

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

The objectives of this research were firstly to conduct the community study and tourism resources audit nearby Ban Phon Rang (BPR) hot spring area in Mueang district, Ranong province and to conduct SWOT analysis of BPR hot spring development to become an International health and wellness hot spring destination as well as to propose recommendations of sustainable health and wellness tourism development of BPR hot spring which is a preliminary study to guide tourism developer, its governmental and strategic planners towards appropriately decide on a process of sustainable tourism development planning and tourism management forms in the future.

The study is applied and mixed with both quantitative and qualitative research methods. This research data is concluded by using several research instruments. In this chapter, the research methodology will respond to the objectives above. The guidelines of the research study have been set out to review on relevant literatures, observation and survey data in the study area. The research data are concluded, proceed and analysis respectively according to the following parts:

1. Population and Samples
2. Research Instruments
3. Data Collection Technique
4. Data Analysis

#### **Population and Samples**

##### **Hot Spring Sample Site**

There are many pilot hot springs in Ranong to be promoted as the health destination in Ranong province development plan. Ban Phon Rang, hot spring had been chosen to be the area of study. According to health and wellness tourism environment and components as the hot spring tourism destination with its potential environment geography of tourism resources locates in the area of Namtok Ngao National park and its mineral water qualification and benefit. Ban Phon Rang hot spring was managed by the office of Namtok Ngao National Park

**Community Study**

Bang Rin and Ngao Sub district were selected to be community study areas according to its' location and boundary next to Ban Phon Rang hot spring site hence, those communities must be more empowered on tourism development.

**Population and Sample**

The target population of this study was the Ranong people in Mueang district and the visitors who visit Ban Phon Rang hot spring site which counted as tourism stakeholder in relation of sustainable tourism development and identified into 4 major groups, using purposive sampling total 400 person which consisting of:

- 1. Public organizations in Mueang district
- 2. Private and business enterprise such as hotels, resort, spa, restaurant and shop owner
- 3. Local people who live in Mueang District where applicable with health and wellness, hot spring tourism components.
- 4. Convenience sampling of BPR hot spring visitors.

The total number of population of this study was 91,004 persons (Ranong Development Plan, 2010-2012). Therefore, the researcher calculated the sample size by using Taro Yamane's formula, a simplified formula for proportions. The formula is as follows:

$$n = \frac{N}{1+Ne^2}$$

When      n = Sample size  
              N = Population size  
              e = the error of sampling

This studied allowed the error of sampling on 0.05, the sample size shows as follows:

$$n = \frac{91,004}{1+ [91,004* (0.05)^2]} = 398.25 \approx 400$$

Therefore, a sample of 400 tourists will give a sampling error of 0.05

## Research Instruments

This study is applied for both qualitative and quantitative research. The data sources are reveal according to Research Conceptual Framework, the research instruments have been developed from relevant sources then implemented by professional with follow detail:

**1. Qualitative Research Instruments** such as Tourism Resource Audit Checklist of Mueang Ranong District and Community Study Checklists for both Bang Rin and Ngao communities have been used within target resources for qualitative data.

1.1 According to the Tourism Development Handbook (Godfrey and Clarke, 2000), the Tourism Resources Audit checklist has been developed and formed into following topics;

1.1.1 Inventory of Natural Resources include of flora, fauna, landscape and water.

1.1.2 Inventory of Cultural Resources include of religious, heritage.

1.1.3 Inventory of Events Resources include of festival, tournament.

1.1.4 Inventory of Activity Resources where attract tourist to pay to use but not the main reason to visit the destination.

1.1.5 Inventory of Services Resources include of accommodations, catering and entertainment.

1.2 Checklist of Community Study a carefully explore for the community-based data with reflection diversity in any communities information and resource, the check list topics are:

1.2.1 Physical Information include of location, accessibility and connectivity of community to others.

1.2.2 Geographical Information include of topography, landscapes, climate, natural resources, current land used.

1.2.3 Social Information include history of community, number of population, form of housing, cultural, belief, religious, health and education, local economic, land used management.

1.2.4 Local Administration to reflect internal and external authority of community.

1.2.5 Local Groups of community member can be host by careers, behavior or interesting.

1.3 Focus Group Discussion Topics are related to current situation of health and wellness tourism in Ranong, sharing information of current situation of Ban Phon Rang hot spring, discussing for problems and ending with solutions proposing.

1.4 In depth interview questions and guideline are designed to use with Ranong Tourism Developer and Ban Phon Rang hot spring administrative Officer in a different purpose.

1.4.1 Ranong Tourism Developer was asked with the topics as same as focus group discussion topics, Mr. Panlop Prajong.

1.4.2 Ban Phon Rang hot spring Administrative Officer was asked for overall information management of Ban Phon Rang hot spring include of mineral water resource, tourism management, environment management, Mr. Banpot Thongsingyoo

**2. Quantitative Research Instrument** have been applied with a set of questionnaire used with the population sampling 400 persons and divided into 5 sessions in order to cover to study objectives.

2.1 General information of respondent, this is the first part of the questionnaire. It is about the general information or demographic factors of the respondents such as gender, age, nationality, marital status, education, occupation and monthly income, the frequency of traveling and transportations. The part of questionnaire comprised 11 check-list questions.

2.2 Motivations and benefits of Ban Phon Rang hot spring tourism resources audit of Mueang district, the second parts of questionnaire is leaded responder into Ban Phon Rang hot spring destination and tourism resources audit in area of Mueang District which included of Natural resources, Cultural resources, Events and Activities resources using the form of Rating Scale questions with 5 levels of answer towards opinions; Maximum (5), Fairly (4), Neutral (3), Somewhat (2) and Minimum (1).

2.3 SWOT analysis of Ban Phon Rang hot spring development to become an international health and wellness hot spring destination and recommendation from SWOT analysis, the third part of this questionnaire is provided for SWOT analysis hence all strength, weakness, opportunity and threat of Ban Phon Rang hot spring destination are gathering from internal and external factors in relations of the destination. Then follow with the SWOT matrix recommendations. The questions with 5 Rating Scale answers are used in this part to reflect the opinion of responders. The details are Maximum (5), Fairly (4), Neutral (3), somewhat (2) and Minimum (1).

2.4 Recommendations for sustainable health and wellness tourism development of Ban Phon Rang hot spring towards tourism vision and policy, strategy and tactics, the details in the 4<sup>th</sup> part of this questionnaire are developed by all relevant information from primary sources 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. The term of questionnaires are divided into 4 session of tourism development policy, environment, economic, socio and community participatory aspects. The answer form of these set of question is divided into rating scale form again to gather people opinion toward the tourism development planning, as follows, (5) = Maximum, (4) = Fairly, (3) = Neutral, (2) = Somewhat and (1) = Minimum.

2.5 Opened End Question for other recommendations. The last section of the questionnaire is opened for recommendation and specific opinion in relation of health and wellness tourism development of Ban Phon Rang hot spring.

In order to measure the data dissemination, the mean score and interval number are shown as follows:

$$\begin{aligned} \text{The width of interval} &= \frac{\text{Highest score} - \text{Lowest score}}{\text{The amount of level}} \\ &= \frac{5-1}{5} \\ &= 0.8 \end{aligned}$$

From the above formula, it is possible to divide the average score into five Levels of opinions, as follows:

Average score between 1.00 – 1.80 is the least, minimum attitude toward opinion.

Average score between 1.81 – 2.60 is the less, somewhat attitude toward opinion.

Average score between 2.61 – 3.40 is the moderate attitude toward opinion.

Average score between 3.41 – 4.20 is the effective attitude toward opinion.

Average score between 4.21 – 5.00 is the most effective attitude toward opinion.

### **Content Validity and Reliability**

In an effort to have the content validity of the questionnaire, the reviews of literature in a field of sustainable tourism development, health and wellness hot spring destinations cases study, were conducted together with 1<sup>st</sup> time destination survey, inspection in order to prepare and set up for the focus group discussion in same period. After that all result had been concluded for the 1<sup>st</sup> phase. The 1<sup>st</sup> phase includes gathering and determining the questionnaire instrument based on the data from inventory checklist and focus group discussion. The content which is cited from the literature review was selected to narrow down the list of attributes. Then, the questionnaire was edited by three experts who worked in the field of academic hospitality and tourism, to help verify the instrument to ensure the content and face validity of the questionnaire. A total of 40 sets of questionnaires were tried out. Ten sets were distributed to each tourism stakeholder groups at Ranong province during the 2<sup>nd</sup> trip. According to Cronbach's alpha value indicates that the reliability of the questionnaire used was equal to 0.796, which is over 0.6. So, the questionnaire used was in the satisfactory level of reliability to analyze the data then used with target respondents.

### **Data Sources, Data Collection and Technique**

Primary Data, at the 1<sup>st</sup> place, the researcher plan and search for Tourism Development stakeholder representative for Focus Group Discussion technique, all the names were listed and appointment was made by telephone call. After the listing have been confirmed and accepted, the official letters are issued by Naresuan University in order to confirm the meeting date and venue in advance. The focus group discussion took place in Ranong province in January 13, 2011 with eight representatives from relevant organizations. The following are the names of the representatives and organization they represent.

1. Mr. Napha Natheethog, Chief of Ranong Provincial Administration Organization.
2. Mr. Pairat Uthaisang, Namtok Ngao National Park
3. Mr. Banpot Thongsingyoo, Ban Phon Rang Administrative Officer, Namtok Ngao National Park
4. Mrs. Tatima Homkeaw, Ranong, Public Hospital
5. Mrs. Unchan Chongcharoen, Suan Sunandha University (Ranong Center)
6. Mr. Sonchai Uitekkeng, Ranong Tourism Business Association
7. Mr. Komen Pethphu, Ranong Independent Education Center
8. Mr. Panlop Prajong, Ranong Provincial Office of Tourism and Sports

Furthermore, one of representatives from Namtok Ngao National Park, Mr. Banpot Thongsingyoo, has been interviewed in regards to health and wellness components at Ban Phon Rang hot spring site. Mr. Panlop Prajong from Ranong Provincial Office of Tourism and Sports and Mr. Komen Pethphu from Ranong Independent Education Department have been organized and set up for in depth interview for Ranong Tourism Situation.

Within 1<sup>st</sup> trip the researcher spend about 14 days in Ranong to do the observation Ban Phon Rang hot pring destination, Tourism Resource Audit inspection in area of Mueang District. Bang Rin and Ngao Sub districts are surveyed according to community study check list. Then the researcher returns to Bangkok to consult and process the questionnaire with the advisor. After finalizing the questionnaire instrument, the researcher revisit Ranong again for 10 days and employed self-

administered questionnaires to distribute. The researcher was able to collect 400 sets of questionnaires in February 2011.

Secondary data, these are collected by reviewing the summary of the Direction of The Eleventh National Development Plan (2010), Ranong Strategic Planning, Ranong Tourism Development Plan, Geological Report of Ranong hot springs, health and wellness tourism, mineral water researches, international case study of Peninsula hot spring, Australia and Guguan hot spring village in Taiwan and other relevant studies of educational institutions, tourism agencies, newspapers, journals, and academic website, statistic websites, traveling websites, electronic papers and brochure etc.

### **Analysis of Data**

After the researcher had collected all the data, it had then been analyzed in order to meet with the research objectives and research instruments as follows:

Tourism Resources Audit Check list, Community Study Check list data are gathering with information for descriptive analysis enhancing all attraction resources and potentiality to respond to the first objective of this research.

In chapter II two cases were reviewed: the studies of Peninsula hot spring, Australia and Guguan village hot spring in Taiwan to be concluded in term of international health and wellness, hot springs destinations, the data to be studied and listed, therefore to study of BPR hot spring environment in health and wellness components and present in chapter IV.

Focus group discussion and in depth interview – The topic discussion framework is used to build questionnaire then gathering all data in order to conduct SWOT analysis in Chapter V in relation of the development strategic of Ban Phon Rang hot spring to become an international health and wellness tourism destination in descriptive analysis style.

In chapter IV, the specific Ban Phon Rang hot spring destination inspection and survey – The data conclusion is produced and reported into descriptive format with specific characteristic of health and wellness hot spring components according to Cooper and Cooper (2009).



The quantitative data which derived from the questionnaires have been draw and coded further complied with the statistic attitude by using SPSS program or Statistical Program for the Social Science by WINDOWS and analyzed by using mean, standard deviation and percentage plus other results mentioned above to be classified and interpreted in descriptive style. A summary of recommendations for the sustainable health and wellness tourism development and SWOT analysis of Ban Phon Rang hot spring will be implored to become an international hot spring destination for health and wellness tourism.