### **CHAPTER 2**

### **METHODOLOGY**

This chapter discusses the methodology used in this research. It starts by discussing the approach of the study. Practical experience of the researcher during the fieldwork is also presented; Different methods used for data collection are discussed in detail. Observations, various types of interviews, questionnaire and personal experiences are used as primary sources of data. In addition, documents from different sources and from different organizations, e.g. books, articles, and publications of various sectors, websites used for obtaining secondary data. A mixed method was applied.

This research is dedicated to overview of the world heritage sites and their existing management systems. This section will be reviewed the steps of survey research, target population, target samples with emphasis on data collection during the survey period and methods of analysis and interpretation. The section ends with anticipated results that are believed to be significant in providing feedback.

### 2.1 Populations and Sampling

For this purpose the population was Local people in the buffer zone area, representatives from Local tourism business organizations, government officials and officials from Lumbini development trust. Especially, Local people from 4 village Development Committees (VDCs) surrounding the Lumbini (refer table 2.1) were selected for the survey. The sample was drawn as listed below:

Residents in four village development committees (Ekala VDC, 1,230 households, Tenuhawa VDC, 1,193 households, Lumbini VDC, 1,092 households and Maduwani VDC, 824 households) in Rupandehi district Lumbini zone, Nepal were the target population for questionnaire survey. The total numbers of household in those four VDCs were 4,339 (CBS Nepal, 2001).

Respondents were people who live with their family and at least 15 years old were the targeted sample. They were local community's people who were or were not directly

involve in tourism activities. Those VDCs surrounded by Lumbini Park. Ekala (north), Tenuhawa (west), Lumbini Adersha (south) and Madhuwani (east).

Local residents from the surrounding VDCs, at least 15 years old were the respondents for the questionnaire. Respondents responded for the questionnaire that, who was able to respond to the questionnaire effectively. When there were more then one adult members presented at the time of survey, the family was free to choose the representative to answer the questions or they can participate collectively.

The questionnaire was administered in the proportion of household according sample size. A total of 15 interviews administered with an interview guide (refer Appendix: C) to get qualitative information's for the study. Interview conducted mainly with Lumbini Development Trust managers and Government officials including all related tourism industries. Refer table 3.14 for detail about interviewees list.

For the selection of interviewees from different organization, mainly the personals that were directly related and closely related about Lumbini and its management were selected. In MoCTCA, interviewee was Joint Secretary, from Planning and Infrastructure Development Division. However, many other related officials also provided theirs supports and ideas from various sections in the Ministry. Likewise, Director General, in Department of Archeology; CEO of NATHM, NPM of TRPAP, Chief of LDT, related official in NTB, In charge of Tourism office were interviewed. During the interview with those officials related officials and staffs were given their inputs as well.

For the tourism industries (hotel, tour guide, travel, rickshaw) the Chair or Vice-Chair of their associations were interviewed as a representation of respective business, they represented theirs associations. And in case of 4 Village Development Committee, Chair or Vice-Chair was interviewed who represented theirs VDC. Almost all interviews were conducted in theirs offices therefore; apart from main interviewee other concern present personal also participated for sharing ideas for the sustainable management of Lumbini heritage site.

The following institutions were selected for the interview for this research.

- 1. Ministry of Culture Tourism and Civil Aviation. Kathmandu Nepal
- 2. Department of Archeology, Kathmandu Nepal
- 3. National Academy of Tourism and Hotel Management

- 4. Nepal Tourism Board, Kathmandu Nepal
- 5. Tourism for Rural Poverty Alleviation (TRPAP).
- 6. Lumbini Development Trust. Lumbini
- 7. Tourism Office Rupandehi.
- 8. Local Hotel Association, Lumbini
- 9. Local Tour Guide Association, Lumbini
- 10. Local Travel Agents Association, Lumbini
- 11. Rickshaw Puller Association, Lumbini
- 12. Village Development Committee, Tenuhawa
- 13. Village Development Committee, Lumbini
- 14. Village Development Committee, Ekala
- 15. Village Development Committee, Madhuwani

# 2.1.1 Sample Size

A stratified random sampling method was applied to have response and data from closely resided people to the Lumbini along with other targeted people. Those selected numbers of respondents were accomplished by randomly. Randomly selected surrounding community people, tourism service industries representatives, service managers from related field were the samples for this study.

Sample of officials from the Ministry, department and other related offices were selected according to their jobs, responsibility, positions, and involvement with Lumbini and availability during that period. The detail of interviewees is as in table 3.14. To get sample size form the community population Taro Yamane (Yamane, 1973) formula was taken in to consideration. Confidence level of 95% and 5% sampling error was considered. This formula was used for get the samples from local residents, But not for the selection of respondents for the interview.

Formula 
$$n = N/(1 + Ne^2)$$

Where, n =sample size or respondents for this research

N = a population size

e = the level of precision (A 95% confidence level

or 5% precision level, was assumed)

n = 4339/[(1) + 4339(0.05)2]

n = 366.2376

Sample Size n = 367

It was decided to use 370 as a sample size from 4,339 households. Those were from four VDCs. The sample size was divided by the size of population and calculated into percentage in order to get the sample size in each village development committees, which was 8.53% of households (gotten from [(370/4,339)\*100]. Calculation of sample size in each village development committees as follows.

Table 2.1 Calculation of Sample Size in each VDCs

| Village          | Number of  | 8.53% of Households | Adjusted Sample |
|------------------|------------|---------------------|-----------------|
| Development      | Households |                     | Size            |
| Committee (VDC)  |            |                     |                 |
| 1. Ekala VDC     | 1,230      | 104.919             | 105             |
| 2. Tenuhawa      | 1,193      | 101.762             | 102             |
| 3. Lumbini Ideal | 1,092      | 93.147              | 93              |
| 4. Madhuwani     | 824        | 70.287              | 70              |
| Total            | 4,339      | 370.115             | 370             |

**Source:** CBS (2001)

The sample size in each village was obtained, and then the researcher selected people in household in each village from those VDCs. All of them were at least 15 years old. Since there was not house number for all residents so researcher applied the proportion of samples according to the numbers of household in that community.

In this research survey design was followed mainly in five steps as follows as Nwuman mentioned. (Neuman, 2004):

- 1. Developing study proposal, Hypothesis, Deciding Type of Survey Personal Interview) and Developing Survey Questions
- 2. Deciding on Target Population, Deciding on sample size and selecting Samples.

- 3. Locating Respondents, Conducting Interviews and Recording Data.
- 4. Gathering Data, Entering Data, Rechecking Data and Performing Statistical Analysis.
- 5. Describing Findings, Conclusion and Recommendations, Presenting findings for critique and evaluation and Publishing work

# 2.2 Type of Research

Both quantitative and qualitative research approach used to carry out this research. The major concern of this research was to explore the culture heritages sites management system in Nepal. It needed both but more qualitative information to provide thick discussions during the analysis. Moreover, the research intended to map the relationship between the principles and practice was being used for management cultural aspects. This study used structured questionnaire, semi-structured interviews, observations and personal experience to obtain primary information for this research. So that it can be interpreted both ways in number, figure charts and in depth of feelings, emotions and meanings of the respondents.

The specific target groups for quantitative method were the local people from the community. This population was the main source of primary quantitative data. At the same time, the on site observation also carried out quantify.

A qualitative data collection through in-depth interview (face-to-face interview) method was applied as a descriptive support to quantitative data. The existing system was explored by site observation. Researcher examined the site by using a checklist with the help of managers from LDT. This method was followed by observations of site, semi and semi-structured interview. This model of interviews try to cover the current state of policy, condition of rules and regulation, condition of management, flow of tourists, environmental awareness of health hazard, accesses of public transport, visitors information center management, accommodation facilities, tour guide and other related sectors. A focus group meeting was conducted at Lumbini in the presence of all related stakeholders, and researcher tried to collect their feelings, emotions, motivation, satisfactions and reactions and recommendations.

#### 2.3 Survey Instruments

The questionnaire was the common research instrument and the researcher selected the personally administered questionnaire after reviewing the advantages and the limitations in time and money. This instrument can establish relationship, motivate respondent, the doubts could be clarified, less expensive and almost 100 percent response rate ensured (Sekaran, 2003).

In this case personally administered questionnaire was used for the research of community participation for sustainable tourism development at Lumbini. Initial version of the survey questionnaire was developed with extensive inputs from faculty members. It comprised of 3 parts in Nepali version questionnaire for local resistant.

In order to see whether the appropriate questions would be asked for meaningful analysis, pre-testing of survey instruments was undertaken to scrutinize the sequence, contents and procedure. Pre testing was used mainly for amending questions in order to ensure for context and location specific and understood by respondents as well as amending techniques and was considered sequential flow of the interview process. The survey questionnaire was divided in three parts as below (Appendix: B).

The questions were pre tested among 40 participants. The research assistants in the presence of researcher administered the pre-testing questionnaires in the adjacent villages. And its reliability was analyzed by using SPSS 14.0. It showed that, reliability coefficient (Alpha) was 0.861. It showed the questionnaire were reliable to administered for the research. Therefore, they survey was started in the sampling area.

### Part 1: Demographic Characteristics

In this part there were total 9 questions related to the demographic the demographic characteristics and some personal information of the respondents. It consisted of a checklist and open-end question. It combined the question of gender, age, marital status, religion, education level, occupation, household monthly income, do they undertake the certain social role in their community and do they working in hospitality and tourism industries.

# Part 2: Opinion with the Tourism Development and Management in Lumbini:

There were 23 questions related to tourism development and management, their opinion to tourism its benefits and effects. Questions were to know their motivations based on

tourism benefits; those were socio-cultural, environmental, economic benefits. Also there were some questions about people's participation in planning, decision-making, problem solving, implementing and benefit sharing. There were 5 components in each main issue and using "Interval Scale" in the range of 1-5 in order to examine their interest level. It was ranged from most positive to most negative response. 5 defined the as high level of agreed to the statement and 1 means strongly disagreed with the statement.

# Part 3: General Informations About Sustainable Tourism, Participation and Infrastructure

There were altogether 18 questions about the involvement in tourism activities directly or indirectly, tourism infrastructure development, health, water supply and sanitation, knowledge about heritage sites and suggestions for development of the Lumbini area and their community. The questions were Yes / No or don't know. Last question was for recommendation related to the ways that were able to persuade or encourage people in community participation in sustainable tourism development activities in Lumbini and in their community. For detail refer the questionnaire (Appendix B).

### 2.4 Data Collection

# 2.4.1 Primary Data

The period of collecting data was from 7<sup>th</sup> February to March 20<sup>th</sup> 2007. 370 sets of questionnaire were administered to the target households in each village with informal interviews related to questionnaire, in some household by conveniences selection. Almost all respondents were illiterate it take long time to ask them and fill up it. So two research assistants were appointed for the survey; they were trained and supervised by the researcher. They were guided for obey social behavioral and cultural issues of host community, about the purpose of the study, interviewing techniques and avoiding personal biasness.

The questionnaire was carried out with adult family members who were community residents at least 15 years old and who were able to respond to the questionnaire effectively. When there were more then one adult members presented at the time of survey, they participated collectively. Female were encouraged for the participation in this study.

### 2.4.2 Secondary Data

The relevant principles, theories, concepts, ideas and research were taken from different relevant sources. Those were from books, articles, and journals and from library and Internet and different sources. The general and tourist information from Ministry of Culture Tourism and Civil Aviation Nepal, Lumbini Development Trust, Nepal Tourism Board and obtained from different Government, Local government, Private sector and related International agencies.

### 2.5 Data Analysis

Descriptive statistics was used to analyze data collected from the survey to get conclusion from the sample data. Confidence intervals for estimating the value of population and test of significance level are to access the evidence provided by the data in favor of a certain claim about the population. Mean, frequencies, standard deviation and hypothesis testing were carried out during the data analysis. The SPSS 14.0 for windows was applied. For the questions related to agree level. A Linkert scale was used. Five levels of satisfaction were ranked as strongly agreed (5, intervals of 4.21-5.00), agreed (4, intervals of 3.41- 4.20), Neutral or neither agree nor disagreed (3, intervals of 2.61- 3.40), disagreed (2, intervals of 1.81- 2.60) and strongly disagreed with the indicator (1, intervals of 1.00-1.80). Twenty-three issues were developed as the indicators of sustainable tourism indicators. For detail of indicators refer (Appendix: B). Qualitative data were analyzed by content analysis and Statistic Package for the Social Science (SPSS) and SWOT analysis.