#### CHAPTER IV

#### RESULTS

This chapter is to present the results of data analysis responding to research objectives and instruments. Mixed instruments were used in this research as mentioned in chapter III in order to perform both qualitative and quantitative research. After the data have been collected as per research methodology, all results have been assessed and illustrated using statistic and applicable data to be analyzed in descriptive style. The results have been proposed into following parts of:

## The qualitative results

- 1. Tourism Resources Audit in Mueang district however, the result of the community study can be overviewed overview from table of conclusion which will be represented in this chapter. The full study have been presented in chapter II in content with the study areas
  - 2. Specific study of Ban Phon Rang hot spring destination
- 3. Data of strength, weakness, opportunity and threat in relations to develop Ban Phon Rang hot spring to become an international health and wellness hot spring destination.

#### The quantitative results

There are results that was gathered and analyzed from the overall research such as the data responds to the questionnaire; opinions and recommendations for sustainable tourism health and wellness development of Ban Phon Rang hot spring at Moo 3, Bang Rin sub district, Mueang district in Ranong Province, Thailand.

### The Qualitative Results

### Tourism Resources Audit of Mueang District in Ranong Province

### 1. Natural Resources Feature: Mountains

#### 1.1 Grass Hill (Phu Khao Ya or Bald Hill)

**Location**: It is located opposite to Namtok Ngao National Park, located in Moo 1, Ngao Sub district, (Ranong-Phang-Nga) about 12 kilometers from Ranong city.

Accessibility: From Ranong downtown, take Highway No 4. The Grass Hill is in Moo 1 of Ngao community.

Resource Attraction and Unique: Unlike most hills, it is not covered with trees, but only grass, known to local residents by a variety of names and endearingly referred to as Thailand's version of a Swiss pasture, this hill is something of an anomaly as it is completely treeless, being covered instead by a thick blanket of grass. Numerous walking trails and good vantage points offering unbroken views of the countryside make this hill the most popular in Ranong. The landscape is a secondary land with soil that loses its ability to nourish trees after being deforested especially the area between the highway and the hill looks very much like it was made into a meadow for grazing animals.

**Potential Significant**: To be developed for Panorama View Point Area at the top for tourist who want to take a photo with the background of Ngao Water fall.

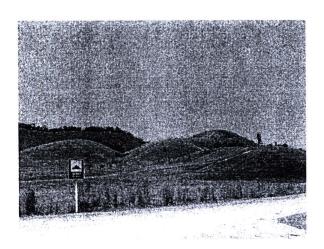


Figure 27 Grass Hill or Phu Khao Ya

# 1.2 Natural Resources Feature: Canyon

Ranong Canyon

**Location:** Located in the north of Ban Thung Ka, Had Som Pane Sub district.

Accessibility: 12 kilometers from town to Ban Thung Ka-Had Som Pane on local road number 4004 by car and motor bike. (Song Theaw, local taxi truck route 3 is available to drop you at Raksawarin Park to take motorbike after that)

Attraction and Unique: The Ranong Canyon is just the other side of Hat Som Pane. This used to be an old mine that used the water strength to seek the mineral out of the soil. As time passed, all the soil was eroded and turned into a deep basin surrounded by high soil and stone cliffs. This large and abandoned mine is now full of water coming up from underground and rainfall. It is now full of big fish you can feed it's great for swimming and picnic. In Thai it's called "SRA MORAKOT" (The emerald basin) Due to the dark green color of the water.

**Potential Significant:** Mountain Bike Tourism should be applied and linked with other tourism resource in the boundary area such as Raksawarin hot spring according to daily tour package relaxing in hot spring after outdoor activity.



Figure 28 Ranong Canyon with a Beautiful Emerald Pool

#### 1.3 Natural Resources Feature: Flora and Fauna

#### 1.3.1 Ngao National Park

Location: Namtok Ngao National Park, Ngao Sub-district, Mueang Ranong, Ranong, Thailand 85000

Accessibility: Nam Tak Ngao National Park's Headquarters is 13 kilometers from the town of Ranong. Follow the road number 4 (Ranong-Ratcha Krud) then turn left for 700 meters you will reach the Headquarters.

Attraction and Unique: The general topographic composition of the park are mountainous regions, which includes Khao Daen, Khao Huai Siat, Khao Nom Sao, and can be seen stretching from the northern to southern areas of the land. The highest peaking is 1,089m height above sea level; it also provides a very important watershed for the provinces of Ranong and Chumphon. The park consists of beauty natural attraction such as Waterfalls, River canals and very interesting plantation.

Formerly, Nam Tok Ngao National Park was called Klong Prao National Park, located in some areas of Ranong Province and Chumphon province. At 668 km<sup>2</sup>, the park's general geography is rugged mountain range. It has valuable trees forest and headwaters, suit to set a national park. There is a moist evergreen forest with valuable floras some are Podocarpus neriilolius, Hopea odorata and Michelia champaca. There also is an orchid scattered in deep forest -Dendrobium Formosum, which is similar to Cathalia Orchid and bloom from October to December. "Bour Put" (Reffesia Kereii Mejjer), it's a new species of fauna and the largest flower in the world. Actually, it's parasitic species in the Rafflesia. It's remarkable, not only because of their size, but also because the flower is the only part of the plant that is visible which appeared on the ground, only in rainy season. Its characteristic is similar to dark red cabbages. Wildlife existing in the park includes wild elephants, tapirs, gaurs, leopards, bears, barking deer, monkeys, wild boars, cobras, King cobra, python, jungle fowl, hornbill, etc. The most important of all the wildlife species found in the park is the famous Chao Fa crab (Phricotelphusa sirindorn Naiyanets) which was discovered around the Namtok Ngao National Park area of the Ranong province.

**Potential Significant:** With natural diversity of Ngao National Park, its' significant to offer tourist with several kind of activities such as Natural trail study, Camping Stargazing, Waterfall Traveling and flower admiring

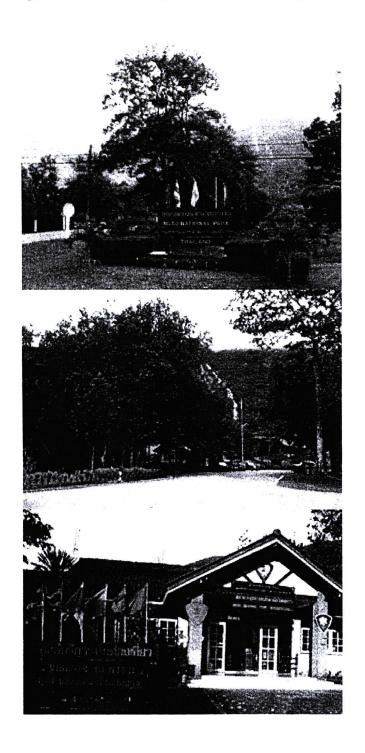


Figure 29 Nam Tok Ngao National Park

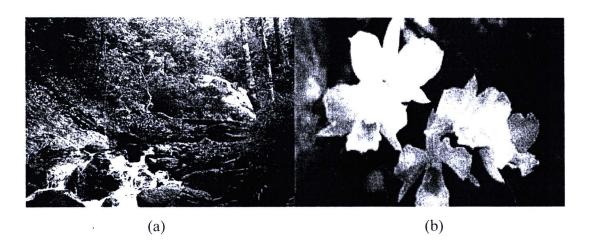




Figure 30 The biological attractions in Namtok Ngao National Park

(a) Mountain Range and evergreen forest, (b) Dendrobium formosum, (c) Chao Fa Crab, (d) "Bour Put" Rafflesia Species

**Source:** http://www.dnp.go.th/parkreserve/nature.asp?lg=2

# 1.3.2 Ngao Mangrove Forest

**Location:** 9°43' to 9°57'N; 98°29' to 98°39'E. Ranong Mangrove Research Center is located in Moo 4, Ngao Sub district, Mueang District Ranong Province 85000

Accessibility: By car or taxi from Ranong City through highway Petchakasem Road, turn right to Ngao municipality, again turn right at Ngao market then you will find Ngao Mangrove Research Center. Study Walking Guide could be arranged subject to contact 3 weeks in advanced.

Attraction and Unique: Ngao Mangrove Forest Area has been declared a World Biosphere Reserve Zone by UNESCO since 1997 owing to the essential role maintaining the region's ecological integrity. The Ngao and Lame Son National Park to Ranong contiguous were zoning, hence there is a continuum of protected habitats going from the mountain ecosystem down to the coast and sea. It consists of a narrow coastal plain characterized by many waterways and mangrove forests, reaching out to the sea towards sea grass beds at a depth of 10 meters.

**Potential Significant:** There are some 4,000 people living in the biosphere reserve, who live mainly from fishing and a shrimp farm (1997). Tourism is slightly developed, with ecotourism resource potentiality. The Ranong Mangrove Research Center has a long history of scientific research in this area, covering topics such as mangrove reforestation and rehabilitation, as well as human health and sanitation.



Figure 31 Ngao Mangrove Forest Reserved Area

#### 1.4 Natural Resources Feature: Water

### 1.4.1 Namtok Ngao or Ngao Waterfall

**Location:** located near the Headquarters of Ngao National Park. Ngao Sub-district, Mueang Ranong Thailand 85000

Accessibility: Follow Petchakasem road for 13 kilometers then turn left at the intersection that opposite Grass Hill or Bald Hill and follow the road for 1 kilometer.

Attraction and Unique: The waterfall has water drops over the high and steep cliff that you can see it even you are far away. The whole stream cascades from a high mountain and can be seen afar. The beautiful scenery of mountains and pastures is visible from the resting area near the fall

**Potential Significant:** Eco tourism activities such as waterfall walking and trekking trail, to be merged within one day trip for tourist to spend time in green and fresh natural. Longer stay should be offered for camping and eco study course.



Figure 32 Namtok Ngao Waterfalls with Evergreen Forest of Ngao National Park

Source: www.ranongguide.com

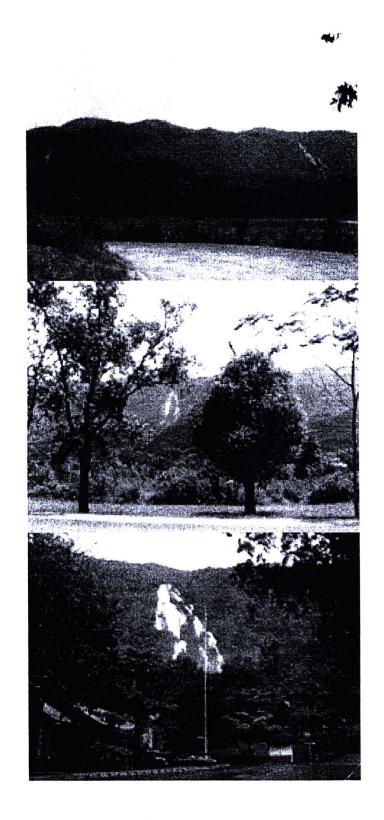


Figure 33 Ngao Waterfall highlight of stream cascades scene

#### 1.5 Natural Resources Feature: Hot springs

# 1.5.1 Raksawarin hot spring (Wat Thapotharam)

**Location:** Situated 2 kilometers east of Ranong town. It is located in a forest park on a bank of Had Som Pane canal, on granite rock of the Cretaceous period.

Accessibility: The hot springs and Raksawarin Arboretum are located near Tape Haram Temple on Highway 4005. Visitors can take highway No. 4 at kilometer 612.7 turn left and head east follow the signs. Mini-bus available from Ranong city.

Attraction and Unique: The hot springs have been a popular tourist spot ever since King Rama V visited Ranong in 1890, and named the road to the hot springs 'Chon Ra-u', meaning 'hot water'. Mineral water coming from the springs maintains a year-round temperature of 65 degrees Celsius. The waters have proven healing qualities and often prescribed by doctors in the locale as a form of treatment. There are three main spring pools: the Father Pool, the Mother Pool and the Child Pool. The water from each of these springs is considered so pure that it was used during important ceremonies to celebrate the 60th Birthday of King Bhumibhol, Thailand's current monarch.

**Potential Significant:** Chemical composition: the hot spring water is clear, free from hydrogen sulfide. It contains a large quantity of carbonate and fluoride.

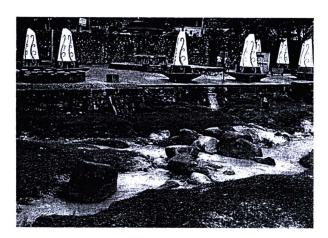


Figure 34 Raksawarin Hot Spring (father pool) along Had Som Pane Canal



Figure 35 The facilities of Hot Spring Pool and Hot Stone Plate area at Raksawarin Park for public and visitors

# 1.5.2 Ban Thung Yo (Plu Lhoom Plee) Hot Spring

**Location:** Located at Moo 2, Ban Phon Rang Sub district, Mueang District, Ranong province. It is 6.5 kilometers from south of Ranong town.

Accessibility: Easy accessed from Petchakasem Highway No 4 by car or taxi service to departure from Ranong town, it is closed the Ranong Local Radio Station. It will take 300 meters from main road to the hot spring.

Attraction and Unique: Ban Thung Yo hot spring is situated in valley of Ranong mountainous and Ranong main land which is 15 meters height above sea level. The geological based from Kgr-Ng granite rock of the Ranong North West and South East faults. There is hot spring water pool in octagon shape with seats around. There is one public toilet and shower room, resting pavilion. Mostly hot spring usage is for local community villager consumption to do bathing by sitting around the pool. The water quality is very clear thermal spring with temperature 40 C° and contain good chemical for healthy.

Potential Significant: Ban Thung Yo hot spring is belong to Bang Rin Sub district public area, with easy access location and slightly developed in build environments. Most of areas are remain original. It is more challenge for tourism planner to design the model of development and make the plan together with local people at first stage of sustainable development.

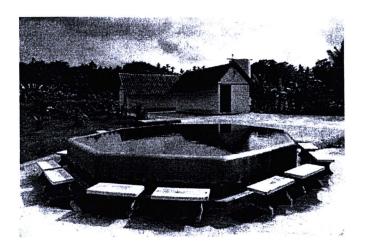


Figure 36 The Bath Area of Ban Thung Yo Hot Spring

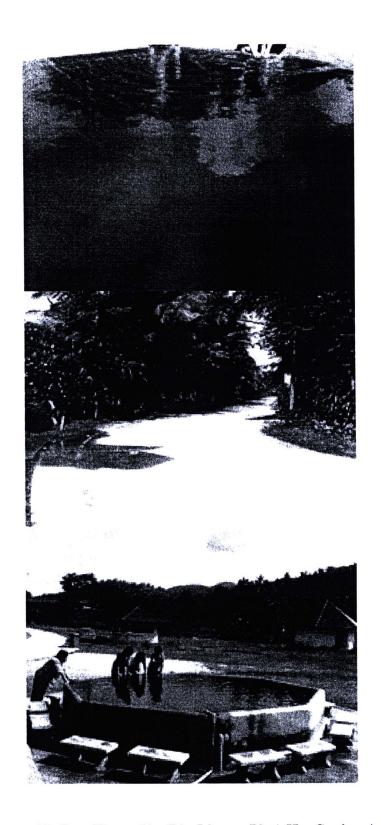


Figure 37 Ban Thung Yo (Plu Lhoom Plee) Hot Spring Area

### 1.5.3 Ban Phon Rang hot spring

**Location:** Ban Phon Rang hot spring site in Moo 3, Bang Rin sub-district, Mueang district, Ranong city.

**Accessibility:** 5 kilometers away from the Ranong city by taking Petchakasem Road, turn left into Phon Rang hot spring sub-road about 2 kilometers follow the signs up to the hot spring. It is in the area Ngao National Park.

Attraction and Unique: Ban Phon Rang hot spring physically is located in the area of Nam Tok Ngao National park's endowment, which is surrounding by natural environment such as forest, fauna, water fall, river and headwaters including thermal hot springs. There is a valley of the landscape along the Phon Rang canal with a walking path. In general, the area is surrounded by mountains. A natural stream and a river flows through a wooden bridge. There are natural hot springs and manmade bath tubs to extend thermal water in visitor areas.

**Potential Significant:** Physical, Ban Phon Rang hot spring is located in one of unit area of Nam Tok Ngao National Park. It is from a hill state level of natural evergreen forest, biological diversity and full blessings of canal flows along hot spring ponds. Activities can be linked and associated with others attractions such as waterfall trekking, forest trekking and camping in area of Nam Tok Ngao National Park.



Figure 38 Ban Phon Rang Hot Spring with small canal

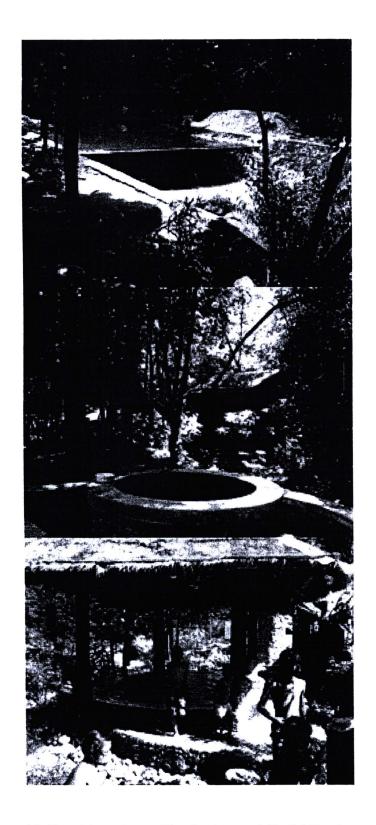


Figure 39 Ban Phon Rang Hot Spring and Build Environments

# 2. Cultural Resources Features: Religion, Historical

## 2.1 Wat Hat Som Pane Temple

**Location:** Addressed in Moo 3, T. Hat Som Pane, 7 kilometers from Ranong provincial town on highway 4005 (Chon Ra-U Road)

Accessibility: 6 kilometers from Raksawarin Park and hot springs.

Attraction and Unique: This temple is on Khlong Hat Som Pane and provides a sanctuary for a shoal of soro brook crap. Besides feeding the fish, visitors to Wat Hat Som Pane temple also pay respect to the image of Luangpho Khlai who was much revered by southerners and who passed away in this temple.

**Potential Significant:** This cultural attraction is added in order to promote Raksawarin hot spring route with in its buffer area. Visitors can enjoy health tourism together with Buddhism Cross cultural study.



Figure 40 Various kinds of Buddha Images Statues for Ranong Buddhism to pay respective

### 2.2 Wat Suwan Khiri (Wat Na Mueang) Temple

**Location:** Located within Ranong Municipality on Highway 4004 (Ranong –Pak Nam)

Accessibility: Public local taxi Route 2 (Song Theaw)

**Attraction and Unique:** It contains a Burmese style Chedi, over 70 years old and 10 meters in height, which was built by a Burmese, a main ordination hall or Phra Ubosot is a beautifully bejeweled standing Buddha image is enshrined and a belfry decorated with a feline pattern.

**Potential Significant:** Buddhism Cross Cultural Significant of Thai and Burmese.

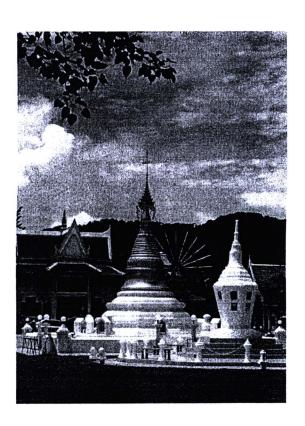


Figure 41 Wat Suwan Khiri Chedi in Burmese Style

#### 2.3 Wat Pa Chai Mongkol Temple

**Location:** It is located in Ban Phon Rang Sub district, at the plain border area near by Ban Phon Rang hot spring location

Accessibility: By car on Petchakasem Highway No 4 (Ranong – Phang Nga) 6.5 kilometers from Ranong town then turn left follow the signage direction to Ban Phon Rang hot spring but only 1 kilometer you will find sub road to Wat Pa Chai Monkol of your right hand side.

Attraction and Unique: The place is one of the centers for meditation retreat officially announced by Religion and Cultural Organization of Ranong. It is situated in the middle of a natural forest where it is peaceful. It is a suitable location for people to practice meditation to balance their mind, spirit as to following Buddha's teaching.

Potential Significant: A wellbeing enhancement is a core for health, hence the success of health and wellness tourism probably includes this attraction into health tourism program to balance their wellbeing of physical health, mental and spiritual.



Figure 42 Wat Pa Chai Mongkol: The meditation practicing center In Ranong

# 2.4 Wat Ban Ngao Temple

Location: Wat Ban Ngao is located at Moo 1, Tambol Ngao, Mueang District, Ranong Province from Petchakasem Road, approximately 300 meters on the other side of Grass Hill Mountains Area.

Accessibility: 12 kilometers from Ranong downtown along Highway No. 4 to Phang Nga province, the grass hill will be on the right opposite Ngao Waterfall then go further 1 kilometer and turn right into Ngao Village; it will take 400 meters from main road to Wat Ban Ngao Temple on the right side.

Attraction and Unique: Wat Ban Ngao has been set up by one Priest name Lhung Pho Nhiet since 1957 and 30 years after that Wat Ban Ngao has been supported and donated land from villagers to develop the area to be official Temple according to the Religious Affairs department. The area have been developed and set up a fish aquarium which is the habitat to several rare fish as a study park "Wang Macha". Wat Ban Ngao has been awarded from the Cultural Religious Affair Department as a community development temple model in the year 2001. Ngao villagers respect and participate into the development of Wat Ban Ngao as one of their social traditional of their village unique. Now a day the National Culture Commission, in cooperation with the Cultural Office, Ranong Province, continuing its support to the local community to participate with government agencies to organize their own cultural landscape, which resulted in maintaining the value and importance of conservation and development of the social environment and sustainable culture.

Potential Significant: There is a very special traditional of Ngao village called "Tak Bart Teh Wo". It is ceremony where all Buddhist will come together to feed the monks and pray. They believe that it is a special day that the Buddha will come to the earth and give mankind good luck and peace. In this ceremony, people will dress as angels to wait and welcome the arrival of Buddha. All the monks are praying. The Big Buddha Image of Wat Ban Ngao temple is located near the top hill on the other side of Grass Hill, hence these attractions could be merged to create a tour packaging for the which include other natural attractions such as Namtok Ngao National Park or Ban Ngao Cultural Village at Koh Sai Dum fishery village.

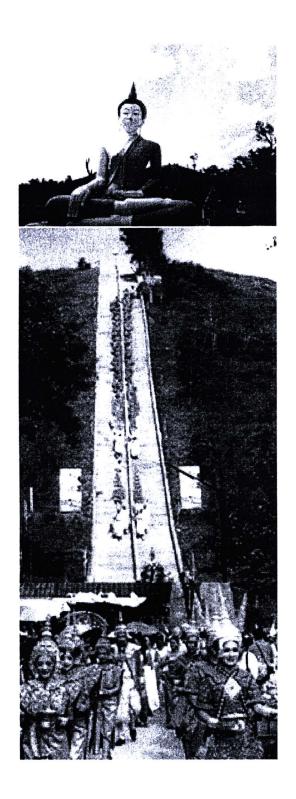


Figure 43 Tak Bart Teh Wo Buddhist Traditional at Wat Ban Ngao Temple

### 2.5 Rattanarangsan Palace

**Location:** The palace situated in area of Khaoniwet Top hill place of Ranong centralized.

Accessibility: Public Taxi Truck (Song Theaw) available for round trip.

Attraction and Unique: Kor Sim Kong or Phraya Damrong Sutjarit Mahitsornpakdee built this throne hall for the residence of King Rama V during his royal visit to Ranong Province on April 23–25, 1890 respectively later by King Rama VI (year 1909) and King Rama VII (year 1928). It is located on the hilltop named "Niwet Khiri". But the original throne hall was later dismantled and replaced by the city hall and then the new provincial hall was built in 2002.

**Potential Significant:** It is a historical tourist attraction of Ranong residents and reflects Ranong historical place in relation to the importance of a commercial city with TIN industry in Thailand.



Figure 44 Rattanarangsan Palace in Central of Ranong Town

### 2.6 Ranong Governor Place

Location: Central of Ranong Town on Rueang Rach Road

Accessibility: Motor Taxi or Song Theaw

Attraction and Unique: The history of Ranong must be traced to the period when Khaw Soo Cheang, a Chinese national arrived at Takuapa and was appointed the Royal Collector in the Ranong area in 1844. He was ascribed the title of Luang Ratanasethi. From then on Luang Ratanasethi moved from success to success. He was elevated to the status of the governor of Ranong and was made the Phra. As a governor, Luang Ratanasethi performed to the best of his abilities and Ranong was ascribed a full provincial status and he was made the Phraya.

The family of Luang Ratanasethi acquired a considerably significant position in Ranong as his other sons assumed the governorship of Kra, Langsuan and Trang. This traditionally inherited administrative power of the family was interrupted when a commissioner from outside the area was appointed in 1913. In 1916, it became mandatory for all the Chinese immigrants to adopt a Thai name and the family of the Khaw Soo Chang was henceforth known as the Na Ranong family

Potential Significant: The historical of Chinese immigrants represented to mixed traditional and social cultural in Ranong for example the Vegetable Festival which is known as a Buddhism cultural activity of Chinese Immigration. As time passed by this tradition is merged into Thai Buddhist. More than that the design of Ranong governor Place construction has relate with Chinese fortunate beliefs.



Figure 45 Ranong Governor Place with Ancestral Prototype Pictures

#### 3. Event Resource Features: Festival

## 3.1 Songkran Festival by Mineral Water Festival

Location: Raksawarin hot spring park, Wat Thapotharam temple

Accessibility: Public Taxi Song Theaw from Ranong town – Bor Nam Pu about 2 kilometers east of the provincial office, the hot springs have been a popular tourist spot ever since King Rama V visited Ranong in 1890, and named the road 'Chon Ra-u', meaning 'hot water'

Attraction and Unique: Holy Mineral Water of Songkran Festival is hold during the Songkran festival of April including ceremony of the monks merit, Buddha Image Bathing, and Old Age people watering day. The water of the hot spring was considered to be holy since 1987. It is used for important ceremonies including the celebration of the 60<sup>th</sup> birthday of His Majesty King Bhumibol Adulyadej, Thailand's current monarch.

**Potential Significant:** People can attend the holy ceremony and enjoy the water tradition of Songkran in additional to health and wellness hot spring activities which are also available.



Figure 46 Merit Ceremony of Mineral Water at Raksawarin Park

### 3.2 Visit Ranong and Andaman Tourism Festival

**Location:** Ranong Mueang Municipality Office in Ranong City **Accessibility:** Central Ranong City, scheduled in March 18-26,

2011

Attraction and Unique: To promote tourism of Ranong province by major Andaman Tourist Attraction plus local culture and traditions to both Thai and International Tourists to know about Ranong tourism diffusion. The Provincial Cultural Office declares a free Alcohol Zone campaign to visitors who visited the festival this year and vendors are not allowed to sale beverages with Alcohol.

**Potential Significant:** The event consist of several Private and Government organizations such as Red Cross and OTOP Offices. There is a local cultural performance of 4 regions and tourism promotion activities such as the festival of Mineral Water and Spa, Exhibition and distribution of local wisdom communities, the local food demonstration and market, the sports competitions such as swimming, motor cross, Canoe – Kayak, and Ranong Beauty Contest, student show's etc.



Figure 47 Local Cultural Performances and Shows

# 4. Tourism Activity Resources Features:

#### 4.1 Recreations

**Mineral hot spring soaking:** The mineral water from Ranong hot springs is accepted to be beneficial for health and wellness. There are 2 types of hot spring. One is a natural hot spring area and another is an extension mineral hot spring (Figure a).

#### 4.2 Adventure

**Elephant Riding**: From Raksawarin Arboretum, there is a forest management unit wherein visitors can ride on elephants and do a jungle, which can lead tourist to see many different species of trees (Figure 48b)

**Hiking, Trekking Trails**: With abundant mountains and evergreen forest, Ranong geology is suitable for people who love adventure in travelling style in several National Parks (Figure 48 c).

**Bird Watching and Camping**: Student camping for wildlife study within the forest's bio diversity with professional guide and park ranger staff to facilitate and serve the tourist and groups (Figure 48d).

### 4.3 Eco-tourisms

Agro – Health Tourism: This garden is located in the area of Bee Thao Lai mountain, Ban Phon Rang. Many kinds of plants grows in this area specifically wild orchids (Figure 48e).

Ngao Mangrove Forest walking and eco study: Mangrove Forest Center is located in Ban Ngao with diversity of fauna and ecology system (Figure 48f).

**Had Sai Dam Homestay:** Located in Moo 5 of Ngao sub district. The local community's main source of income is fishing and cashew nut farming (Figure 48g).

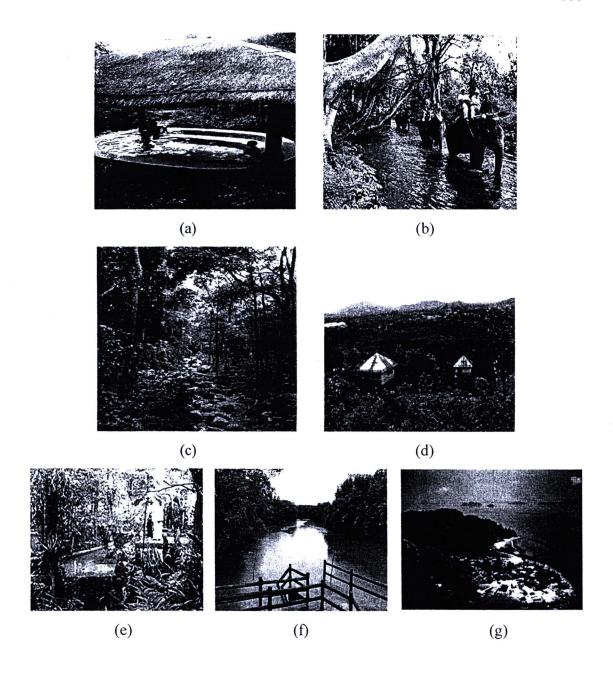


Figure 48 Tourism Resource Activity Audit (a), (b), (c), (d), (e), (f) and (g)

#### 5. Services resource feature:

#### 5.1 Health and wellness facilities

**Raksawarin thermal stone plate**: A hot thermal plate area for public use is located in location of Raksawarin hot spring. By using its thermal temp it can help in blood circulation (Figure 49h).

**Siam Hot Spa, Raksawarin**: It is located near with Raksawarin hot spring and extends the mineral water to serve customer such as spa and massage (Figure 49i).

Jao Ruen Spa under Ranong Hospital: It is a health and beauty center of Ranong hospital where uses the mineral water from Raksawarin hot spring to serve customer (Figure 49j).

**Jan Som Resort Hot Spa:** The resort situated next to Petchakasem Highway near Raksawarin Park. The resort has full service rooms, F&B and health hot spring whirl pool and outdoor swimming pool. Special Health Packages are available for the guest (Figure 49k).

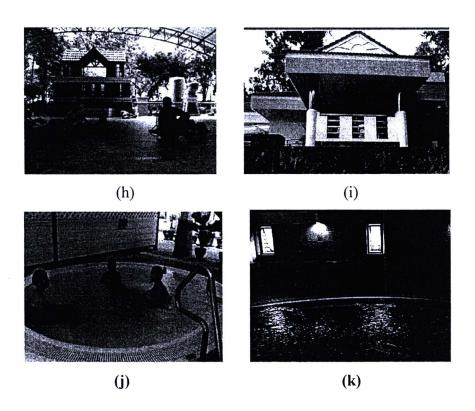


Figure 49 Health and Wellness Facility Services Resources Audit (h), (i), (j) & (k)

### 5.2 Services Resource Feature: Accommodations Services

Namtok Ngao National Park: Budget Accommodation is located in Namtok Ngao National Park with both fan and Air-condition room types. To make reservation, contact the Office of Namtok Ngao National Park (Figure 501).

Ban Phon Rang Hot Spring Resort: Ten Air conditioned units with basic standard facility available at Ban Phon Rang hot spring resort and managed by Ranong Provincial Office (Figure 50m).

Thineedi City Hotel: The hotel is on Tha Mueang Road,

T. Khaoniwet, A. Mueang. It is equipped with luxury spa and fitness facility in Thineedi City Hotel (Royal Princess Ranong) (Figure 50n).

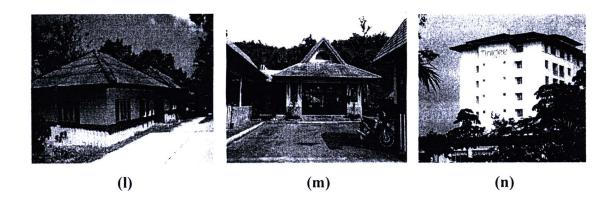


Figure 50 Tourism Resource Audit of Accommodations (l), (m) and (n)

# 5.3 Services Resource Feature: Transportation Services

**Local Taxi Service, Motorcycles Taxi:** Song Thaew and motorcycles taxis will take you anywhere. Most of the Song Thaew and motorcycles taxis stops in front of the morning market. 3 routes of Song Thaews served in the municipal area (Figure 51o).

**Air Condition Bus:** There are air conditioned buses (New Mitr Tours & Chok Anan Tours) from BKK to Ranong every day, for more information to contact BKK Southern Bus Terminal. BKK Tel: 02-4351199 Ranong Tel 077-811548

From Ranong Bus terminal, there are buses going to nearby provinces and destinations including, Chumphon, Surat Thani, Phuket. Taxis are also available on Rueang Rat Road (Figure 51p).

**Airways:** Ranong Air is servicing from Ranong since August 2010 by premium safety standard aircraft SAAB 340 A/B operated by Happy Air. 33 VIP seats. With the destinations from BKK-Ranong-Phuket-HatYai daily, further information please contact Bangkok Office 02-2165151, 081-8912900 and Ranong Office at tel. 077-832222, 081-8915800 (Figure 51q).



Figure 51 Tourism Resource Audit of Transportations (o), (p) & (q)

Community study result is presented in the table below. The conclusion will be drawn in this chapter while the full study have been presented in Chapter II on the content of context study areas

	MUEANG District	Bang Rin Sub district	Ngao Sub district
Populations Areas	91,004p 713.7 km <sup>2</sup>	24,451p 78.6 km 2	6,351p 133.7 km 2
Land Scape .	Mountain plateau , height in the eastern, west coast slope to Andaman	30% of the area is mountainous 70% of land and mangrove	Mountain forest, water generates. Opposite site of the east is wetland to the sea
Sociology	1844 (KSC) L. Ratanasethi Mandatory to Na Ranong Thai & Chinese Buddhism	its name of canal where a lot of lake flies doing rubber farm	Chinese migrant people from Pang Nga
Economic, land used	Tin mining, fishing, rubber, cashew nut farming and trading in Ranong Center	Agriculture Fishery SME Factory	Tin mining, livestock and cow farmer, and "Ngao" was Chinese name of cow
Local Management	Provincial Gov. Authority, Government Bureau, Local Gov. Admin.	Bang Rin SAO is now merged into Bang Rin Municipality	Ngao Municipality Moo 1,2 Ngao SAO Moo 3,4,5

Figure 52 Overview conclusion of community study of Mueang District,

Bang Rin and Ngao Sub districts

### Specific Study of Ban Phon Rang Hot Spring

The data from BPR hot spring study sites are collected, observed then analyzed within the component of international health and wellness hot spring destination framework and the aspects of international attraction hot spring concluded by Cooper (2010).

# 1. Physical Components

**Natural setting,** Ban Phon Rang (BPR) hot spring site is located in Moo 3, Bang Rin Sub-District, Mueang district, Ranong City. BPR hot spring physically is set in Nam Tok Ngao National park the area endowed with several natural attractions and blessed with flora tree, fauna, waterfalls, small canal and headwaters including thermal hot springs.

Water sources, the mild alkaline mineral hot water are generated by water spring of Bang Ring dale. The surface exit water temperature is between  $45^{\circ}\text{C} - 55^{\circ}\text{C}$ 

with pH 8. The hot spring water contained of a group of mineral such as Fluoride, Calcium, Potassium and SO<sub>4</sub>.

Built environment and infrastructure, there are 7 built bathing pools in open air: 5 for adult, one for disable and senior visitor other 4 are for public used. Another 2 bathing pools are for children and 2 separate foot bath areas for short time visitors there are two cement wells of mineral hot spring water for visitor to take some mineral water home with their own packages. There are four of separate toilets and changing rooms in the area. There is no electricity power in the area of BPR hot spring however fully equipped infrastructure is provided at Ban Phon Rang Resort next to the site and that resort is managed by the Ranong Administrative Organization Office. Visitors are able to access into BPR site by using its own vehicle through Highway No 4 from Ranong city and turn left, head east through sub road following tourist signage along the way.

- **2. Health Component** no ancillary service such as spa or Thai massage is provided in the area, only hot spring water. However there is a standard health and wellness spa service such as Jao Reun Spa which is operated by Ranong hospital in Ranong city.
- 3. Social and Psychological Components, the result of this subject was from in depth interview and questionnaire. It was found that mostly Ranong people have good attitude and perception to develop BPR hot spring to become the health and wellness tourism destination. The assumption of local people presented that the thermal water is good for health and most impression of the destination is that it is relaxing and it is abundant in natural scenery such that of forest and waterfall.
- **4. Regulatory Components,** BPR hot springs was assigned by the Ministry of Natural Resources and Environment to be a geological, hot spring tourism area project of Ngao National Park Ngao, the National Park Act 2504 (1961). To ensure consumers of the quality of mineral water in Thailand, the Ministry of Public Health issue the regulation entitled B.E. 2543 (2000) Re: Standards of Natural Mineral Water.

#### 5. Business Components

**Financial Budget,** BPR hot spring is under hot spring tourism development project of Ngao National Park Office. The budget was mostly from Thai Khem Kheang and Ranong Provincial Office subject to their individual development plan while the annual budget of Ngao National Park was too limited and is provided by the Ministry of Environment and Natural Resources

The visitor pattern, the data from Ranong Tourism Office shows the number of visitors and total revenue of Ranong tourism is increasing from January to March 2010. Both domestic and international health and wellness tourist have been raised up slightly. Most of the visitors who visits BPR hot spring are Thai.

**Facility and ancillary Service,** a coffee shop, snack and clothes rental services booths were set and operated by Ngao National Park staff. There is a local restaurant open daily from 8.am–6 pm. beside the hot spring park.

**Human Resource Development,** as part of BPR hot spring is subjected to Ngao National Park, the operation staff were assigned from the Ngao National Park office to work in BPR hot spring area. There are 4 park officers, 3 guards, 4 administrative and cleaner standing at the place.

Table 10 The use of mineral hot springs for health and wellness applications

Hot Spring	Water	Water	Benefits to human	Sources
Destinations	Temperature	Composition	body	
Ban Phon Rang (BPR) Ranong, THAILAND	45°C - 55°C	Basic/alkaline water pH 8, Fluoride - high, Calcium - 3.0 mg/l Sodium - 45.3mg/l Potassium - 3.1mg/l Sulphate - 44.9mg/l	-Strengthen bones and teeth  -Maintain pH balance of body  -Aid the neurological system Improve excretory and skin conditions	-Thailand 's Natural Hot Springs, Office of Tourism Development -The Department of Mineral Resources, Thailand
Peninsula AUSTRALIA	38°C - 43°C	Sulphur spring; sodium, chloride, bicarbonate	-Rheumatism, arthritis, central nervous system, orthopedic, gynecologic disorders	-Cooper & Cooper (2009)
Guguan, TAIWAN	48°C	Carbonate springs pH 7.6	-Heritage of Japanese Onsen culture. Therapeutic effects for arthritis, stomach diseases	-David Hsu, The China Post

The results from Focus Group Discussion, in depth interview and selfstudy from relevant sources, in order to gathering for SWOT, the study have been assessed as follows.

- 1. The result had shown that Ranong province is potential to be developed as health and wellness tourism destination including BPR.
- 2. The numbers of both domestic and international tourists who visited Ranong is increasing (Ranong Tourism and Sport Office 2010).
- 3. The natural environment of Ban Phon Rang hot spring is counted as its' strength to impress tourist to visit the place.
- 4. Other hot springs in Ranong were put into a travel route of for health and wellness tourism.
- 5. Within the study area, there are many forms of tourism and tourism resources where tourist can visit such as Farm tourism, Adventure Tourism and Home Stay tourism.

The research also found the following:

- 1. Some complexity management in BPR hot spring. For example BPR hot springs was assigned as the area of Ngao National Park and set up as tourism areas project according to National Park Act 2504 (1961), hence it has to follow the rules and regulation which have been used for long.
  - 2. Burmese migrant workers in Ranong province
- 3. Apart from that, there were more issues mentioned and discussed such as Tourism Management Organizer, health and wellness facilities, the entrance fees policy, Park ranger staff attitude toward tourism, car park construction, cleanliness and provincial budget.

To gather the opportunities of BRR hot spring site to become an international health and wellness tourism; hot spring destination, SWOT analysis was conducted. The result of the use of the quantitative method which have 400 sample population, will also be analyzed using SPSS method. The result was analyzed by pattern categorization, summarization and descriptive analysis process. The research results were presented in table as follows:

# Table 11 SWOT analysis of Ban Phon Rang hot spring

#### Strength

- 1. The quality of hot spring water
- 2. Location within forest and natural scenery
- 3. Cultural tourism resources are offered
- 4. Several Eco tourism activities provided by Ngao National Park
- 5. Easy link and access to other nearby hot springs
- 6. Infrastructure is developed basically
- 7. Positive community assumption
- 8. Available standard health and wellness ancillary services in Ranong City
- 9. 3-4 star resorts nearby the destination

#### Weakness

- 1. Lack of health and wellness tourism management standard
- 2. Lack of continuous integration development plan
- 3. Lack of hot spring destination marketing plan
- 4. Lack of the destination management organizer (DMO) of the area
- 5. No cooperation between Ranong organizations public and private enterprises.
- 6. Seasonality problem: rainy season for eight months
- 7. Limit of Nation support budget
- 8. Lack of foreigner investment
- 9. Limitation of the National Park Act 2504 (1961)

### **Opportunity**

- 1. World trends of health and wellness tourism
- 2. National and local support for health tourism promotions strategy
- 3. Possibility to brand Ranong as an international mineral hot spring city for health and wellness
- 4. To be promoted as a city of hot springs for MICE
- 5. International Gateway to visit neighboring countries such as Burma and Malaysia through sea link
- 6. Opportunity to raise fund and investment both from Thailand and aboard
- 7. Opportunity to be developed for world class rehabilitation and rejuvenate health and wellness center

#### **Threat**

- 1. Hot springs destination competitors such as Krabi and Trang
- 2. World Economic recession
- 3. Political chaos in Thailand and worldwide
- 4. Health hazard and epidemic: bird flu, H1N1
- 5. Disingenuous and negative attitude of tourism development
- 6. Burmese migrant workers and prostitute problem

# The Quantitative Results

The quantitative result to be gathered and analyzed from overall research data responding to questionnaire; opinions and recommendations towards sustainable tourism health and wellness development of Ban Phon Rang hot spring, Moo 3, Bang Rin sub district, Mueang district in Ranong province, Thailand.

The data of Part 4.2 has been assessed and analyzed in sequence of questionnaire. The information output was described by using the frequency index and frequency percent to respond for the general profiles of responder demographic, region of responder and travel frequency. In part 1 of questionnaire was comprised 10 checklist questions.

Table 12 Frequency and percentage result of responder profile

		Number (n=400)	Percentage (%)
I. Stakeholder	Public Org.	100	25.0
	Business	100	25.0
	People	100	25.0
	Visitor	100	25.0
	Total	400	100.0
1) Gender	Male	115	28.75
,	Female	285	71.25
	Total	400	100.0
2) Ages	17-25	77	19.25
,	26-35	162	40.50
	36-45	88	22.00
	46-55	58	14.50
	56-65	8	2.00
	> 65	7	1.75
	Total	400	100.0
3) Status	Single	172	43.00
· ·	Married	213	53.25
	Widowed	11	2.75
	Divorce	4	1.00
	Total	400	100.0
4) Religious	Buddhism	377	94.25
	Islam	21	5.25
	Other	2	0.5
	Total	400	100.0

Table12 (Cont.)

		Number (n=400)	Percentage (%)
5) Educations	Primary school	6	1.50
	Secondary school	66	16.50
	High school	52	13.00
	Diploma	16	4.00
	Bachelor degree	227	56.75
	Master degree	33	8.25
	Total	400	100.0
6) Occupations	Student	30	7.50
	Company Employee	40	10.00
	Labors	30	7.50
	Government Officer	189	47.25
	Homemaker	4	1.00
	Health and Beauty	7	1.75
	Owner business	66	16.50
	Freelance	34	8.50
	Total	400	100.0
7) Income	< 5,000	33	8.25
	5,001-10,000	114	28.50
	10,001-15,000	93	23.25
	15,001-20,000	57	14.25
	20,001-30,000	55	13.75
	30,001-50,000	37	9.25
	50,001-100,000	3	0.75
	>100,000	8	2.00
	Total	400	100.0
8) Birthplace	Ranong	278	69.50
	Bangkok	26	6.50
	South	67	16.75
	Middle and West	1	0.25
	North	22	5.50
	North-East	3	0.75
	East	3	0.75
	Total	400	100.0

Table12 (Cont.)

		Number (n=400)	Percentage (%)
9) Travel Time /Year	1-2 times/year	180	45.00
	3-4 times/year	90	22.50
	5-6 times/year	47	11.75
	> 6 times/year	83	20.75
	Total	400	100.0
10) Travel By	Private car	344	86.0
•.	Public car	50	12.5
	Boat	4	1.0
	Package tour	2	0.5
	Total	400	100.0

## **Demographic Profile of Respondents**

Based on Sustainable Tourism Development principle with the participation of the stakeholder, the primary data were collected through 400 respondents from sample group of population as a demographic profile. In total of 400 stakeholders: 1) Public, 2) People, 3) Private (Business) and 4) Visitor that visit BPR site during survey period.

According to table 12, majority of the gender of the respondents were female which is equivalent to 71.25% while 28.75% was male. The 40.50% of respondent's age is in range of 26-35 years followed by ages between 35-45 year is 22%, 17-25 years is 19.25%, and 14.50% of responders ages is between 46-55 years, 56-65 years is 2% and 1.75% is ages is 65> years old. For the status and religion of responders, most of them were married with 53.25%, and single was 43.00%, widowed was 2.75% and 1% was divorced. Major religions of the responders are Buddhism for 94.25%, following with Islamic is 5.25% and other religion is only 0.5%.

Education level of the majority group of the respondents graduated bachelor degree at 56.75%, followed by secondary school education at 16.50 %, high school education at 13%. The highest level is Master degree at 8.25 %, 4% of diplomatic and 1.50% of primary school. During the survey, it was found that most of respondent's occupation was in government offices at 47.25%, followed by business man/woman at 16.50%. 10.0% of total are employees of private company, while 8.5% are freelance, and 7.5% are student as same as 7.5% for labor jobs.1.75 % of respondent occupation is health and beauty and 1% of Homemaker.

For monthly income, most income per month ranges of 5,001-10,000 baht for 28.50%, minority group for income ranges from 10,001-15,000 baht for 23.25% then 14.25% of 15,001-20,000 baht. The income range between 20,001-30,000 baht is 13.75%, less than 5,000 baht for 8.25%. For the range of 50,001-100,000 baht is 0.75% and > 100,000 baht is 2.0%. Most of the respondents were born in Ranong province at 69.50%, followed be those who were born in the south of Thailand at 16.75%, Bangkok 6.5%, the north of Thailand 5.5%, the north-east 0.75%, the east 0.75% and the middle and west 0.25%.

According to the Part 2 of the questionnaire, the mean value standard deviation, were descripted statistical methods applied to interpret the data regarding to above topic toward Part 2 of the questionnaire. This is in regards to the respondents' opinion in relations of Ban Phon Rang hot spring motivations and benefits of hot spring tourism and tourism resources audit in area of Mueang district includes natural resources, cultural resources, events and activities resources by using the rating scale questions. However, the mean range and definitions of each range were also applied to interpret the mean value of the data which is displayed as follows:

Interpretation of mean value	Mean range Definition
1.00-1.80	Least
1.81-2.60	Less
2.61-3.40	Moderate
3.41-4.20	Effective
4.21-5.00	Most Effective

Table 13 Mean value, standard deviation of tourist factors in relations to visit

Ban Phon Rang hot spring

No.	Factors to visit BPR Destination	$\bar{\mathbf{x}}$	SD	Meaning
1	Health & Wellness Promotional	4.21	0.79	Most effective
2	Health Curative, skin	3.50	1.18	Effective
3	Relaxation from work load	4.21	0.85	Most effective
4	Waterfall Trekking Trail	2.81	1.11	Moderate
5	Geological Tourism Study	3.21	1.12	Moderate
6	Seminar, Incentive Program	2.71	1.19	Moderate
7	Stopover, Secondary destination point	2.79	1.20	Moderate
8	Business Affair in closed area	2.49	1.33	Less
	Total	3.24	1.28	Moderate

From Table 13, the researcher found from the sample group's opinions that all motive factors of Ban Phon Rang hot springs was evaluated moderate or average as the mean value was equal to 3.24 and S.D. was equal to 1.28. The key factor for health and wellness promotion and the factors to rest & relax from hard work, both factors are the most effective and average of opinions which were equal to 4.21 and S.D. were equal to 0.794 and 0.856 respectively. The factor of medical purpose condition such as dermatitis was viewed effective which the mean value was equal to 3.50. For the factor of hot spring geological travel and study was viewed moderately with a mean value equal to 3.21. In addition, other factors such as travel waterfall trails, stopover as secondary point before going the main destination and seminar meeting program factors were also viewed moderately with mean value was equal 2.81, 2.79, 2.71 value mean respectively to data. However, factors to do business was presented at a less meaning. The average mean value of feedback was equal to 2.49 and S.D. was equal to 1.33.

Table 14 Mean value, standard deviation of beneficial of hot spring tourism

No.	Beneficial	$\bar{\mathbf{X}}$	SD	Meaning
1	Beneficial mineral contents contribute for medical purposes	4.23	0.80	Most effective
2	Soaking in mineral hot spring as water therapy for healing power by the heat and mineral content for health improvement	4.51	0.69	Most effective
3	Soaking in hot spring with surrounding of Natural scene to promote wellbeing	4.27	0.78	Most effective
4	Sustainable Development of Hot spring tourism to promote forest conservation	4.20	0.79	Effective
	Total	4.30	0.78	Most effective

Table 14 presents the benefits of Ban Phon Rang hot spring tourism opinions, overall respondents viewed most effective in average toward overall benefits from Ban Phon Rang hot spring tourism as the mean value was equal to 4.30 and S.D. equal to 0.78. In the meantime, all items of benefits description were view at most effective by overall respondents in average as follows:

The benefit contribution from mineral content to medical purposes, the mean value was equal to 4.23. The maximum mean average of Healing Therapy Power benefit from soaking in thermal hot spring to improve health was equal to 4.51. Other most effective values for both benefits of Soaking in Natural Scene to promote wellbeing of health and the Sustainable Tourism development of Ban Phon Rang hot spring will promote the forest conservative were responded equal to 4.27 and 4.20 respectively.

Table 15 Mean value, standard deviation of natural resources tourism attractions

No.	Natural Resources	$\bar{\mathbf{x}}$	SD	Meaning
1	BPR Hot Spring & Mineral hot spring Significant	4.28	0.75	Most effective
2	BPR Hot Spring in Natural Setting and Scene	4.31	0.74	Most effective
3	Ngao Waterfall Bio-diversity	4.22	0.75	Most effective
4	Ngao National Park with evergreen forest, limestone cliff over mountainous area phenomena	4.11	0.81	Effective
5	Fauna, Flora attractions in Area of Namtok Ngao National Park	4.14	0.88	Effective
6	Grass Hill & Bald Hill (Phu Khao Ya)	4.09	0.81	Effective
7	Ranong Canyon	3.99	0.87	Effective
	Total	4.16	0.81	Effective

Table 15 presents the result that was analyzed in regards to the natural tourism attractions in study where was in the Mueang district of Ranong. The result showed effective average meaning to over all natural yourism resources attractions at equal to 4.16 with S.D. equal to 0.81. The most effective natural resources for tourism attraction was Ban Phon Rang hot spring in natural scene setting. The average mean was equal to 4.31 and follow by the natural resource of Ban Phon Rang hot spring and its mineral water is significant, the average mean which was equal to 4.28. The 3<sup>rd</sup> most effective view of opinion was the natural resource attraction of the Bio-diversity of Namtok Ngao Water fall the average mean was equal to 4.22. For Ngao National

Park Fauna, Flora Natural Resource Attraction was viewed effectively and the value mean was 4.14. The average mean of Ngao limestone water fall cliff was also effective with value mean equal to 4.11 and 4.09 for Grass Hill or Phu Khao Ya Natural Resource Attractions. More effective resource where was Ranong Canyon was viewed as the value equal to 3.99.

Table 16 Mean value, standard seviation toward cultural resources for tourism attraction

No.	Cultural Resource Attractions	$\bar{\mathbf{x}}$	SD	Meaning
1	Ngao Cultural Village (Moo Ban Ngao)	3.95	0.87	Effective
2	Temples: Wat Suwan Khiri, Wat Had Som Pane, Wat Pa Chai Mongkol	3.88	0.80	Effective
3	Ranong Governor Place since 1877	4.16	0.81	Effective
	(Juan Jao Mueang Ranong)			
4	Rattanarangsan Palace	4.22	0.85	Most effective
5	Nine Well known Clergies s' Hall	4.07	0.83	Effective
	(Hoh Phra Koa Ke Ji)			
	Total	4.06	0.84	Effective

According to table 16 with the opinions of Cultural Resources Tourism Attractions in Mueang District, of Ranong was effectively ranged overall sources with the average mean value of 4.06 and 0.84 S.D. value. The Rattanarangsan Palace was viewed as the most effective cultural resource attraction with the value mean 4.22. Another effective cultural resources attractions was the Ranong Governor Place with value mean of 4.16 and then the nine Clergies Hall with effective average value mean was equal to 4.07. For Ngao Cultural Village the mean value was equal to 3.95 and 3.88 average mean to cultural resources attraction of temples; Temples: Wat Suwan Khiri, Wat Had Som Pane, Wat Pa Chai Mongkol.

Table 17 Mean value, standard deviation of events tourism resources

No.	Events, Festival Resource Attractions	$\bar{\mathbf{x}}$	SD	Meaning
1	Holy Mineral Water Songkran Festival	4.05	0.80	Effective
2	Andaman Ranong Festival	4.13	0.78	Effective
	Total	4.09	.079	Effective

Events Tourism Resources Attractions in area of Mueang district were viewed average effective with value mean equal to 4.09 and 0.79 S.D. value. The result of sample group presented that Andaman Ranong Tourism festival is an effective festival for Ranong with the value mean at 4.13. According to the Holy Mineral Water Songkran Festival was viewed as effective event resource attraction to with the value mean equal at 4.05.

Table 18 Mean value, standard deviation analysis of activity resource tourism attractions

No.	Tourism Activities	$\bar{\mathbf{x}}$	SD	Meaning
1	Soaking in Natural Mineral Hot Spring of BPR	4.14	0.88	Effective
2	Namtok Ngao waterfall trail trekking	3.83	1.06	Effective
3	Ecotourism, Had Sai Dum Village	3.74	1.04	Effective
4	Agro-Health Tourism, Be Tao Lai farm, Ban Phon Rang Village	3.70	1.04	Effective
5	Wellness Jogging at Ban Phon Rang Public Park	3.87	0.99	Effective
	Total	3.85	1.01	Effective

From table 18, the result was analyzed in relation to Tourism Activity Resources in study community area. In general of respondent opinion for the Tourism Activity Resources were effective with the average mean value equal to 3.85 and S.D. was equal to 1.01. The effective average means value of soaking in natural mineral hot spring tourism activity was equal to 4.14 and 3.87 for the wellness jogging at Ban Phon Rang Public Park. For the Namtok Ngao waterfall trail trekking, the mean value was 2.83 while the average value mean of ecotourism at Ban Sai Dam activity was equal to 3.74 and the agro health tourism Be Tao Lai Farm activity was equal to 3.70 respectively.

In part 3, the SWOT analysis and matrix to the development of Ban Phon Rang hot spring to become an international health and wellness hot spring destination were applied to questionnaire conditions and the results from respondents are presented in table 19 to table 23. This part of the questionnaire was provided for SWOT analysis hence all strength, weakness, opportunity and threat of Ban Phon Rang hot spring destination were gathered from internal and external factors in relations of the destination.

Table 19 Mean, standard deviation analysis of strength contribute for Ban Phon Rang hot spring development to become an international health and wellness, hot spring destination

No.	Strength contribution of BPR hot spring	$\bar{\mathbf{x}}$	SD	Meaning
1	The good quality of hot spring water with Mineral content for Health & Wellness purposes	4.29	0.75	Most effective
2	The location of BPR in Natural Environment	4.16	0.74	Effective
3	Good accessibility to link with other tourist attractions	3.87	0.81	Effective
4	Cultural Tourism Resources of surrounding communities	3.76	0.91	Effective
5	Several tourism activities available	3.67	0.93	Effective
6	Moderate Accommodations Standard	3.64	0.89	Effective
7	Health & Wellness center is set up within Ranong town	3.67	0.94	Effective
8	Tourist Safe and Security Procedure	3.57	1.03	Effective
	Total	3.83	0.91	Effective

According to table 19, the overall result presented an average effective value mean was equal to 3.83 and S.D. was equal to 0.91. The good quality of mineral hot spring was the most effective strength with the value mean was equal to 4.29 then followed by the effective strength of Ban Phon Rang hot spring located in a Natural Environment with the mean value was 4.16. Other strengths were viewed effective toward Ban Phon Rang hot spring destination as following mean value results orderly: the strength for good accessibility mean value was equal to 3.87, the strength of cultural tourism resources in surrounding community was equal to 3.76 while the strength mean value toward several tourism activities and health and wellness center available in Ranong town were the same and equal to 3.67. The moderate accommodation mean value was equal to 3.64 and the tourist safe and security was equal to 3.57.

Table 20 Mean value, standard deviation of the weakness toward Ban Phon Rang hot spring destination

No.	Weakness of BPR Hot Spring Development to	$\bar{\mathbf{x}}$	SD	Meaning
1	Lack of health and wellness tourism management standard	3.66	0.95	Effective
2	Lack of continuous integration development plan	3.62	1.03	Effective
3	No advertisement in regards of Hot Spring Water beneficial to health	3.72	1.06	Effective
4	Lack of Tourism Destination Management Organizer (DMO) of Hot Spring	3.62	0.95	Effective
5	Limitation sources of financial support and budget	3.67	0.95	Effective
6	Lack of hot spring destination marketing plan	3.69	1.05	Effective
7	Seasonality problem: rainy season for eight months	3.43	1.11	Effective
8	Limitation of the National Park Act 2504 (1961)	3.49	1.01	Effective
	Total	3.61	1.02	Effective

Overall weakness toward Ban Phon Rang hot spring destination was viewed effectively with the average mean value was equal to 3.61 and S.D. equal to 1.02.

The results were presented in effective mean value as the lack of advertisement in regards of mineral hot spring water benefit at 3.72 and the lack of Destination Marketing Plan which the mean value was equal to 3.69. The lack of financial support was viewed as effective weakness with the mean value was equal to 3.67 while the mean value for the lack of health and wellness management standard was equal to 3.66. For the lack of continuous and integrated development planning, the mean value was equal to 3.62 same as the result from lack of Tourism Destination Management organizer. The limitation of the National Pack Act was viewed effective at the mean value was equal to 3.49 while the mean value of seasonality problem: rainy season was equal to 3.43.

Table 21 Mean value, standard deviation analysis toward opportunity to develop BPR hot spring to become an international health and wellness destination

No.	The Development Opportunity of BAP Hot Spring	$\bar{\mathbf{x}}$	SD	Meaning
1	World trends of health and wellness tourism	4.14	0.81	Effective
2	Public Health enhancing Strategy by Health Ministry	4.05	0.80	Effective
3	Sustainable Tourism Strategy enhancing by the Ministry of Natural Resources and Environment	4.10	0.81	Effective
4	Potential Ranong Branding to be int'l Mineral Hot Spring City for health and wellness	4.04	0.92	Effective
5	Potentiality of a city of hot springs for MICE Tourism	3.87	1.05	Effective
6	Int'l sea link gateway to visit neighboring countries such as Burma, Malaysia & Singapore	3.80	0.99	Effective
7	Raising Fund & Investment Opportunity in local and National Sources	3.59	1.02	Effective
8	Raising Fund & Investment Opportunity from	3.45	1.08	Effective
	Oversea Source			
9	Enhancing to be int'l World Class Rehabilitation & Rejuvenate Health & Wellness Center for High End market such as Chiva Som	3.69	1.01	Effective
	Total	3.86	0.97	Effective

An effective average view toward overall opportunities to develop Ban Phon Rang hot spring to become an international health and wellness tourism destination with the average mean value was 3.86 And S.D. was equal to 0.97. The mean values were presented as follows; the world trend of health and wellness mean value was equal to 4.14. The Sustainable Tourism Strategy together with the Ministry of Natural Resource and Environment and the Ministry of Sport and Tourism had the mean value equal to 4.10. The followed effective mean value of the opportunity was the Public health and wellness strategic launched by the Ministry of Public Health which equal at 4.04. The mean value of opportunity to promote Ranong branding as an international mineral hot spring city for health and wellness was equal to 4.04 while the mean value of Ranong potentiality of MICE tourism opportunity was equal to 3.87. The opinion toward the opportunity of international sea link gateway to visit neighboring countries was effective with the mean value of 3.80. The opportunity of enhancing Ban Phon Rang hot spring destination to be an International World Class Rejuvenate health and wellness center for quality market such as a case of Chiva Som Center, the mean value was equal to 3.69 and the opportunity to raise fund and investment from local and National source was 3.59 while the last effective opportunity average mean value to raise fund and investment from overseas sources was 3.45.

Table 22 Mean value, standard deviation analysis toward threats to BPR development

No.	The Threat of Tourism Development	$\bar{\mathbf{x}}$	SD	Meaning
1	Other Hot springs locations within Ranong province	3.57	1.01	Effective
2	Hot Spring Destinations in other provinces such as Trang, Krabi and Surat Thani province	3.82	0.88	Effective
3	Political chaos in Thailand and worldwide	3.60	0.86	Effective
4	World Economic Recession Crisis	3.65	0.93	Effective
5	Health hazard and epidemic: bird flu, H1N1	3.39	0.97	Moderate
6	Negative attitude toward tourism development Environment impacts	3.25	1.04	Moderate
7	Disingenuous attitude toward Spa and Massage	3.17	1.09	Moderate
8	Burmese migrant workers and prostitute problem	3.49	1.14	Effective
	Total	3.49	1.01	Effective

According to the result from table number 22 in regards of overall threats of the development to Ban Phon Rang hot spring to become an international health and wellness destination were viewed as effective meaning, the average mean value of effective meaning was equal to 3.49 and S.D. was equal to 1.01.

The result from the sample group was analyzed in an orderly manner as follows mean value: The efficiency of hot spring destinations in other nearby province such as Krabi, Surat Thani and Trang was viewed as an effective threat with the mean value as equal to 3.82 second, threat with average mean value equal to 3.65 was due to economic recession and crisis worldwide following by the political chaos threat which the mean value average was equal to 3.60. Also within Ranong itself, other hot springs destination in Mueang district was view as others effective threat to Ban Phon Rang hot spring development with the mean value equal to 3.57. Problem against Burmese migrant workers and prostitution were viewed as effective threats for tourism development with the mean value at 3.49 while the mean value of health hazard and epidemic: bird flu, H1N1 etc. was equal to 3.39. The respondents opinions toward the tourism impact of environment was average effective with a mean value equal to 3.25. The development threat was equal to 3.17 for disingenuous attitude toward spa and Massage services.

At the end of Part 3, SWOT Matrix tool was developed from SWOT analysis relatively from the internal and external factors of the environment to generate or identify strategic options by taking best advantage of the opportunities, minimize impact from weakness and preventive measures against threats. Each combination of internal and external environmental factors, consider for Strengths and Opportunities (SO), Strengths and Threats (ST), Weaknesses and Opportunities (WO) and Weaknesses and Threats (WT). The analysis had been put in questionnaire for sample group to respond and the result was presented in table 23.

Table 23 Mean value and standard deviation analyzed toward SWOT matrix

No.	<b>SWOT Matrix Approach Strategy</b>	$\bar{\mathbf{x}}$	SD	Meaning
1	Approach for H&W Tourism Strategic Marketing Plan	3.95	0.93	Effective
2	The Destination Management Organizer of BPR Hot Spring is set up	3.87	0.88	Effective
3	BPR Mineral Hot Spring Water Int'l Assessment Program	4.05	0.90	Effective
4 .	Professional H&W Tourism Marketing Board is set up	3.87	0.97	Effective
5	BPR Hot Spring Tourism Contact Center is organized in area	4.05	0.85	Effective
6	IT – Ecommerce Direct Marketing Channel Distribution	4.04	0.99	Effective
7	Tourism Products Development and Integration Packages of H&W to other form of tourism	4.09	0.89	Effective
8	Advocacy Advertising Production to promote Mineral Hot Spring water in term of Alternative Medical	3.99	0.86	Effective
	Total	3.99	0.91	Effective

The result of SWOT Matrix in table 23 shows an overall Matrix of strategic options that were effective with an average mean value equal to 3.99 and S.D. was equal to 0.91. The sample group opinion presented that the strategy of Tourism Products package development plus the Integration plan of health and wellness with other forms of tourisms was found to be effective strategic option to the development of Ban Phon Rang hot Spring destination with the mean value of 4.09. The international standard assessment program of mineral hot spring water quality procedure and hot spring tourism contact center organization at Ban Phon Rang hot spring were identified as an effective option with the mean value of 4.05 for both. An effective mean value of IT – E-commerce Direct Marketing distribution chanel approaching worldwide traveller was equal to 4.04 while effective mean value to the approaching of Academic advertising production to promote mineral hot spring water in term of alternative medical was equal to 3.99. The effective mean value were orderly distributed to the approach for health and wellness tourism strategic marketing

plan was 3.95 then both other approaches for the Destination Management Organizaion (DMO) of BPR hot spring and the professional of health and wellness tourism marketing board were viewed effective with the same meaning value of 3.87.

The details in Part 4 of this questionnaire were developed by all relevant information from primary source such as recommendations from focus group, in depth interview, researcher observation while secondary data is from literatures review such as Ranong Strategic Planning, Tourism strategy and health and wellness tourism development vision.

Table 24.. Mean value, standard deviation analysis of recommendation toward vision, policy of sustainable health and wellness tourism development

No.	<b>Tourism Development Visions and Policy</b>	$\bar{\mathbf{x}}$	SD	Meaning
1	Ranong to become an int'l health and wellness tourism destination with natural mineral hot springs dominant	4.11	0.74	Effective
2	Ranong to become a moderate MICE Tourism Destination Center with int'l standard	3.89	0.86	Effective
3	Economic attributions to Ranong local communities and BRP community members	3.89	0.87	Effective
4	Ranong with sustainable tourism development to raise	4.04	0.94	Effective
	Community awareness, destination owners' sense of local environment, socio cultural aspects.			
5	The development of health and wellness hot spring tourism to be based on BPR local community resources and sustainability integration	3.92	0.87	Effective
	Total	3.97	0.86	Effective

From the result gathered, the sample group opinion towards the visions, policy of sustainable health and wellness tourism development of BPR hot spring recommendations were analyzed with overall effective mean value to be further developed as a strategic and holistic practical process as a development planning tool of tourism destination development in the future.

According to table 24, the sample group's opinion toward part of questionnaire was viewed to overall effective with the mean value of 3.97 and S.D equal to 0.86. For the recommendations of Ranong vision to become an international

health and wellness tourism destination with natural mineral hot springs have an effective mean value of 4.11, and the 2<sup>nd</sup> effective recommendation from sample group opinion was the vision of Ranong with sustainable tourism development to raise community awareness, destination owners' sense of empowerment to local environment, socio cultural aspects with an average mean value of 4.04. The 3<sup>rd</sup> effective recommendation was the development of health and wellness hot spring tourism based on BPR local community resources and sustainability integration strategy and the mean value was equal to 3.92. Other effective recommendations were contributed to both visions of Ranong to become a moderate MICE tourism destination Center with international standard and Economic attributions to Ranong's local communities and BRP community members which a mean value of 3.89 respectively.

Table 25 Mean value, standard deviation analysis of recommendation for sustainable health and wellness tourism development toward environment aspect

No.	<b>Environmental Aspect</b>	$\bar{\mathbf{x}}$	SD	Meaning
1	Planning tactics of BPR hot Spring	4.06	0.74	Effective
	land use management			
2	Regulatory tactics of BPR hot spring waste & pollution management 3 R tools: Reused, Recycle and Reduce	3.95	1.02	Effective
3	Planning & regulatory tactics of waste water management of BPR hot spring	4.04	0.93	Effective
4	Procedure Policy tactics of BPR Hot Spring biological diversity conservation	3.96	0.83	Effective
5	Zoning Policy Tactics in area of Nam Tok Ngao National Park to support BPR	4.02	0.83	Effective
	Hot Spring Tourism			
	Total	4.00	0.88	Effective

In regards to opinion toward the environment aspects of sustainable health and wellness tourism development of Ban Phon Rang hot spring, the opinion average was contributed as effective with a mean value of 4.00 and 0.88 of S. D.

The Planning tactics of BPR hot Spring land by the use of management was effective with a mean value equal to 4.06, while the planning and regulatory tactics of waste water management of BPR hot spring was effective with a mean value equal to 4.04 respectively. The Zoning Policy tactics in area of Nam Tok Ngao National Park to support BPR hot Spring tourism was also contributed as effective mean value which was equal to 4.02 following by the policy procedure of BPR hot spring biological diversity conservation tactics which was effective with 3.96 mean value and the last mean value is 3.95 for the regulation tactics of BPR hot spring waste and pollution management such as 3 R tools: reused, recycle and reduce.

Table 26 Mean value, standard deviation analysis of recommendations for sustainable health and wellness tourism development of BPR hot spring toward economic aspects

No.	<b>Economic Aspects</b>	$\bar{\mathbf{x}}$	SD	Meaning
1	Strategies for Ranong Branding of Natural Mineral Hot Springs City	4.14	0.92	Effective
2	Strategies of Ranong is the world destination of health and wellness tourism	4.15	0.87	Effective
3	Strategies of Ranong is an international moderate destination for MICE tourism	3.83	0.86	Effective
4	Land & sea link logistic planning tactics to make Ranong as a travel hub destination	3.74	0.96	Effective
5	Communities benefits sharing tactics of BPR tourism development in term of economic aspect to local community	3.98	0.82	Effective
6	Project investment of World Class Rehabilitation & Rejuvenate Center in Ranong such as Chiva Sorm	3.85	0.90	Effective
7	Standard Enhancing tactics of Ranong tourist accommodations	4.02	0.86	Effective
8	Products development project as health and beauty of BPR mineral water branding	4.02	0.87	Effective
9	HRD Training Project in relation of Health and Services Hospitality	4.06	0.92	Effective
10	Public Tourism Development Funding from local and domestic	3.79	0.96	Effective
11	Tourism Development Project Joint Venture	3.64	1.09	Effective

Table 26 (Cont.)

No.	<b>Economic Aspects</b>	$\bar{\mathbf{x}}$	SD	Meaning
12	Small & Medium Enterprises in relevant of Tourism business development support	3.88	0.96	Effective
	Total	3.93	0.93	Effective

In regards to table 26 which related to the economic aspect of the sample group to sustainable health and wellness tourism development of Ban Phon Rang hot spring recommendations, overall opinion was effective with a mean value at 3.93 and S.D., value equal to 0.93.

The 1<sup>st</sup> effective mean value of the strategy of Ranong to become a world destination of health and wellness tourism was equal to 4.15 while the 2<sup>nd</sup> effective mean value of the strategy for Ranong branding of natural mineral hot springs city was equal to 4.14 respectively. For the 3<sup>rd</sup> effective mean value contribution of HRD training project in relation to health and services hospitality was equal to 4.06. The mean value of 4.02 was for the Products development project of Health and Beauty from BPR mineral water source same as the effective tactic to enhance Tourist Accommodations in Ranong to meet with Standardized. In term of the communities' benefits sharing tactics of BPR Tourism development to local community, the mean value was equal to 3.98 follow by a strategies to support Small and Medium Enterprises (SME) relevance to the Tourism Business Industry which was equal to 3.88 which is also found to be effective. The Project Investment of World Class Rehabilitation and Rejuvenate Center in Ranong such as Chiva Sorm was effectively viewed with the mean value of 3.85 while the strategies of Ranong to be the standard international destination for MICE Tourism was equal to 3.83 only. For effective Public Tourism Development Funding from local and domestic, the mean value was equal to 3.79. The strategies of Land & Sea link logistic planning development tactics to make Ranong as a travel hub destination was viewed as effective as the mean value was equal to 3.74 and only 3.64 mean value was contributed for Tourism Development Project Joint Venture with Oversea investor.

Table 27 Mean value, standard deviation analysis of recommendations for sustainable tourism development toward socio & cultural aspects

No.	Socio & Cultural Aspects	$\bar{\mathbf{x}}$	SD	Meaning
1	Planning Strategies: An Integration of Sustainable Tourism Development in Ranong Province	4.11	0.89	Effective
2	Planning tactics to renovate Cultural & Historical Tourism Attraction in Ranong Province	4.13	0.85	Effective
3	Planning tactics to implement local wisdom of Alternative Thai Medicine such as compress	4.10	0.91	Effective
	herbal ball and Thai massage			
4	Tactic to implement local communities in cultural wisdom of career such as local fishery village	3.85	0.85	Effective
5	Participatory tactics enhancing sense of owner from community members	4.04	0.90	Effective
	Total	4.05	0.89	Effective

According to table 27 for the result of sample group's opinion toward Socio aspect to sustainable tourism development of Ban Phon Rang hot spring recommendation was found to be effective with the average value of 4.05 mean value and 0.89 for S.D. The highest mean value was the effective planning tactics to renovate cultural and historical tourism attractions in Ranong province. The value was equal to 4.13, following with the Strategies to develop and integrate the sustainable tourism planning for the Uniqueness of Tourism in Ranong, the effective mean value was equal to 4.11. In regards of the strategy to implement local wisdom of Alternative Thai Medicine such as compress herbal ball and Thai massage was also effective to the sustainable development, with the mean value equal to 4.10. For the Participatory tactics enhancing sense of owner for community member, was effective it has a mean value of 4.04 while the tactic to implement local communities in cultural wisdom careers for example a local fishery village, the mean value was equal to 3.85.

Table 28 Mean value, Standard Deviation of Community Participation
Recommendations for Sustainable Tourism Development of Ban Phon
Rang Hot Spring

No.	Community Participatory	$\bar{\mathbf{x}}$	SD	Meaning
1	To build a group of local community member to support in health and wellness tourism development which based on environment and social aspects	4.06	0.88	Effective
2	To build a network group from all relevant stakeholders of BPR tourism development	3.97	0.91	Effective
3	PAR tactics to be implemented with surrounding local communities nearby the BPR destination in order to have integration of tourism development	3.92	0.97	Effective
4	Practical training in Hot Spring Tourism Management skills to all stakeholders	3.87	0.92	Effective
5	Local young generation guild training for BPR Hot Spring Tourism	3.96	0.98	Effective
6	Enhancing Homestay Tourism Management standardized	3.93	0.97	Effective
7	Support of local community products such as local food, handmade in order to make more family income and career for women	4.01	0.89	Effective
8	Promotional of local community cultural and traditional in special events and campaigned: folk art performance	3.87	1.00	Effective
9	Tactics to raise up moral awareness in overall life and asset security	4.15	0.91	Effective
	Total	3.97	0.94	Effective

The sample group's opinion was contributed to the effective meaning to overall community participatory recommendations in relations to sustainable health and wellness tourism development of Ban Phon Rang hot spring in Ranong province Thailand with a mean value average equal to 3.97 and S.D was equal to 0.94. The 1<sup>st</sup> effective tactics to raise moral awareness in life and asset security with the mean value was equal to 4.15 then the 2<sup>nd</sup> effective tactic was to build a group of local community member to support and have more empowerment on health and wellness Tourism Development with local environment and socio community based by the mean value of 4.06. Other effective tactics such as to support local community products, local

food, handmade in order to make more family income and career for women had a value equal to 4.06 and 3.97 for setting up a network group from all relevant stakeholders of BPR tourism development tactic. For the local young generation guild training for BPR hot spring tourism project recommendation, the mean value was equal to 3.96. Homestay management standardized enhancing strategy was viewed with effective mean value of 3.93 and 3.92. This means that PAR tactics that will be applied and used with the surrounding local communities nearby the BPR destination in order to have integration of tourism development. The mean value for both practical training in health and wellness hot spring tourism management skills for stakeholders and the promotional support to enhance community cultural and traditional in special events and campaigned such as folk art, local performance were equal to 3.87

## Open-ended question

Part 5 of survey questionnaire is an open-ended question, about suggestion, recommendation toward the development of health and wellness Tourism at Ban Phon Rang hot apring as a tourist destination. The purpose of this question is to have the respondents their opinions freely and to make suggestions regarding tourism development.

In order to address the research framework, all of the answers from the openended question were identified into the term of sustainable aspect, plan and policy and product developments as follows:

To minimized overall impacts occur by the increasing number of tourist

To approach for public advocacy of Tourism Development

To approach more awareness of sustainable tourism than mass tourism

To be avoid of waste and pollution management

To maintain the natural setting surrounding Ban Phon Rang hot spring destination

To enhance the health and wellness benefit from mineral hot spring to public especially local people in Ranong

To provide more advertising of hot spring tourism in Ranong

No admission fee for local people to visit Ban Phon Rang hot spring

Local Government Organizations should be coordinated and work closely to other stakeholder such as private sector and people

To provide more budget for the development

To enhance the standard of Tourism Services and facility in Ranong

To promote health and wellness tourism together with cultural tourism or ecotourism