CHAPTER 3
METHODOLOGY

The research methodology in this chapter is designed to create the guidelines on how to develop a STPM, and to develop the sustainable tourism indicators for tourism development at TPLAO. This research is a descriptive research, for which the data collection and data analysis were conducted through a SPSS program for Windows. The process of the research is conducted in the following research direction:

3.1 Research Intended Population
3.2 Research Size
3.3 Sampling Method
3.4 Research Design
3.5 Research Instrumentation
3.6 Data Collection
   3.6.1 Secondary data sources
   3.6.2 Primary data sources
3.7 Data Analysis
3.8 Research Procedure and Steps
3.1 Intended Population

3.1.1 Type of population

The population of the research is a finite population which can be classified into 2 groups of population as shown in the following lists.
- 3,129 Tambon Paklok LRHs.
- 38 officers of TPLAO

3.1.2 Population frame

The framework of population covers only some main tourism stakeholders concerned with STPM at TPLAO, Amphur Thalang, Changwat Phuket of Thailand. Those tourism stakeholders are LRHs, and officers at TPLAO.

3.2 Sample Size

Samples of the study will be LRHs at Tambon Paklok, and officers at TPLAO. Sample size can be calculated by using the Taro Yamane Formula in case of finite population.

\[
\text{Formula: } n = \frac{N}{1+ \frac{N}{e^2}}
\]

The meanings are;

- \( n \) = Sample size
- \( N \) = Research population size
- \( e \) = Confidence interval at 95%

Due to 3 groups of population of the research, they are set by using the Taro Yamane Formula. The results of sample size of each sample are shown in Table 3.1 as follows.
Table 3.1 The sample sizes and methods

<table>
<thead>
<tr>
<th>SAMPLES</th>
<th>Total (people)</th>
<th>Sample size (Units)</th>
<th>Sample Method</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Resident Households (LRHs)</td>
<td>3,129</td>
<td>356</td>
<td>Taro Yamane</td>
<td>Stratum Random Sampling, Qualitative</td>
</tr>
<tr>
<td>- Village no.1 (Pakcheed Village)</td>
<td>394</td>
<td>45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Village no.2 (Paklok Village)</td>
<td>539</td>
<td>61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Village no.3 (Bangrong Village)</td>
<td>522</td>
<td>59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Village no.4 (Para Village)</td>
<td>485</td>
<td>55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Village no.5 (Kor Naka Village)</td>
<td>43</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Village no.6 (Aow Por Village)</td>
<td>328</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Village no.7 (Yamu Village)</td>
<td>186</td>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TPLAO officers</td>
<td>38</td>
<td>35</td>
<td>Taro Yamane</td>
<td>Stratum Random Sampling, And Selective sampling</td>
</tr>
<tr>
<td>- The Management Team</td>
<td>17</td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- The Council of Local Assembly Member</td>
<td>21</td>
<td>19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The research is conducted in both the qualitative and quantitative research. The researcher got the sample size of both two groups of population, including 356 LRHs, and 35 officers of TPLAO.
3.3 Sampling Method

The researcher uses a Taro Yamane formula for calculating the sample sizes of LRHs at Tambon Paklok, and uses a stratum random sample to calculate the sample size of each village of LRHs. Nevertheless, the researcher uses a Taro Yamane formula to calculate the sample sizes of officers at TPLAO, and uses a purposive sampling. The qualification of interviewee at TPLAO must be the officers of TPLAO, who must have experience, and main concerned to the local development planning and management at the TPLAO. The interview will be conducted until the data is repetitive, and the interview will be stopped.

3.4 Research Design

The research is an exploratory study in which the researcher conducts research by following with research questions. The methods of data collection are questionnaire and communication through in-dept interview. The purpose of the study is discovering what, where, when, why, how, and who involved in STPM. The time dimension is cross-sectional studies which represent December 2005 to May 2006 only.

3.5 Research Instrumentation

The research of STPM at TPLAO needed 3 research instruments for data collection. They were questionnaire forms, structured interview forms, and self-observation as follows:

3.5.1 Questionnaire form

The researcher designed a questionnaire form to study the perspectives of Tambon Paklok LRHs towards
sustainable tourism development. There are 6 sections in questionnaire form, they are:

**Section 1**: Brief information of 3LDP (2006-2008)
This section is aimed at giving brief information of the 3LDP of Tambon Paklok to respondents for consideration in questionnaire responses (Section 2 - Section 5). The information includes 7 local development strategies with sub-projects in each strategy. The allocated budget is also provided for each project.

**Section 2**: The benefits received by LRHs from Tambon Paklok 3LDP
This section studies the benefits that LRHs gain from the 3LDP such as job opportunities, youth employment, promoting local culture and nature, participation in the planning process. The characteristics of this section use a rating scale with 13 items. The rating scale is set by Likert. The interval scales, criteria, and rating scales were divided as follows:

The mean scores were classified into 5 interval scales, which were calculated as follows:

The interval level = \([\text{Max-Min}] / n\)
\[= [5-1] / 5\]
\[= 0.80\]

Therefore, the mean scores will be;

<table>
<thead>
<tr>
<th>Mean Scores</th>
<th>Criteria</th>
<th>Interval Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score 1.00-1.80</td>
<td>Absolutely disagree level</td>
<td>5</td>
</tr>
<tr>
<td>Score 1.81-2.60</td>
<td>Disagree level</td>
<td>4</td>
</tr>
<tr>
<td>Score 2.61-3.40</td>
<td>Indifferent level</td>
<td>3</td>
</tr>
<tr>
<td>Score 3.41-4.20</td>
<td>Agree level</td>
<td>2</td>
</tr>
<tr>
<td>Score 4.21-5.00</td>
<td>Absolutely agree level</td>
<td>1</td>
</tr>
</tbody>
</table>
Section 3: The LRHs’ participation in tourism site development

This section is aimed at studying LRHs’ participation in tourism site development especially in planning, management, co-ordination, benefit sharing from tourism management, evaluating, and following up. The characteristic of this section is a check-list with 4 items. There are only 2 choices of answer, such as “Yes” and “No”.
**Section 4:** LRHs’ perspectives toward Tambon Paklok tourism

This section is aimed at studying the perspectives of LRHs toward tourism at Tambon Paklok such as the benefits of tourism, and the negative impacts of tourism. The characteristic of this section is a rating scale with 16 items. The rating scale is set by Likert. The interval scales, criteria, and rating scales were divided as follows:

The mean scores were classified into 5 interval scales, which were calculated as follows:

The interval level = \[\frac{\text{Max-Min}}{n}\]

\[= \frac{5-1}{5}\]

\[= 0.80\]

Therefore, the mean scores will be;

<table>
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<td>Score 2.61-3.40</td>
<td>Indifferent level</td>
<td>3</td>
</tr>
<tr>
<td>Score 3.41-4.20</td>
<td>Agree level</td>
<td>2</td>
</tr>
<tr>
<td>Score 4.21-5.00</td>
<td>Absolutely agree level</td>
<td>1</td>
</tr>
</tbody>
</table>

**Section 5:** LRHs’ tourism knowledge and experience at Tambon Paklok

This section studied the knowledge and experience of LRHs on tourism to see how they know about their own area. It is formed by a variety of questions, which includes 12 in total. There are 3 questionnaires; a check-list, rating scales, and open-end questions.

*Firstly*, type of Check-list questions were established to find out the experience of LRHs in visiting Tambon Paklok tourism sites, knowledge about the tourism sites, English for tourism, frequency of tourism information
receiving, knowledge about sustainable tourism, satisfaction of Tambon Paklok tourism as total, and the demand for future tourism at Tambon Paklok.

Secondly, type of rating scales questions were established to find out as follows;
(1) The quality of tourism facilities at Tambon Paklok, such as accommodation, public toilets, food and beverages, souvenir shops, service by local officers, accessibility, safety, garbage bins, and the tourism information center. The interval scales, criteria, and rating scales were divided as follows:

The mean scores were classified into 6 interval scales, which were calculated as follows:

\[
\text{The interval level} = \frac{\text{Max-Min}}{n} = \frac{5-0}{6} = 0.83
\]

Therefore, the mean scores will be:

<table>
<thead>
<tr>
<th>Mean Scores</th>
<th>Criteria</th>
<th>Interval Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score 0.00-0.83</td>
<td>Not Found</td>
<td>5</td>
</tr>
<tr>
<td>Score 0.84-1.66</td>
<td>Worse</td>
<td>4</td>
</tr>
<tr>
<td>Score 1.67-2.49</td>
<td>Bad</td>
<td>3</td>
</tr>
<tr>
<td>Score 2.50-3.32</td>
<td>Fair</td>
<td>2</td>
</tr>
<tr>
<td>Score 3.33-4.15</td>
<td>Good</td>
<td>1</td>
</tr>
<tr>
<td>Score 4.16-5.00</td>
<td>Excellent</td>
<td>0</td>
</tr>
</tbody>
</table>
(2) The attraction level of each tourism site has 3 ratings which are high, medium, and low level. The examples of attraction are Soponwanaram temple, Ban Para House of Priests, Bang Pae Waterfall, Bang Rong Pier, Tala Beach, Ban Kow Na Ka Beach, Aow Por Beach, Lam Long Beach, Juti Beach, Ban Yamu Beach, and Aow Kung Beach. The interval scales, criteria, and rating scales were divided as follows:

The mean scores were classified into 3 interval scales, which were calculated as follows:

\[ \text{The interval level} = \frac{\text{Max-Min}}{n} = \frac{3-1}{3} = 0.66 \]

Therefore, the mean scores will be;

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<th>Criteria</th>
<th>Interval Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score 1.00-1.66</td>
<td>Low Level</td>
<td>3</td>
</tr>
<tr>
<td>Score 1.67-2.32</td>
<td>Medium/Moderate Level</td>
<td>2</td>
</tr>
<tr>
<td>Score 2.33-3.00</td>
<td>High Level</td>
<td>1</td>
</tr>
</tbody>
</table>
(3) The tourism development guideline asked the perspectives of LRHs towards using natural resources wisely, respecting tradition and culture of local natives, generating income fairly and equally, reducing poverty problem, the need of participation of all tourism stakeholders, and maintaining high level of tourism satisfaction. The rating scale is set by Likert. The interval scales, criteria, and rating scales were divided as follows:

The mean scores were classified into 5 interval scales, which were calculated as follows:

The interval level = \([\text{Max-Min}] / n\)

\[= \frac{5-1}{5}\]

\[= 0.80\]

Therefore, the mean scores will be:

<table>
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</table>

Thirdly, type of open-end questions were established to find out the best and appropriate method of tourism development at Tambon Paklok, and what activities or place in the respondents’ village can be developed as new tourism site. The answer will be collected as content analysis.

Section 6: General information on LRHs. This section is aimed at collecting the personal information of respondents, such as original village, sex, marital status, age (year), education, religion, career, and monthly of respondent
income of respondents. The characteristics of this section were check-list questions only.
3.5.2 Structured interview form

The researcher used open-ended questions to ask offers of TPLAO about tourism situation at Tambon Paklok, the tourism plans, the process of the 3LDP, local participation in tourism development, indicator development in the 3LDP, tourism indicators, the appropriate benefits of tourism for LRHs, and problems in tourism development at Tambon Paklok LAO.

3.5.3 Self-observation

The researcher used the observation form to get a general picture of the current situation of tourism at Tambon Paklok.

3.6 Data Collection

The data collected comprised of secondary data and primary data as follows:

3.6.1 Secondary data

The research emphasized the data from secondary sources, for examples,

(1) The 3LDP from 2003-2005 and 2006-2008
It is to study the components and details of development plan of Tambon Paklok, especially the budget plan. The researcher needs to find out the direction of the development plan by analyzing the budget allocation. The researcher has to find out whether the budget allocation and development planning are subjected to the direction of sustainable tourism.

(2) Indicators for sustainable development for tourism destination
The researcher uses this for studying the sustainable tourism indicator in order to apply in STPM. The sustainable tourism indicator, from the book, assists tourism direction into real implementation.

(3) The research paper
The researcher uses the information and ideas from the research paper to support the research. Most of the research paper concerns sustainable tourism such as the Potential of Phuket Tourism Development to be a World Class Destination with Sustainability by Chaisawat (2003), Sustainable Tourism Development: the Guiding principles for planning and management by Mckercher (2003).

(4) The handbook
The researcher refers to some information in the handbook the citizen handbook for election by Election Commission of Thailand (2004).

(5) The textbook
The researcher uses the textbook concerned with tourism, for writing the theory and concepts such as tourism planning and management.

(6) Website
The websites mostly used are the tourism websites such as the WTO website, the TAT website, the Tambon Paklok website, and the Changwat Phuket website.

3.6.2 Primary data
The researcher collected primary data through questionnaires, interview (face to face), and observation methods mentioned earlier. (Part 3.5.1- Part 3.5.3)
3.7 Data Analysis

The data analysis proceeded after collecting the questionnaire or interview forms and checking for accurate data filling. The researcher, then, decode the data in figure form into the software package SPSS for Window version 11.0 (Copyright 1989-2001) in order to evaluate the results.

The statistics used in this research are frequency, percentages, mean, standard deviation, multiple responses, and content analysis.

The data analysis in questionnaires has many different analyses due to the objectives of the research. They were as follow:

**Section 1**: It was only the brief information of the 3LDP (2006-2008), so there was no analysis in this section.

**Section 2**: For benefits received from 3LDP, the statistics were frequency, mean, and standard deviation.

**Section 3**: For LRHs’ participation in tourism site development, the statistics were frequency, %, mean, and standard deviation.

**Section 4**: For LRHs’ perspectives toward tourism at Tambon Paklok, the Statistics were frequency, mean, and standard deviation.

**Section 5**: For LRHs’ tourism knowledge and experience, the statistics were frequency, percentages, multiple responses, mean, standard deviation, and content analysis.

**Section 6**: For general information of respondents, the statistics were frequency, and %.

3.8 Research Procedure and Steps

The research procedures and steps are designed to achieve the proposed guidelines and indicators for sustainable tourism development at Tambon Paklok, Amphur Thalang, Changwat Phuket. The researcher determined to study the local
development plan of TPLAO, study the perspective of LRHs and the officers of TPLAO towards 3LDP and tourism at Tambon Paklok, and study related concepts of sustainable tourism development in order to proposed guidelines and indicators for STD in Tambon Paklok as follows (See the figure 3.1):
Figure 3.1 The research procedures and steps for developing STD at Tambon Paklok

**Step 1**

- Study the 3 year-local development plan (3LDP) of TPLAO
- Study the Tambon Paklok Tourism situation

  Investigate current tourism situation, tourism resources, and tourism knowledge of LRHs at Tambon Paklok

  Investigate the planning and management of TPLAO toward 3LDP

  Investigate the benefit gaining of LRHs toward 3LDP, and toward local tourism situation at Tambon Paklok

**Step 2**

- Analyze the 3LDP and tourism situation at Tambon Paklok
- Approaches to sustainable tourism development concepts

**Step 3**

Propose the guidelines and indicators for sustainable tourism development at Tambon Paklok

**Step 4**

Final Report