

## CHAPTER V

### ANALYSIS OF RESEARCH FINDING

#### 5.1 Natural Capital

**Box: 5.1 Natural Assets**

Natural's economic and cultural goods and services includes food (both farmed and harvested or caught from the wild), wood and fiber, water regulation and supply; waste assimilation, decomposition and treatment, nutrient cycling and fixation, soil formation, biological control of pests, climate regulation, wildlife, habitats, storm protection and flood control, carbon sequestration, pollination, recreation and leisure (UNDP 2001: 72).

##### 5.1.1 Natural Capital

The climate of Laos is wet-dry tropical monsoon. The rainy season lasts from April to September and the dry seasons occupies the other six months of the year.(Taki, Yasuhiko 1974: 13). Which is suitable for aquaculture and wildlife conservation. Better resource management is urgently needed to sustain inland fisheries resource (MRC 2002.c: 33).

##### Why Natural Capital does really matter?

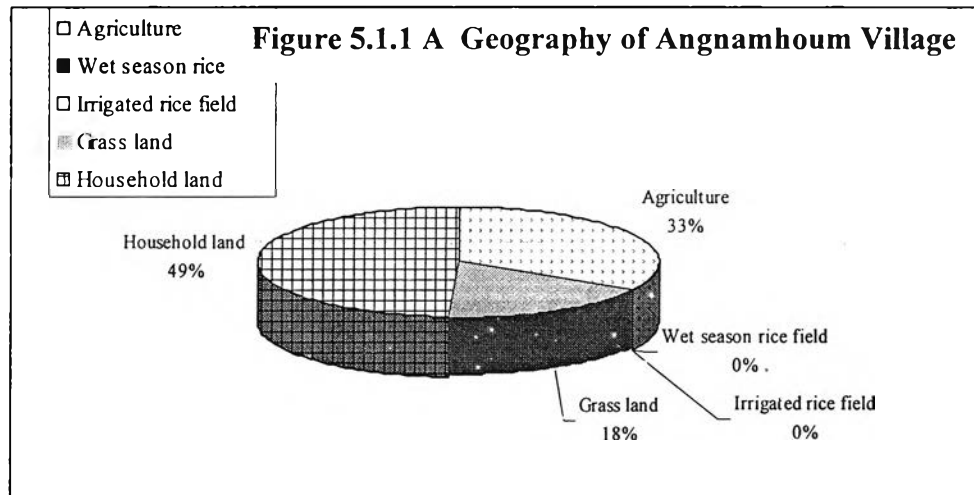
Any vary of natural capital will reflect to spatial, socio-economic changes and livelihoods especially the rural livelihood whose much of the living depends on natural resources and ecology. Therefore, it would be useful to observe what has been changed (in terms of natural capital) over the last five years in Angnamhoum and Hoinamyen Villages after the MRC/MRRF II launched In 2000. The implications of those changes are also provided.

**Table 5.1.1 A Natural Capital – Angnamhoum Village**

Landscape	Before 2000	2005
-Total Area	1,240,000 m2	1,240,000 m2
-Agricultural Land	416,000 m2	416,000 m2
-Wet Season Rice Field	0	0
- Irrigated Rice Field	0	0
- Household Land	612,000 m2	612,000 m2
- Grassland	220,000 m2	220,000 m2
<b>Environment</b>		
-Water source	1. Namhoum Reservoir 2. Hoinamyen Spring Water	1. Namhoum Reservoir 2. Hoinamyen Spring Water
-Other Resources	N/A	N/A
-Agricultural plantation	Tamarind/Mango/Banana	Cucumber/Rubber Trees/ Eucalyptus/Agar wood
-Slash and Burn Agriculture	Abolished (2000)	N/A
-Disaster Phenomenon	N/A	1 case in Nov. 2003

*Source:* Baseline Data, Angnamhoum Village 2004-2005

The obvious changes in the last five years in terms of the natural capital of Angnamhoum village would be in the agricultural plantation. Table 5.1.1 A shows that in 2000 the village grew a lot of fruit trees, while in 2005, there were also the permanent crops such as Eucalyptus and Agar wood; these trees are commercial crops and can generate high income for the community.



*Source:* LARReC 2005

Figure 5.1.1 A shows the land use at Angnamhoum Village. It can be seen that, despite having 33% of the land in agriculture, this village has no land to farm rice; conversely it means that people in Angnamhoum are engaged in gardens, plantation and fisheries. The large amount of household land 49%, allows the community to raise livestock, engage in handicraft, and social activities.

### 5.1.1 B Hoinamyen Village

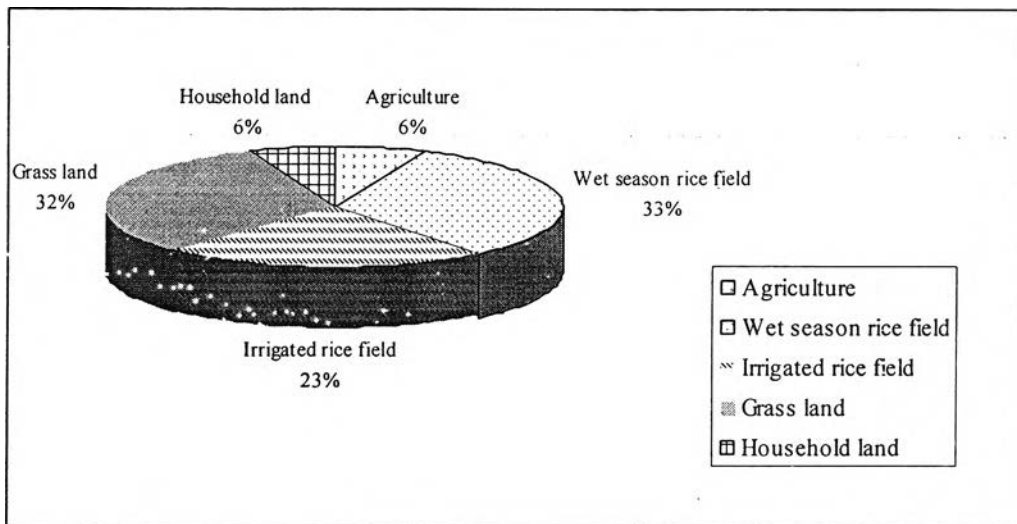
**Table 5.1.1 B Natural Capital- Hoinamyen Village**

Landscape	Before 2000	2005
-Total Area	2,240,427m <sup>2</sup>	2,240,427m <sup>2</sup>
-Agriculture Land	140,240m <sup>2</sup>	140,240m <sup>2</sup>
-Wet Season Rice Field	735,377m <sup>2</sup>	735,377m <sup>2</sup>
-Irrigated Rice Field	510,150m <sup>2</sup>	510,150m <sup>2</sup>
-Household Land	137,077m <sup>2</sup>	137,077m <sup>2</sup>
-Grassland	717,538m <sup>2</sup>	717,538m <sup>2</sup>
Environment		
-Water Rource	-Hoinamyen Water Spring	- Hoinamyen Water Spring
-Other Resources	N/A	N/A
-Agricultural Plantation	Fisheries/Cucumber/Rice	Rice/Cucumber / Fisheries
-Slash and Burn Agriculture	Abolished (1982)	-
-Disaster Phenomenon	N/A	N/A

*Source:* Baseline Data, Hoinamyen Village 2004-2005

Table 5.1.1 B shows that, there was no major change in land use. However, for agricultural plantation, the list of activities in order of importance, it shows that, five years ago fisheries was the first main source of livelihood in the village. However, in 2005 fisheries dropped to third position. The reasons behind that population growth caused over-fishing (illegal fishing) which led to a decrease in the number of fish and that people have more choices to improve their lives.

**Figure 5.1.1 B Geography of Hoinamyen Village**



*Source:* LARReC 2005

The land use at Hoinamyen Village is shown in figure 5.1.1 B. It is obvious that the village use more than 50% of land (wet season rice fields and irrigated rice fields) is for farming rice. As 70% of the working population are farmer, rice farming has become the number one source of livelihood at present followed by cucumber and fisheries.

### 5.1.2 Fish Production

The development objective of MRC Fisheries Programme is coordinated and sustainable development utilization, management and conservation of fisheries of the Mekong Basin. (MRC 2003.a: 3).

**Fish Stocking:** Naxaythong district has four reservoirs namely: Namhoum, Namsuang, Hoisone and Nongtaler. Fish stocking is carried out by rotation base. Officially, fish stocking is usually organized on April 14 during the Lao New Year and on July 13, the National Conservation Day of Wildlife and Aquatic Animal every year.

In both Angnamhoum and Hoinamyen Villages, donations are made for annual fish stocking. Donation of a thousand of kip are collected from each household and contributions are made by businessmen and merchants.

“A few years ago every household was required to contribute 500 kip for fish stocking, now living standard is higher we are asked to contribute 1,000 kip a household. However, we consider this to be reasonable.” Focus group, Angnamhoum Village, 2-February- 2005

However, the focus group from Hoinamyen village (3 February 2005) said, “We normally contribute 5,000 kip per household for fish stocking; this it is by voluntary”

This implies that community participation was involved from the beginning. It is expected that by this contribution, the community will gain ownership to the reservoir as one of its main resources.

**Table 5.1.2 A Fish Stocks at Namhoum Reservoir (2000-2004)**

No.	Fish species	2000	2001	2002	2003	2004
1.	Tilapia (Pa Nin)	60,000	-	-	60,000	15,000
2.	Silver carp (Pa Ket Lab)	40,000	-	-	60,000	10,000
3.	Bighead (Pa Hoa Yai)	20,000	-	-	20,000	10,000
4.	Common carp (Pa Nai)	10,000	-	-	10,000	5,000
5.	Mrigal (Pa Malikan)	20,000	-	-	20,000	10,000
	<b>TOTAL</b>	<b>150,000</b>	<b>-</b>	<b>-</b>	<b>170,000</b>	<b>50,000</b>

Source: District Agriculture and Forestry Office (DAFO, 2005)

The table shows the number of fish stocks from 2000 to 2004 at Namhoum Reservoir and the existing fish species there. The total fish stocks increased from 2000 to 2003 but fell from 2003 to 2004. The reasons is that fish stocking was carried out on a rotation basis during 2001 and 2002, there was fish stocking at Namsuang and Hoisone reservoirs. However, the contribution rate was not standardized and compulsory, which would increase flexibility and also stabilize the fish stocks.

The positive impacts from Natural Capital are that the water in the reservoir remains in good condition, the number of dying fish has decreased, and productivities is higher. Natural capital is richer.

According to District Project Coordinator, DAFO, 2 February, 2005, it was mentioned that:

“In the past, the amount of daily catch was only between 40-50kg per fisherman. This was because too many illegal fishing methods were used and people from elsewhere came to the reservoir. Now the Fish Conservation Zones has been identified, fishing rules and regulations are in place; this has helped increase the catch from 70-120 kg per fisherman”

“The obvious changes in these years are that the Namhoum Reservoir is much better organized and managed; moreover, the District Fisheries Management Committee (DFMC) has also provided supervision. Once fish stocking is regular, fish population increases slightly”

Focus Group, Angnamhoum Village: 1 February 2005

**Table 5.1.2 B Statistics of Catchments in the MRRF II from 2000-2004, Fish Production by Year (unit: kg)**

Namhoum	2000	2001	2002	2003	2004	Remark
Dry season 7 months (November-May)	-	34,267	71,463	94,365	100,737	
Wet season 5 months (Jun-October)	-	-	48,709	-	-	
<b>TOTAL</b>		<b>34,267</b>	<b>120,172</b>	<b>94,365</b>	<b>100,737</b>	

Source: LARReC 2005

Although, the fish stocks (5.1.3 A) fell from 2001 to 2004, the number of the catch as shown in figure 5.1.3 increased gradually from 2001 to 2004. However, it is noted that there is only a record of the catch the wet season in 2002 the data for the other years is unable to mentioned as the survey forms were not returned. From the baseline data, it was found that,

“there was a big storm in November 2003, and a lot of properties was damaged such as 12 rafts, 2 cycling boats, and one death from Angnamhoum village”

Deputy Chief of Angnamhoum Village, 7 December 2004

“Moreover, the Namhoum Reservoir is considered to be rich in aquatic life, if we have the strong efforts in managing the FCZ, avoiding illegal fishing gear, and raising the awareness of the community on the value of aquatic resources in Namhoum reservoir, we almost do not need to add fish stocks, because fish breeds naturally”

Fisheries Programme Officer, MRC 1 March 2005

However, fish production from the Namhoum Reservoir has to be harvested at a sustainable level for the survival of the population and the sustainability of the livelihood of millions of people in the villages and the country as a whole.

To summarize this part, it can be said that basically natural capital has a lot of influence on the community’s livelihood. It helps villagers find better choices to meet their needs and improve their lives. However, from the development programme perspective, natural capital could also be a facilitating factor and limitation on the fisheries programme. The earlier the acknowledgement of this issue, the better in order to adjust and provide appropriate supports for the community for sustainable development.

## 5.2 Physical Capital

### Box: 5.2 Physical Assets

Local infrastructure includes housing and other building, road and bridge, energy supplies, communication, markets and transport by air, road, water and rail. (UNDP 2001: 72)

### 5.2.1 Physical Capital

Physical Capital is another connotation assets. In order to ensure that logistic arrangement provided are met fish distribution channel. Therefore, the national and local fisheries institution would be considered in addition to the economics of any new fishing equipments. It could be identified whether the processing and storage, transportation, and marketing infrastructure are adequate to handle an increased catch. However, some of these interconnected considerations influenced the transfer of fishing technology and also the infrastructure.

Table 5.2.2/1 (below) shows the existing infrastructure or the physical capital of Angnamhoum village. It indicates that the village generally has a good communications network, as 70% of the people have access to information technology (two shops provide internet services). This shows that people generally have more access to information channels with the people from outside. The motorcycle services and access to the main road are very importance factors in transporting the catches to the markets in the city and elsewhere.

**Table 5.2.1 A INFRASTRUCTURE OF Angnamhoum Village**

<u>Information/Media Access</u>	<b>Before 2000</b>	<b>2005</b>
-Number of Public Announcement System	N/A	1
-Access to Newspaper	50%	70%
-Access to Radio	90%	10%
-Access to TV/VCD	80%	90%
-Access to Internet	N/A	70%
-Internet Service shops	N/A	2
-Electricity coverage	100% (1998)	100%
-Telecommunication coverage	Mobile: 70%	Desk Telephone 0%/ Mobile: 90%
<u>Transportation</u>		
-Number of Public Roads	Road No. 13 North	Road No. 13 North
-Number of Bridge(s)	1 Hoinamyen Bridge	1. Hoinamyen Bridge
-Number of Pubic Services	-85 Motorcycles serviced	-85 Motorcycles serviced

*Source:* Baseline Data, Angnamhoum Village 2004-2005

However, there is only one Public Announcement System which is located in a temple. The population density of this village is one person per 601 m<sup>2</sup> (see. Table 4.2.1) and the community is scattered settlement. This could cause difficulties in gathering people for meetings. Due to this situation, updated information on fishing rules and regulations, which is regularly announced by the RFMC as well as the Fishermen Groups, is not always received by the people.

**Table 5.2.1 B Infrastructure-Hoinamyen Village**

<u>Information/Media Access</u>	<b>Before 2000</b>	<b>2005</b>
-Number of Broadcasters	N/A	8
-Access to Newspaper s	-	-
-Access to Radio	70%	50%
-Access to TV/VCD	60%	90%
-Access to Internet	N/A	N/A
-Internet Service	N/A	N/A
-Electricity Coverage	90%	95%
-Telecommunication Coverage	80	85%
<u>Transportation</u>		
-Number of Public Roads	No. 13 North	No. 13 North
-Number of Bridge(s)	1. Hoinamyen Bridge	1. Hoinamyen Bridge
-Number of Pubic Services	-85 Motorcycle serviced	-85 Motorcycles serviced

*Source:* Baseline Data, Hoinamyen Village 2004-2005

Table 5.2.2 B demonstrates the physical capital of Hoinamyen Village, indicating the infrastructure available locally. Although there is no access to newspapers and the internets, Hoinamyen village has comparable infrastructure to Angnamhoum village. It should be noted that Hoinamyen is physically twice the size of Angnamhoum village. Thus, easy access to a main road and public services greatly helps the transportation of fish to the markets and to the consumers. On the other hand, the easy access to a main road and to the city also enable people to work out side the village in the areas of construction, driving, and trading for exchange goods and products.

Indeed, it mainly also supports the connection of people in the village to the outside world to exchange knowledge, idea and migration as an effect of globalization. This could result in a decrease in the number of people engaged in fishing.

## **5.2.2 Fishing gears and accessibility**

### **Where to find fishing gear?**

Almost all the fishing gear used at Namhoum Reservoir is imported from Thailand, especially the gill nets and cast nets. A gill net costs about 300,000 kip (or 30 US\$) and lasts no longer than six weeks to 3 months. It means the fishermen need to buy a gill net 3 or 4 times a year.

It appears that, the community has attempted to produce its own fishing gear such as fish traps and cast nets, lift nets, bamboo rafts and boats. However, this equipment provide only minimum capacity for catch and require labor intensive maintenance. Therefore, these locally made items seem to be unpopular with the fishermen because of water level of the reservoir and its size.

Although the fishing equipment is not completely and locally-made, the fishermen have no major problems in getting the equipment as there are many merchants who sell fishing gear in all seasons.

### **How the villagers expressed their views about fishing gear?**

Most of the fishermen mentioned the expense of fishing gear. This is one reason why they could not fully participate in fishery.



“We have lack of fish traps. Fishing gear is very expensive and sometimes we can not afford, to buy a gill net, it costs 100,000-300,000 kip(or approx 10-30 US\$). They can be used only for 3 or 4 times. As each time we can earn only 30,000kip, it means we are taking a risk”

Focus Group, Angnamhoum Village, 2 February 2005

However, it would be interesting to see how the fishermen handle about this problem. “We, as the fishermen, were given some funds from the fish traders, to invest in fishing gear, the caught is sold to the fish traders and they deduct the cost from the price they pay to us”

Focus Group, Hoinamyen Village, 4 February 2005.

Phounsavath, Sommano (1998: 28) has classified fishing gear into two main groups, namely, small-scale fishing gear consisting of fish traps, fish hooks, harpoons, and cast nets; and large-scale fishing gear consisting of gill nets and lift nets. However, the fishing gear commonly used at Namhoum Reservoirs is cast net, fish hooks, fish traps, gill nets, rafts, boats and motor boats. The fishing equipments are raft and boat, and the fishing technology is consisted of motor boat, ice and light attraction.

**Table 5.2.2 Fishing Gear used at Namhoum Reservoirs**

Fishing gear	Price per unit (kip)	Length of use (months)	Max. capacity (kg)	Seasonal use
Cast nets	100,000	48	5 kg	Dry season
Fish hooks	40,000	24	2 kg	Rainy season
Fish traps	50,000	12	1 kg	All seasons
Gill nets	250,000	1.5	50 kg	All seasons
Fishing equipments				
Rafts	100,000	36	100 kg	Dry season
Boats	300,000	36	100 kg	All seasons

*Source:* RFMC Interview 2005

Table 5.2.2 shows the fishing gear used at Namhoum Reservoir. It appears that the gill net are the most popular. They are used in all season and their capacity is relatively high. However, in terms of price and length of use, gill nets are the most expensive equipment as it can be used for only a month and half. In addition, this nets are imported from Thailand. Thus, improving fishing gear made locally at a reasonable cost is needed. (Also See annex-E.2)

It is suggested that the introduction of fishing equipment must also be carefully compared with and evaluated against the current technologies to ascertain that it is more successful and is worth the increased investment. Providing less expensive fishing gear locally should be carefully considered. To sustain fisheries programme, it is crucial to support fishing gears to fishermen with affordable price. Furthermore, the infrastructure of these two village are facilitating factors to bring about smooth process of fish marketing and transportation of the catch to the city.

### 5.3 Human Capital

#### Box: 5.3 Human Assets

The status of individuals, including the stock of health, nutrition, education, skills and knowledge of individuals, access to service that provide this, such as schools, medical services, adult training, the way individuals and their knowledge interact with productive technologies, and the leadership quality of individuals. .(UNDP 2001: 72)

#### Human Capital Context

Before going through the implication of Human Capital, it would be useful to look at when the term, 'Human Capital' is first used and how it is developed. From the earliest record, it was found out that human capital was first introduced in 1960s. However, the concept was not so clear, as it was only the starting point. from 1990s onwards, the term 'human capital' has become cleared and it is universal and being applied in many leading international development organizations, such as World Bank and UNDP.

Human capital probably the most important and most original development in the economics of education in the past thirty years has been the idea that the concept of physical capital, as embodied in tools, machines, and other productive equipment, can be extended to include human capital as well. (Schultz, 1961; Becker, 1964)

Individual's chosen activity can be understood to reflect their perceptions of their interests: after all they choose what they would like to do. And development is the extension of individual rights to behave according to their preference. This is modernization theory. (Cole, Ken. 1999: 165)

The theory of human capital is the most fundamental and popular concept for discussing the economic value education brings about. It is the idea that education is in

demand as the value of additional future returns on educational investments exceeds a value of costs necessary for education. In this theory, it is necessary to deliberate what educational returns are, what educational costs are, and what an educational demand means as a result. ([http://www.fcronos.gsec.keio.ac.jp/englishsite/e\\_humancapital.html](http://www.fcronos.gsec.keio.ac.jp/englishsite/e_humancapital.html)) (in 2000s)

In this case, the impacts of the MRC's Fisheries Programme on human capital can be translated into capacity building, human development, and human initiative-empowerment, which includes ownership and leadership of the people from Angnamhoum and Hoinamyen villages. However, the indirect impacts such as the condition of health and education of the community will also need to be analyzed.

### **5.3.1 Capacity Building**

It has become fashionable to both talk about and attempt to pursue sustainable development in the developing countries. Capacity-building is directly related to this objective, because only domestic capacity can make the development process sustainable. However, this is not possible, if the message of sustainability itself has to come from foreign aid. (UNDP 2002:73)

The main objective of the MRC/MRRF project is to invest in capacity building. (Annex 4.3 shows that in the five-year programme). The MRC has supported more than twenty workshops and training sessions for national project staff and the RFMC members. For instance, in March 2003, there was RFMC Training on Planning, Monitoring and Evaluation (PME), and in December 2004, there was RFMC study tour on fish-food processing in Thailand.

#### **Leadership**

A total of 17 RFMC members were chosen in order to take the leading role and represent the best interests of the local community, especially of the fishermen and the non-fishermen of the four villages. During the last five years, the RFMC has made a number of initiatives on improving the fisheries at Namhoum Reservoir particularly after the completion of the PRA survey in 2000. As a result, the RFMC proposed eleven activities (annual plan of action), to the MRC for funding. This has been practiced yearly. The RFMC is the closest local implementer and monitor of the programme.

“We have already been trained. We can not stop this programme, we need to take a lead to implement and maintain the project, in order to ensure the continuation to the next generation”  
RFMC, Angnamhoum Village, 2-Feb-2005

“We were formed by the villagers, we have to continue improving fishing activities, because this is our reservoir”  
RFMC, Hoinamyen Village, 3-Feb-2005

### **Empowerment**

Development of leadership skills are RFMC’s capacity has been built and they are able to manage the fisheries at Namhoum Reservoir in a participatory manner. For example, after training on the PME (2003), RFMC has been able to prepare request proposals for the MRC/MRRF II. The financial reports are supplied after fund has been used in line with the plan of action. In the same year, after attending the workshop on fish stocking in reservoirs, and a demonstration of a mobile fish hatchery, the RFMC was able to operate a fish hatchery. However, this activities so far has not been officially implemented because of limited funds. In 2004 RFMC members participated in food processing training in Thailand. This has made significant changes in the community as a food processing group was established in early 2005 at Angnamhoum and Hoinamyen villages. In addition, concentrated efforts from both RFMC and villagers have been focused on the production of fishing gears and solution to the problems.

Moreover, in 2002 DAFO issued resolutions on fishing rules and regulation at Namhoum and Namsuang Reservoirs given by the District Governor (DAFO, 2002.c: 1-3). This enforcement was initiated by the RFMC and supported by MRC and LARReC. There are 19 articles to be strictly followed. This resolution outline the rights and obligations of the RFMC in managing the aquatic resources in Namhoum Reservoir. The RFMC as well as the patrolling teams are empowered to seize illegal fishing gear (article 3) and to arrest illegal fishermen (article 7).

“We have seized seven electric generators and 29 gill nets (90 m long) from illegal fishermen, and compensation was received accordingly.”

RFMC Chairman, Angnamhoum Village, Feasibility Study, 7 December 2005

This is a commitment by the government to the RFMC for strengthening empowerment and gaining legal power in the communities.

### **Women Participation**

To ensure sustainable resource management, it is necessary to make sure both men and women join the implementation and share the benefit equally. The MRC has clearly identified the importance and supported of women participation in the Fisheries Programme, by encouraging women from the Lao Women Union (at village level) to take part in the RFMC. Thus, one out of four RFMC members has to be a woman. According to the interview of DAFO Project Coordinator (2-February 2005), it was mentioned that.

“Women participation in fisheries has increased to 10% in 2004-2005, while as there was not much women participation before 2000”. (see Table 5.4 Fishermen at two villages).

In addition, It should be noted that, fish caught by women are mainly destined for household consumption. (LARReC, 2004: 6)

### **5.3.2 Health and Education**

Fish contents a lot of nutrition value and necessity for human development (Smith, Lynwood S. 1991: 151). Fisheries activities also contributes to the development of Health and Education status for both villages. Concerning human health impacts, it is necessary to predict and interpret the possible impacts of a proposed activity on human health and well-being. Although considerable progress has been made in predicting biophysical impacts, a meaningful integration of such impacts with social and human health effects is seldom achieved. (Sadar, M. Husain. 1996: 124)

Table 5.3.2 A (below) shows the human capital of Angnamhoum Village comparing the status before 2000 and in 2005. In terms of health and education. It was found that generally people have improved health conditions such as more health staff, fewer deaths, access to health sanitation increased (such as dug wells and latrines). Common diseases have improved from malaria/diarrhea to minor fever. In terms of education, there was not much change, although the number of teachers and students had increased in 2005. It is good that, almost people are literate and educated. From the baseline data it was also found that more than 70% of the people in Angnamhoum village were technicians and dam construction workers. These people have brought with them technical and management skills of the water resources. Thus, it will be easier for MRC to introduce a fisheries programme to this community and strengthen the capacity in the future.

**Table 5.3.2 A Health and Education of Angnamhoum Village**

Health	Before 2000	2005
-Number of Healthcare Center	1 Military Hospital	1 Military Hospital
-Number of Health Staff	15	17
-Number of Village Caretakers	5	5
-Number of TBA	3	3
-Number of Dead	5	4
-Common Diseases	Malaria/Diarrhea	Minor fever
-Access to Clean Water	Dug well 80%	Dug well 95%
-Access to Dispensaries	N/A	N/A
-Access to Latrines	70%	90%
<b>Education</b>		
-Number of School	1 primary school	1 primary school
-Number of Teacher	7	10
-Number of Students	217/114	289/180
-Enrollment Rate	80%	80%
-Drop-out Rate	N/A	N/A
-Number of Training Centers	N/A	N/A
-Distance: Village-School	50m	50m
-Vocational Training Centers	N/A	N/A
- Illiteracy Rate	Eradicated in 1997	2 %

Source: Baseline Data, Angnamhoum Village 2004-2005

The implications for health and education of the fisheries programme would be a healthier community as well as the healthier fishermen, which could be the key resource to prosper implementation of the programme. However, it should be noted that there was no training center from five years ago until now and no vocational training, This would be the center points to maintain and provide fishing and related studies for the community. Thus, fishing training was solely carried out by the concerned organizations and implementing agencies.

**Table 5.3.2 B Health and Education– Hoinamyen Village**

Health	Before 2000	2005
-Number of Healthcare Center	1 District Hospital	1 District Hospital
-Number of Health Staff	5	8
-Number of Village Caretakers	1	1
-Number of TBA	1	N/A
-Number of Dead	3	2
-Common Diseases	Malaria/Diarrhea	Minor Fever
-Access to Clean Water	Dugwel 100%	Dugwel 100%
-Access to Health Care Service	30%	20%
-Access to Latrines	70%	95%
<b>Education</b>		
-Number of School	1 primary school	1 primary school
-Number of Teacher /female	10/7	10/8
-Number of Students	260	289
-Enrollment Rate	90%	95%
-Number of Drop-outs	2%	3%
-Number of Training Centers	N/A	N/A
-Distance: Village-School	nearby	nearby
-Vocational Training Centers	N/A	N/A
- Illiteracy Eradication	1978	N/A

Source: Baseline Data, Hoinamyen Village 2004-2005

Table 5.3.2 B elaborates the human capital of Hoinamyen Village regarding health and education. The village overall has improved health condition similar to Angnamhoum Village. However, it was noticed that people's access to health care service fell to 20% from 30% in 2000. As this villager have access to the main road. The infrastructure is available and it allows villagers to visit the hospital in Vientiane easily. In terms of education, the improvement is slight. Another common feature of Angnamhoum and Hoinamyen villages is lack of a training center.

Fishing activities are about water contact and sometimes at night time. It was reported in the feasibility study that, there were a few malaria cases in Angnamhoum village as a possible consequence while fishing at night. The issue need to be applied for the consideration of preventive measure in future.

As the MRC is focused on capacity building, it would be more sustainable if the training was regularly given, practiced locally and conducted by the local fisherman of each village. The physical arrangements is another big issue for the programme.

It is obvious that, The fisheries programme is highly regarded and has made positive impacts on human capital in terms of capacity building, nutrition, empowerment and a transfer knowledge to the next generation. Activities that promote the well-being of individuals and society, e.g., education, literacy, and health care, are necessary components of sustainable development, contributing to the production of human capital. (ADB 2003: 10). Both tables show that the MRC programme is working very well and it has positive impacts on human capital.

## 5.4 Financial Capital

### **Box 5.4 Financial Assets**

Stocks of money, including saving, access to affordable credit, pensions, remittances, welfare payments, grants and subsidies. (UNDP 2001: 72)

Fish also contributes to the economies of developing countries through tourism and recreation (World Fish Center 2004:6). The financial assets seem to be most tangible in comparison with the other five assets. In this context, financial capital refers to economic

activities that creates a source of income directly or indirectly for an individual or a group in the community in the two villages from the fisheries programme (MRC/MRRF II). This section will describe the activities practiced in the programme. The topic provides the existing financial capital of the two villages and analyze the potential economic activities of the villages. It would be interesting to look at what are the fishermen's view on fishing, what are the fund raising potentials could be considered in the future.

### 5.4.1 Financial Capital

Some basic features of financial assets in the two fishing villages as revealed by the sample survey are summarized in Tables 5.4.1 A and 5.4.1 B.

<u>Economic</u>	<b>Before 2000</b>	<b>2005</b>
-Average Income per capita/year	350 US\$	500 US\$
-Main source of income	Fisheries/Construction/Handicraft	Handicraft/Construction/Fisheries
-Number of Micro Credit Services	-	1. Saving Group
-Number Financial Institution	N/A	N/A
-Number of Factory(ies)	-	1
-Number of Markets	-	1
-Number SME	-	3
-Number of Tourist Sights	1	4
-Number of Livestock sold per household	90 US\$	200 US\$
-Poverty Eradication	Applicable in 2000	N/A

*Source:* Baseline Data, Angnamhoum Village 2004-2005

Table 5.4.1 A compares the financial capital of Angnamhoum village between before 2000 and in 2005. It is clear that, there is a lot of improvement such as that income per capita increased from 350US\$ in 2000 to 500 US\$ in 2005. There are many economic activities in 2005 such as a saving group, a factory, a market, and three small and medium enterprises. Four tourist sites were developed. These factors will boost local income from fish marketing. Fish are transported to the local market before being sent elsewhere. Moreover, Angnamhoum village is a good location for tourists. There are at least four islands to be developed to serve local and foreign visitors for fishing-holidays. If the government starts this project, fisheries and reservoir conditions will have to be improved.

Table 5.4.1 B presents the financial capital in Hoinamyen village, indicating the status before 2000 and in 2005. It is apparent that the economic condition of this village has improved moderately. Income per capital rose from 280 US\$ before 2000 to 350 US\$ in



2005. The main sources of income are rice farming, plantations and fisheries. There were two development projects launched in this village

<b>Economic</b>	<b>Before 2000</b>	<b>2005</b>
-Income per capita	280 US\$	350 US\$
-Main source of income	-Fisheries/Farm rice	Farm rice/Plant cucumber/Fisheries
-Number of Micro Credit Services	-	1/ Village Development Fund 2/ Saving Fund.
-Number Financial Institution	N/A	N/A
-Number of Factory (ies)	-	4
-Number of markets	1	1
-Number SME	-	-
-Number of Tourist Sights	-	-
-Number of livestock sold per household	100 US\$	150 US\$

*Source:* Baseline Data, Hoinamyen Village 2004-2005

In addition, four factories are operated which are metal factory, a dried noodle factory, a furniture factory and a chicken farm. The improvement has extended to raising livestock which has risen from 100US\$ to 150 US\$. There are many improvement in 2005, in terms of income, local credit, markets and factories. The villagers' skills in financial management have also developed. These are the important to support fish marketing in the villages.

#### **5.4.2 Perception of fishermen on fishing**

##### **What is the fishermen's perception about "fishing"?**

Most of the focus groups from both villages seem to agree that fishing is a source of income. The income and assets of the fishermen have increased over the last five years.

"The average annual income of the village during 2000 was around 300 US\$ and it has slightly increased in 2005 to 350 US\$"

Focus Group, Angnamhoum Village, 3 February 2005

"Previously, people used bicycles to go fishing. Today, many people use motorcycles instead."

Focus Group, Hoinamyen Village, 3 February 2005

From the baseline data, a member from the Lao Women Union reported that there are new concrete houses and pick up vehicles in Hoinamyen Village. Money was gained from fishing at Namhoum Reservoir.

However, fishing is a part-time job, and it is a step forward to another job. It is possible for the villagers to have multiple income sources such as seeking seasonal wage earning opportunities and traveling to find work in the city.

“In the past, we could earn a lot from fishing at Namhoum Reservoir. Once we noticed that we had a certain amount of money, then we would like to do another job such as trading or construction work to get more income”

Focus Group, Hoinamyen Village, 3 February 2005

“There will be more fishing activities during the non-rice cultivation season and while people are jobless. And there will be less fishing during the rice cultivation season. Although our village has no land to farm rice, we have to help our relatives”

Focus Group, Angnamhoum Village, 1 February 2005

This is in line with what Ellis said that rural livelihood diversification is defined as the process by which rural household construct an increasingly diverse portfolio of activities and assets in order to survive and to improve their standard of living. (Ellis, Frank. 2000: 15).

Fish Marketing provides work for over one hundred male and female fishers in the two villages. The local fish seller earns well in excess of one thousand US Dollars a year. However, there is some information to be considered in Table 5.4

**Table 5.4.2 Fishermen at two villages**

No.	Description	Angnamhoum Village		Hoinamyen Village	
		Before 2000	2005	Before 2000	2005
1	Total Fishermen	120	60	70	40
2	Number of Registered Fishermen	N/A	60	N/A	40
3	RFMC members	N/A	4	N/A	4
4	Female Participation in fisheries	N/A	10%	N/A	10%

*Source:* Interview DAFO Project Coordinator, 2004.

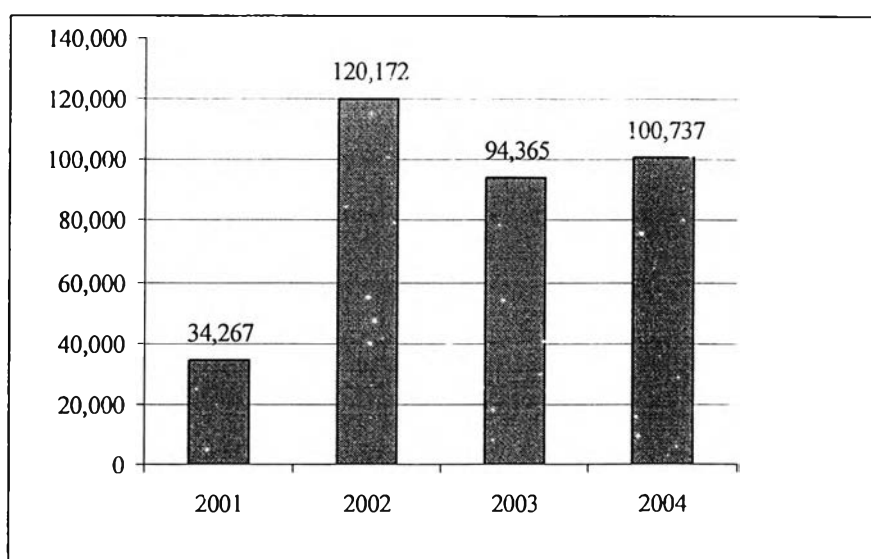
Table 5.4 shows the fishermen statistics, it could be seen that, the total fishermen in two villages decreased almost half, for example from 120 in 2000 to 60 in 2005 (Angnamhoum Village) and 70 in 2000 to 40 fishermen in 2005. From both villages, there are

almost 100 people who has identified them self as a fishermen. However, there is a reason to be well thought-out.

“The decreased of fishermen in both Angnamhoum and Hoinamyen villages is due to there are the development integration in the villages. For example previously people depended on fishing, now a day development opened multiple choices for their career such as: construction work, factory work, driving, trading and etc”

DAFO Project Coordinator, 2 February 2005

**Figure 5.4.2 Fish Caught at Namhoum Reservoir MRRF II (2000-2004)  
Fish Production by Year (unit: kg)**



Source: LARReC 2005

Figure 5.4.2 shows the number of catch from 2001 to 2004. It was an upward trend in the amount of the catch and it reached a peak in 2002, then from 2002 to 2004 the amount of the catch fluctuated. It was found that, 70% of fish caught is sold to mall traders and to the markets in the city, and 30% of fish is distributed to local market. This implies that the more the catch increase, the higher the income will be.

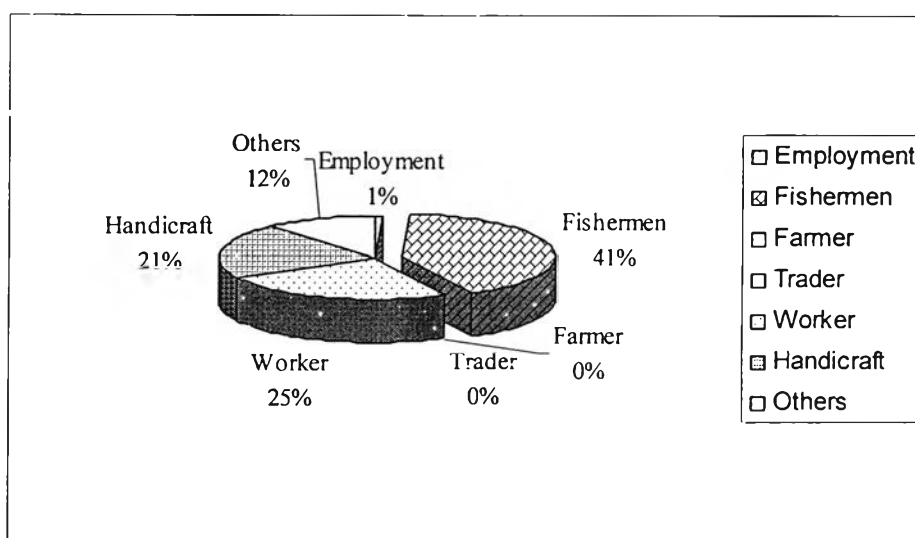
### 5.4.3 Household income

The sample survey contained a number of questions about household income, including various criteria such as land-based activities (farm and non-farm activities), water-based activities (fisheries, boat rental, raising aquatic animals), Live stock and poultry,

Skilled work (handicraft, driving, construction worker, trading), social work, and religious activities. However, two figures below show the seven most common sources of household income in the two villages.

Figure 5.4.3 A (below) shows the sources of income from different occupation of the 40 households interviewed in Angnamhoum village. This village has no land to farm rice. The majority are fishermen, which accounts for the highest proportion of 41%, and it is followed by workers 25% and handicrafts 21%. It was seen from the feasibility study that almost every household had between 1 to 3 textile weavers, sometimes people unite and work in a group.

**Figure 5.4.3 A Composition of Household Income-Angnamhoum Village**



Source: Household survey 2005

**Table 5.4.3 A Household Income in Angnamhoum Village (2005)**

Currency: US\$

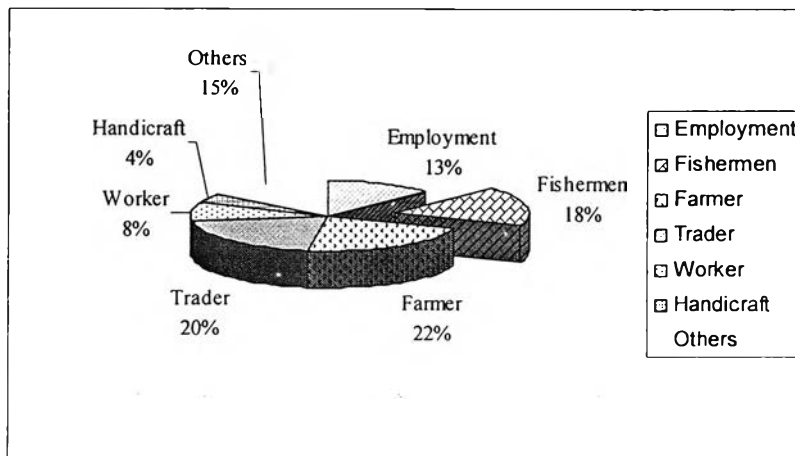
Scale	Employment	Fishermen	Farmer	Trader	Worker	Handicraft	Others
Max.	50	1,300	0	0	1,500	1,080	997
Min.	23	100	0	0	180	100	90
Average	37	700	0	0	840	590	544

Remark: The figures are presented according to household earning from each job in each year.

Source: Household survey 2005

Table 5.4.2 A has helped to explain why fishermen, worker and handicraft take the position of top three. These people earn US\$ 1,000 a year. The professional fisherman can earn up to US\$ 1,300 or US\$ 3.6 a day, while a young fisher can earn only US\$ 100 a year.

**Figure 5.4.3 B Composition of Household Income in Hoinamyen**



Source: Household survey 2005

Figure 5.4.2 B suggests that farmer, trader and fishermen are the main chosen occupations of Hoinamyen Village. In this case, fishermen account only 18% of total income. The smallest incomes are generated by worker (8%) and people engaged in handicraft (4%).

**Table 5.4.3 B2 Household Income in Hoinamyen Village (2000)**

Currency: US\$

Scale	Employment	Fishermen	Farmer	Trader	Worker	Handicraft	Others
Max.	730	1,460	900	1,200	500	240	800
Min.	22	200	60	300	200	150	80
Average	376	830	480	750	350	195	440

Remark: The figures presented according to household earned in each job per year

Source: Household Survey 2005

Although table 5.4.2 B shows that fishermen earn the highest income of US\$ 1,460 per year, these people account for only 18 % of the total population (See. Figure 5.4.2 B). Those who have larger pieces of land can earn US\$ 900, while people providing labor can earn only US\$ 60 a year. Wholesalers who deal in consumption goods can earn 1,200 US\$ or more per year and retailers can earn around US\$ 300 per year.

#### 5.4.4 Fund Raising Potentials

Although a Reservoir Development Fund was proposed in 2003, so far it has not been implemented. However, it would be interesting to discuss what such a fund could do to boost local income and strengthen reservoir development in the near future.

### **Additional Income**

Food processing seems to be the most likely beneficiary. Because fish processing can be done in the traditional way and it requires only small amount of money. Revenue can be gained in a short period. It was reported that every year there will be roughly 30-50kg of fish that go bad, especially in November and December. There are many kinds of processing such as salting, drying, and smoking. In addition, it was noticed that processing can double the price of the fish. The group could feasibly send their finished products to the local markets for testing before supplying fish to the big market in the city.

Fishing cards could be another step forward for the fisheries reservoir management. It was discussed among LARReC Project Officers and the RFMC members that in the future, the MRRF II would like to achieve the registration of fishermen in the villages. These people will be provided with fishing cards. This means that they are authorized to fish and are aware of the fishing rules. In addition, outside fishermen will need to contact the Angnamhoum village and pay the fishing card fee of 12,000 kip per year or (1,000 kip per month). This money will contribute to the maintenance of the reservoir.

Boat rental costs 30,000-50,000 kip (for 2 hours). Tourist can to rent a motor boat to take a trip to enjoy seeing the nearby island. Boat rental should be arranged to meet the increasing number of visitors and tourists.

Parking lot management has been discussed by the RFMC. They would like to be involved in managing the parking lot for the visitors and the fee is 2,000 kip for a motorcycle, and 5,000 kip for a car. This will also help to raise funds for the village.

### **Fund raising proposed by the focus groups and RFMC members**

#### ANGNAMHOUM VILLAGE

- 1- Cage Culture
- 2- Food Processing
- 3- Fishing gears
- 4- Livestock
- 5- Boat rental

#### HOINAMYEN VILLAGE

- 1- Cage culture
- 2- Food processing
- 3- Fishing gears
- 4- Fish trade

Both villages have similar investment categories, cage culture was most mentioned in this case because, investment on cage culture could have the revenue in the short run (only 6

months). Many women mentioned about food processing, while fishing gear is another common problem raised by fishermen. As gears are very important, without gear villagers could not achieve no. 1 and 2. Livestock and boat rental were mentioned by Anghnamhoum village for household consumption. Hoinamyen village has initiated on fish trade.

It could be said that, the general enhancement of economic conditions in the villages encourage people to be involved in the labour market and to be employed in the factories. Although fisheries is a source of income generation, it should be noticed that development has influenced human activities and led to livelihood diversity.

## 5.5 Social Capital

### Box 5.5 Social Assets

The cohesiveness of people in their societies, including relation of trust that lubricate co-operation, the bundles of common rules, norm and sanctions for behavior, reciprocity and exchanges, connectedness and social institution. (UNDP 2001: 72)

This topic provides the overview of social capital and highlights a number of conceptual issues. First, to highlight the potential impacts of sociability, for instance the existence of the RFMC and its function in the community. Second, to identify RFMC participation in community affairs. Third, to elaborate interconnection of RFMC to different community and stakeholder toward the MRRF II programme. Last, to give the consequences of village social capital over the last five years and in the present, and some problems which remain unsolved are examined.

### 5.5.1 RFMC and Social Capital

RFMC seems to have the greatest influence on strengthening social capital in the fishing villages because its members were chosen by the village and it represents the villages' interests. RFMC's roles and responsibility are classified into two levels: local level and project level. At the local level, these are to manage the fisheries in the reservoir, to prevent inappropriate methods that might be used by fishermen, and to ensure that information reaches the fishermen and community.

**How to measure social capital?** This question was raised while conducting the field research. However, we were lucky enough to have (Portes 1998; Woolcock 1998) been given some thoughts about the measurement of social capital, details are as follows:

### **Box 5.5.1 Measurement of Social Capital**

1. Bounded solidarity: this refers to actions that follow on from solidarity that emerges from being together in a common fate such as is found in Marx's analysis of emergent class consciousness.
2. Value introjection: this leads to endowment and identification with one's own group or community, and make resources available.
3. Reciprocal transactions: this is when the expectation of repayment is based on the insertion of both actors in a common social structure.
4. Enforceable trust: this is a mechanism facilitating access to resources and group approval for its members. (Portes 1998; Woolcock 1998)

At the beginning, The plan and procedure of this fisheries programme was initially developed by the MRC, with the involvement of the planning and decision making of people in the two communities (though PRA Process). Such is a top-down and bottom-up policies which is likely to be effective in the long run because it come from the needs of the people themselves. In addition, after the project had been implemented for sometimes people realized that they would benefit from the project and began to be more involved, which led to people to be able to express their opinion regarding different factors related to the project. For example, when people realized that the fish would be sold at a higher price if they sold it directly to the consumers without the involvement of the middlemen. The RFMC, the representative of community members proposed to the DAFO that people were willing to manage their own fish marketing which would benefit them better than in the past. This eventually led to people's more control of the project where fish marketing became under their management.

RFMC has been involved in mediation of economic disputes. For example, when the fishermen had fish marketing problem as fishermen were offered low price by the fish traders/middle men, this issue was reported to RFMC for resolution. The locals have the following suggestion;

“we would like the RFMC to operate fish marketing instead of the private sector, because the RFMC is more neutral and can represent the voice of community”

Focus Group, Hoinamyen Village, 3 February 2005



For almost five years, the RFMC has built solidarity and social ties to the community by its own role and obligation to create social harmony that can help a community overcome constraints.

Besides solidarity, it appears that there is a kind of ownership and reciprocity built toward the fisheries programme. As most people in the community come from only a few extended families. These people are generally poor with low or irregular income. However, they help each other whenever they could, with limited resources they have because they understand each other's circumstances and hardship. This kind of shared disadvantaged experience makes people have sympathy toward each other and willing to help one another to have a better life. With the introduction of the fishery project, people saw a way they could improve themselves and their families, so they did not hesitate to get together working as a team to make the project work.

“we normally contribute 5,000 kip per household for fish stocking, this is by voluntary”

Focus Group, Hoinamyen Village, 2 February 2005

When people are not forced but rather participate in the community development project according to their own will, their participation would be highly appreciated and people have sense of ownership of their work. It also creates unity among the people because they know that by working together their whole community or their extended families would be improved. The Focus Group, Angnamhoum Village, (1 February 2005) said that:

“....., Although our village has no land to farm rice, we have to help our relative”

It is common that, according from the focus group fishermen often rent fishing tools from each other when they are shortage, especially the gillnets.

The above mentioned implies that, the villages have mobilized labour and resources, this interchange generates some reciprocity among people with kinship ties.

Furthermore, The RFMC is also involved in solving problems in the community and providing advice to the fishermen. The RFMC is easily approached once the fishermen encounter with problems. According to the background of the two village, there is kind of administration which is not officially constructed but rather carried on from generations to

generations supported by social and cultural aspects such as seniority and close relationship among people in the community. These people in a close society know everyone in the community, especially when the community was developed from only a few extended families. Many of these people are related by blood. A village may be seen as their bigger family where the village head or older people (Lao Front for National Construction) would help supervise younger people and take charge in discussing or solving problems or conflicts. This kind of indigenous administration has been nurtured a number of times during the fishery projects particularly at the time when some community members broke the project rules and prone to punishment. The problems were often solved in a friendly and compromising way with the presence of concerned party such as the village head and some senior members of the community who are often village committee.

The following are the responses of the local Focus Groups relating to the problems mentioned above:

“If we come across some problems, we usually go to the RFMC, because they are responsible for fisheries reservoir management in our village.”

Focus group, Angnamhoum Village, 3 February 2005

“We normally ask RFMC members for suggestions, since we are aware of the existence of the RFMC and this taskforce is responsible for monitoring and supervision of Namhoum Reservoir.”

Focus group, Hoinamyen Village, 3 February 2005

“So far, the bidding process is fine; however, to be effective, we would like the RFMC to be involved in this process. As RFMC is the local people, they will treat us better”

Focus group, Hoinamyen Village, 3 February 2005

Fukuyama (1995) has some suggestion. He equates social capital with “trust” and highlights its role in reducing transaction costs and increasing economic efficiency. (ADB 2003:24). The RFMC has gained trust in the community through its roles and responsibility in MRRF II Project.

### **5.5.2 Interconnection of different community**

Social capital interactions matter: They create social networks, foster trust and values, sustain norms and culture, and create community. These social entities, be they in the form of social network or community norms and culture or trust and value that have an important influence on economic as well as social outcomes. (Adopted by M.G. Quibria, ADB, 2003: 19-20).

There is networking among the fishermen and the villagers linked by the RFMC. Coleman (1998: S95) defined social capital “by its functions” and Putam (1993: 167) viewed it in terms of “features of social capital.” Indeed, social capital has its benefits and costs, and it is not an unmixed blessing. (ADB 2003: 29).

#### **At the local level**

Both communities comprise of different ethnic minority groups such as Lao Soung, Lao Loum and Lao Theung. These groups of people usually have different culture or way of life. Differences in their culture may make these people live separately among the same members of the same ethnic minority group, even though they are members of the same community. This could lead to separation among community members. However, the fishery project allows all members to participate in the project, regardless of their ethnic background. The process of this project also includes meeting and activities in which allow people to participate. When working under the same project people have a chance to associate, talk, discuss and do things together to make sure that the objectives of the project are achieved. It creates sense of belonging that though they come from different ethnic background but they have all have the equal right to participate in the community development activities. This leads to assimilation or unity among community members of different ethnic groups and the people from different reservoirs.

Table 5.5.2 shows the project network and coordination of the MRRF II to be taken by the RFMC and other stakeholders. Locally, RFMC frequently appears in the community; the patrolling team has to monitor the fisheries reservoir at least 40 times a month. The RFMC, DAFO and fishermen meet every month to update the situation on fishing at Namhoum Reservoir. Common constraints are discussed and advice is given accordingly. The RFMC conducts the community awareness on fishing rules and regulations every quarter. In addition, during traditional events, RFMC is also in organizing the events and religious ceremonies. This helps create a relationship and affiliation between the RFMC, the fishermen, and the villagers. This helps achieve common social understanding and unity.

**At the Project level**

During the MRRF II Project implementation, there have been several opportunities that allow RFMC and the other stakeholders to increase their networking. The networks can be built through sharing information and communication such as official meeting and the study tours between villages, reservoirs and provinces. At the central level (LARReC), the donor(MRC/MRRF II), provincial, district and village levels. As the RFMC is gaining technical and management knowledge, RFMC expands their relationships through the agents and presents itself as the local leader.

**Table 5.5.2 Project Network and Coordinating System**

No.	Activity Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Remark
<b>I Official Agenda</b>														
1	Monthly meeting: RFMC, DAFO on every 25th of the month	•	•	•	•	•	•	•	•	•	•	•	•	
2	Monthly meeting: RFMC, DAFO, Fishermen on every 30th of the month	•	•	•	•	•	•	•	•	•	•	•	•	
3	Annual Review Meeting: MRC, LARReC, DAFO, RFMC in December of each year												•	
4	Community Awareness: RFMC, Fishermen, Villagers			•			•		•				•	
<b>II Ordinary Events</b>														
1	Annual trade fair at Naxaythong District: 11 February 2005		•											
2	Fish stocking: 14 April-July				•	•	•	•						
3	National Conservation Day of Wildlife and Aquatic animals: 13 July							•						
<b>III Traditional Events</b>														
1	Hmong New Year: February	•												
2	Lao New Year: 13-15 April				•									
3	Begin Buddhist Lent: 1 Agust(depending on the full moon in the lunar Calendar)								•					
4	End Buddhist Lent: 29 Oct (depending on the full moon in the lunar Calendar)										•			
5	Thatluang Festival: 27 Nov											•		

Sources: Technical Reports Compilation: LARReC, DAFO, Villages Authorities 2005

### 5.5.3 Social Capital

In order to answer what contributes to migration or enhances stability, we have to start from the fundamental insight that many resources are local assets. Local assets are tied to interests, norms and expressions that often engage people more than do great national association

<b>Social Relations</b>	<b>Before 2000</b>	<b>2005</b>
-In-migration(HH)	15	0
-Out-migration(HH)	3	N/A
-Local Committees	1. Village Authority 2. Lao Women Union 3. Lao Youth Union 4. Lao Front for National Construction	1. Village Authority 2. Lao Women Union 3. Lao Youth Union 4. Lao Front for National Construction
-Project Committee		1. RFMC
-Number of temples	1 Wat Outhoumphone (2000)	1 Wat Outhoumphone
-Traditional Festival	1. 12 months 2. Water festivals	1. 12 months 2. Water festivals
-Village Activities	1. Sports Contest	1. Sports Contest
-Community Center	Temple	Temple
-Social Image	N/A	N/A

*Source:* Baseline Data, Angnamhoum Village 2004-2005

Table 5.5.3 (A) shows the existing social capital of Angnamhoum village. Generally, it appears to have improved slightly. The MRC/MRRF II project is the single project in Angnamhoum village and created the RFMC as the project committee. In addition, it is seen that the social negative phenomenon decreased from 11 to 3 cases. According to the Focus group interview, one female villager reported,

“my husband and I’ve just moved to this village three years ago because we realized that Angnamhoum village has wealth of natural resources and it is a healthy social environment. There is no crime and no violence.”

Angnamhoum Village, 3 February 2005

This implies that, historically, this village has a healthy social environment. This is another attraction beside natural resources (especially aquatic animals) for outsiders to live in this village. This village has no village office, so people always gather for social and official purposes at Outhoumphone temple.

<b>TABLE 5.5.3 B1 SOCIAL INSTITUTION – HOINAMYEN VILLAGE</b>		
<b>Social Relations</b>	<b>Before 2000</b>	<b>2005</b>
-In-migration (HH)	20	15
-Out-migration (HH)	N/A	N/A
-Local Committees	1- Welfare Association	1- Welfare Association
	2- Village Development Association	2- Village Development Association
	3- Helping Hands Association	3- Helping Hands Association
		4- Fishermen Group
-Project Committee		5-RFMC
-Number of monastery	2 Temples: North and South	2 Temples: North and South
-Traditional Festival	12 months	12 months
-Village Activities	- Annual Sport Competition	Annual Sport Competition
-Community Center	- Temple	- Temple
-Social Image	1- Security Award (2000)	
	2- Sport Contest Award (1999)	

*Source:* Baseline Data, Hoinamyen Village 2004-2005

Table 5.5.3 (B) presents the progress of social capital in Hoinamyen village over the last five years. It is clear that Hoinamyen Village has more activities and local associations. This is because Hoinamyen was established four generations before Angnamhoum Village. In addition, the social negative phenomenon has also improved slightly. Significantly, this village was offered two awards for security and sports. This recognition helps build trust and confidence in the people.

### **Project Intervention**

Before concluding it would be helpful to see how the MRC/MRRF II is playing a part in the overall picture in all project intervened in the villages.

<b>TABLE 5.5.3 A2 PROJECTS INTERVENTION – ANGNAMHOUM VILLAGE</b>		
	<b>Before 2000</b>	<b>2005</b>
Government Projects		1. Welfare for Elder People 2. Road Construction
Local Initiatives	1. Fisheries	1. Fisheries + Project 2. Road Maintenance 3. Irrigation Renovation
International Organizations	1. Denmark (Fish Culture)	1. Thai Group (Education-Text Books) 2. Private Sector (Education-PCs) 3. Foreign Aid (Road Construction) 4. MRC (Fisheries)

*Source:* Baseline Data, Angnamhoum Village 2004-2005

Table 5.5.3A2 describes the project intervention in Angnamhoum village. This shows the potential social capital in the village. There are two government projects on welfare for elderly people and road construction. There are two activities initiated by the local people. As this village is the nearest to the reservoir and more remote than Hoinamyen village, it is necessary for the community to maintain its own roads. Regarding international organizations, the MRC is one among four donors. However, the MRC is the single donor for fisheries. The other donors are also contributing potential benefit to the fisheries programme. For example, if the roads are well-constructed, the transportation of the catch will be much smoother and easier.

<b>TABLE 5.5.3 B2 PROJECTS INTERVENTION- HOINAMYEN VILLAGE</b>		
	<b>Before 2000</b>	<b>2005</b>
Government Projects		-Micro Credit by Lao Women Union
Local Initiatives	-Fisheries	Fisheries+ Project
International Organizations	-FPI (family planning)	-FPI (family planning)
	-MoE (Reading Campaign)	-MoE (Reading Campaign)
	-Joicep(Village Care Takers)	-Joicep(Village Care Takers)
	-EU (Roll Back Malaria)	-EU (Roll Back Malaria)
		- Mekong River Commission

*Source:* Baseline Data, Hoinamyen Village 2004-2005

Table 5.5.3 B2 presents the project intervention in Hoinamyen Village. It is clear that there is one government project launched for micro credit by the Lao Women's Union. Local initiative has only one fishery activity. While five international organizations intervened, it is noted that, there were four international projects in 2000s before MRC/MRRF II. This shows that social-interaction, coordination and cooperation widely existed. It would not be difficult to strengthen the coordination. Moreover, the MRC could have further discussions with the EU to monitor the malaria that fishermen suffer from.

Lastly, it can be said that, the MRC/MRRF II has made constructive impacts on social capital in Angnamhoum and Hoinamyen villages in terms of solidarity, reciprocity, endowment, trusts and social network through the RFMC and its stakeholders. The existing social capital and project intervention help measure where social capital exists, and it shows potential consequences of the current activities.