

## **CHAPTER III**

### **METHODOLOGY**

In this study, “An Innovative Model for Cultural Tourism Management : Local Islamic Food in the Andaman Sea Region for Supporting the International Tourists,” mixed methods research was used as the research methodology. This social research project integrated both quantitative and qualitative research (Punch, 2005) in order to clearly answer the research questions. The quantitative research was applied to answer general questions, including the needs of the target group. Results from the study were used as information and guidelines for further qualitative research. The following were the research methodologies incorporated:

1. Research design
2. Population and research sample
3. Research tools
4. Validity and reliability of research tools
5. Data collection
6. Data analysis
7. Statistical techniques
8. Research process

#### **1. Research Design**

This study focuses on an innovative model of cultural tourism management on the local Islamic food along the Andaman Sea, which has unique characteristics, to support international tourists. The study highlights the unique identity of local food in Thailand. The study area covers the shoreline along the Andaman Coast on Yao Island and Panyee Island in Phang Nga Province, Thailand. These areas are very famous tourist spots amongst tourists in Thailand. Moreover, it is evident that these areas represent characteristics of the Islam community, especially due to the Islamic population that has been settled along the Andaman coast for a long time and their significant local culture.

A research survey was used to study the identity of Islamic food and both the participation and the development of value-added production under tourism management related to local Islamic food culture. Data was collected for the sake of innovating a new related model of cultural tourism management and will also serve as a guideline for product development, which could increase the value of the local Islamic products. Data were gathered using questionnaires administered to the local population. Another part of the study focuses on behavior and the needs of tourists toward local Islamic food. Data for this part was retrieved from tourists in the form of another questionnaire, which used quantitative analysis.

Interviewing, focus groups, and workshops were also used in data analysis, including interviews conducted with the government, private sectors, community leaders, and villagers knowledgeable in terms of the identity of Islamic food and related value-added production in tourism management. This data analysis was also used to synthesize the related innovative model of cultural tourism management.

The results are presented in the form of qualitative data to increase the reliability of the research.

## **2. Population and Research Sample**

The “Innovative Model of Cultural Tourism Management Related to the Local Islamic Food along the Andaman Sea for Supporting International Tourists” study applied a methodology of mixed-method research, integrating both quantitative and qualitative research in order to completely answer the research questions. Therefore, the research methodology was specified as follows:

### **2.1 Population**

In the “Innovative model of Cultural Tourism Management Related to the Local Islamic Food along the Andaman Sea for Supporting International Tourists” study data was collected from a sample which can be divided into 4 groups:

2.1.1 Government and private sectors were a part of the study due to their involvement in developing value-added local production. This study population included government sector and local administrative organization personnel and entrepreneurs of local Islamic food. The participants are summarized below.

Chief executives or government and private sector representatives involved in cultural tourism related to the local Islamic food consisted of the following:

- 1) Director of Phang Nga Office of Tourism and Sports (Yao Island and Panyee Island) or a representative their place
- 2) Personnel responsible for Phang Nga culture along the Andaman coast in Phang Nga Province (Yao Island and Panyee Island) or representative
- 3) Chief Executive of the Provincial Administrative Organization of Yao Island and Panyee Island or representative
- 4) Mayor of Yao Island or representative

2.1.2 Community leaders and knowledgeable villagers included sub-district headmen, village headmen, and imam (Islamic headmen) who live in the study areas.

2.1.3 Local population consisted of the population living in Yao Island and Panyee Island

2.1.4 Tourists were another target group in this study and included those who had traveled in the area along the Andaman Coast (on Yao Island and Panyee Island).

## **2.2 Research sample**

The research sample was divided into 4 groups as follows:

2.2.1 Government and private sectors were sample groups employed to study the identity of Islamic food, participation, and ways to increase the value of local products. Sample groups included those who work in the government sector and local administrative organization and were selected by purposive sampling. Those involved in the search for the identity of local Islamic food and participation in and value-added local production were interviewed using purposive interviewing with both structured and unstructured interviews. A focus group and public hearing workshop with 10 relevant participants were also organized.

2.2.2 Community leaders and knowledgeable villagers consisted of 40 participants, such as sub-district headmen, village headmen, and imam living in the study areas of Yao Island and Panyee Island, Phang Nga Province.

2.2.3 Local population in the study areas consisted of 50 local sub-populations (food entrepreneurs, Women's Group Association, etc.) in the areas of Yao Island and Panyee Island, Phang Nga Province. These sub-populations participated in focus groups, workshops, and the administration of a questionnaire to analyze qualitative data. 760 local people in the study areas of Yao Island and Panyee Island were selected for collecting multi-analysis statistics, in which sample groups should be 10-20 times the observable variable (Nongluk, 2009). These statistics will be used to analyze quantitative data.

2.2.4 Tourists included 400 individuals selected for the research sample who were traveling on Yao Island or Panyee Island in Phang Nga Province. A questionnaire was used to collect quantitative data. The average number of tourists travelling to Phang Nga Province is 1,612,978 per year (Tourism Authority of Phang Nga, Tourism Authority of Thailand, 2012). The Taro Yamane technique was used to select sample groups (Taro Yamane, 1973). As the number of tourists travelling on each island was similar, data was equally collected from both areas.

Quota sampling was used to gather data from the two islands. Sample groups included 200 tourists travelling on Yao Island and another 200 travelling on Panyee Island in Phang Nga Province.

### **3. Research Tools**

The "Innovative model of Cultural Tourism Management Related to the Local Islamic Food along the Andaman Sea for Supporting International Tourists" study involved four types of research tools. Mixed methods research, which is a combination of quantitative and qualitative research, was used in the current study in order to answer the research questions. Quantitative research was applied in this study by administering questionnaires on the local population and on tourists, so as to collect information related to the primary context, including the needs of the target groups. In addition, interviewing, focus groups, and workshops were also used to collect primary data, which will be used to support a quantitative research discussion.

#### **3.1 Interviewing**

Semi structured interviewing was used to collect data from sample group 2. The interviews were divided into 3 sets:

Interview Set 1 was used to collect data from sample group 1 (government and private sectors). Semi structured interviewing was used in this set with questions prepared in advance. Open-ended questions were designed for studying the identity of local Islamic food and for analyzing value-adding under cultural tourism management related to local Islamic food in the study areas. The interview was divided into 5 parts:

Part 1: Information of interviewee

Part 2: Information of Government or Private Organization

Part 3: Cultural tourism related to local Islamic food

Part 4: Model of Cultural Tourism Management related to Local Islamic Food along the Andaman Sea for Supporting International Tourists

Part 5: Suggestions

Interview Set 2 was used to collect data from sample group 1 (government and private sectors food entrepreneurs). Semi structured interviewing was used in this set with questions prepared in advance. Open-ended questions were designed for studying the identity of local Islamic food and for analyzing value-adding under cultural tourism management related to local Islamic food in the study areas. The interview was divided into 3 parts:

Part 1: Information of interviewee

Part 2: Information of government or private organization

Part 3: Cultural tourism related to local Islamic food

Interview Set 3 was used to collect data from sample group 2 (community leaders and knowledgeable villagers). Semi-structured interviewing was used in this set with questions prepared in advance. Open-ended questions were designed for studying the identity of local Islamic food and for analyzing value-adding under cultural tourism management related to local Islamic food in the study areas. The interview was divided into 4 parts:

Part 1: Information of interviewee

Part 2: Identity of local Islamic food

Part 3: Value-adding under cultural tourism management related to local Islamic food

Part 4: Suggestions

### 3.2 Questionnaire

The questionnaires were divided into 2 sets. The first set was used with the local populations in the study areas. The objectives of this questionnaire were to study the identity of local Islamic food and the participation of the community and relevant sectors in related cultural tourism management. The results will also be used for an analysis of value-adding under cultural tourism management related to local Islamic food in the study area. The sample groups included 760 local people who participated in the survey. The second set of questionnaires was distributed to tourists. The objective of this questionnaire was to study the behavior and needs of the tourists in the study areas. The sample groups included 400 tourists travelling in the study areas at the time.

Questions in the questionnaire used with local populations were designed according to identity theory, including questions concerning symbols, images, and characteristics to reveal the identity of local Islamic food in the study areas, the participation of the community and relevant sectors in cultural tourism management related to local Islamic food, and value-adding under related cultural tourism management in the study area. The questionnaire was divided into 5 parts:

Part 1: General information of local population

Part 2: The identity of Islamic food

Part 3: Participation in cultural tourism management related to local Islamic food

Part 4: Value-adding under cultural tourism management related to local Islamic food

Part 5: Suggestions

The details follow:

Part 1: General information of local populations in the study areas. The questions were multiple choice and were analyzed by using percentages.

1) Gender: Nominal scale with choices consisting of male and female

2) Age: Open-ended question

3) Marital status: Nominal scale with choices consisting of single, married, and divorced or widowed

4) Level of education: Ordinal scale with choices consisting of elementary level or lower, secondary, bachelor's degree, master's degree, doctoral degree, and other

5) Occupation: Nominal scale with choices consisting of agriculturist, business owner, state enterprise employee, office worker, government officer, and other

6) Income per month: Ordinal scale with choices consisting of lower than 10,000 Baht, 10,001-15,000 Baht, 15,001-20,000 Baht, and over 20,000 Baht

7) Length of stay in the area: Ordinal scale with choices consisting of 1-5 years, 6-10 years, 11-15 years, 16-20 years, 21-25 years, and over 26 years

Part 2-4 consisted of questions related to identity, including questions concerning symbols, images, and characteristics of local Islamic food. These parts were used to study the identity of local Islamic food, helping to answer questions related to the first objective.

For the next objective, the participation of the community and relevant sectors in cultural tourism management related to local Islamic food, there were questions concerning the planning, process, benefits, and evaluation of said cultural tourism management. For the last objective, value-adding under cultural tourism management related to local Islamic food, the 7 P's (Marketing Mix Factors) were applied as the topic of the questions. The 7 P's include product, price, place, promotion, process, people, and physical evidence.

The analysis of the answers is based on the following point system in terms of participation:

5 points	means	Highest
4 points	means	High
3 points	means	Moderate
2 points	means	Low
1 point	means	Lowest

Average scores were divided into the five classes and the class interval was calculated by the following formula: (Kanlaya, 2009)

$$\text{Class Interval} = \frac{\text{highest score} - \text{lowest score}}{\text{Number of classes}} = \frac{5 - 1}{5} = 0.8$$

The rating scale was interpreted using the mean score of each question.

Means of each strata were interpreted as follows:

Average score 4.21-5.00	means Highest
Average score 3.41-4.20	means High
Average score 2.61-3.40	means Moderate
Average score 1.81-2.60	means Low
Average score 1.00-1.80	means Lowest

Part 5: An open-ended question was asked to illicit suggestions.

Questionnaire for tourism: Tourists were asked questions related their needs regarding cultural tourism related to local Islamic food. These questions covered many aspects, including sensory attributes, health concerns, methods of preparation and cooking, value and quality, and the authentic tourist experience.

The questionnaire was divided into 4 parts as follows:

Part 1 General information

Part 2 Tourists' behavior towards cultural tourism related to food

Part 3 Tourists' needs regarding cultural tourism related to food

Part 4 Suggestions

Part 1: General information of respondents. This part consisted of multiple choice questions, and the results were analyzed using percentages.

- 1) Gender: nominal scale with choices consisting of male and female
- 2) Age: Open-ended question
- 3) Marital status: Nominal scale with choices consisting of single, married, divorced or widowed, and separated
- 4) Level of education: Ordinal scale with choices consisting of lower than bachelor's degree, bachelor's degree, master's degree, higher than master's degree, and other
- 5) Income per month: Ordinal scale with choices consisting of lower than 10,000 Baht, 10,001-20,000 Baht, 20,001-30,000 Baht, 30,001-40,000 Baht, 40,001-50,000 Baht and over 50,001 Baht

6) Occupation: Nominal scale with choices consisting of government officer, state enterprise employee, chief executive officer, business owner, employee, student, and other

7) Religion: Nominal scale with choices consisting of Buddhism, Christianity, Islam, and other

8) Homeland: Nominal scale with choices consisting of Asia, Europe, America, Africa, Antarctica, Australia, and other

9) Nationality: Open-ended question

Part 2: Tourists' behavior towards cultural tourism management related to food.

There were 11 check-list questions.

Part 3: Level of need and expectations of tourists towards cultural tourism management related to food was evaluated using Likert's Scale (Thanin, 2010). The scale was divided into five levels: highest, high, moderate, low, and lowest. Needs were divided into 5 aspects: sensory attributes, health concerns, methods of preparation and cooking, value and quality, and the authentic tourist experience.

In order to interpret the rating scale, the following criterion were set:

5 Points	means	Highest
4 Points	means	High
3 Points	means	Moderate
2 Points	means	Low
1 Points	means	Lowest

Average scores were divided into the five classes and the class interval was calculated by the following formula: (Kanlaya, 2009)

$$\text{Class Interval} = \frac{\text{highest score} - \text{lowest score}}{\text{Number of classes}} = \frac{5 - 1}{5} = 0.8$$

The rating scale was interpreted using the mean score of each question. Means of each strata were interpreted as follows:

Average score 4.21-5.00	means	Highest
Average score 3.41-4.20	means	High

Average score 2.61-3.40 means Moderate

Average score 1.81-2.60 means Low

Average score 1.00-1.80 means Lowest

Part 4: An open-ended question was asked to illicit suggestions.

### **3.3 Focus Group Discussions**

Focus group discussions were used to collect data from two sample groups, namely government and private sectors and community leaders and knowledgeable villagers. For this process, the researcher raised issues and questions related to the research and elicited the two groups of participants to brainstorm answers or responses. The purposes of these discussions were to seek the identity of local Islamic food and to analyze value-adding under cultural tourism management related to local Islamic food in the study areas. The information retrieved from the discussion was synthesized to come to an innovative model of cultural tourism management related to local Islamic food along the Andaman Sea for supporting international tourists.

### **3.4 Workshop**

Data was collected from 3 sample groups, specifically government and private sectors, community leaders and knowledgeable villagers, and local populations. The results from the brainstorming of each sample group were used to present the issues and themes related to the research.

Journaling, discussion, analysis, and synthesis were then used as techniques to design an innovative model of cultural tourism management related to local Islamic food along the Andaman Sea for supporting international tourists.

## **4. Validity and Reliability of Research Tools**

### **4.1 Content Validity**

Questionnaires and interview questions were designed and validated by the following specialists:

4.1.1 Somruthai Soontayatorn, Ph.D., Specialist in Tourism,  
Chulalongkorn University

4.1.2 Assistant Professor Duang-ngern Suepakdee, Ph.D., Specialist in  
Cultural Tourism, Silpakorn University

4.1.3 Kanchana Tonpo, Ph.D., Specialist in Thai Language,  
Srinakharinwirot University

After they were examined, the research tools were improved according to suggestions from the specialists.

#### 4.2 Reliability

The 40 improved questionnaires were tested out with tourists and relevant sectors in tourism along the Andaman Sea. The test data was retrieved and analyzed to check for reliability before distributing to sample groups for this research.

Questionnaires were validated by specialists using content validity and then were tested to ensure the quality of the questionnaires. Reliability of the questionnaires was validated by using Cronbach's Alpha, a reliability coefficient of internal consistency with the following formula (Cronbach, 1970):

$$\alpha_k = \frac{k}{k-1} \left[ 1 - \frac{\sum_{i=1}^k s_i^2}{s^2} \right]$$

Let

$\alpha_K$  be reliability of the questionnaire;

$\sum S_i^2$  be the overall value of score variance for each question;

$S_i^2$  be questionnaire variance;

K be the number of questions in the questionnaire

## 5. Data Collection

The "Innovative model of Cultural Tourism Management Related to the Local Islamic Food along the Andaman Sea for Supporting International Tourists" study consists of two types of data, primary and secondary.

### 5.1 Primary Data

The following tools were used to collect primary data:

#### 5.1.1 Interviewing

Interviewing was used as a research tool in order to gather information about the identity of Islamic food and to analyze value-adding under cultural tourism management related to local Islamic food in the study areas according

to participating local populations. The results from the interviews, conducted with two sample groups, including the government and private sectors and community leaders and knowledgeable villagers, were used to synthesize an innovative model of cultural tourism management related to local Islamic food.

### **5.1.2 Questionnaire**

Questionnaires were used to retrieve information involving the identity of Islamic food and the participation of the local population and relevant sectors in cultural tourism management related to local Islamic food and to analyze value-adding under related cultural tourism management. The sample groups consisted of 760 people local to the study areas.

To study the behavior and needs of tourists in the study areas, questionnaires were distributed to a sample group of 400 tourists.

The questionnaire results also reveal the participation of the local population in cultural tourism management related to local Islamic food.

### **5.1.3 Focus groups**

Data was retrieved from brainstorming and opinion sharing from two sample groups, government and private sectors and community leaders and knowledgeable villagers. The data was used to explore the identity of Islamic food and to analyze value-adding under cultural tourism management related to local Islamic food in the study areas.

### **5.1.4 Workshop**

Data from the workshop was gathered through discussion, exchanging opinions, and brainstorming by government and private sectors, community leaders and knowledgeable villagers, and also local populations. The purpose was to conclude with an innovative model of cultural tourism management related to local Islamic food.

**Table 10** Processes and data collection

<b>Research objectives</b>	<b>Tools</b>	<b>Samples</b>
1. To study the identity of local Islamic food within the study area.	Questionnaire	Local populations
2. To study the participation of local populations and relevant sectors in tourism management related to local Islamic food in the study area.	Questionnaire	Local populations
3. To study the behavior and the needs of tourists in the study area.	Questionnaire	Tourists
4. To analyze value-adding under tourism management related to local Islamic food in the study area.	Questionnaire	Local populations
5. To innovate a model of cultural tourism management related to local Islamic food.	Interviewing	Government and private sectors Community leaders and knowledgeable villagers Government and
	Focus groups	Private sectors Community leaders and knowledgeable villagers
	Workshop	Government and private sectors Community leaders and knowledgeable villagers Local populations

## 5.2 Secondary Data

Additional information in this research was compiled and analyzed from textbooks, journals, newspapers, relevant documents, and international research. Online sources, such as online journals and academic articles were also used. Other online sources included those from government and private sectors, such as the United Nations World Tourism Organization (UNWTO), the Tourism Authority of Thailand (TAT) in Phang Nga, the Phang Nga Provincial Office of Tourism and Sports, the Office of Phang Nga Province, and Khon Kaen University's library.

## 6. Data Analysis

6.1 Qualitative data from interviewing was retrieved from government and private sectors and community leaders and knowledgeable villagers in terms of the identity of Islamic food, and an analysis of value-adding under cultural tourism management related to the local Islamic food. This data was used to synthesize an innovative model of cultural tourism management related to local Islamic food.

6.2 Questionnaires from local populations were analyzed using structural equation modeling (SEM) with AMOS, which is a program that facilitates computer data analysis for multivariate analysis. SEM is an analysis technique that is used in correlation and causal research when a variety of multivariate analysis techniques are used for data analysis, especially including variant correlation technique (Factor Analysis). This technique was used in the current study to analyze the innovative model of cultural tourism management related to local Islamic food along the Andaman Sea for supporting international tourists.

6.3 Questionnaires from tourists were gathered and reviewed and only completed questionnaires were selected for coding. Data from the questionnaires were recorded and computerized using the program SPSS.

Descriptive statistics were used show frequency distributions in the form of percentages, so as to present the overall characteristics of tourists.

6.4 Focus groups were another tool used in this study. Data from focus groups were analyzed and summarized using capability levels. Knowledge from focus groups, observations, and general information were analyzed according to the research questions and objectives. The concepts from this data analysis were applied

to the innovative model of cultural tourism management related to local Islamic food along the Andaman Sea for supporting international tourists.

## **7. Statistical Techniques**

7.1 Descriptive Statistics were used to describe demographic characteristics of each sample group and tourists' behavior. Data was enumerated in terms of frequency and analyzed using percentages.

7.2 Inferential statistics were used to describe the characteristics of the specific subject or group of subjects that needed to be studied. This type of data can serve to reference the population in the form of parametric statistics, which is beneficial for collecting data relating to populations and sample groups that have a tendency to fluctuate. It also benefits data clustering and data structuring.

8. Research Process

