves. The leaf sheath can be light yellow and mixed with green-purple and has thorns called “Nguang Tan” (or trunk) since it resembles the trunk of an elephant. A palm trunk may be used for creating a basic sugar, vinegar and sweet drink. The sweetness comes from its flower inflorescence which is retained when a palmyra palm grows to between 12-25 years of age. Each tree can continually produce ‘sweets’ for at least two months and collecting the sweet can be done on an annual basis with approximately an eighty consecutive year period.

Image 2. Palmyra palm, Toddy palm  Source: Digital Herbarium of Crop Plants Available online at http://dhcrop.bsmrau.net/palmyra-palm/

Thai People have known how to make a crude sugar and palm sugar formed into cake since the Sukhothai (1238 - 1438 CE) and Early Ratanakosin (1782 – 1932 CE) periods, and during both these periods, palmyra palm products were produced so widely that taxation was collected for the production related to palmyra palm uses (taxes for pan, firewood, pot palm sugar and palm sugar stove). At the preliminary stage, an abundance of palmyra palm plantations were specifically scattered throughout the west part of the central region of Thailand connected to southern areas, especially in Petchaburi, Ratchaburi, Suphanburi, Surat Thani, Songkhla but its’ availability has been constantly reduced.

Uses of the composition of palmyra palm fruits have been developed in various methods to be matched with the following sequence of the plants ages:
1. Palmyra Palm Flower or generally so-called “Nguang Tan”: It is the flower where its stamen and pistil are on a separate plant. Each inflorescence consists of 2-4 segments with 30-40 centimeter length of each “Nguang” and there are 3-9 stamens in each “Nguang” An approximate number of 10 inflorescences of pistil will later bloom. After a stamen’s blooming they are bigger and have more sweetness. However, in each inflorescence, a number of the pistils is less than the stamens but both will continually bloom and even though there is a little sweetness, people can gain sweet from “Nguang Tan” for the further use in various products.

2. Young Palmyra Palm Fruit: In cases where palm farmers let their palmyra palms grow without cutting the sweet from Nguang Tan, they can use palmyra palm fruits, when its exocarp becomes light green and is the same as a young coconut, or so-called “Hua Tan On” (or young fruit) for food processing. The Hua Tan On when young, will not be in the form of a sticky fiber and its internal light white pulp can be transformed for various food products whereas 2-3 sweet jelly seed sockets in each fruit can also be used as some food ingredients as well.

3. Cut-Off Toddy Palm: This can be obtained when the fruit gets ripe and its exocarp’s color becomes darker but its top remains shiny green. The top portion of the fruit must be cut off to reveal the sweet jelly seed sockets. After harvesting, fruits will be cut off to be taken off the sweet jelly seed sockets occurring in combinations of two, three or four seeds inside the fruit. The fresh seed can be eaten or used in other food dishes.

4. Crushed Toddy Palm: This is a toddy palm left to ripen and drops on the ground and its exocarp is dark black. After peeling the exocarp, its pulp is seen as being bright yellow with a sweet flavor. Crushing the toddy palm is done to separate the pulp and fiber attached to the seeds, and then it is filtered with a piece of filter cloth to totally separate dust, if there is any. Then, the yellow water left over is left for 1 hour for draining or so-called “Leaching-out”. This method helps not only separate the fiber but also ferments the pulp before it is used for making various dishes.

5. Jao Tan for planting: The seed remaining from crushing toddy palm as per item 4. will be a dark color with a hard exocarp and it us later planted to get Jao by soaking it in water for approx. 15-30 days. After the root germinates, and is long enough, it is cut off to maintain Jao so as to be grown with nutrients, otherwise the nutrients in the seeds will be food for the root instead. After cutting off the root, the seed will be left for a period of 1-2 months before taking off Jao for making dishes i.e. Jao Tan Sour Soup, Jao Tan in syrup, etc.

**Palmyra Palm uses as food and as a dessert**

**Hua Tan Curry** (or young fruit curry) is one of the most respectable dishes of Petchaburi Province which is made with peeled and sliced young palmyra palm fruits after being boiled in saline or tamarind juice, and then cooked with red curry paste, coconut milk, finger roots (or Chinese’s ginger) and roasted fish meat, according to preferred recipes, with jaggery.

**Yum Hua Node** (or sour salad) is a local dish of Ra Node District, Krasae Sin District, Sathing Phra District of Songkhla Province. The main ingredients consist of young palmyra palm fruit, palmyra palm vinegar, salt, shrimp paste, roasted coconut, sliced shallots, fresh chili, dried shrimp powder, boiled fresh shrimp or roasted fish, sugar, etc.

**Khanom Mor Gaeng** (similar to an egg custard) is the popular and symbolic dessert of Petchaburi Province. However, its tastiness improves by storing it in a normal temperature for not more than 10 hours. This popular Petchaburi dessert is well-known in all of the provinces as far as Bangkok. Due to increased trips by train and car, this recipe’s fame has become well-known throughout the country.
Khanom Tan (Toddle Palm Cake) is the original dessert which is in the form of a dark yellow round soft flour with a sweet flavor of palmyra palm. It is made by mixing rice flour, coconut milk and jaggery put in a banana leaf cup, covered by shredded coconut and then steamed until it is well-done. This kind of dessert has been for many years made for religious ceremonies and especially the Buddhist Lent Day, since during this period there are generally available ripened toddy palms. At present, it is difficult to find this kind of dessert due to the reduction of palmyra palm plantations. Khanom Tan which is sold in general markets, contains only a little pulp of the toddy palm but it has plenty of flavor and added food coloring but it is not luscious and tasteless.

Lod Chong Namtankan is the famous dessert of Petchaburi Province. The particular outstanding character of this recipe is its use of condensed jaggery which contributes to its delectableness. Making Lod Chong Namtankan consists of 3 parts. Lod Chong itself is made with flour, has a green color, and is tasty and has a smell of pandan leaves, and its clear syrup is made with sugar. The most important part is the condensed syrup made with jaggery, water and coffee.

Khanom Aa-Lua is made solely with flour having its surface as hard sugar whereas its internal parts are sticky flour. It is often made in small colorful pieces and has a sweet smell. The Aa-Lua name came from the Portuguese word meaning ‘a fascination’ and it was originally introduced to Thailand by Lady Marie Gimard, the wife of Chaophaya Wichayen (or Constantine Phaulkon) - a Portuguese diplomat during the reign of King Narai the Great. There are 2 types of Aa Lua; large (Aa-Lua Chao Wong) and small sizes (Aa-Lua Jiw). The large one contains more coconut milk and the main ingredients of both types are flour, sugar and coconut milk mixed and boiled until it condenses and is not-sticky. After this it is then put into bag to be pressed out and formed as preferred and then dried via sun-bathing or by a short period of baking.

The role of Jaggery as an ingredient

Jaggery is the condensed palm sugar made by boiling down palm sap in a shallow iron pan to form a thick unrefined mass. For a quantity of 6-7 portions of sap, once much of the water is evaporated out, the boiled juice will be crystallized and left with only one portion in the form of a yellow syrup concentration or even as light yellow honey with a sweet taste.

Bucket Sugar is derived from the next step of continual boiling down the jaggery with light heat and stirring it continuously to avoid it becoming dark brown. A metal coil is used for stirring and circulating the palm sugar around the pan so it can be warm and have air bubbles and it then changes from being a clear concentration to being muddy. The boiled palm sugar will be poured into a small bucket before cooling it down.

Palm Sugar Cake is the end-product derived from the next step of the bucket sugar. It is boiled down until being condensed and is sticky. After that, it will be also cooled down and stirred for another half an hour with a metal coil (so-called a crashing wood) and then poured into a small cup or soil mold laid with a moistened white filter cloth or unbleached cloth, to protect the palm sugar and not allow it to be sticky to the mold.

Granulated Sugar is derived from boiling palmyra palm sap to become condensed like honey and then dropping it on a rounded palm leaf. This product is dry and thick and has dark brown tint.
The role of Jaggery as a beverage

Palmyra Palm Sap is obtained from the young inflorescences, either male or female. The dripping juice is normally collected in the early morning and evening, and has sugary sweet taste of about 9-10% sweetness, but its fresh sensation will be around for only a short period. The sap naturally obtained from the top shoots drips into hanging earthen pots and is green like sugar cane and luscious with floating white bubble at the top.

Analysis of Spatial Data

Considering a quantity of the palmyra palm trees grown in eight provinces, the data revealed that they were mostly found in the following three provinces; Suphanburi, Samutsakorn and Petchaburi, and Petchaburi has the most trees. Petchaburi and the palmyra palm tree have been a counterpart since the old days for over 200 years. According to the poetry “Journey to Petchaburi” written by the great world poet living during the Rattanakosin period, one part of the poetry described: “A great number of palmyra palm trees are fully scattered throughout the land of Petchaburi”. This shows that in Petchaburi Province, there have always been a great number of palmyra palm trees as shown in the below table.

Table 1. 2007 Survey Data of Palmyra Palm Trees Cultivated in Petchaburi Province

<table>
<thead>
<tr>
<th>District</th>
<th>Female Plant</th>
<th>Male Plant</th>
<th>Unclassified</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muang</td>
<td>47,286</td>
<td>32,540</td>
<td>39,973</td>
<td>119,799</td>
</tr>
<tr>
<td>Ban Lad</td>
<td>56,160</td>
<td>9,858</td>
<td>7,840</td>
<td>73,858</td>
</tr>
<tr>
<td>Tha Yang</td>
<td>15,660</td>
<td>9,858</td>
<td>7,840</td>
<td>33,358</td>
</tr>
<tr>
<td>Khao Yoi</td>
<td>12,534</td>
<td>10,285</td>
<td>19,160</td>
<td>41,979</td>
</tr>
<tr>
<td>Cha-Am</td>
<td>12,789</td>
<td>8,512</td>
<td>4,710</td>
<td>26,011</td>
</tr>
<tr>
<td>Nongyaplong</td>
<td>310</td>
<td>205</td>
<td>227</td>
<td>742</td>
</tr>
<tr>
<td>Ban Laem</td>
<td>30</td>
<td>28</td>
<td>4,000</td>
<td>4,058</td>
</tr>
<tr>
<td>Kaengkrajang</td>
<td>145</td>
<td>55</td>
<td>350</td>
<td>550</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>144,914</strong></td>
<td><strong>71,341</strong></td>
<td><strong>84,100</strong></td>
<td><strong>300,355</strong></td>
</tr>
</tbody>
</table>


The research data obtained from eight provinces of the lower central region, showed that the palmyra palm has been mostly cultivated in Petchaburi so in essence it symbolizes and represents the identity of Petchaburi Province. It is even represented in the seal and flag of the Province. Phetchaburi is divided into 8 districts; Mueang Phetchaburi, Khao Yoi, Nong Ya Plong, Cha-am, Tha Yang, Ban Lat, Ban Laem, Kaeng Krachan and each of these has an abundance of Palmyra trees.

Phetchaburi and the Palmyra Palm – a special relationship

Phetchaburi has lovely beaches and mountains and it is located not too far from Bangkok. It is thus one of the most visited tourist destinations by Thais and foreign travelers. It would be very interesting for them to visit Palmyra plantations and taste Thai foods of the various areas en route. Located in Petchaburi Province, we also find the beautiful palace named Phra Nakhon Khiri which is a valuable art and cultural heritage site built by His Royal Highness King Rama IV with the income solely gained from taxes obtained from palmyra palm production. Thus, it can be said that Phra Nakhon Khiri absolutely originated from Petchaburi’s palmyra palms. In addition, the palmyra palm has been the local plant continually playing a vital role towards the economic growth and way of life of Petchaburi’s people for centuries now.
Economic Aspects: For Petchaburi’s people, the Palmyra Palm is a multi-purpose plant contributing towards various forms of products all year round. Apart from its regular and certain production, it also contributes diversity of occupation to local communities in term of both principal and part-time employees. People producing palm sugar cakes are enabling to gain more income, and household industries are growing for various types of dessert production.. The planting of seedlings of Palmyra palm trees to get germinated fruits (so-called Jao Tan) for direct sales or being used as an ingredient in desserts, palm sugar sellers, etc. all generate employment and sustain livelihoods. Thus, this can be concluded that Petchaburi people can earn a fair living by obtaining income gained from the production of the Palmyra Palm plantation in their local area.

Social Aspects: Arising diversified occupations including various types of Palmyra Palm products lead to trading and resource sharing and exchanges enabling farmers to have self-sufficiency without relocating to another area. They have an opportunity to learn and develop themselves and participate in their local community development, and also have growing self-esteem that helps minimize social problems, as people have sense of worth.

Environmental Aspects: The Palmyra Palm tree helps the ecosystem balance since it is a source of dwelling for owls. These birds helps humans to get rid of rats, an enemy of rice and other plants and they also minimize pesticide usage. Moreover, the Palmyra Palm’s root system does not interfere with other plants’ roots i.e. paddy’s since it will grow down deep into soil and not expand on soil surface. Growing of roots deep into soil allows for the circulating of soil nutrients which not only holds soil effectively but also strengthen soil in ditches where the trees are cultivated.

Five good tourist attractions based on the Palmyra Palm

1. Lung Thanom Palm Plantation of Mr. Thanom Phoo-ngern: This is in Ban Lad District, and this farmer cultivates over 450 palmyra palm trees in rows. At this farm, tourists can learn how to cultivate the Palmyra Palm tree and harvest its production such as jaggery and palm fruit, and learn to separate male and female inflorescences. Any questions can be fully clarified by Mr. Thanom since he is knowledgeable and an expert. Tourists will experience how to climb the Palmyra Palm tree, how to thresh the trunks, how to collect sap including having a demonstration of climbing Palmyra Palm trees. In suitable weather, tourists can also try to climb up the tree by themselves. Tourists will also experience how to separate pulp (obtained from female flowers only) by both hand and labour-saving machines created by indigenous knowledge, nursery transplanting and learn about the steps of the Palmyra Palm’s growth from seed to becoming a stem.

2. Basketry Community in Tham Rong Sub-district: This is based on the concept of multi-purpose uses of the Palmyra Palm tree’s composition which can contribute to more income for villagers. For example, they can make a doll by combing its seed’s fibers properly or clustering seeds continuously so as to let the soft white taproots grow within the endocarp. This results in sweet palm kernels or they can just consume the fresh ones. In addition, the leaves can be used for making handicraft products, basketry or thatching for roofing. Ban Lad Sub-district is also the center for tourists to learn how to make basketry with the leaves or other type of innovations like hats and leaf ties.

3. Rice Field-Palmyra Palm Farming of Ban Rai Krang in Rai Sa-thorn Sub-district Administrative Office, has a group of villagers who established a learning center and living nature learning room with the cooperation of the Wat Nong Kae School (Klom Withayakarn) in a field area of 15 rai of Khun Somchai Mee-nuch. The landlord intends to conserve the living style of Petchaburi villagers under the concept of “Climbing up Palmyra Palm trees after the harvest of rice farming and indulging in rice farming after palm harvest”. The land of K.Somchai, it has been
used for rice farming and Palmyra Palm plantation for years. There are 21 palm trees that have been planted using the turn-down seed method since 1983, whereas another 29 have been planted by a turn-up seed method in towering rows on the dike of the rice field. Both planting method concepts aimed to experiment and explore the gender selection method of Palmyra Palm plantation according to the ancestral wisdom conveyed from generation to generation. This asserted that planting by means of a turn-up seed method would result in reproducing palm trees having pistil flowers while planting by a turn-down seed method would reproduce a palm tree to having stamen flowers only.

4. **Learning Center, Cultural Court and Wat Na Phrom** (the same route to Had Chao Samran or near Petchaburi Rajbhat University): This is a great way to experience the rural life of villagers climbing the Palmyra Palm trees to yield their results. This center is also the learning source of villager’s wisdom about the uses of Palmyra Palm trees.

5. **Pon Kum Wan Shop**: This is a factory producing various kinds of desserts. Here, tourists will have an opportunity to experience the clear process of dessert manufacturing starting from the plant to their distribution in restaurants and shops. The demonstration of the Aa-Lua dessert is held in the factory area whereas the manufacturing area is clearly separated according to GMP standards such as the raw material storage room, preparation room, mixing room, forming room, baking room and packing room. In addition, each class learns how to bake and technique to use to form the Aa-Lua dessert. This is also arranged and taught by experts, Tiw and Khun Phrae, the owners of the shop.

**Three tourism routes that can be enjoyed by visitors**

1) **“Salt Route”**: The purpose of this route is to avail tourists an opportunity to experience the lifestyle of villagers and fishermen whose daily living concerns the Gulf of Thailand including learning how salt is manufactured, salt farming and its utilization for other purposes apart from being used as a food seasoning. In addition, it also focuses on an activity showing how much each coastal province links to its existing natural resources that helps contribute to its distinctive identity. Among those provinces, there are three related to a salt farming and food processing from salt; Samut Sakhon, Samut Songkram and Petchaburi, and their tourist attractions along this route are the Learning Center for Indigenous Knowledge of Samut Songkram, Khokkharm Salt Farm Learning Center, Ban Laem Salt Farmer Group, Ban Laem Agriculturist Group, Kanghuntong Sea Salt Group and the Home Krateng fishermen.

2) **“Jaggery Route”**: The Palmyra Palm learning has been applied as the communication tool to link with various other learning aspects such as agriculture, indigenous knowledge and Thai desserts, related to Palmyra Palm jaggery and sugar. Petchaburi is the province intensely related to Palmyra Palm plantation and food processing from these trees with a constant long-term Palmyra Palm history. The purpose of this route is designed to learn the villagers lifestyle where the Palmyra Palm has played a vital role in their daily living. In addition there is a Palmyra Palm climbing demonstration, jaggery boiling and dessert cooking made with jaggery. The activities have been launched to symbolize Petchaburi as the authentic city of desserts through the step of exploring the province’s most popular ones, both savory dishes and desserts, having their unique taste in both Petchaburi District and Tha Yang District. The tourist attractions along this route are Wat Na Phrom Dessert Community – Wat Na Prom Cultural Temple Court - Phra Nakhon Khiri Historical Park (Khao Wang) – Muang Petch Popular Shop Tour – rice field – palmyra palm forest – Tha Yang Fries Noodle Thai Style – and the Pon Kum Wan Shop. All are worth a visit time allowing.

3) **“Fish Route”**: The purpose of this trip is to learn the lifestyle of villagers who consume fish, from both fresh water and the sea, and make a living from it. Thus, the activities along this route focus on the importance of fish as the main food resource of Thai people since the old days. This has
created the distinctive identity of this local area. The tourist attractions along this route are Kaeng Krachan Dam – Sun Dried Squid in Pran Buri District – Pechnairoo Shop – Prachuap Khiri Khan Coastal Aquaculture Research and Development Center – and the Milkfish Processing Community Enterprise Group.

**Tracking the jaggery**

Tracking the jaggery (Palmyra Palm tree) is the tourism route starting from the Palmyra Palm planting. This consists of how to plant, climb and harvest plants and an explanation is also provided of its composition and uses. Tourists will experience arranged activities concerning the Palmyra Palm and learn inter alia how to collect the nectar. Local wisdom is also brought to link with such activities such as how to boil and drop nectar, how to produce fresh palm nectar and palm powder, how to make a toddy palm cakes, how to use palm leaves for basketry, using jaggery for Thai desserts i.e. Khanom Mor Gaeng, Khanom Khao Too, Aa Lua, etc. This is a tour program for learning a variety desserts together with food processing techniques and processes of manufacturing until obtaining the dessert products. The details of activities are provided in a recommended itinerary as follows:

**Day 1**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>07.00 hrs.</td>
<td>Leave Bangkok for Lung Thanom Palm Plantation, 150km distance (from the Victory Monument) or around 2 hours. Here, tourists will see a great number of large-size palm trees in towering rows and they are densely planted as never seen before. Mr. Thanom, who intends to conserve the Palmyra Palm trees as long as possible, will share his knowledge of fertilizing the trees and how to crush the palmyra palm. Tourists can also experience climbing palm trees and see their tops on the bridges between each palm tree. In addition, the method of making a luscious toddy palm cake will be also taught.</td>
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<tr>
<td>12.00 hrs.</td>
<td>Lunch at Suan Tan Rie Thaew Restaurant serving savory dishes and desserts made with jaggery such as Kangliang Hua Tan (spicy mixed soup), Luktan Loykaew (palmyra ice), toddy palm cake, young palm fruit and Jao Tan.</td>
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<td>13.00 hrs.</td>
<td>After lunch, the group goes to visit the Basketry Community in Tham Rong Sub-district to learn to make beautiful basketry products using with various parts of the palm trees that enable the villagers of the sub-district to earn a livelihood.</td>
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<tr>
<td>15.00 hrs.</td>
<td>Leave the basketry community for Ton Tan Resort located along the irrigation canal in Muang District, Petchaburi Province to drop off luggage and time for a short nap before a selected evening activity.</td>
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<td>16.15 hrs.</td>
<td>Leave the resort for a sight-seeing tour of the Palmyra Palm trees – the day’s last destination where tourists can see a beautiful natural picture of Palmyra Palm trees at Rice Field-Palmyra Palm Farming of Ban Rai Kwang of Khun Somchai Mee-nuch. The conservative owner intends to maintain lifestyle of Petchaburi villagers under his concept of “Climbing up palmyra palm trees after harvesting of rice farming and experiencing rice farming after the palm harvest”. The tourists will also experience the lifestyle of villagers through Khun Yai (Grandma) Chue, who is 80 years old, and he demonstrates climbing up a Palmyra Palm tree and also teaches the group how to make fresh palm nectar jelly, Tanode Tod (Fried Jao Tan in syrup after blending it with flour) and how to make Kra Chae (or palm wine – alcoholic beverage created from the sap of palm tree).</td>
</tr>
</tbody>
</table>
| 18.00 hrs. | Dinner at Rice Field-Palmyra Palm Farming of Ban Rai Kwang served with seafood in grill and in camping style. Enjoy the show of Khun Somchai and his team. Tourists
will also enjoy tasting Kra Chae (palm wine) and watch the folk plays of Petchaburi artists and the Lao Ta Phone Performance.
20.30 hrs. Return to the resort and have leisure time.

Day 2
07.00 hrs. Breakfast at the resort
08.30 hrs. Visit Phra Nakhon Khiri Historical Park, also known as "Khao Wang", the authentic tourist attraction of Petchaburi Province. Only a few people know that this palace was built under the huge income budget gained from the palm tax (Palmyra Palm) which implies that in the past, there were a great number of Palmyra Palm trees all over this province.
9.30 hrs. Leave Khao Wang for Wat Na Phrom to pay respects to the abbot of this temple located in Na Phrom Sub-district, Muang, Petchaburi Province. Tourists will also learn and see a demonstration of climbing up the Palm Trees and how to make jaggery as demonstrated and taught by the villagers at Learning Center, Cultural Court and Wat Na Phrom. Here, tourists can closely experience the lifestyle of villagers living within the area and near the temple and see more Palmyra Palm trees and learn how to make Khao Chae (or rice in ice water) at the original shop which has been open for over 10 years.
12.30 hrs. Lunch at a restaurant in Tha Yang District’s market, Petchaburi Province to taste Phad Thai Tha Yang (fried noodles Thai style) that has been a popular dish having a story of the ‘greatest taste’ for over 30 years.
14.00 hrs. Leave Phad Thai Tha Yang and stopover at Pon Kum Wan Shop to buy various kinds of desserts. This shop has been open for over 10 years from Aa-Lua Kru Jiw to Aa-Lua Pon Kum Wan. Tourists can also learn how to make Aa-Lua dessert.
16.00 hrs. Stopover at the last destination of the tour program “Ban Nanthawan” to buy Petchaburi souvenirs and desserts.
18.00 hrs. Arrive back in Bangkok.

Conclusion
The Palmyra Palm is a source of income for agriculturists in Phetchaburi, especially in rural areas, but it is also important for tourism development and the promotion of sustainable livelihoods for villages. This article has stressed the multiple uses from the fruit, wooden products, roots and leaves, and as a source of food and tourism value. Main dishes and enjoyable desserts such as inter alia Palmyra fruit jelly seeds, crystallized fruit, jelly seeds soaked syrup, steamed Palmyra pudding, Palmyra jaggery and Palmyra juice are all wonderful creations which tantalize taste-buds. Moreover, it has huge potential use in ecotourism and agritourism where tourists can visit Palmyra plantations, and learn about its many uses. This is important for local communities as it stimulates the economy due to the diverse range of products that invariably bring large amounts of income to the locals in Phetchaburi province. It is important to promote such a valuable asset and to as far as possible involve locals in the decision making processes, and support them in implementing programmes for tourists to enjoy. The development of tours and creative industries can only improve the economy of the community, and the local tourism industry also experiences a rapid growth. Culinary aspects of the Palmyra Palm as cultural heritage are cultural products that are suitable to
be established since their development has a close economic relation with creative industries. Palmyra Palm products including its delicious food offerings should be processed in such a way as to become a key tourism product, and alongside innovative tours such as the one described above relating to the plants, these can enthral tourists and add huge value to the provinces in which the Palmyra Palm is grown and even beyond.

Tracking the jaggery (Palmyra Palm tree) is the tourism route starting from the Palmyra Palm planting source and it includes how to plant, climb and harvest the plant followed by an explanation of its composition and multiple uses. Tourists will experience pre-arranged activities concerning the Palmyra Palm such as how to collect the nectar. The local wisdom is also brought to bear with activities such as how to boil and drop nectar, how to produce fresh palm nectar juice and palm powder, how to make a toddy palm cake, using palm leaves for basketry, using jaggery for Thai desserts i.e. Khanom Mor Gaeng, Khanom Khao Too, Aa-Lua, etc.

The model can be applied for mainly foreign tourists in the form of a two-day trip. It is expected that the commercial potential of the plants can be used in all provinces to create a new tourism model in the western region and it can be matched with foreign individual tourism (FIT) needs as well as the tourists preferences for local food knowledge acquisition in the form of a “Tour, Taste and Learn” event or tour (Ekgnarong Vorasiha, 2018) The above data require further refinement so as to enable a working team in each regional office of the Tourism Authority of Thailand (TAT) to further develop and upgrade the creative tourism route through the notion of local food promotion and other ideas as proposed in the above article.

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