CHAPTER III

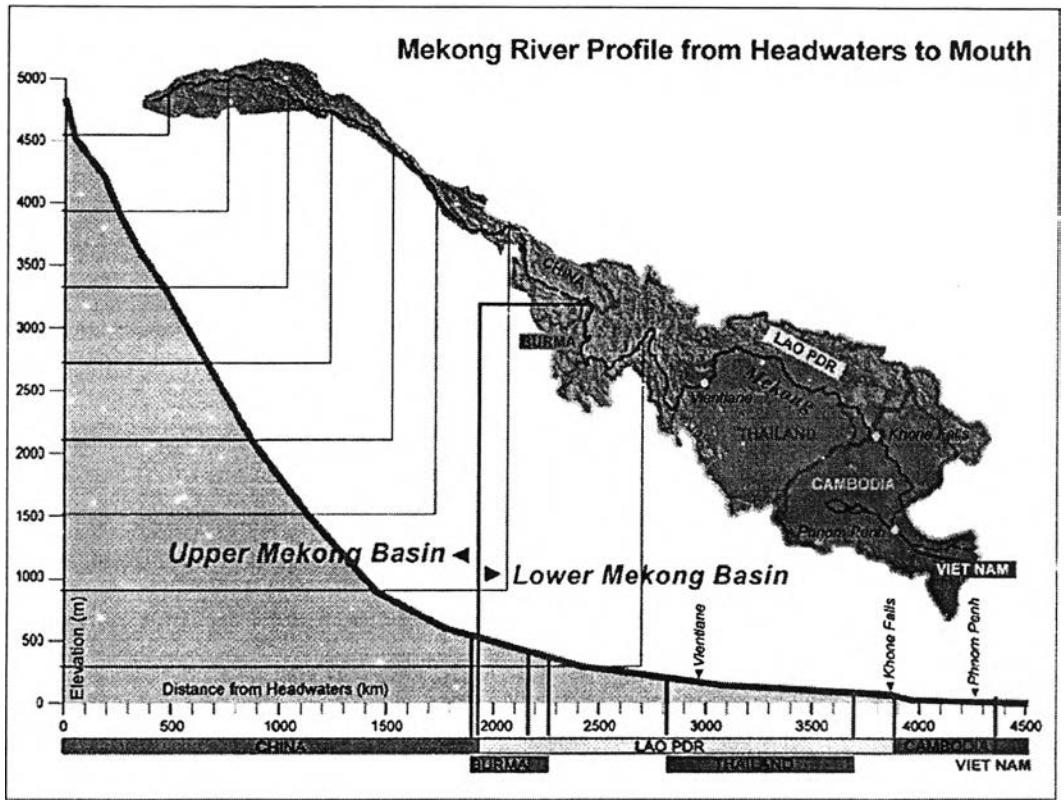
RESEARCH METHODOLOGY

3.1 Key Terminology in Use

3.1.1 The Mekong River Basin

When talking about the Mekong River and the Mekong River Basin, people have generally conceptualized that they are same thing, However, geographically, water resource experts of the MRC have defined the region as below.

Map: 3.1.1 A Mekong River Profile from Headwater to Mouth



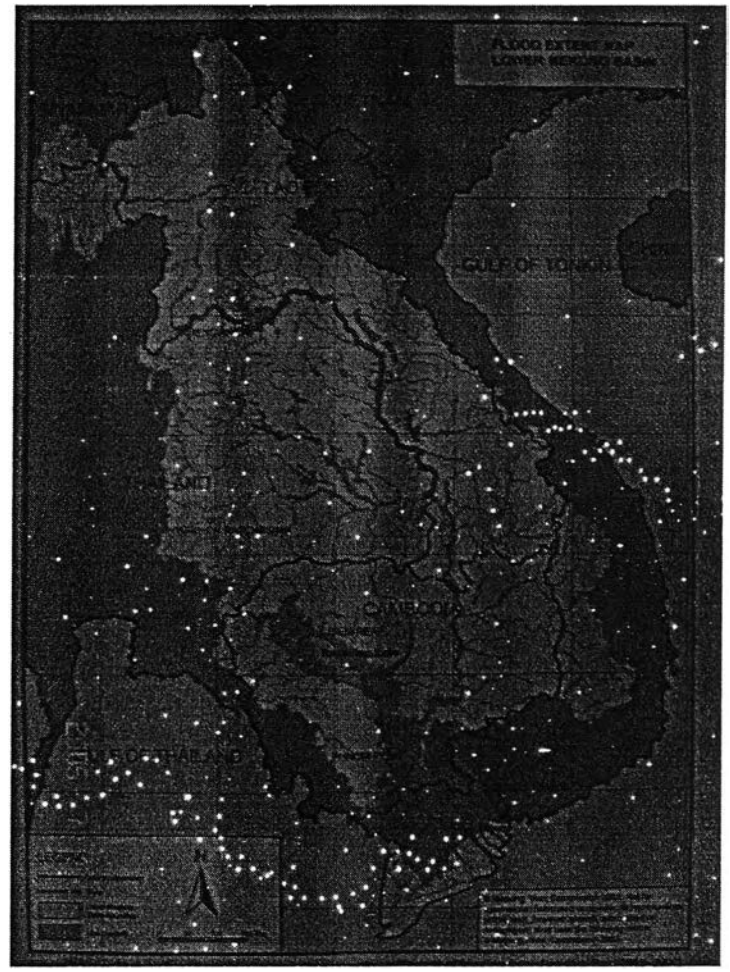
Source: Mekong River Commission 2000

The Mekong can be divided into two parts: first, the upper Mekong Basin or the Lancang River, which comprises two countries, China and Myanmar, and the second, the lower Mekong Basin comprising the four countries Thailand, Laos, Cambodia and Vietnam.

In principle, the MRC is working only on the second part, the Lower Mekong Basin. Details of tributaries in each country are described below.

Map 3.1.1 B

Lower Mekong Basin Flow Contribution



Source:

Mekong River Commission 2003

In total area, the Mekong River Basin comprises some 795,000 sq.km and stretches about 2,600 km across Southeast Asia from the Tibetan Plateau to the South China Sea. It is the 21st largest river basin worldwide; it incorporates areas of six countries, and it comprises six broad physiographic regions.

The Lancang River Basin: The Lancang, as the Mekong is called in the People' Republic of China, drops more than 4,000 m as it flows from its source on the Tibetan Plateau down to the border between China and Myanmar.

The Northern Highlands: With elevation up to 2,800 m, the highlands run from southern Yunnan Province, through Myanmar, Laos and northern Thailand, and then eastwards into the northern end of the Annamite Cordillera in Vietnam.

The Korat Plateau: Lying largely within Thailand, the Korat Plateau slopes gently to the east, with ancient lava flows scattered along its southern edge. The Mekong cuts deeply into the eastern rim of the plateau, forming sheer cliffs above the river in some places, and canyons up to 100 m deep in others.

The Eastern Highlands: A southern extension of the Northern Highlands, these mountains extend about 700 km from Laos through Vietnam, with altitudes as high as 2,800 m. A number of the Mekong's larger tributaries flow from this part of the basin, including the Se Kong, Se San and Sre Pok Rivers.

The Lowlands: With elevation just above sea level, the lowlands comprise the Cambodian floodplains and the delta. Each year, at the peak of the rainy season, floods cover vast areas of the lowlands across Cambodia as far as the mouth of the river in Vietnam. The Mekong branches at Phnom Penh, with the Bassac forming the western arm of the delta, and the Mekong proper forming the eastern arm. The delta area extends across some 65,000 sq.km. In the upper delta, the river channels are lined by natural levees formed through silt deposition. Lower down, within the Vietnamese section of the delta, there is an elaborate network of canals.

The Southern Uplands: The southern uplands in southern Cambodia are extensions of the Northern Highlands and include the Cardamom and Elephant ranges in Cambodia. Both these ranges are still densely forested, with low population densities, and are considered significant areas for conservation. (MRC 2003.b:3)

3.1.2 Fisheries Programme

The "Fisheries Programme" in this context means the MRC's Fisheries Programme in Laos, which began in 1995. The programme was split into two phases: Phase I was implemented in only one big reservoir, the Namgnum Reservoir, with a total area of 37,000 Ha, in Vientiane Province, during the period 1995-2000. Phase I was completed, and it is now being maintained and operated by the Ministry of Agriculture and Forestry (MoFA), at provincial and district levels. The MRC has continued with its Fisheries Programme and is now implementing Management Reservoir Fisheries (MRF Phase II) in two provinces: there

are two reservoirs in Vientiane Capital, namely Namhoum, Namsuang, and another two reservoirs, namely Hoiset and Pakpeung, in Borikhamxay Province. Work on these reservoirs cover the period from 2000-2005.

All these projects are financially and technically supported by the MRC and the Living Aquatic Resource Research Center (LARReC) and functioned by the local committees, which established the "Reservoir Management of Fisheries Committee" (RFMC).

Table 3.1.2 MRC Management Reservoir Fisheries in Lao PDR

Phase I (1995-2000)		Phase II (2000-2005)	
Reservoir/ Total Area	No. of Direct Recipient Villages	Reservoir/ Total Area	No. of Direct Recipient Villages
1. Namgnum	30	1. Namhoum (500 Ha)	4
(39,000 Ha)		2. Namsuang (1,090 Ha)	8
		3. Hoiset (150 Ha)	5
		4. Pakpueng (300 Ha)	11

Source: Technical Report Compilation 2005

Namhoum reservoir is considered to be of medium-high (capacity) in comparison with the other three; in addition, the total population, as well as four nearby villages, is relatively manageable. Thus, conducting research at Namhoum Reservoir should be a good indication of the potential for Management Reservoir Fisheries.

3.2 Criteria of Selection

3.2.1 Sample Design

Given the objectives of this research, which is aimed at identifying the roles of the MRC as well as the responses of the local community to the Fisheries Programme in terms of sustainable livelihood development, the samples are divided into three groups: local groups, implementing agencies and donors.

1. The *local level* consists of the local community: fishermen and non-fishermen, and the local committee of the Reservoir Fisheries Management Committee (RFMC). Thus, the Fishermen's group and the RFMC members were gathered for the focus group interview.
2. The *implementing agency level* consists of the government counterpart of the MRC, which means the Living Aquatic Research Resource Center (LARReC), and the District Agriculture and Forestry Office (DAFO). As a result, the Director of LARReC, the MRRF Project Officer, and the Project Coordinator from DAFO were involved in the in-depth interview.
3. The *donor level* means the MRC, which is acting as the single donor to the entire MRRF project. To determine the overall role of the Fisheries Programme and its technical aspects, the Fisheries Programme Officer of the MRC also participated in the in-depth interview

Table 3.2.1 Sample of the research

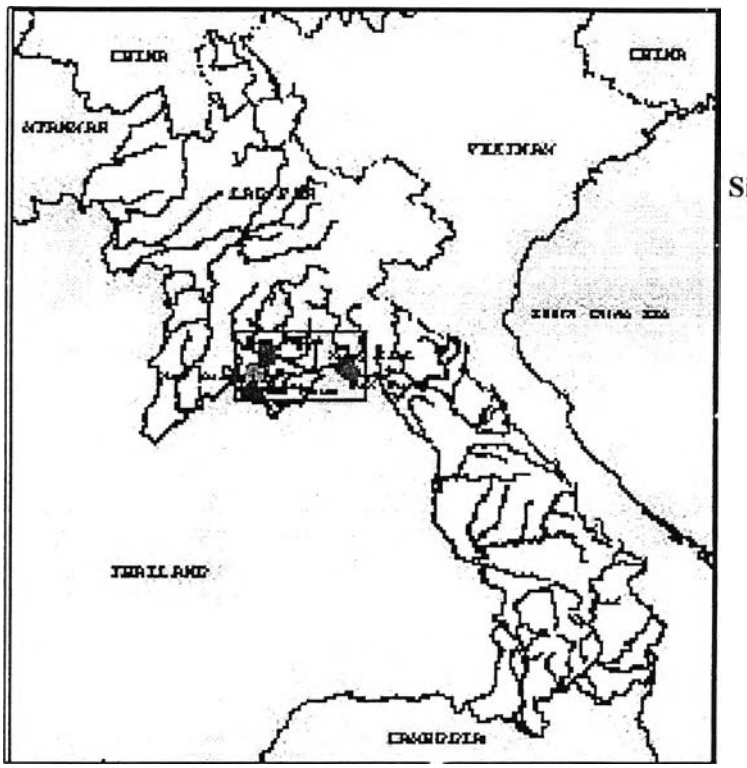
No.	Target Groups	No. of Respondents	Methodology	Remark Questionnaire
1.	Angnamhoum Village			
	-Village Headman	1	In-depth Interview	Form-1
	-RFMC Members	4	In-depth Interview	Form-1
	-Registered Fishermen	10	1st Focus Group	Form-2
	-Non-Registered Fishermen	30	2nd Focus Group	Form-2
2.	Hoinamyen Village			
	-Village Headman	1	In-depth Interview	Form-1
	-RFMC Members	4	In-depth Interview	Form-1
	-Registered Fishermen	10	1st Focus Group	Form-2
	-Non-Registered Fishermen	30	2nd Focus Group	Form-2
3.	Implementing Agencies			
	- MRC	1	In-depth Interview	Form-3
	- LARReC	2	In-depth Interview	Form-3
	- DAFO	1	In-depth Interview	Form-3
	Total	**94**		

(*Please note that*: questionnaires were provided on annex –A 1, A2 and A3 and summary of the focus group interview were also provided on annex – B1 and B2)

3.2.2 Selection of Research Sites

It was obvious that to study the impact of the Fisheries Programme of the Mekong River Commission on Sustainable Development at Namhoum Reservoir in two villages, the villages selected should meet the following criteria :

1. Be part of the MRC Fisheries Pilot Project, or MRF Phase II, project period 2000-2005.
2. Be located near the Namhoum Reservoir
3. Be regularly involved and/or participate in the MRC Fisheries Project Activities: Participatory Rural Appraisal, Capacity Building, Project Management Training, Financial Management, Fisheries Rules and Regulation Raising Awareness, and Fish Processing Orientation.
4. Be directly and indirectly likely to benefit from the fisheries project.
5. Be receiving technical and financial support from the MRC and the LARReC

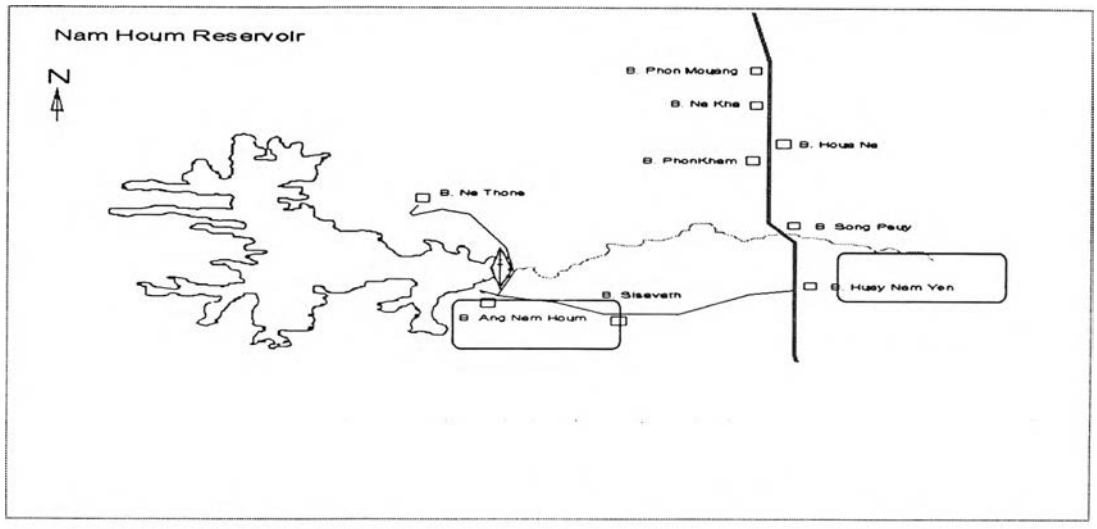


Map 3.2.2 A MRRF II Project Sites

Source:
LARReC 2004

The two villages which were chosen for this research meet all the above criteria. However, there are also some differences between these two villages in terms of historical background; natural and physical advantages; size of population; pattern of livelihood development and socio-economic development.

Map 3.2.2 B Research Site



Source: LARReC 2004

These two villages are a comparative case study in terms of access and location. The purpose was to observe how the communities would response with regard to fishing when there was the introduction of projects which influenced technology and infrastructure. How would those facilities influence decisions on making a livelihood?. For example, formerly, the majority of the people in Hoinamyen village were fishermen, but later, infrastructure was developed in this village and good roads linked the community to other, rural and urban areas. Hence, people could see that fishing was not the only choice for income generation; the existence of infrastructure opened up multiple choices regarding employment, interests and social values. Also, how would the Fisheries Programme be sustained in terms of building social interests and commitment to the community? Therefore, the comparative study would be useful in helping to answer such questionss.

3.2.3 Seasonal Calendar

I spent almost two semesters studying for and conducting this research. Actually, it began as my individual study in the first half and as field research in the second. It was fascinating for me to visit the Mekong River Commission Secretariat in Phnom Penh, Cambodia (the former MRC's Headquarter) during the "traveling class room". I had a good chance to talk with Project Officers to gain an overall picture and understanding of the MRC's Project Implementation and Coordination System. This visit and the literature review went hand in hand.

Figure 3.2.3 Seasonal Calendar for field research

No.	Main Activities	J	F	M	A	M	J	J	A	S	O	N	D	Remark
*	Conducting Research													
I	Seasonal Diversities													
	-Dry Season													
	-Wet Season													
II	*Rice Cultivation*													
	- Wet Season Rice													
	- Irrigated Rice													
III	Fisheries													
IV	Skillful/Laboring Jobs													
V	Religious Activities													

In the second half (which was my last semester) I had more time to concentrate on the issue "Impact of the Fisheries Programme of the MRC on sustainable livelihood in Hoinamyen and Angnamhoum Villages, Naxaithong District, Vientiane Capital, Laos"

1. Preparation

April 2004: Visited the MRC Secretariat, Phnom Penh (during the traveling class room, Cambodia). For gathering secondary data, the MRC Programme Reports and Publications were used. Met with Project Officers (Programme Coordinating Unit) for a better understanding of the overview of the programme and general issues. June, July 2004: Attended the International Conference at Chiang Rai and the International Symposium at Khon Kaen, regarding Socio-Economic Issues in the Mekong Sub-region. June-October 2004: Individual study: literature review, selected relevant topics.

2. Field Work

September 2004: Preliminary fact-finding, met with implementing agencies: the MRC Secretariat has now moved to Vientiane. The purpose was focusing on the Fisheries Programme, visiting the project sites for selecting the case study, and meeting with representative of the Angnamhoum Reservoir Fisheries Management Committee (RFMC).

November 2004: Feasibility study conducted with two village headmen using the checklist and baseline data collection in order to get a better understanding of the background and current situation of Management Reservoir Fisheries Programme at Namhoum. Appointments were also arranged with the MRC, LARReC, Angnamhoum and Hoinamyen Villages and two research volunteers for upcoming field research which would take place in January 2005.

January- 1st week of February 2005: Questionnaire testing and conducting field research at the selected villages and agencies.

3.2.4 Research Team

There were four people involved in the research team, the Project Coordinator from the LARReC, two research volunteers and myself. The briefing and questionnaire testing had been conducted before the field research took place.

The field research was conducted in the selected areas in villages that had benefited from the MRC Fisheries Programme. In depth interviews, focus groups and observation were used for gathering primary data. The interviewees and/or respondents were classified into three categories:

1. Beneficiary group: Fishermen and Non-Fishermen
2. Implementing Agencies: MRC and LARReC
3. Village Headmen and RFMC Members who had local leadership roles

3.3 Research Methods

3.3.1 Design of Research Methodology

As the case study focused on the impact (what changed) after the MRC's Fisheries project was launched in the villages, using purely quantitative data would not have been enough. So, it was necessary to have the in-depth interviews with key persons: village headman, and officials from RFMC, DAFO, MRC and LARReC. In addition, fisheries issues are not as sensitive issues as HIV/AIDS, it was possible to conduct interview with the focus groups and exchange views points.

Baseline Data Collection: We need to use this approach to the historical background to indicate and to conceptualize the theories about finding or about the particular issues being investigated. Historical consideration can help contextualize the issues and provide additional types of explanations. (Braud, William and Anderson, Rosemarie. 1998: 40-41). In the case study, the baseline data collection was carried out into two periods. The first was to collect the data back to 2000 and earlier to build up a picture of what villages were like before the MRC project was launched. The second was the collection of information concerning the current situation during project implementation (2004-2005).

Questionnaires Structured questionnaires were prepared to interview the beneficiary groups. The majority of the question were open questions and semi-structured questions were few in number.

In-depth Interviews: In-depth interviews were used to allow the interviewees to describe the situation and problems. These were arranged for the key implementing agencies such as: the village headmen, local mass organizations, the MRC and donors who had important roles in the decision-making.

Focus group: In principle, this involved a group interview in which 6-12 people were brought together for a discussion. Often they had experiences in common, but not always. They may have been strangers to each other or drawn from an existing community group. It was not a series of individual interviews conducted in a group. The interaction between group members was part of the process. (Laws, Sophie with Harper, Caroline & Marcus, Rachel 2003: 298). It is a semi-structured group discussion focused on changes and trends over the preceding five year (before 2000 and 2004-5 as current year).

In the planning the focus groups for the case of the MRF Phase II.2000-2005 was important to distinguish between two groups: fishermen and non-fishermen. The participants had to share some important characteristics or experiences rather than a diverse group; the people brought together had to genuinely represent a wider population. The fishermen and non-fishermen participated in the group discussion were asked to compare the situation now with that of five years ago.

Observation: In order to understand a fishing community's general behavior, observation had to take place; choosing informal sites for visits at certain times was essential. There were three visits: firstly, conducting feasibility study; secondly, to

test the questionnaires (while conducting baseline data collection), and thirdly, to undertake field research.

3.3.2 Data Analysis

Table 3.3.2 Process of Research Methodology

Steps.	Description	Methods	Sources of Data
1.	Literature Review	Collecting of Secondary Data -Visit resource centers -Visit organizations -Attend International Symposiums	AIS, AIT, CU, DAFO, KKU, LARReC, MFLU LNMC, MRCS, NSC
2.	Field Research	Collecting of Primary Data: -In depth Interview -Focus Group -Observation	Informants from: -Angnamhoum village, -Hoinamyen Village, -LARReC -MRCS
3.	Data Analysis	Qualitative Data Spread Sheet MS Excel	Same as above
		Quantitative Data -MS Access -SPSS 13.0 for windows	Same as above

As this case study consists of both qualitative and quantitative data, the SPSS was used for analyzing the quantitative data, and an excel spread sheet was used to support the qualitative data. Details of the analytical processes are as follows.

3.3.3 Research Ethics

- Anthropology, more than any other social discipline, is conscious of ethical questions. The nature of the anthropologist's work sometimes involves the urge to intervene and take action as a result of the knowledge gained during field studies. This is expressed as a series of ethical dilemmas by an Indian anthropologist, Paliwala (Mikkelsen, Britha 1995: 263-264)

- Research ethics have not only been addressed during the field work but also applied throughout the entire research, including literature review, documentary and/or historical research, field research and data analysis. All research obeyed the following rules:

1. Giving the name of the respondent with the permission of the respondent.
2. Asking permission before using tape recorder.
3. Regarding all information given as confidential
4. Guaranteeing respect for and protection of the individual
5. Showing respect for the culture of the interviewees, without influence or personal bias
6. Expressing caution in reporting practices which might bring individuals and/or organizations into the conflict

In addition, according to Braud, William and Anderson, Rosemerie (1998:239) the study of social interactions and relationship process should be restricted to those that can be easily simulated or modeled in a research setting. This is an attempt to remove the investigator from judgmental and decisional responsibilities through the use of automatic, impersonal decision tools provided by research designs themselves and by statistical outcomes. Subject matter, evidence, and conclusions are limited to what can be observed "from the outside", rationally processed, and communicated to others in straightforward, linear prose. These issues are also taken into consideration.