

# **A Work in Progress: Study on the Impacts of Vietnam's Son La Hydropower Project**



Vietnam Union of Science and  
Technology Associations (VUSTA)

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## **ABBREVIATIONS**

|         |                                                          |
|---------|----------------------------------------------------------|
| CHS     | Commune Health Station                                   |
| DC-RMUs | District and Commune level Resettlement Management Units |
| EVN     | Electricity of Vietnam                                   |
| EIA     | Environmental Impact Assessment                          |
| Ha      | Hectare                                                  |
| MOH     | Ministry of Health                                       |
| PRMU    | Provincial Resettlement Management Unit                  |
| RMU     | Resettlement Management Units                            |
| VND     | Vietnam Dong                                             |
| VUSTA   | Vietnam Union of Science and Technology Associations     |

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## EXECUTIVE SUMMARY

On November 12, 2002, the National Assembly of the Socialist Republic of Vietnam<sup>1</sup> approved the construction of the Son La Hydropower Project, requiring the largest resettlement of people in Vietnam's history. By 2010, 91,000 people or 18,968 households in the three provinces of Son La, Lai Chau and Dien Bien are expected to be resettled. Most of these people will be moved between 50 to 100 kilometers away from their current homes and without access to the Da River (Black River)—a source of livelihood for most of them.

Dam construction formally started on December 2, 2005. As of early 2006, over 1,000 families had been moved. Land-use rights and the availability of arable land are the two most contentious aspects of the Son La resettlement project. Inter-related with these issues are ensuring sustainable livelihood for the affected people, and the impacts that resettlement will have on the cultural continuity and community values of the affected people, most of whom come from ethnic minority groups.

This study, conducted by the Vietnam Union of Science and Technology Associations in late 2005 and early 2006, used an inter-disciplinary team of researchers to examine the socio-economic, cultural, environmental and health impacts of the Son La resettlement project. Field surveys were conducted by the study team in the two provinces of Son La and Lai Chau and included 5 districts, 11 communes and 25 villages. This English version<sup>2</sup> is a summary of a much larger, four-part study that was published in Vietnamese in July 2006. The study provides much-needed and new empirical data on how resettlement is impacting project-affected people – pre-resettlement, post-resettlement and in host communities.

Because this study has been carried out at the start of the implementation phase of resettlement, it provides a timely tool for policy makers, affected people and international donors to address outstanding concerns. It is hoped that the concerns reflected in this study will be taken seriously and a follow-up plan developed based on the findings of this report. The report is only a first step in ensuring that resettlement improves rather than worsens the lives of more than 91,000 people that will be resettled as a result of the project.

## KEY FINDINGS

While there is a serious attempt to implement resettlement in a positive manner, there are several areas that require significant improvement. The following outlines the key findings and concerns raised by the study team.

### A. Positive Aspects of the Resettlement Program

**1. Encouraging the participation of local government and people:** The resettlement master plan has been developed with the participation of the provincial People's Committees of Son La, Lai Chau and Dien Bien Provinces and of local people. The plan has been developed in a way that attempts to respect and uphold the cultural values of ethnic minorities in the area. This is a step in the right direction. Compared to other dam projects in Vietnam, the resettlement plan allows affected people to have greater control over the

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<sup>1</sup> In the second session of the 11<sup>th</sup> Legislature, approval of Government Proposal No. 1425/ CP – CN

<sup>2</sup> The English translation was published in October 2006

resettlement process. The support to resettled people has been targeted to those who need it, and the project has increased the funding for compensation and resettlement activities in response to the needs of affected communities.

**2. The project aims to increase living standards:** The La Ha, Kho Mu and Khang minorities, who previously lived in congested spaces by the Da River, now live in larger villages, although more infrastructure needs to be built in order to make these villages inhabitable. Furthermore, affected people have been satisfied with their new houses and the infrastructure in some resettlement sites is a remarkable improvement upon previous living conditions. This creates more willingness by local people to participate in the process and cooperate through its different phases.

**3. Environmental health issues are being addressed:** Issues surrounding environmental health, potable water and sanitary conditions in resettlement sites are being addressed alongside housing, employment and income concerns. Basic provisions for primary health care have been put in place. Local authorities have assigned commune health stations and village health points in host communities to provide healthcare for resettled people.

## **B. Problems and Challenges of the Resettlement Program**

**1. Administrative Hurdles and Delays:** Though legal documents and a resettlement master plan exist, specific guidelines and plans have not been developed or implemented by local authorities in a timely manner. Bureaucratic mismanagement is creating delays in implementation. The result is that many people are moved before necessary infrastructure is in place. There is a serious shortage of qualified and trained personnel at district-level Resettlement Management Units, affecting the success of the resettlement program.

**2. The Question of Land:** The availability of sufficient arable land has been a major problem in this project. The shortage of land in the area is making the provision of “land for land” compensation difficult. Most of the resettled people remain without any agricultural land. The land that will eventually be given to them will be taken from host communities, potentially leading to inter-community conflicts in the future.

**3. The Question of Livelihood:** Resettled communities are not being given adequate assistance in transitioning from their former method of farming (wet rice cultivation) to other forms of upland agriculture production. Very little is being done to help them grow food and create an environment for food self-sufficiency in their new locations. This is leading to greater food insecurity. In the short run, affected people face the immediate difficulties of moving to a new environment, community, climate and a completely different way of living without the river. In the long run, they risk being deprived of sustainable sources of livelihood. There are already signs of increased poverty amongst affected people.

**4. One Size Fits All Doesn't Work for Affected People:** The allotment of 400 m<sup>2</sup> of residential land (including garden plots) to each household in rural resettlement sites regardless of family size is unfair to large families or those who had more property pre-resettlement.

**5. Problems Managing Cash Compensation:** Many households who have received large sums of cash compensation have had a hard time managing it. Not accustomed to saving and investing, some have bought motorbikes, while others have wasted it on drinking or drugs.

These households are likely to suffer from future food shortages and may fall back into poverty if no sustainable means of income is found.

**6. Unequal Costs and Benefits between Resettled and Host Communities:** Disparities are emerging between host communities and those being resettled. In some cases, the host population ends up with smaller houses than those who have been resettled, with less compensation. This is starting to create resentment in resettlement sites.

**7. Disintegration of Communities:** Some communities are being torn apart because clan members and kin cannot move together to a new resettlement site; or names of their old villages cannot be taken with them. Existing social structures and community relationships are breaking down. The involuntary nature of resettlement is creating trauma for many groups as their ancestral lands will be flooded from the reservoir.

**8. Creating Better Access to Clean Water:** In some sites, people have poor quality drinking water, and serious water shortages during the dry season. According to the resettlement policy, the government must provide pipes, water tanks or wells for villages before they are resettled, but this has not been the case for many villages.

**9. Creating Access to Healthcare:** Some resettlement sites are constructed far from health clinics. People have been moved to new sites while clinics are still under construction. In these instances, affected people find it very difficult to get to their local health clinic due to lack of roads and distance.

## **RECOMMENDATIONS**

This report addresses issues that have been overlooked in previous impact assessments of Son La and thus provides an important resource to improve resettlement in Son La. We make the following recommendations based on this study:

### **1. Planning**

- Affected people should be moved into new resettlement sites only after detailed plans have been agreed upon for the site. In urban resettlement sites, component projects that include, basic water and sanitation infrastructure, roads, clearly marked boundaries and detailed plans for town development must be completed before affected people are moved in.
- Electricity of Vietnam (EVN) must link its construction on the Son La Hydropower Project with the resettlement project and be accountable for the impacts of its work on resettlement. Currently, the onus has been put on provincial authorities to deal with the aftermath of EVN actions on resettlement. Rather than speeding up project construction, it must be slowed down to deal with resettlement.

### **2. Compensation for losses**

- Affected people must be compensated for the loss of property, trees, crops and other assets. In particular, where people have to move out of their district before new agricultural land has been distributed, affected people must be given sufficient

transition time to adjust to their new environment with adequate government support to secure their livelihood and food security.

- Affected people should not be moved until agricultural land is available. Moving affected people without proper livelihood provisions is creating a dangerous situation whereby compensation money is rapidly spent and people remain without work for months. This uncertainty leads to wasteful spending, alcoholism and depression.
- Affected people must have an effective livelihood plan **before** they are resettled. Part of the plan must include a discussion with the resettlers about what they can do at the resettlement site to earn income, what crops they can grow and the necessary agricultural extension they may need to help them with their new environment.
- Compensation should be provided to those who depended on the river for their livelihoods but now have been resettled away from it.
- Compensation should also be provided for infrastructure investments made by communities on their former sites and which were costly to build (such as canals or water irrigation systems built by households or groups of households). These investments can no longer be utilized by the communities and will have to be rebuilt in the new resettlement areas.

### 3. Implementation

- Residential land should be given to resettled people taking into account the lifestyles of the different ethnic groups and how residential areas looked in their former villages. Policies should be flexible enough to allow more than the current maximum level of 400 m<sup>2</sup> for residential land (house and garden).
- The quality of farmland should be assessed with the participation of those being resettled before being allocated. If the land is fertile, then the amount currently designated is adequate for allocation. However, where the land is on a hillside or degraded, then the amount allocated to households must be greater. Land allocation should also be contingent on family size.
- The allocation of residential plots should respect people's wishes. For instance, members of the same clan and/or family should be allowed to live close to or next to each other.
- Basic and essential services such as schools must be completed before the new academic year starts. Currently, many resettled children stay at home because the nearest school is over 10 km away and no public transport exists to take them to school. Access to schools should be legally binding for all resettlement sites.<sup>3</sup>
- Resettlement management must be improved at the district level. For instance, resettlement personnel must be trained better to deal with local people. More personnel should be recruited from within the affected ethnic minorities so that the

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<sup>3</sup> Currently, the policy says that schools and health clinics must be provided in concentrated resettlement sites.

cultural dimensions can be better incorporated in resettlement. There should also be an increase in full-time staff at the district resettlement units.

#### **4. On Improving Community Health**

- Solutions must be found for water provision. For instance, the district Resettlement Management Unit (RMU) should invest in water storage such as construction of water wells, water tanks and other methods to harvest rainwater for dry season use. This is particularly necessary where forests are seriously degraded, affecting natural water sources such as mountain creeks or rivers.
- The authorities should invest in improving the quality and capacity of healthcare in project affected areas by training healthcare workers, providing an action plan for prevention of common diseases, health education and access to medicines for prevalent illnesses in the area.
- Sufficient funding should be allocated to the resettlement project to prevent epidemics in districts where resettlement is underway. Though no new diseases or epidemics have yet occurred in resettlement sites, preventive healthcare must be improved. This can be done by improving hygiene and sanitation in resettlement sites.

## INTRODUCTION

Large scale dam projects are controversial, especially since they often require involuntary resettlement of a large population. In addition to significant environmental impacts, social impacts include material losses such as land, housing, infrastructure, but also trauma related to living conditions, livelihoods, culture shock and social conflict. Marginalized, ethnic minorities are particularly vulnerable to these factors.

On November 12, 2002, the National Assembly of the Socialist Republic of Vietnam<sup>4</sup> approved the construction of the Son La Hydropower Project. The assembly agreed to a water level of 215m, forming a reservoir of 9,260 million m<sup>3</sup> of water. By 2010, 91,000 people or 18,968 households in the three provinces of Son La, Lai Chau and Dien Bien are expected to be resettled<sup>5</sup>. Most of these people will be moved between 50 to 100 kilometers (km) away from their current homes and without access to the Da River (Black River)—a source of livelihood for most of them. Twenty-four thousand hectares (ha) of land are expected to be submerged, of which 8,000 ha are agricultural land and 3000 ha are forest land<sup>6</sup>.

Dam construction formally began on December 2, 2005. However, the first resettlement of affected people took place in 2003 on the pilot resettlement sites of Tan Lap (Son La province) and Si Sa Phin (Lai Chau Province). To date, a little over 1000 families have been moved. Resettlement is just beginning and is already behind schedule.

Land-use rights and the availability of arable land are the two most contentious aspects of the Son La resettlement project. Inter-related with these issues are the socio-economic sustainability of the affected people, their cultural values system and how this shapes the social structure in the area, and the health and environmental impacts linked to resettlement.

Though the government of Vietnam has conducted various studies regarding the dam, designed pilot resettlement areas and improved specific project policies, many resettlement issues urgently need attention. A thorough assessment of the Son La resettlement program that integrates socio-economic, cultural, environmental and environmental health impacts in an interdisciplinary manner has not previously been conducted. Therefore, this study conducted by the Vietnam Union of Science and Technology Associations (VUSTA) hopes to fill this empirical gap. This report is an English summary of a much larger four-part study conducted by VUSTA (available in Vietnamese language only). Recommendations are made to the state management agencies and policy makers to revise existing policies and to mitigate negative impacts caused by resettlement in the Son La hydropower project.

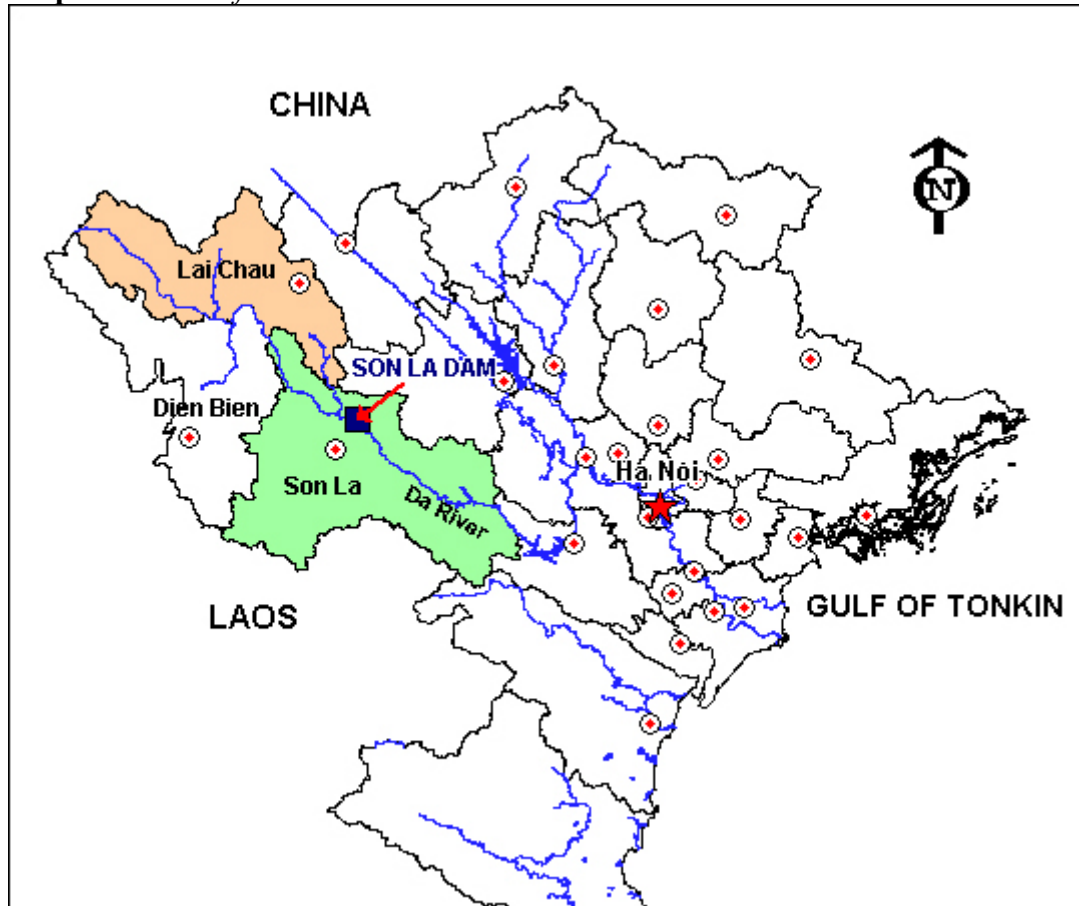
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<sup>4</sup> In the second session of the 11<sup>th</sup> Legislature, approval of Government Proposal No. 1425/ CP – CN

<sup>5</sup> See Appendix 1 on the resettlement schedule of the three provinces through 2010.

<sup>6</sup> NIAPP, 2005

**Map:** *Location of the Son La dam*



## **Research Methodology**

A team of ten experts from the Institute of Anthropology, the Analysis and Forecast Center under the Vietnam Institute of Social Sciences, the Vietnam Association of Nature and Environment Protection and the Hanoi University of Public Health collaborated in the research, fieldwork and data compilation for the four-part study.

This report is based on a two-month desk study and a 25-day field survey using both qualitative and quantitative research methods. Field surveys were conducted in the two provinces of Son La and Lai Chau and included 5 districts, 11 communes and 25 villages. 503 families filled out a questionnaire, qualitative interviews were conducted with 53 women and 25 village headmen, and focus group interviews were conducted in each village visited.

This is the first study on the Son La project involving extensive research with affected people. The target groups of the qualitative survey included resettled and host communities belonging to the Thai (Tai), Hmong, Giay, Mang and La Ha ethnic minority communities and lowland Vietnamese, referred to as the Kinh.

In addition to qualitative analysis, a quantitative analysis of the questionnaires was conducted using SPSS software. Due to time and financial constraints, health information was collected based on personal interviews of affected people and through observation by health experts and not by medical examination. Medical examinations will be a necessary follow-up as part of further project assessment. It was also not possible to acquire lab data

on water quality, dust and soil samples at the survey sites due to financial constraints. Thus, additional resources to acquire such lab results remain critical. Finally, language barriers posed challenges in some interviews, in spite of translators, since various ethnic languages are spoken by affected people.

This report is divided into four chapters. The first chapter examines the official resettlement and compensation policy of the Son La Project and analyzes the problems that have emerged in implementing it. It identifies key areas where the policy must be modified in order to address the practical realities on the ground. It also examines the main reasons why a gap exists between policy and practice. The second chapter discusses the theoretical and analytical framework for the study and how it is applied to the Son La hydropower project. The third chapter presents the study's main findings and is divided into four parts: socio-economic, anthropological, health, and environmental implications of resettlement on affected people. Chapter Four concludes by highlighting both positive aspects of the resettlement process and underlines key areas that must be addressed as resettlement gets underway. Finally the report offers several recommendations to improve the project in ways that will benefit the resettled people.

## CHAPTER I

### RESETTLEMENT IN THE SON LA HYDROPOWER PROJECT: POLICY VERSUS PRACTICE

This chapter looks at the compensation and resettlement policies for the Son La Hydropower Project and highlights the current problems faced in implementing them. In particular, it examines the problems of project affected people in the resettlement areas from October-December 2005.

The Provincial People's Committees of Son La, Lai Chau and Dien Bien plan to resettle people within their own provinces. Three options exist on where to move affected people: 1) close to their original home, but at higher elevations around the reservoir (referred to as *di ven* in Vietnamese and in this report); 2) to a "mixed site" (or *di xen ghep*) where a host community already exists, either close or far from the original location; or 3) to a "concentrated" resettlement site (*di tap trung*), often the furthest away from original homes. A concentrated site refers to an area that has been taken from a host community (typically, their non-residential land) and converted into a separate resettlement site from barren land. Typically, whole villages or communities are moved to these sites from a different commune or district. The chapter addresses specific problems related to resettlement in these three types of sites. The concept of "land" in this study includes cultivable, residential, grazing and forest land.

#### 1.1 The Compensation and Resettlement policy

The goal of the Son La Hydropower Project is to supply electricity, control floods, improve irrigation and contribute to socio-economic development in Vietnam's Northwestern region. The goal of the overall compensation policy "for losses and resettlement" (Decision 459, QD-TTg, referred to as Dec 459 in this paper) for the three provinces is to ensure that affected people can rebuild their lives, have sustainable livelihoods and improved incomes and to slowly build infrastructure that could contribute to long-term sustainable development and an improved quality of life. This includes ensuring social harmony between the resettled population and host communities that have to deal with an influx of people.

The policy also aims to provide adequate land to resettled households with an emphasis on providing arable land for food production. According to the policy, the process of compensation must be participatory, democratic, transparent and egalitarian.<sup>7</sup>

More specifically, Dec 459 states that **land** will be exchanged for land or valued in cash. Each resettled family in a rural area will be given an area of 200 – 400 m<sup>2</sup> of residential land which includes space for housing and a family garden. Each resettled family in an urban area will be given one lot of 100m<sup>2</sup> in a planned settlement area/town. The allotment of family gardens<sup>8</sup> beyond the 400m<sup>2</sup> will depend on any extra available land.

Dec 459 also guarantees that each household will receive 1 ha of farmland. Son La Province has modified this provision by taking into account family size. Son La Province's Dec 01/2005/QD-UB (referred to as Dec 01 in this paper) allots 0.3 ha of land for a single

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<sup>7</sup> Dec 459

<sup>8</sup> People grow vegetables and fruit trees in their gardens. Some families even have fish ponds in their gardens. Therefore, gardens play an important role in providing nutrition and supplementing income.

person and 1 ha for a 2- 4 member household. A family of five or more is supposed to receive an additional 0.2 ha/member starting with the fifth member.

On the issue of **housing**, Dec 459 encourages resettled households to dismantle and remove their houses by themselves and rebuild them in the new resettlement sites. Cash is supposed to be provided to cover construction costs. Compensation for housing damage will be given to households who move to concentrated and mixed resettlement sites. The area allotted for housing will depend on the space available at the resettlement area. Usually, land is cleared from hills or taken from host communities.

The amount of residential land allotted depends on the size of the household (see Table 1). If a household does not want to receive land for housing in the resettlement site, it can choose to receive cash instead. Typically, ethnic minorities build houses on stilts, while the *Kinh*<sup>9</sup> build houses on the ground.

**Table 1: Housing Allotment in the Resettlement Site**

| No of the family members | Cash compensation (million VN dong) | Housing area (m <sup>2</sup> ) |                 |
|--------------------------|-------------------------------------|--------------------------------|-----------------|
|                          |                                     | House on ground                | House on stilts |
| Single member            | 30                                  | 40                             |                 |
| 2-4 members              | 50                                  | 60                             | 50              |
| 5-7 members*             |                                     | 80                             | 70              |
| >=8 members              |                                     | 100                            | 90              |

(\*for more than a 4 member household, an extra VND 10 million is given for each additional member) Source: Decision 01/2005/QD-UB

In addition, Dec 459 is supposed to provide **support for food, basic services and agricultural extension**. This includes money to buy rice and other staples for up to 2 years, healthcare for up to six months, school supplies for primary school children, fuel and electricity supplies and agricultural extension including reforestation projects and new agriculture techniques.

Finally, Dec 459 also provides for the **construction of public services in concentrated resettlement sites in both rural and urban areas**. This includes a comprehensive list of services such as the construction of primary schools,<sup>10</sup> roads, health clinics, community centers where cultural/social activities can take place, potable water sources, drainage and sanitary waste disposal systems, sports and recreational grounds, cemeteries and even monuments dedicated to martyrs.

Host communities are given an incentive of VND 25 million (US\$1,620) per each new resettled person that they allow into their site. This money is supposed to be invested by government authorities to further develop the infrastructure in these mixed sites and to create better public services such as water, health and education.

<sup>9</sup> *Kinh* refers to the ethnicity of the majority Vietnamese population.

<sup>10</sup> In some areas, they also build secondary schools.

## 1.2 Planning for Resettlement

While the general resettlement master plan (Dec 459) has been created for the three provinces, each province is supposed to create more detailed plans and blueprints for each resettlement site in its province. For example, the more detailed resettlement plans developed by Son La Province have improved upon the general resettlement policy of Vietnam<sup>11</sup> and the Dec 459 for the Son La Project. However, only Son La Province has so far completed a specific plan; Lai Chau and Dien Bien Provinces have yet to complete their plans.

Resettlement in each province falls under the jurisdiction of the Provincial Resettlement Management Unit (PRMU) and is implemented by the District and Commune level Resettlement Management Units (RMUs).

## 1.3 The Reality of Resettlement

Although resettlement had been underway for only three months when the study was completed, the findings offer critical lessons about existing problems with implementation. Given that only 1/18<sup>th</sup> of the households have thus far been moved, the findings highlight areas that need urgent attention if resettlement is to mitigate the suffering of affected people and create benefits that justify the enormous costs the project will incur.

The following problems have thus far been revealed:

- The projected schedule of resettlement is ambitious compared to what local authorities and the affected people can achieve given current constraints
- Problems with sequencing is resulting in affected people being moved before necessary infrastructure has been completed, causing further problems
- Identification of the rightful users of land, finding adequate land, and determining appropriate prices for compensation of land is creating a high amount of anxiety and resistance towards resettlement
- The definition of “residential” land that includes garden plots is creating problems for ethnic minorities whose gardens stem beyond their residences and are effectively used for horticulture and sources of food security and income
- The notion of what comprises a “household” differs for ethnic minorities and thus is creating problems in the appropriate allocation of resources per household during compensation
- Provision of sustainable sources of livelihood for affected people in the medium to long term remains highly uncertain
- Compensation money for food support has been given to some, but not all, and administrative bottlenecks are creating barriers for people to get their rightful compensation in a timely fashion.

The next three sections look at these problems in two provinces and conclude by identifying specific areas that need to be addressed during implementation.

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<sup>11</sup> Decision 196-QD-TTg and 197– ND-CP

### 1.3.1 Schedule and Sequencing of Resettlement

Resettlement began in October 2005, nearly three months before the official ground-breaking ceremony of the Son La hydropower project in December. Fieldwork took place during this time and revealed that resettlement was proceeding at different speeds in different localities due to problems on the ground. Progress varied in terms of preparations for infrastructure at resettlement sites, land acquisition and compensation for resettled households and host communities. There were also substantial differences between official records of resettlement and what had actually taken place.

#### In Lai Chau Province

Lai Chau Province lies on the North and Northeastern side of the reservoir. According to the resettlement master plan for Lai Chau, four resettlement regions will be created with seven concentrated resettlement areas and 24 resettlement sites to accommodate a total of 3000 households whose main source of income is agricultural production (NIAPP, 2005). But, according to a report of the Provincial Resettlement Management Unit (PRMU), the plan to move 500 households to resettlement sites in 2005 had not been implemented. The official resettlement schedule (see Appendix 1) for the project shows that Lai Chau had resettled 266<sup>12</sup> households by February 2006. The fieldwork for this report also showed that in most of the four regions of Lai Chau, construction was only just beginning in designated resettlement sites.

The reason for delays includes problems with land acquisition and distribution. For example, land acquisition in Pa So resettlement site (in Phong Tho District of Lai Chau) in November 2005 remained stalled because the government is offering low prices for the land. Around 500 non-agriculture based households from the town of Lai Chau and Chan Nua commune were to resettle there; however, conflict around land prices has stalled the process. At present, only 27 households from Chan Nua have moved to Pa So.

In other instances, delays are being caused by the lack of appropriate infrastructure for resettlement. For example, water supply and drainage systems have not been installed although people are being relocated in some areas. This is causing complaints from both host communities and new settlers. In the Huoi Luong resettlement site, only ground-leveling work has been done to prepare for house construction. Provincial and district level agencies provide the following reasons for delays and mishaps: 1) the unavailability of detailed resettlement plans (only 1 out of 24 sites has a detailed resettlement blueprint); 2) the process for agreeing to a detailed plan has not been finalized at the provincial level; and 3) the lack of urgency to move those in Lai Chau relative to those in Son La province.<sup>13</sup> The first areas to be submerged under water will be those under 132m of elevation (by 2006), followed by 150.4m (by 2008), 191m (by 2009) and 215m by 2010 (NIAPP, 2004). Since many people in Son La currently live under the 140m level, they are being pressed to move out of faster since these areas will be flooded more quickly than the others. In Lai Chau, most affected people live at a level above 150m and thus they will move at a later phase of the construction.

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<sup>12</sup> This number also includes the pilot site of Si Sa Phin, constructed in 2003.

<sup>13</sup> Son La will be flooded faster than areas in Lai Chau.

## **In Son La Province**

Son La Province is the key resettlement area in the project. 12,479 households will have to move out from the reservoir area by 2010. This accounts for 66% of the total number of resettled families in the whole project. According to the resettlement schedule, Son La authorities should be resettling around 1,600-2,000 households per year to meet the deadline.

However, as of the end of 2005, resettlement was still far behind schedule and deeply problematic in the 3 districts of Quynh Nhai, Muong La and Thuan Chau. According to the Son La Provincial Peoples Committee plan of 2005, Quynh Nhai District was supposed to have moved 1,306 households from the communes of Chieng Bang and Nam Et. They both fall under the 140 m reservoir level. However, as of October 31, 2005, only 265 households from these communes had been resettled, achieving only 20% of the resettlement goal for last year.

In Thuan Chau District, 146 households had been moved out of the 140m zone. These households were moved within 1500-2000 m from their old villages and were classified as *di ven*. According to a provincial level report (Report No 65/BC-TDCTDSL), 63 families in Mong Luong Village (from this district) had already moved; however, fieldwork revealed that these families were still living in their original sites. Their houses had been taken apart, but they were living in temporary shelters with plastic roofs as no roads had been constructed to transport their houses to their new resettlement sites. In the Muong La district, 500 households in the 140m zone were supposed to have moved out by the end of 2005, but only one third of them had actually been resettled.

A lack of coordination between different governmental departments and bureaucratic hurdles and exigencies has also created delays in construction while people are being rushed for resettlement. For instance, in order to inaugurate the project by the end of December 2005, Son La Province officials gave 3 million VND (US\$194) as an incentive to any household willing to move out by October 25, 2005. Those who refused to move were forced to do so. But at the same time, some major construction work essential for resettlement had not been carried out due to delays in bidding and a lack of detailed provincial plans.

There has also been a lack of coordination between different governmental departments and the PRMU since resettlement has been considered the jurisdiction of the PRMU. The district level RMU is supposed to produce detailed resettlement plans and submit them to the PRMU. However, essential input from other departments on how to conduct this resettlement is missing. If the rural development and environment and natural resources departments worked closely with the PRMU, resettlement may proceed with less delays and more smoothly. Currently, these departments deny any responsibility for mishaps in their region.

In summary, both district reports and fieldwork show that the implementation of resettlement remains slow, uncoordinated and out of sequence. Families are being asked to move while provisions have not been put in place for them to resettle properly. Key reasons for the delays include the lack of proper identification of households that need to be compensated in both the project affected areas and in host communities, delay in disbursement of compensation, delays in creating detailed plans for resettlement and

inadequate resettlement plans. Finally, draft plans bear little resemblance to the situation on the ground and have to be revised several times.

### **1.3.2 Issues Related to Land Allocation, Land Use Rights and Compensation**

#### **Problems with Land Allocation**

There are four major concerns with how Dec 459 addresses land allocation. First, the “principle of equality” in the Decision whereby each family is to receive between 200-400m<sup>2</sup> of residential land in rural areas and 100m<sup>2</sup> in an urban area dismisses the family demographics and the cultural concept of “family” in the region. This is also the case for agricultural land since each family, regardless of size, is supposed to get 1 ha. of land. One hectare is not adequate to ensure the food security of large families.

The notion of “family” is different for ethnic minorities such as the Giay, Kho Mu, Mang and the Hmong versus that of the Thai (Tai) or the Kinh. For instance, a 400m<sup>2</sup> plot of residential land per household is considered large for the Giay, Kho Mu, Mang or Hmong who typically have small families, but considered insufficient for a Thai (Tai) family who is accustomed to living in extended families in large houses with garden plots.

The policy on the allocation of farmland prioritizes providing lowland for wet rice cultivation, and states that families must be given adequate land for subsistence farming, cash crops and livestock. A household is supposed to be given 1 ha of land to grow food crops so that after initial support from the government, the family can become food self-sufficient. However, this policy is also based on the “principle of equality” so that regardless of family size, each household is given an equal amount. Ironically, the number of members in the household and the quality of land distributed are not factored in and result in massive inequality with regards to compensation. For instance, a ten-member household family has drastically different needs than a 3-4 member family, but they receive the same amount of land. This has caused major strife among affected people.

Second, the ethnically determined concept of “gardens” poses significant problems in what different affected people consider adequate residential land. This is because Dec 459 includes gardens in the allocation of residential land, whereas for all ethnicities except the Kinh a garden is agricultural land separate from their residences. The Kinh, on the other hand, fence their gardens around their residences and thus consider a garden to be part of their residential land. This is the definition that Dec 459 has adopted. However, most ethnic minority families do not fence their gardens. They prefer to live close to each other and spread their gardens throughout village property. Since Dec 459 adopts the Kinh philosophy of “home” and garden use, it is creating problems in resettlement in a region that is dominated by other ethnic minorities whose lifestyles are very different than the Kinh.

Third, there is a problem with the lack of implementation of the land allocation policy altogether, particularly with regards to agricultural land. Many families have not received any agricultural land at all. In reality, land for wet rice cultivation is unavailable and therefore the land given to resettled families is obtained from households in the host community. This land is typically infertile, nutrient-poor and on hillsides where it is prone to greater erosion. Dec 01 of the Son La Province is preferable since it provides more land for families with more members. In reality however, even where land was available, affected people have not received any agricultural land, even months after resettlement. In

concentrated and mixed sites, host families will have to give up a part of their own land and many have been unwilling to do that. It is also unclear to host families how they will be compensated for their land.

Finally, Dec 459 mandates that resettled people pay taxes in order to be granted land-use certificates and documents for house ownership. Historically, this tax has prevented many from officially putting their own name on land use certificates. In many cases, the name of the original owner remains on the certificate though ownership has changed. This informal handover of ownership has been a practice in Vietnam even before resettlement because of these fees. However, in the resettlement process, the practice has resulted in completely skewed and inaccurate land use records. In order to prevent confusion, affected people should be exempt from this kind of tax since they have not voluntarily moved from their premises. They should be allowed to put their names on the new land use certificates without having to pay fees.

### **Problems with Compensation**

As stated above, the definition of “residential land” in Dec 459 remains problematic. The policy’s definition of “residential land” includes a small garden, which is typically the front and backyard of a house for the Kinh. However ethnic minorities use large garden plots for growing fruit trees, perennials and other cash crops. Since they do not keep fences, this land extends around the village and is maintained by their own customary land use laws. Thus, ethnic minorities of the region consider all the land around their houses as “garden land.” The limited definition of “garden” and its inclusion in “residential land” according to resettlement policy is shortchanging many affected people of their original land holdings. They thus do not feel that they are adequately compensated, if at all, for losing their garden land upon resettlement.

Therefore, the inclusion of gardens in residential land remains problematic for the ethnic groups. This causes complaints about the compensation policy among project affected people and leads to corruption. For instance, some individuals may be able to bribe officials to get more residential land with a bigger garden plot in order to compensate for their garden loss in their previous homes.

Compensation also remains a problem for losses in aquaculture. Article 14 of Dec 459 does not clarify the compensation rates for aquaculture products. Son La Province’s Dec 01 calculates losses based on the average value of production over the past three years. However, this is also problematic. For instance, how are households to be compensated if they have only practiced aquaculture for one or two years? Is the average price calculated by the provincial People’s committee based on the market price or the purchase price? The purchase price at the pond is typically lower than the market price. These questions create difficulties for project staff implementing resettlement on the ground and in turn create conflicts between staff and affected people.

### **1.3.3 Identifying Major Problems in Resettlement**

Although project planners and technicians have intended to minimize negative social and environmental impacts of the dam, resettlement remains riddled with complications related to land, livelihoods, compensation and infrastructure. Our fieldwork reveals that households

that were less seriously affected by resettlement<sup>14</sup> and those in *di ven* sites (sites where affected people have been moved to higher ground around the reservoir) have been satisfied with both the compensation rates and project policies. Though some in these households still have mixed opinions about resettlement, they accept the compensation prices for housing, agricultural land, crops and trees as adequate and close to the local market prices. However, several problems have also emerged during the resettlement process thus far and because resettlement has only been underway for three months, most of the outstanding problems remain unsolved.

First, ***compensation for losses in both mixed and concentrated resettlement sites has been inadequately handled.*** Inadequate compensation has compounded problems related to land loss. The value of land for compensation was estimated in 2004, however, by the time resettlement and construction began in 2005, land prices had increased. Affected people demanded that they be paid the actual land price in 2005, particularly for their residential properties. In some districts, people have refused to accept inadequate compensation. Forty households in Na Nhung commune (Muong La District, Son La Province) have not even allowed authorities to appraise their land for compensation because of fears that they will not be compensated adequately. Authorities have failed to respond adequately to most problems with the exception of one case in Muong La. There, some families declared that they needed to be compensated for the removal of more ancestral graves than actually existed. When authorities realized this, they took the money back. Many other complaints relating to the miscalculation of compensation prices, however, have not been verified and resolved.

Second, ***the prospects of having sustainable forms of livelihood or retaining their former standard of living and incomes remain uncertain for affected people.*** The current failure to provide agricultural land and natural resource losses remain the biggest and most critical problems in resettlement. The government has not allocated any agricultural land to those being resettled. Many affected people have lost their original land and are still waiting to be allocated new farmland. As a result, many households are left with no means of livelihood after resettlement.

On average, those in *di ven* sites<sup>15</sup> find it easier to rebuild their lives because they build their homes more quickly and with less damage to their existing crops and other assets. They are also able to maintain more social harmony since village demographics do not change much. And they can still use their farmland until it is submerged.

However, most affected people are concerned that when government support for food, electricity and fuel ends, they will have no viable means of food production and income. This fear is greater for those who move far away.<sup>16</sup> Those who have moved as far as 50 km from their original homes can no longer get to their fields, which remain untended even though they have not yet been submerged. In most cases, they receive less fertile land in the resettlement area and thus face lower crop yields and incomes. Though they will be given opportunities to attend agricultural extension courses during the resettlement process, how

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<sup>14</sup> This includes those from remote and poor villages.

<sup>15</sup> Son La Provincial People's Committee, No. 01-2005 QD- UB mandates that people should be moved close where possible.

<sup>16</sup> Evidence of this is from the Tan Lap pilot site. Those resettled there keep going back to their original sites to farm because they are unable to adapt to their new environment, thus they prefer to farm on their original land until it is flooded.

effective these courses will be remains unclear. This socio-economic aspect is discussed in greater detail in Chapter III.

At the same time, most of these households have received such large sums of money all at once for the first time in their lives that they have had a hard time managing it. Not accustomed to saving and investing, some have bought motorbikes, furniture or wasted it on drinking or drugs (for example, the La Ha minorities in Ban Xa village, Liep Te commune, Son La province). These households are likely to suffer from future food shortages and may fall back into poverty if no sustainable means of income is found. Seriously affected households such as those who have completely lost their land and means of production are demanding “land for land” compensation for their agricultural lands because they fear they will not have a sustainable means of livelihood in the new resettlement areas.

Third, ***problems have emerged with regards to inadequate provision of infrastructure, and basic services in resettlement sites.*** At the time of fieldwork, most of the infrastructure work in resettlement areas remained unfinished. Only foundations for houses had been constructed (which should have been completed much earlier) and the pace of construction varied from site to site. In *di ven* sites, ground leveling work and construction of houses proceeded more quickly once people moved in.

Although not mentioned in official documents, the PRMU’s policy is to prioritize the resettlement of households moving farther away because they face more hardships. Attention has thus been given to greater planning, building of infrastructure and basic services there compared to *di ven* sites that still have access to much of their old facilities. However, the planning and infrastructure in these sites is often less than adequate when people are moved in.

For example, at resettlement sites such as Chieng Bang commune (Quynh Nhai District, Son La Province) and Muong Bu commune (Muong La District, Son La Province), new settlers and host communities are mixed together. There, the ground leveling work for foundations has been completed and people can begin building their houses. However, inter-village roads are still under construction and most of the electricity and water supply systems are still temporary. Thus, it is very difficult for affected people to move around. Moreover, detailed designs and cost estimates for the construction of community centers, kindergartens and village class rooms are still not available. Only some resettlement sites have main water supply systems such as filtration tanks and water pipelines.<sup>17</sup> However, very few resettlement sites have this type of infrastructure.

Moreover, only the design phase has been completed for seven out of 16 projects that deal with irrigation and water provision. For example, in the resettlement site in Thuan Chau District, Son La Province, delays in planning and implementation forced the district to use 5,400 meters of plastic pipes to temporarily supply water to households for domestic use.<sup>18</sup> In resettlement sites in Quynh Nhai District, only two out of 20 irrigation and water supply projects have been completed and are functional.<sup>19</sup> The others are either under construction or still being designed.

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<sup>17</sup> Such as the resettlement site of Na Nhung commune in Muong La District

<sup>18</sup> Report of Thuan Chau District People’s Committee, dated Dec. 21, 2005.

<sup>19</sup> In Pu Hay resettlement site and Chieng Khay commune center.

Resettlement planning has also been negatively impacted because the construction of other complimentary infrastructure faces delays due to bureaucratic hurdles. For example as of 2005, in Quynh Nhai District, Highway 279 leading to the resettlement sites of Na Mat, Loong Mac – Co Liu, Huoi Man and Pa Nga had not been completed. The Muong Gion road linking Chieng Khay to Khop Xa resettlement site had also not been constructed. The failure of building major roads to resettlement areas prevents construction in the sites themselves.

It is thus critical to address adequate compensation of land (both productive and residential) and housing, natural resources such as crops, animals, trees, aquaculture and the provision of critical public services such as water and waste management, and basic healthcare and education. Where compensation amounts are based on outdated figures, they need to be modified according to market prices at the time that families begin resettling. The policy must be assessed at regular intervals and have the flexibility to be modified according to the reality of resettlement if the government is truly interested in mitigating suffering and ensuring long term project support.

Those being moved close to their original homes are finding it easier to adjust to resettlement. Fewer resources go to waste in this type of resettlement in the short term. Those being moved much farther away are facing numerous difficulties in meeting the same living standards as they had before. This is leading to longer term economic and social instability in the region. Currently, Dec 459 and other policies do not differentiate between the types of support that should be given to the various resettlement groups. Therefore, there is much greater resistance in moving to mixed and concentrated sites than to *di ven* sties.

#### **1.4 Why Differences between Policy and Practice?**

There are many reasons leading to differences between the policies formulated and the reality faced by project affected people.

- ***The Resettlement Policy has not been highly practical; it does not quite fit the real context.*** Critical areas of investigation have been ignored in designing the policies such as geographical and climatic conditions of the resettlement areas, quality of land designated for resettlement, lack of accessibility to designated resettlement sites, land use practices and customary laws of affected people, as well as the differences in socio-economic levels amongst them.
- ***Legal documents and guidelines are not detailed enough, delayed or ineffectual in implementation.*** At times, it has been difficult for various government officials to administer policies because of lack of clarity in policy documents. At other times, policies have been implemented hastily in order to meet the deadline to inaugurate the project. Local RMUs also question the capacity of sub-contractors to carry out the various components of the project. All these factors badly affect the progress and quality of the projects.
- ***The process of resettlement lacks proper direction and coordination.*** In places like Thuan Chau, Son La Province, the lack of communication and problems with compensation is creating problems between staff and local communities. In addition, the sequencing of resettlement has been ad hoc and badly coordinated between the

province, the district and the commune level. At times only land for housing is provided to resettled people, while the guidelines for compensation continue to be revised or vary across different localities. In some places, the commune authorities are not involved because of a lack of capacity or because resettlement is considered a task of the district level Resettlement Management Unit.

- ***There is a lack of capacity and resources for government personnel and local resettlement management units (RMUs).*** Most of the personnel involved in resettlement work at the district level are appointed from other district offices. There are insufficient numbers of full-time staff in this area. In some cases, newly graduated students and inexperienced have been recruited. Though resettlement is a new area for many of the staff, most of them have not been trained in conducting it. In addition, the resettlement areas are scattered across great distances in rough terrain. This requires good transportation and infrastructure which currently do not exist. Consequently, staff are overtaxed with a large volume of arduous work. This affects their performance and the project's effectiveness.
- ***Resettlement policy and practice has not adequately reconciled customary laws and practices of the ethnic minorities in the region and is thus creating conflicts with regard to land related issues.*** Officially, families have to register the household with commune authorities and acquire a registration number. However, in many rural areas, families do not possess registration numbers or certificates for land use. People in their villages know and acknowledge each other's land rights without needing official certificates. In some cases, they have lost these documents. During inventory for compensation, these obstacles pose significant problems for both resettlement staff and affected people. These problems indicate a need to integrate local knowledge and customary laws in the resettlement process. In addition, there were no specific guidelines for what constitutes a "legal" family at the time the inventory for land compensation was carried out. In some cases, the definition of what different ethnic groups considered "family" differed substantially from the legal definition of family.
- ***The lack of information about resettlement plans led to non-cooperation from affected people in some areas.*** In some areas where people are slated to move out, they remain uninformed about their entitlements and compensation mechanisms. They thus refuse to cooperate with administrative agencies during the inventory and compensation process. This lack of communication is obstructing the implementation of the resettlement process.

## CHAPTER II

### THEORETICAL AND ANALYTICAL FRAMEWORK FOR THE STUDY

#### 2.1 Introduction

Dam building requires resettlement of populations who live adjacent to rivers and areas that are flooded by reservoirs created by dams. The predictable nature of this population displacement has resulted in two models of displacement and resettlement: the four-stage model developed by Scudder and Colson in 1982, 1996 and 2005; and the impoverishment model developed by Cernea in 1990, 1999 and 2005. The first model was based on an image of voluntary resettlement. Over time it became increasingly clear that resettlement was rarely voluntary and often led to impoverishment and Cernea developed a new model.

The first model centers on a dynamic process emphasizing the different stages in resettlement efforts, while the second concentrates on the risks that resettlement poses for the displaced communities. Both models are useful in fully explaining the range of risks and benefits that communities face upon resettlement. Thus, it is helpful to use both models to clarify exactly what factors are relevant to the Son La hydropower project.

It is also helpful to examine the experience of resettled communities around the world to provide both a theoretical framework and practical guide to the impact of the Son La hydropower project on resettled communities. This section is designed to review the current theoretical analysis and international experience of resettlement. With that information it then proposes an analytical framework to examine the resettlement process involved in the Son La hydropower project. More specifically the analyses will examine the socioeconomic (including livelihood considerations) and environmental conditions faced by the resettled population.

#### 2.2 Theoretical Review

Two models, the four-stage model by Scudder and Cernea (1990, 1996, 2005) and the impoverishment risks and reconstruction model by Cernea (1990, 1999, 2000), are used as theoretical frame work for this study. These models are covered in detail below.

##### 2.2.1 Four-Stage Model

Scudder et al. (1979-1990s) attempts to clarify the resettlement process by dividing it into four stages:

- First is the *Planning and Recruitment Stage* which deals with the lengthy pre-resettlement period and development opportunities for resettled people, instead of emphasizing compensation policies. This stage should involve affected people in the planning and recruitment process to reduce their stress.
- The second stage is *Adjustment and Coping*. This stage deals with the actual physical dislocation. Two important characteristics exist in this stage. Firstly, living standards of the majority of people decline after their physical removal. The cause of the decline in living standards is due to multidimensional stresses. These stresses include poor health conditions due to an inadequate and polluted environment; new diseases due to new habitats and HIV infection. It can include psychological conditions including grieving for a lost home syndrome-here home means the community in the

widest sense and anxiety about the future. Finally there are cultural and economic factors including conflict with the host population, threats to a community's cultural identity, loss of livelihood-support patterns and comforting customs, loss of institutions and customs of dealing with birth, marriage and death, and finally, undermining of the local leadership. The majority of people are described as becoming risk-averse after resettlement. This stage could last several years. It becomes serious if the government policies emphasize tangible losses and compensation, rather than intangible losses and development opportunities.

- The third stage is *Community Formation and Economic Development*. In this stage people's behaviors would change from risk-averse to a risk-taking attitude. Resettled people feel more "at home" with the host population and should have gained self-sufficiency in foodstuffs.
- The fourth stage is *Handing Over and Incorporation*. Three likely scenarios are described as taking place: (1) specialized project agencies (e.g. line ministry agencies dealing with agriculture, education, public health, private sector and NGOs) hand over assets to resettler institutions since the ministries may not have adequate resources and personnel to absorb. Some conflicts between project management and local government agencies may take place; (2) the resettled people must have institutional and political strength to compete for their share of national resources; and (3) resettled people continue to improve their living conditions.

Critics point out that the four-stage model has several weaknesses. They are as follows:

- First, as mentioned by De Wet (1993), this model attempts to explain similarities, rather than the differences in people's responses to involuntary resettlement. It does not include the heterogeneity of responses as they relate to gender, culture, society and the organization of authority in the particular area.
- Second, while this model helps to explain the dynamics of the resettlement process, it also tends to reify the various processes. However, as Goodland (2000) argues, improved resettlement planning and implementation may allow most affected people to become beneficiaries immediately following their resettlement; hence the second stage may not exist.

### **2.2.2 The Impoverishment Risks and Reconstruction Model**

The impoverishment risks and reconstruction model of Cernea and et al (1990-2000) delineates eight types of development-induced risks in resettlement projects. They include landlessness, joblessness, homelessness, marginalization (downward mobility), increased morbidity and mortality, food insecurity, loss of access to common property, and social disarticulation. The model recommends that the development of resettlement policies is necessary to improve the living standards of the people. In general, this model provides risk analysis to affected communities. However, the major weakness of this model is that it does not include violations of human rights and their institutional power. This model also does not take into account the resettled people's behavior. This factor plays an important role in community formation and economic development, which Scudder mentions in Stage 3.

### **2.3 International Experiences**

In the past century, dams were considered a symbol of development in many countries. The development of big dams quickly accelerated during the economic boom after World War II. Dams were promoted as an important measure to meet the need for food production,

energy, flood control and water use. Some 30-40% of agricultural land in the world depends on dams and 19% of the world's electricity comes from hydropower. (WCD, 2000)

There are however serious downsides to dam construction which have become increasingly apparent over the past 50 years.

According to the World Commission on Dams (WCD), 60% of rivers in the world are obstructed by dams. The WCD estimated that by the end of 20<sup>th</sup> century about 40-80 million people had been displaced by dams (WCD, 2000:8-9). Compensation was often inadequate. International experience has indicated that the outcome of resettlement programs are rarely as successful as projected. Opportunities for these people to restore their livelihoods after resettlement were very limited. In addition, millions of people downstream have suffered from dam construction as a result of changes in the floodplain, fisheries, people's livelihood, etc.

According to Scudder's (2005) survey of 44 big dam projects, only 7% (3 out of 44 cases) of dam projects actually improved the living standards of resettled people. In about 82% of the cases (36 out of 44 cases) living conditions actually worsened for resettled people. The reasons that living conditions worsened are summarized as follows:

- *Inadequate capacity:* Not enough staff are hired for resettlement programs and they do not receive sufficient training. In the case of the Zimapan Dam in Mexico, most staff handling resettlement confirmed that they were not trained in participatory methods and poverty analysis. Twenty-seven out of 41 cases were regarded as problematic due to a lack of capacity.
- *Lack of funding:* In fifty-eight per cent of projects the primary issue identified was inadequate funding for the resettlement program. An inability to access funding in a timely manner has put severe constraints on many projects.
- *Lack of political will:* This is a lack of commitment by the project authorities and government to implement a resettlement action plan intended to improve the living standards of the resettled people. The planners of the Manantali Dam in Mali did not provide enough land for the majority of resettled people to continue their shifting cultivation patterns nor did they provide the irrigation system necessary for intensive cultivation.
- *Lack of development opportunities:* Training and credit for new employment during dam construction and off-farm and on-farm activities in the project areas are inadequate. Small-scale commercial opportunities such as tea and coffee planting and carpentry should also be included in development plans.
- *Underestimates of the number of people to be resettled:* Underestimations of the number of people requiring resettlement results in inadequate financing and staffing for resettlement programs. The main reason for consistent underestimation is that it suits project authorities and lending agencies to distort these figures (McCully 1996: 76-92).
- *Failure to ensure resettled people's participation in project planning:* The people most affected by dam projects are rarely included in the site selection process, nor do they have any say in the size of the unit's relocation, the social services offered, and options available for economic development.
- *Landlessness:* In 86% of cases examined by Scudder, the majority of resettled people are rural residents and poor farmers. This means that land scarcity can become a serious problem due to population increases and environmental degradation.

- *Unemployment*: Land scarcity combined with insufficient job opportunities resulted in unemployment for resettled people who have lost access to natural resources.
- *Food security*: Seventy-nine percent of people resettled suffered from food insecurity after resettlement.

## 2.4 Domestic Experience

Vietnamese dam construction has had serious repercussions for the environment and people. The Hoa Binh dam alone displaced 58,000 people. Many of those resettled people are still suffering negative effects of their resettlement. In Son La Province, 1,000 families affected by the Hoa Binh reservoir are still under Program 1382, a program designed to help resettled families, twenty years after they were originally resettled.

The good news is that Vietnam has learned from the Hoa Binh experience. At the Yali Falls dam, the second biggest in the country, resettlement policies have improved considerably. The resettlement process is considered as “the best” so far in Vietnam. However, numerous studies still show that 6,500 resettled families in Kon Tum Province face issues around food security, land use, compensation, housing, culture, etc. (CRES, 2001:23).

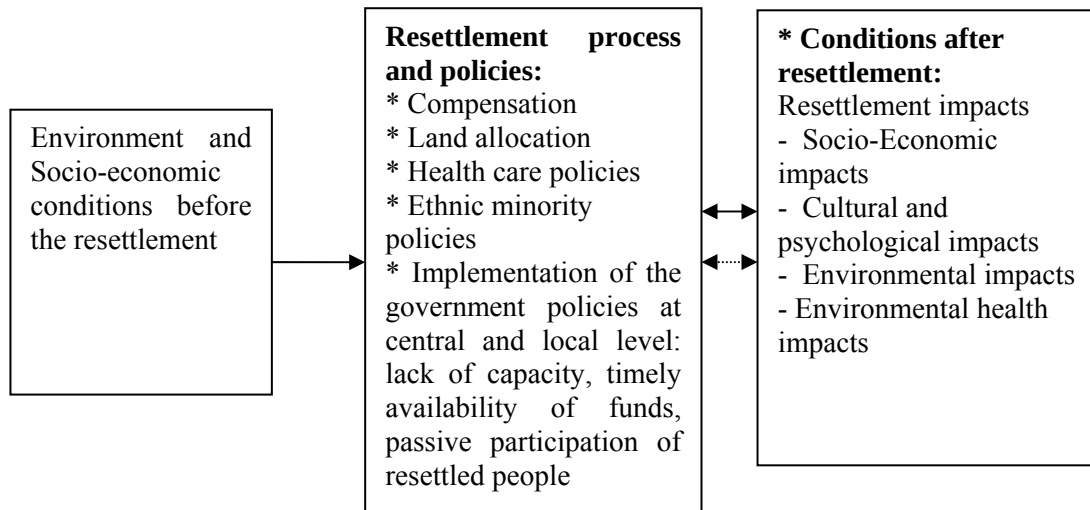
Resettlement is a very complicated process. It requires preparation and participation by all stakeholders. Planners must take into account the needs of the affected people.

## 2.5 Proposed Analytical Framework

Michael Cernea has outlined the risks faced by resettled people including landlessness, homelessness, joblessness, loss of common property resources, food insecurity, marginalization, increased mortality and morbidity due to resettlement. This study is designed to assess the impact of resettlement policies on both the living conditions and social well-being of resettled people.

Cernea's risk analysis model is used here to investigate the environmental and socio-economic conditions faced by the local population before and after the resettlement in order to provide insight into the impact of resettlement. Scudder's four-stage model is also used by this study to examine the dynamic process of resettlement (at present this process is in its very first stage). Thus, this study can be considered a baseline analysis that will provide a foundation for further dynamic studies coupled with the long-time resettlement process.

Finally, after assessing conditions before and after resettlement, the study will look at the consistency, effectiveness, and the weaknesses of current resettlement policies and how they are being implemented. This study will offer policy recommendations for an improved resettlement process for both Vietnamese local and central governments.



## **CHAPTER III**

### **MAJOR FINDINGS ON THE IMPACTS OF RESETTLEMENT**

#### **PART I Son La Hydropower Project and Socio-economic Issues**

Part I outlines the main findings from VUSTA's Socio-economic study. It highlights the problems related to socio-economic conditions of affected people as well as the opportunities and benefits incurred through resettlement.

#### **3.1 Resettlement Options and Land Scarcity**

The Provincial People's Committees of Son La, Lai Chau and Dien Bien have planned to resettle people within their own provinces. The resettlement of people within the same province has both advantages and disadvantages. The advantage is that resettlement can be faster, with less disruption to local customs and lifestyles and it can be organized by the Provincial People's Committee. The disadvantage is that it can lead to a reorganization of the demographics of the provinces themselves—crowding areas that were once less populated, putting different communities together and changing local livelihoods. Resettling in the same province also creates greater agricultural land scarcity.

The study shows that about 71% of affected people are being resettled in concentrated sites, while 26% are in mixed sites. Close to 2% are in *di ven* sites. The government policy to move an entire village where only half the households actually need to resettle exacerbates crowding in mixed and concentrated sites. This creates greater competition for arable land.

The most productive land has already been allocated, especially in Son La Province. Affected people are supposed to receive land for cultivation at their new relocation sites, but there is a scarcity of land. Thus, a percentage of affected people will have to move where land is available, even if it is very far away and with a completely different soil structure. This is leading to greater insecurity and changes in livelihood. Many will not be able to cultivate the same crops they once grew and they will require new agricultural techniques. This will lead to longer adjustment periods for those who have to move far away than those who relocate to *di ven* sites.

According to the Son La Project's Master Plan, the resettlement and compensation policy includes land allocation or culturally acceptable alternatives for income generation to protect the livelihoods of affected people. Land-for-land compensation is the most appropriate and preferred option in rural areas. Land-based income restoration strategies could include investment by the project in agricultural diversification. For instance, under-utilized land could be developed into productive land, especially since irrigation and technical assistance to increase agricultural productivity are supposed to be provided by the government for resettlement. But land-for-land strategies are becoming difficult to implement due to land scarcity. This is one of the biggest concerns for affected people.

When fieldwork was conducted for this study, affected people had still not been assigned agricultural land. This was especially true for those who moved to concentrated resettlement sites. Those who moved to *di ven* sites still used their old fields. After the reservoir is filled, *di ven* settlers will also have to acquire new land. Affected people in mixed communities expressed alarm over the shortage of agricultural land in their area.

Even those who possessed land-use certificates were concerned about whether they would have to give up their current farmland and look for land elsewhere.

As mentioned above, though compensation for land exists in the resettlement policy, it lacks detail and specificity. In reality, if cultivable land is unavailable, resettled populations will reclaim existing lands and clear other forested areas thereby leading to more natural resource degradation. Thus far, local and provincial authorities have responded to these fears and emerging conflicts by stating that they have not received resettlement blueprints for land allocation from consultants; until these blueprints are received they cannot address these problems.

**Households from Nom Village were moved within the same district to both mixed and concentrated resettlement sites (about 60 km from their original land to the resettlement sites). The Headman of Phieng Bung resettlement village, Muong Bu commune (Muong La District, Son La Province) said:**

Though these households have relocated near Son La town which has better roads and electricity, the quality of drinking water is causing problems.

Villagers have rebuilt their houses, but resettlement committees have not finalized the compensation procedure and land allocation. Therefore, they have not provided the remaining 70% of compensation for villagers. To date, we have not received land for production. People want to have their land so they can continue working for a living, without relying much on the government.

A number of households had invested millions of Dong in new boats and nets, having quite a high income before. But now moving up here, they cannot use them anymore. This is a huge loss for them. They need assistance from the government.

### **3.2 Restoration of Lives and Livelihoods**

Restoration of incomes, rehabilitation of livelihoods, maintaining and/or raising standards of living and food production levels are stated as some of the critical objectives of the project. Measures to achieve this include land and monetary compensation; providing support for alternative livelihoods; covering monetary expenses for relocation and the establishment of communities at resettlement sites. It is thus critical to examine whether these important objectives are being met to restore the quality of life of affected people. Are affected people better or worse off socio-economically as a result of resettlement?

One of the biggest impacts of the hydropower project is on affected people's ability to sustain decent incomes and livelihoods for the long-term. Since most of them are farmers, the issues of land scarcity and insecurity pose serious risks to maintaining sustainable livelihoods after resettlement. According to the study, 87% of those who have resettled continue to work. However, only 66% of them have kept the same livelihood after resettlement.

After moving, several households changed their livelihood due to losing their lands, finding a better opportunity, or being forced to do something different because of changed locality. Nearly 13% have completely lost a means of earning income. According to affected people, the prevalent reason for this is land scarcity and/or lack of arable land. Households that

depend on fishing and boating now face even greater risks of impoverishment when forced to move further upstream or away from the river. It will take them more time to adjust to their new life; or worse, to a completely different livelihood.



**Picture 1:** Making fishing net by the Da River (Black River), Pa Hat village (La Ha people), It Ong commune, Muong La District, Son La Province.

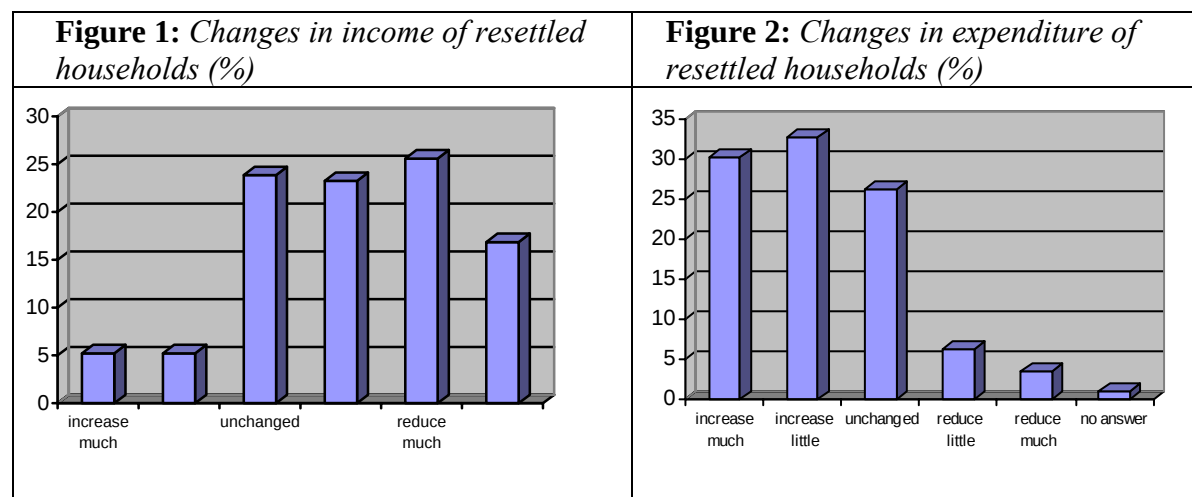
The host communities in mixed sites face their own risks and changes. Most of them are farmers and must now share their farmland with those who are being resettled. Four percent of them have become unemployed and 3 percent have changed their livelihood. Though there is not much information about how some of these families have become unemployed, some interviewed during the fieldwork said that they shifted from farming to commerce or the service sector due to the increased population in the area.

**Table 2:** Working Status of Resettled Households

|                               | Density | Percentage |
|-------------------------------|---------|------------|
| Remain unchanged              | 100     | 66.67      |
| Changed to another occupation | 1       | 0.67       |
| Job loss or unemployment      | 44      | 29.33      |
| Retired                       | 1       | 0.67       |
| Other                         | 4       | 2.67       |
| Total                         | 150     | 100        |

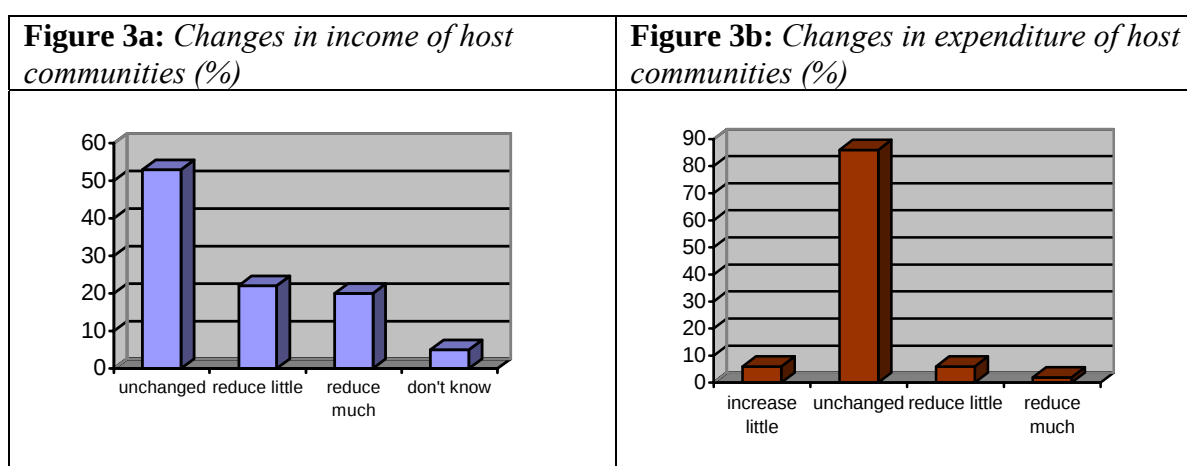
### 3.3 Changes in Income and Expenditure

Fifty percent of those who resettled responded that their income had been reduced, while only 10% said that their income had increased. It is understandable that at the beginning of the resettlement period, household income is negatively affected because households typically compare their “current” income with that from the previous month, pre-resettlement. It is more critical, however, to measure how long it takes to recover their main source of income and to stabilize to pre-resettlement levels. For instance, households in *di ven* sites can at least farm their own lands until they are flooded. In contrast, those who are in concentrated or mixed sites face the most difficulty in search of arable land. At the time of the study, none of the households who had moved far from their old land had gotten new arable land. Most of them were trying to harvest as much rice or maize as they could to sell on the market before moving. However, they suffered losses in livestock because of their inability to transport them to their new location. Though chickens and pigs could be transported, it was much more difficult to take their cows to the new sites. For many of these families, livestock serves as a major asset which can be used as collateral in times of need. Thus it is a major loss for affected people.



In terms of expenditure, nearly 63% of surveyed households reported that their expenses had increased. Only 4.5% thought that their expenditure had decreased and 26% felt that expenditure remained unchanged. They cited new needs as one of the main reasons for increased expenses. For example, whereas they had their own vegetable gardens, animals and systems in place for food self-sufficiency at their original homes, they now had to rebuild their houses and associate infrastructure. They thus spent more money on basic needs. They also cited higher prices for purchases in their new locations.

Host communities also bear costs in assimilating displaced communities. About 35% of host households in the study thought that they were adversely affected, while the rest felt that they had experienced little or no impact. This is in spite of the fact that 64% were aware that agricultural land and other resources would now have to be shared and would become more limited in the future. They have still not received compensation for sharing these resources. Host communities will be forced to share existing resources and social services with resettled households and measuring these “losses” and how to adequately compensate host communities for this will not be straightforward.



Fifty-three percent of host community households felt that their income remained the same as before; while 42% felt that their income had been reduced. Out of the 42%, 20% felt that it had significantly decreased. Income, in turn, influences expenditure and poverty levels. About 86% of host households noticed no change in their expenditure. About 6% of the

households perceived that their incomes increased a little and the same percentage felt that it was “reduced a little”(see Figure 4b) This does indicate that host family households might be poorer after resettlement since income levels have stayed the same or decreased while expenditure levels have stayed the same.

### 3.4 Improved Housing

The survey shows that more than 80% of resettled households took their old house apart and rebuilt it in the new resettlement sites. Seventy percent of them wished to build their own houses if they had the opportunity to do so. More than 80% of them had houses on stilts (called *nha san*). This includes both resettled and host community households. Houses on stilts are considered a sign of wealth in these mountainous regions and are usually good quality. Out of those that rebuilt their own houses, more than 90% have housing made of wood, compared with 70% of affected people pre-resettlement. This shows that there is a reduction in the number of households using bamboo<sup>20</sup> for housing after being resettled. These figures indicate that poor households, on average, have better housing after being resettled. It also shows that housing compensation is being handled well by the government. Housing of host community households will not change due to resettlement.

The majority of those who have moved, dismantled and transported their houses from their old villages to their new locations. During the move, much of their housing materials were damaged. They have, therefore, had to buy new materials for rebuilding their houses. However, with cash compensation, many of them have expanded their houses and their roofs have been funded by the government. In a similar vein, the resettled households seem to have bigger houses compared to those who are waiting to be resettled. Around 11% of the total post-resettlement households have 100-150 m<sup>2</sup> compared to 5% of pre-resettlement households. However, this accounts for only the house size and not the garden plots surrounding the houses.

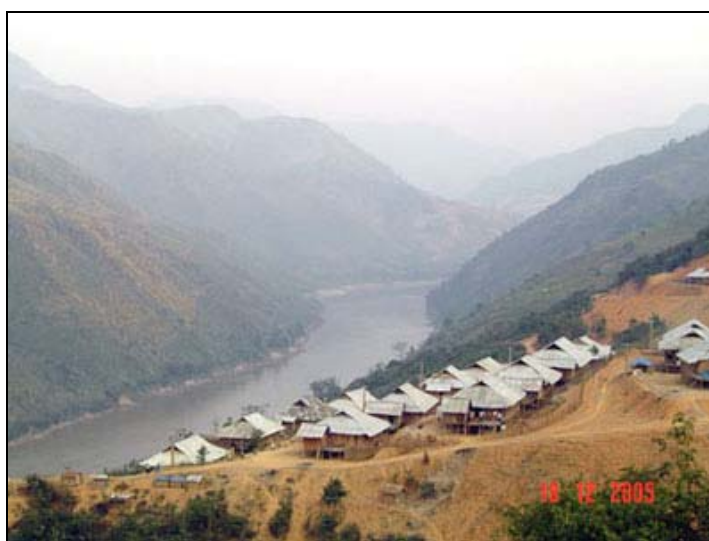
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<sup>20</sup> Bamboo is considered poorer quality housing material.

### 3.5 Information disclosure and participation of project affected people.

#### 3.5.1 Information disclosure and public consultation

The data indicates that most of the affected people in all groups studied are fully aware of that they will receive compensation, but they do not have sufficient information about the specifics of the compensation that they will receive. Both the commune level People's Committees and village meetings have been used as the main methods of public consultation. Most affected people know where they will move and host communities are aware of where new people will be coming from.



**Picture 2:** *Di Ven site in Ban Sa village, Liep Te commune, Thuan Chau District, Son La Province (La Ha people).*

Information booklets and posters on Son La Hydropower Project and the Resettlement and Compensation Plan were printed for distribution to each project-affected household. However, this method has not been effective because of the limited literacy levels in the region. Furthermore these booklets have been printed in Vietnamese rather than in local languages. Thus, they are inaccessible to the many ethnic communities in the region.

The implementation of social safeguard policies also requires that special attention be paid to vulnerable groups such as women, the elderly, the landless and the very poor. However, these groups have not received appropriate attention from authorities thus far. Typically women-headed households and poor households remain the most adversely impacted groups. However, both quantitative data and in-depth interviews show that no special measures were taken to assist women-headed households. Although local women's unions were included in certain activities concerning resettlement, their participation was limited to creating "buy-in" from the union members rather than to actually listening to the viewpoints of women, especially those from women-headed households.

#### 3.5.2 Community Participation in the various project stages

Before the Vietnamese government approved the Son La project, many technical, social and environmental studies took place in order to evaluate the impacts of the hydropower plant. However, villagers that would be affected by the project were not involved at all during this stage. The government made the decision to build the hydropower plant and move people living in these areas. The resettlement is thus involuntary and indicates that there was no community participation during the "initiation phase" of the project.

The second “planning” stage entails outlining detailed plans and blueprints for construction of infrastructure, houses and allocation of farmland in specific resettlement sites. However, the study indicates that resettlement is being conducted prior to or at the same time as detailed blueprints for resettlement are being completed. Thus resettlement in many sites is proceeding “in the dark.”

The third stage for resettlement in the project is considered the “design stage.” At this stage, people are encouraged to participate in decision-making and providing suggestions for relocation. In fact, feedback from affected people has changed the way the government is providing housing for resettled households. Most people prefer to move their old houses to their new villages. The government has thus agreed to provide monetary compensation to replace damaged parts of the house and to provide trucks for transportation. This is a positive and clear example of how active participation has helped create a more effective resettlement process.

The “implementation” stage is the final step. At its peak, affected people will need assistance from the government for transport. Compensation for labor in moving and building their housing is integrated into monetary compensation for resettlement. Effective participation during this stage requires that everyone involved be well-informed about the resettlement process and the expected outcome. This will help ensure a smooth transition, create better chances for success in resettlement and create support for the project. .

#### **Problems in Mong Luong Village:**

Involving affected people from the start helps prevent delays in the project and limits conflict. The affected population can then feel more empowered to help make decisions that directly and acutely impact their lives and authorities can expect a smoother functioning of project plans and even see improvements in how they are handled. Where these considerations have been disregarded, the project has faced numerous difficulties.

For instance, in Mong Luong village (Liep Te Commune, Thuan Chau District, Son La Province), villagers refused to move to a new location because infrastructure had not been constructed as promised. Even the ground leveling work at the new location had been done incorrectly. Mong Luong is one of the villages located beneath the projected water level rise of 140 m. Many households have already dismantled their houses in preparation for relocation to a new site. But they have not been able to move because of a lack of roads leading to the new site and because of problems with the ground leveling work. Thus many are living in makeshift housing and under a high level of stress.

### **3.6 Benefits from Infrastructure Development**

Some of the poorest people in Vietnam live in the project affected areas, especially those living in really remote mountain villages. According to the data, the average income of the poorest portion of the population (first quintile) is around four million dong a year, and the income of the richest portion of the population (the fifth quintile) is around 34 million dong a year. In these rural areas, infrastructure is already very poor. Therefore, the project provides an important opportunity to help improve existing infrastructure for some of the poorest in the region.

**Table 3: Average Income of Resettlement and Host Groups (thousand dong)<sup>21</sup>**

| <b>Quintile</b> | <b>Total hhs surveyed</b> | <b>Host hhs</b> | <b>Resettlement hhs</b> |
|-----------------|---------------------------|-----------------|-------------------------|
| Poorest         | 4,388                     | 3,031           | 5,350                   |
| Poor            | 9,747                     | 7,469           | 10,529                  |
| Average         | 14,654                    | 11,851          | 15,521                  |
| Rich            | 21,091                    | 18,829          | 22,204                  |
| Richest         | 33,917                    | 32,509          | 34,332                  |

The improvement of the road systems will lead to higher accessibility to and between villages, thereby making them less isolated. Many of the resettlement sites already have decent roads, while others are still being completed after resettlement. Since this road construction is an essential part of the project, it should be done strategically with a view to improving economic opportunities for resettled populations.

Our study also shows a positive response by affected people towards improved roads and ease of transport as a result of the project. Interviewees expressed that though the market is still far from their resettlement sites, it is easier to access it with better roads. They are even willing to spend more on public transport because of the improved quality of the roads. This was exemplified by the fact that 80% of resettled households said that they were satisfied with their new life for many reasons, including more convenient transportation. Only 4% said that they moved because the government policy required them to do so.

The government had committed to providing water and electricity before people relocated; however, many resettlement sites still have no electricity. They will eventually have electricity but will have to wait for some time. Only 35% of resettled households are connected to the national electricity grid and 40% use electricity from pico-hydro<sup>22</sup>. The rest use kerosene for lighting. Those living close to their original homes mainly use picos and still maintain their former lifestyles. Some resettlement sites surveyed (such as Phieng Bung, Ban Xa, Mong Luong, Ban Hoc, Ba Nhot) did possess electricity infrastructure such as electric poles, but households still used batteries and kerosene for lighting because they were still not connected to the grid. This is an example where the policy to provide infrastructure differed from the reality on the ground.

The situation for those resettling with existing host communities is more positive. More than 46% of host community households are on the national grid. This means that these localities will already have electricity when people resettle there. The remaining households in the mixed sites will continue to use either picos or kerosene to serve their energy needs until they are linked to the national electricity grid.

Another area where the project has potential to benefit affected people is the construction of irrigation systems. Since resettlement is in its early stages, irrigation has not been addressed. However, if properly done and with good participation of affected people, irrigation has the potential to reap benefits for the region.

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<sup>21</sup> Classification is based on each 20% of total households with income from low to high in the survey. It is not based on poverty line from national standard.

<sup>22</sup> A very small hydro dam of about 1 MW from a nearby stream. It usually provides enough electricity for household lighting.

Currently, access to essential public services such as health care and education, access to local markets and to local government headquarters from the current resettlement sites are still problematic. Such services are either under construction or in the process of being revamped and improved at mixed resettlement sites.

Effective resettlement should integrate appropriate housing, sustainable livelihoods, the provision of health care and other basic services. It should create an environment where local customs are respected and where communities are strengthened. Therefore, effective resettlement must go beyond economic indicators and also address cultural, health and environmental concerns.

## **Part II Resettlement Concerns - An Anthropological View**

There is a common perception that social and cultural impacts of resettlement are more clearly evident in the post-resettlement period. In the Son La project, where resettlement is in its early phases, much can be learned from the process thus far about how culture and customary laws shape social cohesion and governance in Northwest Vietnam. Part II addresses some key ethnographic considerations in creating more effective resettlement.

### **3.7 Social Structure and Social Relations: Existence of an official and a non-formal system**

At present, there are two governance systems in the Northwest. The more recent is the “official” system of governance composed of provincial and local authorities. The other is an “informal” system of governance shaped by ethnic alliances, kinship and family. In this area, customary law largely determines social relations as communities of the same ethnicity share common spiritual and cultural beliefs. These beliefs and practices are fundamental to community organization and social welfare within the region.



**Picture 3:** *Tan Hung village (Thai (Tai) people), Chan Nua commune, Sin Ho District, Lai Chau Province. This village will be moved to Paso resettlement site, Phong Tho District, Lai Chau Province.*

Customary laws based on community and kinship play an essential role in all aspects of clan and family life in the region. Families from the same clan often cluster together along a river or stream. Each clan member is aware of her/his responsibility in sharing daily tasks and in creating social cohesion amongst the group. Village norms are maintained through such customary laws. Each locality, based on the ethnicity of the

group, abides by a different set of customary laws for its village. These laws shape social obligations, delineate territorial boundaries, lifestyle norms, important rites and rituals for spiritual growth and ways to strengthen the family, clan and community.

In Thai (Tai), Hmong, Mang and Giay villages where fieldwork was conducted, the village patriarchs play an extremely important role. Their opinions are greatly respected with regards to clan, community or village decisions. The opinion of the head of the clan, particularly among the Hmong and Giay, is critical in deciding issues related to clan cohesion and land. With regards to resettlement, this includes allocation of agricultural land, impacts to sacred sites and environmental protection and management of their natural resources.

The existence of both the official governance system and customary law within the region leads to two different value systems and ideas in these villages. The fieldwork reveals the following key considerations:

- The family, clan and village not only serve as the cradle of reproduction, but also represent the social, environmental and cultural identity of ethnic groups in the region over many generations. The current official policy of resettlement does not necessarily integrate these concerns in the resettlement plans and thus tempers with these systems;
- Because traditional customary law holds precedence amongst these communities, the administrative operations that ignore these values not only disrupt social cohesion but also affect the economic and governance structures within these communities.

### **3.8 Identifying Social Networks in Resettlement Areas**

The geographic distribution of ethnic groups (in 25 villages in Lai Chau and Son La provinces) varies within the highlands. Though all are considered groups from the highlands, the Thai (Tai) live in valleys and along rivers and the Giay, Hmong, La Ha and Mang live in the mountains. There are many similarities between these groups in terms of how social relationships are valued and in clan and village structures.

As Thai (Tai) communities build elegant and spacious houses-on-stilts in valleys, they will be resettled when the water level from the reservoir rises between 140m and 180m. This population relies on wet rice cultivation, upland farming and fisheries. In the past decades, the Thai (Tai) who live in and migrate from rural areas of Muong La, Thuan Chau and Quynh Nhai districts (in Son La Province) or Sin Ho and Phong Tho districts (in Lai Chau Province) have more or less maintained their village organizational style even if the same clan members no longer live in the same locality. Years of migration may have scattered them across the region, but they still hold onto their social structures and customs.

Though they may live in different villages, their relationships with each other and their common identity are defined through land, the concept of “brotherhood” (*tai hem*) and kinship. A close relationship exists between people of the same “*Xinh*” (clan) and the same “*Va*” (people sharing the same ancestors over five to seven generations). This closeness also exists between cousins sharing the same grandparents and living in a large *dam* (house-on-stilts). Those living in the same house worship the same god or *phi* as their house god (*phi dam*).

They also share the same *muong*,<sup>23</sup> a powerful spiritual/cultural concept of “ancestral land” which signifies their common origins and is an actual physical location as well. And Kinship is defined by their “*Ai noong*” (sibling relationship), “*Nhinh sao*” (maternal lineage) and “*Lung Ta*” (father’s lineage). These relationships are further strengthened through rights and obligations maintained through seven generations on the mother’s side. The intricate web of relationships that these customary laws maintain forms a strong social network within these communities.

However, government-run resettlement units do not necessarily take this social web into account and thus can relocate clan members from the same village to different localities. This is resulting in the disintegration of social units (and thus essential social safety-nets) of ethnic minorities. Involuntary resettlement is different than voluntary migration and thus the separation of clan members and kin who wish to stay together creates social disintegration and stress within these communities.

The Thai (Tai), Hmong and Giay live in patriarchal nuclear families. The man is the household head and is the main decision-maker for all important family matters. The eldest son is entitled to inherit property and land from his parents and grand-parents. He administers all economic activities. However, it is important to note that gender roles are not static within these communities. There has been a dynamic change in the role and status of women within households and the community as socio-economic changes take place in the region. Whereas traditionally women had little say in important family decisions, they are increasingly having more input in discussions related to key resettlement issues such as migration and relocation. Most of the women interviewed said that decisions were made mainly by the male head of household, but there is greater tendency for joint discussion between husband and wife on family affairs.

Houses are also an essential symbol of community and family for the ethnicities in the region. For instance, the Thai (Tai) build elegant houses that are hundreds of square meters long such as those in Chan Nua and Ban Cho (in Lai Chau Province) or in Quynh Nhai, and Muong La (in Son La Province). The La Ha build houses on stilts that are 30 – 40 m<sup>2</sup> long. For ethnicities such as the Hmong and the Giay, these houses serve not only as shelter but also as a critical cultural space that symbolizes the character of the community.

During the resettlement process, most Thai (Tai) prefer to dismantle their original houses and rebuild them in the new resettlement sites since their housing materials are strong and good quality. Not only is this cost effective, but also provides psychological comfort from the trauma of displacement. Using the same housing materials provides a sense of warmth and familiarity with the “old house in a new land.” However, for most other ethnic groups, this is not an option since they have much poorer housing at their original sites. They thus prefer to build new houses.

## Clans

Clans, as stated, are an important governance unit in a village. Clan members have helped each other in relocation, in dismantling and building houses, in preparing funerals and weddings and in supporting each other during natural disasters. One Thai (Tai) village can

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<sup>23</sup> However, within the same ethnic grouping, the “Black Thai (Tai)” (Tai Dam) originate from a different *muong* than the “White Thai (Tai)” (Tai Khao).

have 10-12 clans. A Thai (Tai) clan can consist of as few as 15 households or as many as 45 households. In contrast, the upland villages of the Hmong, La Ha, Mang and Giay have smaller clans with only 8-10 households per clan and a total of 3-4 clans per village. And many of these households live in the same residence. Thus a village with 15 to 20 households might only have 14 - 16 houses. In the current resettlement process, this becomes problematic because the definition of “household” in the resettlement policy is limited. It has not adequately dealt with compensation for a scenario in which 2 or 3 households/kin live under one roof. Should they be counted as one family or be compensated separately? Or can the policy become more flexible for joint households and offer them larger residential space?

In fact, many joint households were counted as one family during the compensation inventory. These joint households demanded separate compensation for each nuclear family since the house offered through resettlement was too small for a joint family. This has continued to be a problem in dividing up communities and families.

Marriage and kinship also cement the social structure of ethnic groups in the region. Marriage forms the basis of family relations and a cross-clan unity while kinship forms the basis of clan cohesion through blood relations. A village, thus, serves as a foundation for a symbiotic relationship between various clans bound together through marriage and kinship. Resettlement is impacting this structure by separating people from the same village to different resettlement sites. The lack of productive land will also impact how and where these communities are resettled.

Kinsmen and villagers said they expected to move together as a village to the new resettlement site. Blood brothers and relatives wish to reside close to each other.<sup>24</sup> This is the case of Phieng Bung village in Muong Bu Commune which has already resettled and in Mong Luong village in the Thuan Chau district (Son La Province) where resettlement is underway. The flexibility of being able to reside next to each other and build their own houses is a lesson that has been learned from mistakes in the resettlement process in pilot sites. Pilot sites built identical houses for settlers and assigned people locations. This resulted in a lot of dissatisfaction from affected people. Many refused to take the houses allocated to them. Since then, provincial authorities have tried to learn from this experience.

In some cases, when the Clan head’s family has not been moved, other households in the same clan refuse to relocate. For example, in the resettlement site of Huoi Pan (in Muong Khieng Commune, Thuan Chau District, Son La Province), five Thai (Tai) households of the Quang clan have not moved to the resettlement site because the head of the clan has not moved. There is no river there, no arable land and no schools for the children. Though 60 families have moved, these five remain because their clan has not wished to move. Although this is a rare case, it reflects the importance and strength of clan relationships among ethnic minority groups.

Thus far local authorities have dealt with this situation through financial incentives and pressure. According to local authorities, the households mentioned above might be forcibly moved to the new locations so as to not create an uprising from those who have already

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<sup>24</sup> In allocating residential land at the new sites, local authorities use a lottery system. Settlers can then exchange their designated spots with each other if they wish to do so. This enables flexibility for households of the same clan to live close to each other.

moved. Those who move within a designated timeframe are offered financial rewards while those who do not move face increasing pressure from the authorities.

### **Social Capital and Resettlement**

All ethnicities have resettled to new sites with mutual assistance from relatives and villagers in their communities. The level of mutual assistance depends on the size of the house and other property that need to be moved. In villages where there are large clans, clan members can more easily lend a hand. In villages where the clan is small, other neighbors help out. The compensation money for moving is used to cover meals for those who help and for housing construction rites and rituals. It is not used to pay for labor. For this reason, in addition to compensation for the house itself, VND300,000 (around US\$18.75) is given to each household to organize a house-building ceremony.

The house building ceremony is an important cultural and spiritual activity throughout Vietnam, but especially so for ethnic minorities in the region. As noted above, the Thai (Tai) and other minorities consider the home as the center of social and spiritual relationships. The “ground breaking” ceremony for a new home, therefore, is an important event where families, villages and clans come together for a big feast. These feasts can last up to three days.

### **3.9 Problems with Land Allocation**

At the time of fieldwork, data on the compensation of agricultural land for resettled households was unavailable for many of the villages. Lowland farmland (for wet rice cultivation) and upland farmland (for maize, cassava, beans and dry rice) and forest land had not been allocated to communities or households as stipulated by the 1993 Land Law.<sup>25</sup> (Land Law, 1993).

Data from the questionnaires only provides information regarding who has received land use certificates from local authorities for their original land. Around 65% of the households surveyed possess land use certificates while 35% do not have such documents for their residential land, the land reclaimed alongside streams as gardens and the upland area where farming occurs. Thus many affected people find themselves in a situation where they lack papers for their original lands and do not yet possess certificates for new land.

Land use rights at the resettlement sites also vary. Many of those resettled originally have rights to inherited land. And these lands must also be compensated. Additionally, in recent years when the land lease and rent market was formed, many households bought upland farms from other households to produce commodities such as maize. Many land transfers took place, but formally, the name on the land rights certificate remained the original owner's to avoid paying the tax. In other instances, the land was leased to others once original land transfers took place. This has created massive confusion for both authorities and for affected people in terms of compensation since it is often difficult to identify the actual land owner.

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<sup>25</sup> The 1993 Land Law defines various types of land use rights for Vietnamese citizens. All land in Vietnam is the property of the State, therefore citizens do not have ownership but only usage rights.

There is another major conflict in land allocation. The Commune land administration manages all land records of lowland farming and issues land use certificates for these. However, upland cultivation areas, such as hillsides, are also used by households. There is thus a disparity between the actual land area in use and that in official records of the commune land administration. This is posing serious constraints in the process of land compensation and allocation since affected people feel that they should be compensated for more land than is recorded in official documents. Moreover, the value of existing land is not estimated properly and thus the compensation price is unsatisfactory to most affected people.

Resolving the emerging conflicts related to land use, land titling, land allocation and land compensation are key in creating a successful resettlement process and for long term stability of the hydropower project itself. This means that existing customary laws regarding land and the management of natural resources must be an integral part of land compensation policies. Therefore, the legal and political environment with regards to this region must have sufficient flexibility and insight with which to integrate essential features of customary law.

Currently, there are overlapping systems of land regulation and management. This includes the formal legal institutions vs. the current system of land and forest use by ethnic minorities that is managed by customary law. Some of these “informal” rules include customary inheritance laws, gender equity in land use and the management of common property resources such as sacred forest and reclaimed land. At the same time, Vietnam’s land law provides women-headed households with the right to land. And thus, both customary laws and official land use policy must be reconciled to benefit affected people to provide them with land and food security.

Local authorities are managing the current land policy according to the 1993 Land Law, however, this law proves inadequate in addressing critical compensation and land allocation issues. This is because there is an over-emphasis on relying on official records and documents rather than verifying and substantiating local knowledge and actual land use patterns. The recent inventory work done by local authorities on land compensation ignores the actual patterns of land use and customary laws integral to the ethnic communities being resettled. It is therefore not surprising that implementation of land compensation has been riddled with conflict--at times overwhelming local authorities. It has also resulted in villagers refusing to submit their legal papers and accept compensation due to a lack of faith in the situation being handled justly by authorities.

### **3.10 Respect for Important Religious Rites during Resettlement**

In addition to land rights, the cultural norms and spiritual considerations of the various ethnic groups being resettled must be respected. First, attention must be paid to the manner in which graves of the deceased from these communities are removed from the reservoir area. Ancestral graves and remains hold important spiritual significance for ethnic minorities in the region. Often, there are no specific cemeteries for these graves, but rather the graves are scattered throughout communal property. If not appropriately handled, the removal of these graves is likely to result in anger and conflict and thus in serious delays of the entire resettlement process.

For example, religious customs of the *Ty Khao* (literally, “White Tai”), the *La Ha*, *Mang* and *Giay*, do not permit graves to be moved from their locations. However, because these communities do not want the graves to be submerged, they have accepted a compromise on this aspect of their tradition. In order to make it acceptable, they have agreed to conduct a ritual for the dead called “*lum ly*” that is typically very costly and time intensive. The ritual requires families to give offerings to the spirit of the dead for three days and three nights. Some households have reduced the ritual to two days and one night. To the credit of local authorities, this issue has been dealt with sensitively and the idea of compensation for these costly rituals has been addressed voluntarily by commune and district officials. This is a step in the right direction in integrating cultural practices within resettlement processes.

Another important rite is the worshipping of ancestors and the *muong* (and other sacred ground) linked to various clans and communities. This is a major spiritual issue for ethnic minorities such as the Thai (Tai), Hmong, La Ha and Giay who will have to leave these areas altogether and try to substitute for them in new resettlement areas. Sadly, this is an unquantifiable and irreplaceable loss for these groups due to resettlement. They have designated sacred forests (spirit forests) in their communities and sacred shrines to worship their ancestors. Currently, these communities are grappling with how to replace them in their new settlements.

### 3.11 Relationships between ethnic groups in new resettlement sites

Because resettlement will put different ethnic communities in the same space who may not have lived together in the past, social harmony will be an important element of successful resettlement. In the early phases of resettlement, in some areas there seems to be harmony between those who have been resettled and the host community. In Phieng Bung or Huoi Hao villages, for example, both the resettled and the host community belong to the “Thai (Tai) Den” (Tai Dam) or Black Tai ethnic group. Therefore, they speak the same language and have similar cultural practices, making communication easier. Moreover, the new arrivals account for 12 - 14 % of the total population and thus do not overwhelm the host community.



**Picture 4&5:** Thai (Tai) people in Sang village help La Ha people in Pu Nhung village to build new house. (Men are helping with the house, women are cooking).

The situation at the Pu Nhung resettlement site is different as there are two different ethnic groups – the Black Tai and the La Ha. The Black Tai already lived in Sang village (where the site is) and the La Ha have been resettled there. In the initial phase, the relationship

between the two groups seems to be mutually supportive. The resettled population is only 8.7% of the total number of people at the site. Moreover, the La Ha are already deeply influenced by the Tai culture and thus can speak Tai fluently, making it easier to communicate with each other.

However, comparisons of the benefits received by one group and another are being made, particularly between the new settlers and the host communities (see section 2.5 below). Host communities are not getting as many benefits as they are forced to give up in order to accommodate new settlers. It is thus imperative that lines of communication and expectations are clear between all parties and that local authorities address any disparities that could result in social conflict.

According to anthropologists conducting this study, ethnicity, inter-ethnic relations and differences in customs may become an easy scapegoat for any socio-economic conflict that results due to perceived economic disparities in resettlement. With proper guidance and with the help of social anthropologists, these issues can be addressed before they become a problem.

### **3.12 Breakdown of Community Structure**

It is suggested that the hydropower project will bring new and promising opportunities to the Northwestern region. In order to achieve this, more work needs to be done to improve resettlement practice and mitigate negative social impacts. Issues such as allocating farmland and providing a healthy communal environment are critical to the psychological well-being of both resettled and host communities.

The study has found that the Thai (Tai), particularly in Muong La district, are especially vulnerable. They still maintain their traditional Thai (Tai) values and customs and the breakdown of community is most visible there. It is hard to deduce from the existing data why this group is facing tremendous psychological strife. However, it is clear that the community is experiencing psychological trauma even in areas where they can integrate and harmonize with other ethnic groups. Two factors are contributing to trauma and breakdown of communities in the reservoir area: 1) limitation of residential space and 2) the disintegration of community and clan unity.

*First*, moving an entire community to a completely new geographical area is causing stress. Because the Thai (Tai) are not nomadic, resettlement is a major change in lifestyle, especially since they have lived in this area for many generations and practice sedentary farming. As a result, many have not been able to cope with the idea of moving. In many cases, they have agreed to move, but at the last minute are unable to go through with it. This is felt acutely by the Thai (Tai) since their way of life depends on the river and most of them are being resettled away from the water. Moreover, losing their ancestral land is a big psychological and social loss for them that cannot be compensated through monetary means.

*Second*, clans and communities that have existed for centuries are breaking up. For instance, a community was broken up because it had to move 70 km from its original site to Pu Nhung and Phieng Bung resettlement sites (Muong Bu Commune, Muong La District, Son La Province). There, the Thai (Tai) Den (Tai Dam) and La Ha people moved together (from Muong Trai Commune—remote region III). Though they moved within the same district, they still moved far from their original very rural site to an urbanized area. Though they

moved in with a Thai (Tai) Den (Tai Dam) host community, there was a major difference between their rural lifestyle and the urban one of the host community.

The host community was forced to share their garden plots and other resources. As the new settlers started to build houses on their orchards and gardens, the host community reacted with anger and retaliated by making life difficult for those entering. Host communities in general have not been able to psychologically accept resettlement into their communities. This was the case in resettlement sites in Muong Khieng commune (Thuan Chau District) or Muong Bu commune (Muong La District). They worry that new settlers will shatter their long time stability.

This is often not imagined, but is rather substantiated by their actual experience of losing their former standard of living. For instance, if those resettled are richer and get more benefits and are commercially successful, there will be greater resentment in the host community. This was the case in Pa So resettlement site, Lai Chau Province, where the Kinh in the host community were quite hostile toward the Thai (Tai) community that moved in from Chan Nua commune, Sin Ho district. Flawed resettlement policies are contributing to this because at this site, resettlers received 105m<sup>2</sup> of land while host families had to give up their large residential areas and live in 95m<sup>2</sup>.

Resentment can arise not only because host communities must give up their own land and share their limited resources with new settlers, but also because they often remain in the dark about whether they will receive any compensation for giving up that land. Currently, no detailed plans for their compensation exist.

On the other hand, there are host communities who have gone out of their way to help new settlers. In Sang village in Muong Bu, the Thai (Tai) Den (Tai Dam) people in the host community have helped La Ha settlers build their new houses and have assisted them with their basic needs. In the future, if the settlers are able to adjust well in the village, little negative impact will occur. On the contrary, if they are poor and in need, there is a greater chance of social conflict. They may even decide to move back to the areas around the reservoir as many did from the Tan Lap pilot site.

Each ethnic group has its own sense of its ancestral land and its social structure. Thus, a major consideration should be the envisaged role of village patriarchs, village heads and heads of clans to maintain stability of their communities. For this reason, the social environment in the new resettlement sites will require recognition of existing village regulations and customary laws and leadership of both resettled and host communities. The official political authorities will have to pay attention to the existing governance structure within these communities that can help enable social order and provide stability for both communities when resettlement occurs. To date, it is not evident that local authorities understand and respect the importance of these cultural issues for social stability in the Son La Project area. Understanding some of these key cultural concerns and addressing them to solve current conflicts in the resettlement process will significantly improve the chances of sustaining the resettlement itself. Decision-makers should integrate these concerns in revising the current resettlement policy.

### Part III Health and Sanitation

Part 1 and 2 have addressed socio-economic concerns and anthropological factors that are critical in implementing an appropriate resettlement in the Son La Hydropower Project. Part 3 now turns to more physical aspects of resettlement. The large scale resettlement planned for Son La will impact infrastructure and the provision of basic services such as access to clean water and health care. At the same time, the reservoir and new resettlement sites will create sweeping changes to the physical environment in the three provinces impacted by the project. This section addresses findings related to both environmental health and environmental concerns of the project.

#### 3.13 Access to Clean Water

Within the twenty-five resettlement sites that were surveyed for environmental health concerns, the main water source for drinking and household use was *mó* water (a very small flow of water from mountains, streams or river). This water is transported through rudimentary water pipes called *nuoc mo* that are placed directly in a mountain stream and flow through the village to houses. The pipes are usually made of rubber or plastic and are susceptible to contamination if they break. Chieng Chan village 1 and 2 in Chan Nua commune (Sin Ho District, Lai Chau Province) serve as examples where this occurred.

*Mó* water was the primary drinking source for 86.7% of the households, while 5% of the households had their own taps, 7.8% and 0.4% of the households used hand dug and drilled wells, respectively for the same purpose.

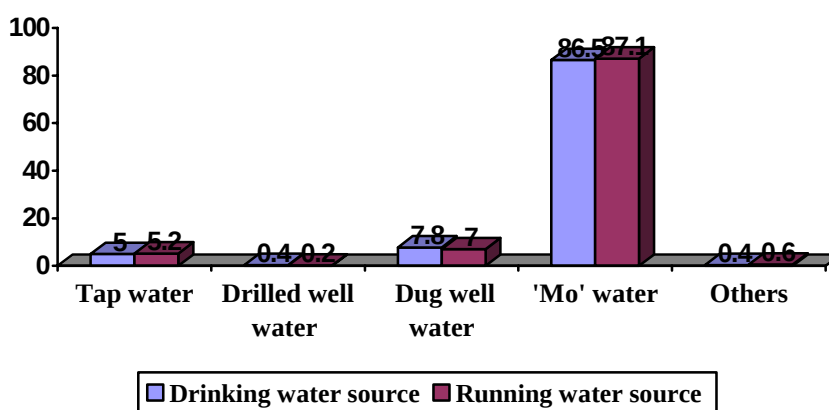


Figure 4. Main Source of Drinking and Running Water for Households

Similarly, the main source of “running water” for other household uses was also *mó* water. Approximately 87% of the households use this source for washing. The rest used tap water (5.2%), drilled well water (0.2%), dug-well water (7.0%) and other sources (0.6%).

Construction is currently contaminating water sources in some resettlement areas. For example, Pa So village (Phong Tho district, Lai Chau province) has polluted water, though it is slated to become a large resettlement town in the next few years. The stream water that households use daily gets contaminated upstream due to construction for the new town. Moreover, garbage is discarded directly into the stream which is used by households. Currently, households use home made pipes that transport water from the mountains to their homes. However, according to local people, these pipes become heavily polluted with

animal dung, garbage, mud, and uranium from a mining operation upstream. The lack of a sewerage system in the village also creates high risks of water contamination during the rainy season as rain mixes with raw sewage and pours into streams.

### Water Scarcity

According to quantitative results, 146 households out of 503 (29% of the sample) frequently lacked water during both the rainy and dry seasons. The remaining 71% had just enough to meet their needs. Water scarcity varied across the 146 households. In the dry season, the situation was even more dire. Almost 44% of these had water shortages for more than one week during the dry season and an equal percentage had it for more than one month during the same period.<sup>26</sup> Only 12.3% of the households faced water scarcity for a short period of time (one week) during the dry season. In the rainy season, the situation was less critical. Most of the



**Picture 6:** *Water pipe from the mountain to household: it's broken and that makes the water contaminated.*

households (93.8%) lacked water for just one week. And the number of households short of water for one week to a month (4.1%) and for more than a month (2.1%) represented a very small proportion of the total population. The greatest scarcity of water occurs in February and March each year when the water level in streams is so low that it is impossible to transport water through pipes. People have to walk at least one kilometer to fetch water or in some cases beg neighboring villages. Though the quality of this water is poor, people have no other options.<sup>27</sup> Twenty-three and half percent of those who are waiting to resettle suffer from scarcity of water compared to 31.4% of those who have resettled. Thus currently water is more scarce upon resettlement.

### 3.14 Human Waste Management

More than half of the households at the sites investigated had simple latrines (a hole in the ground), while 31% did not have latrines and had to defecate in dry streams, rivers or go to their neighbors' house. Very few households had sanitary waste disposal options: only 9% had septic tanks and 5% had more sophisticated two-compartment latrines. Those using septic tanks had built latrine systems according to project plans and with the help of compensation money. The remaining households (close to 85% of the households) were still waiting to receive monetary compensation before they could build their latrines according to project plans. This means that 78.9% of the households used unsanitary latrines or other means.

<sup>26</sup> The dry season in mountainous Northwest Vietnam lasts from November/ December to April (4-5 months).

<sup>27</sup> This was the case in some villages such as Ban Xa Resettlement village, Liep Te Commune, Son La Province.



**Picture 7:** Temporary latrine in a resettlement site (Muong Khieng commune, Thuan Chau District, Son La Province).

According to provincial policy, resettled households must finish building standard latrines before getting money for them in order to prevent corruption. However, the study found that many households could not afford to build standard latrines without prior government support. Without improved latrines, many people relieved themselves in the garden near their houses, in a dry stream or in temporarily-built latrines.

The study found that the situation for those who had not moved was more sanitary than for those who had resettled since the former used much cleaner latrines (53.4% compared to 24.4% of the resettled households). Thus, resettlement has created a greater incidence of dirty latrines. This is also because newly resettled households prioritized building new houses, stabilizing their lives and procuring a livelihood before worrying about having a clean latrine. This is leading to greater health and hygiene problems.

**Table 4:** The Relationship between Affected People and the Incidence of Latrines

|                                                         | Latrines   |             | Total      |
|---------------------------------------------------------|------------|-------------|------------|
|                                                         | Without    | With        |            |
| Resettled communities                                   | 43 (26.2%) | 121 (73.8%) | 164 (100%) |
| Host Communities who have received resettled households | 1 (1.7%)   | 59 (98.3%)  | 60 (100%)  |
| Total                                                   | 44         | 180         | 224        |

**Table 5:** The Relationship between Resettlement and the Incidence of Latrines

|                   | Latrines   |             | Total      |
|-------------------|------------|-------------|------------|
|                   | Without    | With        |            |
| Pre-resettlement  | 75 (42.1%) | 103 (57.9%) | 178 (100%) |
| Post-resettlement | 43 (26.2%) | 121 (73.8%) | 164 (100%) |
| Total             | 118        | 224         | 342        |

At the same time, the statistical analysis of the situation pre- and post-resettlement shows that more people had latrines post-resettlement. While 73.8% of post-resettlement households had latrines, 57.9% of them had it pre-resettlement (see table 6). The project plans to financially support the building of a new house and latrine for those resettled is contributing to these favorable trends.

### 3.15 Using Human Waste as Fertilizer

**Table 6:** *The Use of Human Waste as Fertilizer Amongst Households*

| Use of human waste                         | Frequency           | %           |
|--------------------------------------------|---------------------|-------------|
| Yes                                        | 101                 | 20.1        |
| <i>Fertilizing fields/farm produce</i>     | <i>75 (N = 101)</i> | <i>74.3</i> |
| <i>Fertilizing trees in family gardens</i> | <i>50 (N = 101)</i> | <i>49.5</i> |
| No                                         | 402                 | 79.9        |
| Total                                      | 503                 | 100         |

The table above shows that 20.1% of the households in the study (101 out of 503) used human waste for either fertilizing fields/farm produce or for fertilizing trees in their gardens. Only 16 out of the 101 waited more than six months (the recommended time for decomposition of human waste) before using it. Only a small percentage (10.9%) waited 3-6 months before use. The vast majority either used it right away (29.7%) or waited less than three months (43.6%) before using it.

These are alarming findings because the rapid use of human waste without allowing adequate time for decomposition can result in various gastro-intestinal diseases. Unfortunately, less than half (46.9%) of the 503 households interviewed understood health and hygiene problems associated with the use of poor latrines and untreated human waste. Close to 8% of the people actually believed that there were no health problems associated with the use of human waste and unhygienic latrines. The remaining 45.3% were unaware of either negative or positive consequences.

The results from the questionnaires reveal the following:

- 236 households responded that they knew that there was a link between disease and the use of human waste and unhygienic latrines. However, their level of understanding varied.
- 45.3% believed that they might get parasitic worms from the use of human waste or unsanitary latrines
- 75.4% believed they could get diarrhea (the most common disease cited)
- 26.7% believed that one might get dysentery
- 7.6% believed they could get typhoid; and 19.1% believed that they could acquire other diseases.

### 3.16 Household Waste Management

Household waste management and collection pose significant challenges in the communities studied. According to some health staff at the commune level, the lack of education, the lack of support from the local government and traditional habits contribute to these problems. Out of 503 households in the survey, 60.4% piled garbage in their own gardens and burnt it, 18.3% put garbage in a hole and buried it; 10.5% threw it in a pond, lake or stream; and 3.6% had it collected by someone.

### **3.17 The State of Health in Resettlement Communities**

#### **3.17.1 Infrastructure and Human Resources at Commune-level Health Stations**

Each commune has only one commune health station (CHS) and there are about 4-6 health staff working in each station. In addition, each village has one village health worker who mainly does health education in the communities, such as encouraging pregnant women to go to the CHS for delivery and mothers to bring children for vaccination. Most communes investigated had inadequate infrastructure and human resources to address community health concerns. Some had small houses which were either degraded or in the process of construction. One health station typically served a large commune and there was no transportation to get to these centers. Health-related compensation has been divided into two parts. One part goes directly to resettled households and the other part is budgeted for the CHS. However, the survey reveals that not all health workers and local people knew about this compensation.

Village health workers also received little training and thus found it difficult to meet health concerns of the communities. Health stations were understaffed, particularly in terms of village health workers. Some communes did not have village health workers at all, especially those communes with resettled households. Where resettlement communities were accompanied by their village health workers from the original site, health work was put on hold until these health workers had finished resettling themselves.

The difficulty of the terrain in the Northwest also makes it difficult to travel from villages to health stations. It can sometimes take a day to go from a village to the nearest CHS. Resettlement has also taken a toll on the workload of health staff, particularly at the commune level since these workers deal directly with a large number of people. Perhaps due to this or other reasons, there were cases where village health workers did not welcome a newly resettled community.

Health stations at the commune level are supposed to be able to provide primary health care services such as first aid, labor and delivery, vaccinations etc. However, most births took place at home since commune health stations were often too far. It was promising to see that all home births were aided by village health workers using clean delivery kits provided by the Safe Motherhood Program of the Ministry of Health.

#### **3.17.2 Affected People's Perceptions of their Current Health Status and Illnesses**

A person's health status was classified as 1) very healthy 2) healthy 3) average 4) sick or 5) very sick. It was based on the interviewee's perception of his/her own family members' health. No clinical examination was performed and therefore the result was qualitative. and depended totally on the interviewee's assessment. Five hundred and three households (a total of 2,537 individuals) were interviewed. The results are as follows: Only 6.1% of the individuals considered themselves to be sick and only 0.4% considered themselves to be very sick. The majority considered themselves to be healthy (55.3%) and very healthy (20.7%). Seventeen and a half percent considered themselves to be average. Thus the bulk of the population considered itself to be healthy. Out of 2,537 people, 12.7% reported that they were ill and had to have at least a day off in a month.

The statistical analysis of the questionnaires shows that two weeks prior to the interview, the prevalence of communicable diseases amongst those interviewed stood at 0.6%-2.7% of the entire interviewed population. The highest incidence was malaria (2.7%), followed by diarrhea (2.5%), TB (0.6%), skin diseases (1.1%) and sore eyes (1.7%).

Based on the research, we found that the prevalence of malaria was very high at the sites researched, up to 2,719 cases/100,000 people, and much higher compared to national figures for malaria (156 cases/100,000 people) and the figures for the Northwest region (514 cases/100,000 people)<sup>28</sup>. Malaria is prevalent in Son La and Lai Chau provinces in the Northwest. However, the prevalence of malaria in the researched sites was even higher than the statistical figures for Son La province (168 cases/100,000 people) and Lai Chau province (1,834 cases/100,000 people).<sup>29</sup> This could be because moving and staying temporarily in tents increases the risk of being bitten by mosquitoes and coming in contact with malaria vectors.

The prevalence of diarrhea was also very high (2,522 cases/100,000 people). However, without clinical examinations, it was hard to discern the possible causes for diarrhea such as cholera, dysentery bacteria, etc. The prevalence of TB was 630 cases/100,000 people. Similar to diarrhea, without a clinical verification, it is difficult to discern the exact number of people suffering from TB. Skin diseases and sore eyes were both highly prevalent: 1,143 cases/100,000 people with skin disease and 1,655 cases/100,000 people with sore eyes. Comparison with national figures can only be done once these numbers are verified by clinical examinations.

Finally, the qualitative study revealed that people faced a higher risk of being injured either lightly or more severely in the process of moving to a new resettlement place. In the worst cases, some broke their arms or legs.

### **3.17.3 Choice of Healthcare**

The questionnaire also revealed that people chose to address their illnesses through different means depending on the severity of their illnesses. For minor illnesses, most families (92%) applied traditional remedies such as herbs and other traditional medicines. A small number did nothing and the illness eventually went away by itself. Very few people (1%) invited a traditional medical practitioner home. However, if a family member became seriously ill, most families chose to go to the district level health station (55.7%) and/or the provincial hospital (61%). Only 1% of the people treated the disease by themselves with traditional or western medicine. Some still rely on traditional healers within their communities for serious illnesses. Only 0.2% chose a private health care service or had the doctor come to them.

### **3.17.4 The Distance from Home to the Nearest Healthcare Facility**

The above section shows that most people choose the state-run healthcare system when it comes to serious illnesses. However, often the state-run health facilities are too far from village communities in need. According to MOH regulations, each commune must have a CHS that provides primary healthcare services for the commune and neighboring

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<sup>28</sup> MOH, 2004

<sup>29</sup> MOH, 2004

communities. Some villages find it easier to go to a CHS from another commune because it is physically closer than their own CHS.

According to the study, 63% of households had to travel less than 5 km from their house to the CHS, whereas around 20% had to travel more than 10 km to the CHS (see Table 8).

**Table 7: Distance from Household to the Nearest Commune Health Station**

| <b>DISTANCE</b> | <b>NUMBER OF HOUSEHOLDS</b> | <b>%</b>   |
|-----------------|-----------------------------|------------|
| < 1 km          | 131                         | 26         |
| 1 – 5 km        | 186                         | 37         |
| 5 – 10 km       | 84                          | 16.7       |
| 10 – 20 km      | 84                          | 16.7       |
| > 20 km         | 18                          | 3.6        |
| <b>SUM</b>      | <b>503</b>                  | <b>100</b> |

The distance from the households to the nearest district hospital was even greater. Almost half of those interviewed lived over 30 km from a district hospital (see Table 9). And only 5.8% of the people lived less than a kilometer from the hospital.

**Table 8: Distance from Household to the Nearest District Hospital**

| <b>DISTANCE</b> | <b>NUMBER OF HOUSEHOLDS</b> | <b>%</b>   |
|-----------------|-----------------------------|------------|
| < 1 km          | 29                          | 5.8        |
| 1 – 5 km        | 61                          | 12.1       |
| 5 – 10 km       | 36                          | 7.2        |
| 10 – 20 km      | 93                          | 18.5       |
| 20 – 30 km      | 36                          | 7.2        |
| > 30 km         | 248                         | 49.3       |
| <b>SUM</b>      | <b>503</b>                  | <b>100</b> |

The distance for most households to the nearest provincial hospital was quite large (see Table 10). Around 50% lived more than 50 km from the nearest provincial hospital.

**Table 9: Distance from Household to the Nearest Provincial Hospital**

| <b>DISTANCE</b> | <b>NUMBER OF HOUSEHOLDS</b> | <b>%</b>   |
|-----------------|-----------------------------|------------|
| < 1 km          | 3                           | 0.6        |
| 1 – 10 km       | 58                          | 11.5       |
| 10 – 20 km      | 36                          | 7.2        |
| 20 – 30 km      | 57                          | 11.3       |
| 30 – 50 km      | 101                         | 20.1       |
| 50 – 100 km     | 247                         | 49.1       |
| > 100 km        | 1                           | 0.2        |
| <b>SUM</b>      | <b>503</b>                  | <b>100</b> |

It is evident from above that the access to the district or provincial level health facilities is difficult for many affected people because of the long distances and bad roads. This directly influences their decisions on receiving timely and appropriate healthcare. People interviewed worried about greater distances to reach healthcare after resettlement and about the rising costs for healthcare and transportation to access health treatment.

In summary, although the quantitative result showed no real statistical difference among post-resettled, pre-resettled and host community affected people in terms of their health status and illnesses, the qualitative interviews reflected that the pre-resettlement group was much more anxious about accessing healthcare after resettlement. They worried about illnesses resulting from a changed environment and a change in water.

Though we cannot make conclusive statements about the incidence of disease, water quality and the possibilities of epidemics in the resettlement areas, precautions should be taken to avoid conditions that can lead to epidemics during the current phases of resettlement. This is because infrastructure, particularly related to water and waste, are still underdeveloped while populations are being shifted. Children, the elderly, pregnant women and the poor remain some of the most vulnerable.

#### **Part IV: Resettlement and Environmental Issues**

Environmental considerations are inextricably linked to development projects and the government's environmental policies recognize this. Resolution No. 41-NQ/TW of the Politburo, dated November 15, 2004 on environmental protection and economic development states that environmental protection is a key *“target and one of the basic factors in sustainable development. Environmental issues need to be included in socio-economic development strategies, as well as in project plans of each sector and locality.”*

According to the 1993 Law on Environmental Protection and its revised version that became effective on July 1, 2006, an Environmental Impact Assessment (EIA) report is required in development projects. Articles 9 and 10 in Decree No 175-CP on “guidelines on implementation of the Environmental Protection Law,” dated October 18, 1994 reinforce the need for an EIA. These regulations thus provide a strong mandate for addressing environmental impacts related to resettlement in the Son La Hydropower Project.

#### **3.18 Attempts at Impact Assessments**

The government first designed the criteria for research on resettlement impacts of the Son La Hydropower Plant project in November 2002. The following list depicts some of the key criteria used for impact assessments: <sup>30</sup>

- 1) Scale of previous location and the new relocation area
- 2) Possibility of utilizing the previous production area
- 3) Possibility of land conflict in relocation area
- 4) Possibility of harmonizing ethnic groups, families and communities
- 5) Assessment of appropriate land and livelihood options at resettlement sites
- 6) Expectations of those resettled into the resettlement area
- 7) Relocation distance
- 8) Assessment of local authorities regarding resettlement
- 9) Timetable and sequencing of resettlement

These criteria however, disregard environmental considerations of resettlement such as impacts on deforestation, land degradation and erosion. The following sections address some of the environmental concerns regarding the resettlement areas.

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<sup>30</sup> NIAPP, 2005

### **Environmental Conditions during the Resettlement Process**

Resettlement is leading to more natural resource degradation as land is cleared for new resettlement sites. It is also leading to more air and water pollution as heavy construction leads to more dust particles and sediment in the air and streams.

Observation in Pa So Commune, Phong Tho District shows significant environmental changes where 20 households were relocated. The newcomers were still building their residences when the study took place. Host communities were being forced to remove trees and garden plots to make room for new settlers in the mixed site. Poor sequencing of construction was forcing people to move into the site as road building and other construction was underway. Thus residents were exposed to more dust.

Streams next to these roads are turning into waste grounds and daily life of both host and resettled communities are being disrupted. Though a new town has not been established, this once remote area is becoming urbanized.

### **3.19 Identification of Key Environmental Issues**

Environmental policy planning requires identifying major environmental concerns of a project; prioritizing which ones to address and when; and allocating resources to meet those goals. The major environmental issues affecting areas of the Son La Hydropower Plant are forest degradation and soil erosion. The region suffered from these problems even before plans for the hydropower project were underway<sup>31</sup>. The construction of the reservoir and resettlement will exacerbate these problems.

In recent years, greater flooding has occurred in the Northwest region. These flash floods have damaged land and infrastructure such as dikes and embankments. Deforestation and the resulting soil erosion in recent decades are considered the major reason why more flash floods and greater damage have occurred. Inhabitants of Lai Chau town and other areas of Son La Province still remember how badly floods damaged their region in the early 1990s. Major floods are occurring more frequently and with more ferocity.

Construction of the Son La Reservoir further reduces forest cover and clearing land for resettlement will compound this problem. Lack of ground cover and reforestation measures will result in greater erosion and soil degradation around streams and in watersheds, thereby affecting water resources and biodiversity. Thus far, government authorities and resettlement planners have completely overlooked these environmental considerations. Authorities must thus begin to pay serious attention to the interconnection of deforestation, soil quality and resettlement. They must also begin to link these on going problems with water and waste management problems cited by affected people.

The study shows that 95% of those interviewed understood the key environmental problems facing them. People were asked 10 environment related questions. Both resettled and host communities considered the following five issues to be a priority for them with one being

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<sup>31</sup> The Northwest region had its coverage of 85% before 1945. It had been reduced rapidly and remained at 27% in 1999. (Le Van Khoa, 2001)

the highest priority and five being the lowest: 1) Water pollution 2) Deforestation 3) Waste Management 4) Soil erosion and landslides and 5) Air pollution (see Table 8).



**Picture 8:** Domestic waste in Paso resettlement site, Phong Tho District, Lai Chau Province.

Though all major environmental studies of the region acknowledge that deforestation and erosion are the main environmental threats in the Northwest, fieldwork shows that affected people considered water contamination and scarcity as more important than deforestation. They also considered waste management as a more important issue than soil erosion and landslides. It is critical that authorities understand what affected people consider to be environmental concerns

regarding resettlement. Without addressing their immediate concerns such as waste and water, it will be difficult to convince affected people to address major environmental concerns such as deforestation and soil erosion, though they are directly tied to their livelihoods. The onus is also on governmental authorities in carrying out resettlement in a way that minimizes deforestation and soil degradation in a situation where arable land is already reduced due to the construction of the reservoir.

The following are major concerns for the environment based on the findings of the environmental research team:

- There is no financial support to address environmental issues within the resettlement plan.
- Environmental education programs must address livelihood and health concerns.
- More deforestation and resettlement will result from construction of the Son La Reservoir and its component projects and from resettlement.
- Forested areas which are now being destroyed for more land for resettlement will contribute to greater soil erosion.

### 3.20 People's Awareness of the Environment

People's awareness of environmental issues<sup>32</sup> affecting them is a necessary element of environmental planning and education in resettlement. Questionnaire results show that only 53% of those interviewed had heard about "environmental issues." People in Phong Tho District were most aware (71%) while those in Muong La District (38%) less so. Muong La is most affected by the Son La Hydropower Plant because the dam will be located there.

<sup>32</sup> "Awareness" in the section means whether they have heard about environmental problems such as deforestation and/or soil erosion and whether they are concerned about them.

The environmental awareness of host communities appears to be about the same as those who are resettled.

The “improved” 2005 EIA of the state-owned corporation, Electricity of Vietnam (EVN)<sup>33</sup> emphasizes investment in education and communication to improve community environmental awareness.<sup>34</sup> However, it fails to propose specific measures and a budget for those activities though other items have been budgeted in great detail.

### **3.21 Environmental Education Efforts**

Communities access environmental information through the TV, radio and newspapers. The TV and the radio play critical roles in this regard. However, local authorities and social union organizations such as women’s groups or youth groups are not particularly effective in environmental education (see the figure below). This could be due to insufficient budget allocation for environmental education, lack of human resources or environmental education materials. In addition, where local officers are not trained in environmental protection themselves, there will be limited progress in state run environmental protection activities.

The loud speaker system which is currently used in villages to make major village-wide announcements may be an effective tool for environmental education. This is because local languages could be used and the timings of the broadcasts could be organized to suit people’s work schedules.

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<sup>33</sup> EVN, 10/2005. EIA for Son La Hydropower Scheme (Improved report)

<sup>34</sup> See pages 263, 271 and 273 of the EIA.

## **CHAPTER IV CONCLUSION**

This report has shown that the resettlement policy for Son La has been a dynamic process whereby realities on the ground have forced provincial authorities to modify and specify certain aspects of resettlement as set out in Dec 459 for the overall resettlement in the Son La Hydropower Project. This summary report of a much larger four-part study of the socio-economic, social/cultural, environmental health and environmental conditions in the project areas provides much needed and new empirical data on how resettlement is impacting project affected people--pre-resettlement, post-resettlement and in host communities.

The report also shows areas where flexibility of project authorities is resulting in improved outcomes for affected people and where much more work needs to be done in addressing bottlenecks and emerging conflicts. Because this study has been carried out at the start of the implementation phase of resettlement, it provides a timely tool for policy makers, affected people and international donors to address outstanding concerns. It is hoped that the concerns reflected in this study will be taken seriously and a follow up plan developed based on the findings of this report. The report is only the preliminary step in ensuring that resettlement improves rather than worsens the lives of more than 91,000 people that will be resettled as a result of the project.

### **4.1 Positive Aspects of the Resettlement Program**

Because of the large number of people involved and the complexity of the process, the Vietnamese government has designated resettlement as a project of its own<sup>35</sup>. A State Steering Committee has been established to oversee the assessment, planning and implementation of resettlement in close coordination with the Son La Hydropower Project Council. The committee will also manage the development of a resettlement master plan with the participation of the provincial People's Committees of Son La, Lai Chau and Dien Bien Provinces. This new approach is supposed to ensure that those affected by the project will have better living standards than in their former residential areas. Better living standards include housing, infrastructure, public services, provision of productive land and water resources as well as agricultural extension and other conditions for a sustainable future. The committee also hopes to conduct the resettlement in a way that respects and upholds the cultural values of ethnic minorities in the area. Moreover, participation of local people is being stressed for the planning process itself. This is a step in the right direction.

In general, the study has found that compensation for and support to resettled people has been conducted in an open and democratic manner and targeted to those who need it. Even the process of identifying people who need to be compensated and resettled has improved and been modified during implementation to minimize suffering and financial losses for the State. In fact, the project has increased finances towards compensation and resettlement activities from the amount that was originally provided in the Son La resettlement master plan. For example, Muong La district will provide settlers in the Tan Lap pilot resettlement site<sup>36</sup> with more funding to come back to the site. The authorities have tried to help create

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<sup>35</sup> Thus the hydropower project consists of three main parts 1) the construction of the dam, its components and the power plant 2) resettlement 3) and the construction of the transmission lines.

<sup>36</sup> These affected people went back to their original homes after encountering several problems at Tan Lap, including having no means of livelihood there.

livelihood options for them in Tan Lap and offered more compensation in order to entice the settlers back. They will also reward households that move within a given timeframe.

Another visible achievement has been the improvement in living conditions for certain ethnic minorities. For example, because of compensation and resettlement, the La Ha, Kho Mu and Khang minorities who formerly lived in congested spaces by the Da River, now live in larger villages (though more infrastructure needs to be built in order to make these villages sufficient for living). Moreover, new houses have been constructed; new furniture such as beds, wardrobes; and luxuries such as TV sets have been bought with the resettlement money. Thus, in some ways, the Son La Hydropower project has completely dwarfed other development projects that have taken place in the region over the last decades due to the level of investment that has gone into it.

In most of the sites surveyed, the compensation program for resettlement has also been implemented in an egalitarian manner. In general, affected people have been satisfied with resettlement with regards to housing. And the infrastructure in some resettlement sites has been remarkably improved in the initial phases. Because of these reasons, the resettlement program has won support to some degree from project affected people. This creates more willingness on their behalf to participate in the process and cooperate through its different phases.

The district-level Resettlement Management Units are committed to supporting resettlement sites, areas and regions during the planning, construction and resettlement phases, as well as in managing construction of housing and public service infrastructure. In addition, the resettlement units are now working more closely with the Department of Agriculture and Rural Development and the Department of Environment and Natural Resources to complement resettlement plans with ongoing development initiatives in the region.

Overall, the reports from the RMUs and this study show that in five districts, *di ven, xen ghep* (mixed) and *di tap trung* (concentrated) resettlement has been carried out without major physical harm to human lives<sup>37</sup> or personal property. The resettlement process that allows affected people to have greater control over the resettlement process (with government support) and in which compensation reflects the type of resettlement and the quality of houses being dismantled is more ethical and culturally appropriate. Moreover, it is less costly in the long run and allows for mutual help from clans, villages and existing informal social institutions.

In terms of environmental health, potable water and sanitary conditions in resettlement sites are also being addressed alongside housing, employment and income concerns. The district level resettlement steering committee has made great efforts to work in conjunction with resettled people to provide temporary means of potable water. At concentrated resettlement sites, public water wells, water tanks and the *nuoc mo* pipes have been constructed to provide clean water. In some places, water pipes reach every household and even provide water to a section of the host population, such as in the Muong Bu resettlement site (Muong La District). Although water provision in crowded resettlement sites does not meet national standards as yet, it is still better than what was available to project affected people in their former residences, according to resettled households.

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<sup>37</sup> There were a few cases of minor injuries caused during the dismantling and transportation of houses.

As noted in Chapter 3, new latrines have also been built in crowded resettlement sites and some houses have even invested in septic tanks<sup>38</sup>. However, waste management regulations must be put into place and implemented as construction gets underway since currently solid wastes are simply being dumped outside of the villages whereas pre-resettlement and in *di ven* sites, people burn their trash in their garden plots once a week.

Finally, basic provisions for primary health care have been put in place. For example, local authorities have assigned commune health stations and village health points in host communities to provide healthcare for resettled people. Under stipulations of Program 135<sup>39</sup> they are supposed to provide health check ups and medical treatments for people who have just been resettled, including those who have received minor injuries from the process of resettlement.

## **4.2 Issues that Need to be Redressed in the Resettlement Program**

While there is a serious attempt to direct resettlement in a positive manner, there are several areas that require significant improvement in the process. The next section groups problem areas into the following two categories 1) socio-economic and cultural issues that require urgent attention and 2) community health and environmental issues that need to be redressed.

### **4.2.1 Socio-economic and Cultural Issues**

#### **Administrative Hurdles**

Though legal documents and a resettlement master plan exist, specific guidelines and plans have not been implemented by local authorities in a timely and sequential manner. Operations face delays as project plans wait for approval and payment at various administrative levels. Payments for compensation and housing are supposed to be made at the district level but the provincial level authorities are supposed to approve the payments, thus causing delays. Bureaucratic mismanagement also creates constraints and delays in finalizing bids for project components, selection of contractors and the establishment of properly functioning and trained personnel at district level RMUs.

#### **Lack of Detailed Planning before Resettlement and Legal hurdles**

The lack of coordination and management continues after ground leveling work and resettlement has begun in villages. For instance, the boundaries of different residential plots remains unclear to new settlers and confusion regarding land rights certificates and ownership remains pervasive amongst authorities.

#### **The Question of Land**

As noted in Chapter 3, land resettlement has been a major problem in this project. There is a scarcity of quality land for production and the provision for “land for land” where

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<sup>38</sup> For example, Phieng Bung Village in Muong La District.

<sup>39</sup> Program 135 is an especial program designed for assisting very difficult remote areas. Under this program, annually, each commune in the remote areas receives USD25,000 (VND400 millions) to invest/support in electricity, roads, school and health care. People in these areas can have free health insurance and medicines.

conditions permit has not been implemented. This is especially the case for those who have been resettled far away from their homes.

### **The Question of Livelihood**

In addition, resettled communities are not being transitioned from their former method of farming (wet rice cultivation) to hillside dry rice farming or other forms of upland agriculture production such as tea cultivation or dairy farming. And very little is being done to help them procure food and create an environment for food self-sufficiency in their new locations. This is leading to greater food insecurity.

Resettlement policy has also not paid sufficient attention to the concerns of ethnic minorities with regards to natural resource management of forests, agriculture and meadow lands, including the provision of credit to maintain them. In the short run, affected people face immediate difficulties of moving to a new environment, community, climate and a completely different way of living without the river; and in the long run, they risk instability with regards to the restoration of their livelihoods and their assets such as farmland and livestock. There are already signs of increased poverty amongst affected people. In particular, the danger of unemployment looms large given that existing resettlement sites have still not provided new settlers with farmland, even after they have been there for three months. Land for production thus is central to livelihood security and it continues to be a central issue in all resettlement projects in Vietnam.

### **Building Timely and Appropriate Infrastructure**

Much of the infrastructure needed to create adequate resettlement sites is still being built while people are being moved into sites. Meanwhile, Government Program 135 for the needy is being cut at resettlement sites. These programs for the most disadvantaged and remote communes for health and education are essential safety nets for the most vulnerable affected people.

### **One Size Fits All Doesn't Work for Affected People**

The allotment of 400 m<sup>2</sup> of residential land (including garden plots) to each household in rural resettlement sites regardless of family size is unfair to large families or those who had more property pre-resettlement. For instance, some large Thai (Tai) families had anywhere between 1500-2000 m<sup>2</sup> of residential land pre-resettlement. The house itself could be 120-135 m<sup>2</sup>. On the other hand, the Kho Mu, Khang and La Ha may have much smaller houses pre-resettlement, such as 50-60m<sup>2</sup> houses. In new resettlement sites, the Thai (Tai) who formerly had large houses are given small plots of residential land of about 50 m<sup>2</sup>, more typical of La Ha and Kho Mu houses. Often this is inadequate for their large families.

### **Pros and Cons for resettling within the Same Province**

The amount of residential land available also varies between provinces. Though Son La province has designated 400 m<sup>2</sup> per household, Lai Chau Province may designate a different number. The process by which they will set the figures remains unclear. Currently, provincial authorities prefer to resettle people within their jurisdictions regardless of the amount of land available so that resettlement money stays within provincial control. This

does not necessarily have to be bad where there is land, but will be problematic if there is land scarcity.

### **Unequal Costs and Benefits between Resettled and Host Communities**

Disparities are emerging between host communities and those being resettled. While the resettled communities are getting compensation for houses, land, crops, and support for moving, the host communities are losing their land and are forced to share common resources and public services. Moreover, they have still not received any compensation for this loss. Typically, the government buys land from the host community and redistributes it between the host and the settler population. However, the government sets its own price for buying land from host communities rather than paying them the market price. In many cases, the host population ends up with smaller houses than those who have been resettled with less compensation. This is starting to create resentment in many mixed and concentrated resettlement sites. Moreover, the lack of detailed resettlement plans for mixed sites creates more problems in terms of a balanced redistribution of land and natural resources. Where authorities speed up the resettlement process to meet construction schedules, this host and new settler conflict gets exacerbated. These issues of imbalanced compensation and inadequate infrastructure for sites that involve host communities continue to be problematic.

### **Disintegration of Communities**

Some communities are being torn apart because clan members and kin cannot move together to a new resettlement site; or names of their old villages cannot be taken with them. These cultural and symbolic issues have real meaning in the lives of ethnic minorities. Existing social structures and community relationships are breaking down. This is visible within Thai (Tai) minority groups who look to their *muong* for a sense of identity and roots. Though family members have migrated in the past century, most have migrated voluntarily. The involuntary nature of resettlement is creating trauma for many groups as their ancestral lands will be flooded from the reservoir. They will thus have to devise culturally acceptable ways to cope with this loss. Moving entire communities together does not necessarily mitigate this loss.

### **Lack of Cultural Sensitivity**

Unfortunately, government personnel involved with resettlement lack socio-cultural training and experience and thus have difficulty understanding how local customs, traditions, religious values and customary laws are inextricably tied to the success of resettlement itself. These informal structures form the very fabric of society in Northwest Vietnam. The lack of sensitivity is visibly impacting affected people attitude towards resettlement.

### **4.2.2 Environmental and Community Health issues**

The Son La Hydropower Project is the largest dam project in Vietnam, yet in spite of this, environmental considerations of resettlement have been ignored. Environmental stipulations within the resettlement plan remain weak or are missing altogether. Fieldwork shows that resettlement in both *di ven* and concentrated sites have significant environmental considerations tied to the shifting of a large number of people and ensuring their livelihoods.

The five districts studied in Son La and Lai Chau provinces all face major environmental problems. These include water scarcity and water contamination; deforestation; soil erosion and degradation; increasing volumes of solid wastes; and air pollution. These environmental problems urgently require attention for the health and safety of both the resettled and host communities. At the same time, the general environmental awareness of ethnic minorities in the five districts remains low. Contributing to this is the lack of effective environmental education programs in the region.

### **Creating Better Access to Clean Water**

In many of the pre-resettlement sites, people faced water shortages. Resettlement was supposed to redress this problem. In some villages, this water shortage has become more acute, while in many villages the water situation has improved post-resettlement or stayed the same. In some *di ven* sites and in areas where land is still being prepared for new resettlement sites, people have poor quality drinking water. In *di ven* sites where fieldwork was conducted, water scarcity was severe during the dry season. According to resettlement policy, the government must provide pipes, water tanks or wells for villages before they are resettled, but this has not been the case for many villages. Thus people continue to suffer from water shortages even after resettlement. According to the District level RMUs, this is because concentrated sites receive greater priority than *di ven* sites and detailed planning for *di ven* sites is lacking. According to the policy however, affected people are entitled to clean water, electricity, schools and healthcare upon arrival at the new sites.

### **Improving Healthcare during Resettlement**

The government of Vietnam divides healthcare into three categories. Region I areas belong to urban localities with access to roads, region II areas are more distant from urban areas while region III areas are classified as the most remote for healthcare access. These remote areas are supposed to receive support from Program 135 and people in some *di ven* sites rely on these region III healthcare facilities. However, as noted, these programs are now being cut. In fact, *di ven* sites are finding it harder to receive basic services as priority shifts towards mixed and concentrated sites.

The overall accessibility and quality of healthcare also remains a problem in the short term in resettlement sites and raises questions about its prospects in the long term. In general, region III clinics are in very poor condition with degraded infrastructure, lack of medical equipment, poor accessibility due to bad roads and with insufficient healthcare providers. Moreover, in many cases village health providers have not been able to adapt to resettlement into new communities. In areas where the entire health centre has to be moved, the health care workers are still trying to resume practice.

### **Creating Access to Healthcare**

Some resettlement sites are constructed very far from health clinics and people are moved to new sites while clinics are still being constructed. In these instances, affected people find it very difficult to get to their local health clinic due to lack of roads and distance. Healthcare workers who are moved with affected people also find it difficult to reach health clinics. The policy states that when a site is too far from the local clinic, a new clinic must be built at the site. However, this has yet to happen. In addition, the administrative procedures for

setting up new clinics and moving healthcare workers to them continue to be cumbersome. Staff have to register in new clinic stations in new communes while resettling.

## **Preventive and Basic Healthcare**

Finally, healthcare planning for resettlement must pay serious attention to the prevention of epidemics in resettlement areas. Currently, there are no epidemics or new diseases among the existing human and animal population. However, prevention is key at a time when people are in a state of flux and basic infrastructure has not been built. Local epidemics such as Avian flu and foot and mouth disease in animals; and digestive illnesses and respiratory infections among children must be guarded against. Resettled people already suffer from some common diseases in the area such as malaria, influenza, diarrhea, dysentery, typhoid, parasitic diseases and lung and eye diseases. Resettlement sites must have the healthcare resources necessary to treat these common ailments.

### **4.3 Recommendations**

This report addresses issues that have been overlooked in previous impact assessments of Son La and thus provides an important resource and baseline to improve resettlement in Son La. The analysis points to some concrete steps that can now be taken. Based on this study, we put forward the following recommendations:

#### **4.3.1 Planning**

- Affected people should be moved into new resettlement sites only after detailed plans have been agreed upon for the site. Concentrated resettlement sites in rural areas continue to face numerous immediate problems as a result of this negligence. Most of these sites are either very poorly planned or lack detailed resettlement plans altogether.
- In urban resettlement sites, component projects such as basic water and sanitation infrastructure, roads, clearly marked boundaries and detailed plans for town development must be completed before affected people are moved in. The lack of town planning continues to be a major problem in proper resettlement.
- Electricity of Vietnam (EVN) must link its construction on the Son La Hydropower project with the resettlement project and be accountable for impacts of its work on resettlement. Currently, EVN is in denial of the fact that its schedule impacts the speed with which resettlement takes place. The onus has been put on provincial authorities to deal with the aftermath of EVN actions on resettlement. Rather than speeding up the project, it must be slowed down to deal with social concerns of resettlement. The reservoir should not be filled until all resettlement has been completed satisfactorily.

#### **4.3.2 Compensation for Losses**

- Affected people must be compensated for the loss of their housing early in the process so that they can purchase additional construction materials to rebuild houses in resettlement sites.

- They must be compensated for the loss of property, trees, crops and receive other forms of support. In particular, where people have to move out of their district before new agricultural land has been distributed (this is currently the case in all resettlement sites), affected people must be given sufficient transition time to adjust to their new environment with adequate government support for their livelihoods and food security.
- In fact, affected people should not be moved until the availability of agricultural land is resolved. Currently, moving affected people without proper livelihood provisions is creating a dangerous situation whereby compensation money is rapidly spent and people remain without work for months. The uncertainty leads to wasteful spending, more alcoholism and depression. Affected people must be provided an effective livelihood plan **before** they are resettled. Part of the plan must include a discussion with the settlers about what they can do at the resettlement site to earn income, what crops they can grow and the necessary agricultural extension they may need to help them with their new environment. Affected people should only be resettled once this has been done and land provided.
- Authorities may also want to consider providing savings options, trust funds and participatory learning on money management.
- Compensation policy should also include compensation for households whose houses have not been submerged but who can no longer access their farmlands. These households should receive the same compensation as those who have been resettled completely.
- Additional funding should be provided for the construction of the People's Committee headquarters at the Commune level. When a commune is moved to another location, administrative delays take place because of lack of funding to reconstruct Commune headquarters.
- Compensation should be provided to those who depended on the river for their livelihoods but now have been resettled away from it. This includes compensation for fisheries related investments previously incurred by affected people, such as motor boats, fish breeding cages etc.
- Compensation should also be provided for infrastructure investments made by communities on their former sites and which were costly to build (such as canals, water irrigation systems built by households or groups of households). These can no longer be utilized by the communities and will have to be rebuilt in the new resettlement areas.

### 4.3.3 Implementation

- The RMU should coordinate with consultants, district agencies, line agencies and commune and village authorities in allocating residential and farm land. They should also jointly develop plans for land use management in resettlement sites.
- Residential land should be given to resettled people taking into account lifestyles of the different ethnic groups and how residential areas looked in their former villages.

Policies should be flexible enough to allow more than the current maximum level of 400 m<sup>2</sup> for residential land (house and garden), especially when needed and where land is available.

- The quality of farmland should be assessed with the participation of those being resettled before being allocated. If the land is fertile, then the amount designated in Decision 01- 2005/ QD – UB of Son La province is adequate for allocation. However, where the land available is on a hillside or degraded, then the amount allocated to households must be larger in order to have enough land to produce sufficiently. Land allocation should also be contingent on family size.
- In resettlement sites where lowland for wet rice cultivation is available, priority should be given to households who lost more lowland in their former residential area. However, special consideration should be given to larger families and where food security is a major factor in allocating lowland for wet rice.
- Special safety nets such as a social security or a food security program should be developed to support households suffering from food shortages and for poor households who used to receive benefits from existing social policies or where they face special difficulties in resettlement sites. For example, wherever there are delays in the allocation of farmland in resettlement sites, the period of food support should be extended to households. Resettlement sites throughout the five districts are currently facing these delays without an adequate safety net for food provision.
- Garden land should be given in addition to farmland and not included in the quota for residential land. This is because ethnic minority groups generally have much bigger gardens than what is allocated under the compensation policy.
- When infrastructure and public works are completed in resettlement sites, regulations should be developed for maintenance and management of these services with the full participation of people in the community.
- Important cultural consideration such as naming of a new village or changing the name of a resettlement site should be allowed by members of the resettlement community. This would contribute to a sense of empowerment for affected people.
- The allocation of residential plots should respect people's wishes. For instance, members of the same clan and/or family should be allowed to live close to or next to each other. This will avoid confusion and conflict that results when people start to change locations amongst themselves out of dissatisfaction. Participatory planning of residential units could be more beneficial.
- Basic and essential services such as schools must be completed before the new academic year starts. The district level education division must coordinate with local authorities to send teachers to resettlement sites in accordance with the regulations of the Ministry of Education and Training. Currently, many resettled children stay at home because the nearest school is over 10 km away and no public transport exists

to take them to school. Access to schools should be legally binding in resettlement policy.<sup>40</sup>

- To strengthen democracy at the grassroots level, administrative, social, and community-based organizations at the commune level must improve their role in guidance and education regarding resettlement. They must take advantage of the capital allocated for resettlement to develop local infrastructure, restore agricultural production and rural development, thereby contributing to hunger eradication and poverty reduction. In order to do so, they must strengthen community-level awareness of project-affected people's political and social rights and identify the policies and benefits that people are entitled to.
- Policies regarding planning, compensation inventory, compensation payment, land recovery, land allotment and monitoring of infrastructure must be made open and transparent. This will create a greater sense of responsibility for affected people and community based organizations to engage in and better implement the resettlement plan.
- The resettlement management machinery must be improved at the district level. For instance, resettlement personnel must be trained better to deal with local populations. They should be given sufficient benefits, per diems etc. if they are required to travel long distances and stay in remote sites for a long duration. This will allow them to gain more job satisfaction. More personnel should be recruited from within the ethnic minorities affected so that the cultural dimensions can be better incorporated in resettlement. There should also be an increase in full-time staff at the district resettlement units, especially where there are a large number of people being resettled or where there are a lot of problems such as Quynh Nhai and Muong La (Son La Province).

#### **4.3.4 On Environmental and Community Health Issues**

- The government should supplement policies and a budget for the environmental component of the resettlement project. More funding needs to go into studies on the environmental implications of the project.
- Provincial, district and commune level authorities must have the funds to address environmental problems related to resettlement and have detailed guidelines on environmental issues such as provision of clean water, prevention of deforestation, soil erosion, air pollution and solid wastes.
- An environmental education program should be developed in resettlement communities to raise awareness about different environmental impacts in the resettlement sites, in both rural and urban areas.
- A fund should be started from the revenues of the project to be devoted to mitigating environmental problems related to the project and to restore the environment.

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<sup>40</sup> Currently, the policy says that schools and health clinics must be provided in concentrated resettlement sites.

- In addition to giving priority to water supply problems in resettlement sites outside the district, solutions must also be found for water provision for *di ven* sites. For instance, the district RMU should diversify the water supply and invest in water storage such as construction of water wells, water tanks and other methods to harvest rainwater for dry season use. This is particularly necessary where forests are seriously degraded, affecting water sources such as mountain creeks or rivers.
- The authorities should invest in improving the quality and capacity of healthcare in project affected areas by training healthcare workers, providing an action plan on prevention of common diseases, health education and access to medicines for prevalent illnesses in the area.
- Sufficient funding should be allocated to the resettlement project to prevent epidemics in districts where resettlement is underway. Though no new diseases or epidemics have occurred in resettlement sites (given the short duration of resettlement), it is necessary to improve preventive healthcare and prevent diseases. This can be done by improving hygiene and sanitation in resettlement sites.
- Campaigns on hygiene, sanitation and disease prevention must be launched in resettlement sites. People must be mobilized and sensitized to eating cooked food, boiling water for drinking, avoiding the use of non-decomposed human waste for fertilizer, building sanitary latrines. People can also be educated about sanitary ways of tending to their animals.
- Village health worker should become a key force (in coordination with the commune health station and local authorities and mass organizations) to help tackle malaria and other communicable diseases.

# APPENDIX 1

## MOVING SCHEDULE FOR SON LA RESETTLEMENT PLAN

|       | Localities          | According to<br>196-QD-TTg |        | Review in February 2006   |        |                                 |        |                     |        |                    |        |                  |        |                     |        |                     |        |
|-------|---------------------|----------------------------|--------|---------------------------|--------|---------------------------------|--------|---------------------|--------|--------------------|--------|------------------|--------|---------------------|--------|---------------------|--------|
|       |                     | From 2005 to<br>2010       |        | Moving schedule 2005-2010 |        |                                 |        |                     |        |                    |        |                  |        |                     |        |                     |        |
|       |                     | Total                      |        |                           |        | 2005 upto<br>2/2006<br>(<=132m) |        | 2006<br>(<= 150,4m) |        | 2007<br>(<=191,7m) |        | 2008<br>(<=215m) |        | 2009<br>(<=218,45m) |        | 2010<br>(<=218,45m) |        |
|       |                     | HHs                        | People | HHs                       | People | HHs                             | People | HHs                 | People | HHs                | People | HHs              | People | HHs                 | People | HHs                 | People |
| Total |                     | 18,897                     | 91,100 | 19,669                    | 94,892 | 1,990                           | 11,335 | 4,973               | 24,149 | 6,870              | 31,905 | 4,216            | 20,421 | 1,212               | 5,156  | 408                 | 1,926  |
| I     | Son La Province     | 12,479                     | 62,394 | 12,479                    | 62,394 | 1,724                           | 9,926  | 4,058               | 19,492 | 3,975              | 19,315 | 2,564            | 12,849 | 158                 | 812    | 0                   | 0      |
| 1     | Quynh Nhai District | 8,253                      | 41,265 | 8,150                     | 41,060 | 1,334                           | 7,976  | 2,907               | 13,744 | 1,825              | 8,814  | 2,084            | 10,527 | 0                   | 0      | 0                   | 0      |
| 2     | Muong La District   | 3,443                      | 17,217 | 3,660                     | 18,112 | 390                             | 1,950  | 1,077               | 5,394  | 1,997              | 9,770  | 37               | 186    | 158                 | 812    | 0                   | 0      |
| 3     | Thuan Chau District | 782                        | 3,912  | 669                       | 3,222  | 0                               | 0      | 73                  | 354    | 153                | 732    | 443              | 2,136  | 0                   | 0      | 0                   | 0      |
| II    | Dien Bien Province  | 3,840                      | 14,959 | 3,840                     | 14,959 | 0                               | 0      | 315                 | 1,501  | 1,818              | 6,971  | 751              | 2,679  | 745                 | 2,723  | 211                 | 1,085  |
| 1     | Tua Chua District   | 335                        | 1,824  | 385                       | 1,895  |                                 |        | 315                 | 1,501  | 70                 | 394    | 0                | 0      | 0                   | 0      | 0                   | 0      |
| 2     | Muong Lay Town      | 3,505                      | 13,135 | 3,455                     | 13,064 |                                 |        |                     |        | 1,748              | 6,577  | 751              | 2,679  | 745                 | 2,723  | 211                 | 1,085  |
| III   | Lai Chau province   | 2,578                      | 13,747 | 3,350                     | 17,539 | 266                             | 1,409  | 600                 | 3,156  | 1,077              | 5,619  | 901              | 4,893  | 309                 | 1,622  | 197                 | 841    |
| 1     | Sin Ho District     | 2,201                      | 11,713 | 2,954                     | 15,505 | 266                             | 1,409  | 600                 | 3,156  | 977                | 5,105  | 801              | 4,353  | 209                 | 1,082  | 101                 | 401    |
| 2     | Muong Te District   | 377                        | 2,034  | 396                       | 2,034  | 0                               | 0      | 0                   | 0      | 100                | 513    | 100              | 540    | 100                 | 540    | 96                  | 440    |

HHs = Number of households to be resettled

Source: NIAPP, 2006

**APPENDIX 2**  
**INUNDATED ASSETS IN RESERVOIR AREA OF SON LA DAM**

| No.        | Item                        | Unit           | Total     | Provinces |           |          |
|------------|-----------------------------|----------------|-----------|-----------|-----------|----------|
|            |                             |                |           | Son La    | Dien Bien | Lai Chau |
| <b>I</b>   | <b>Housing</b>              | m <sup>2</sup> | 1,617,443 | 1,177,013 | 285,230   | 155,200  |
| <i>1</i>   | <i>Stilt House</i>          | m <sup>2</sup> | 1,268,343 | 1,075,251 | 80,218    | 112,874  |
| a          | Woody stilt house           | m <sup>2</sup> | 924,721   | 791,989   | 68,832    | 63,900   |
| b          | Bamboo stilt house          | m <sup>2</sup> | 343,623   | 283,263   | 11,386    | 48,974   |
| <i>2</i>   | <i>Ground House</i>         | m <sup>2</sup> | 349,100   | 101,762   | 205,102   | 42,326   |
| a          | Tiled floor                 | m <sup>2</sup> | 225,457   | 63,022    | 148,979   | 13,456   |
| b          | Thatched floor              | m <sup>2</sup> | 123,563   | 38,660    | 56,033    | 28,870   |
| c          | Others                      | m <sup>2</sup> | 80        | 80        |           |          |
| <b>II</b>  | <b>Housing's attachment</b> | m <sup>2</sup> |           |           |           |          |
| 1          | Kitchen & Latrine           | m <sup>2</sup> | 140,488   | 74,109    | 45,452    | 20,837   |
| 2          | Well                        | number         | 5,081     | 5,158     | 504       | 139      |
| 3          | Water tank                  | m <sup>2</sup> | 6,417     | 2,527     | 3,085     | 805      |
| 4          | Drying Ground               | m <sup>2</sup> | 74,565    | 74,565    | 2,527     |          |
| 5          | Breeding facilities         | m <sup>2</sup> | 82,065    | 45,893    | 74,565    | 7,832    |
| <b>III</b> | <b>Graves</b>               | number         | 21,526    | 13,239    | 5,738     | 2,549    |
| <b>IV</b>  | <b>Fences</b>               | m <sup>2</sup> | 1,180     | 1,180     | 0         |          |

**Source:** NIAPP, 2004

**APPENDIX 3**  
**GENERAL INFORMATION OF THE INTERVIEWEES**

| <b>Information</b>            | <b>People</b> | <b>%</b>   |
|-------------------------------|---------------|------------|
| <b>1. Ages</b>                |               |            |
| Below 25                      | 36            | 7,2        |
| From 25 to 30                 | 68            | 13,5       |
| From 30 to 45                 | 228           | 45,3       |
| Above 45                      | 171           | 34,0       |
| <b>Total</b>                  | <b>503</b>    | <b>100</b> |
| <b>2. Sex</b>                 |               |            |
| Man                           | 453           | 90,1       |
| Woman                         | 50            | 9,9        |
| <b>Total</b>                  | <b>503</b>    | <b>100</b> |
| <b>3. Qualification</b>       |               |            |
| Illiteracy                    | 72            | 14,3       |
| Elementary School             | 204           | 40,6       |
| Secondary School              | 177           | 35,2       |
| High School                   | 37            | 7,4        |
| College                       | 13            | 2,6        |
| <b>Total</b>                  | <b>503</b>    | <b>100</b> |
| <b>4. Ethnicity</b>           |               |            |
| Tai                           | 340           | 67,6       |
| Kinh (Vietnamese)             | 67            | 13,3       |
| La Ha                         | 61            | 12,1       |
| Others (Dzay, Mang, Hmong)    | 35            | 7,0        |
| <b>Total</b>                  | <b>503</b>    | <b>100</b> |
| <b>5. Occupation</b>          |               |            |
| Civil servants                | 55            | 10,9       |
| Farmers                       | 343           | 68,2       |
| Others                        | 105           | 20,9       |
| <b>Total</b>                  | <b>503</b>    | <b>100</b> |
| <b>6. Settlement Status</b>   |               |            |
| Resident people <sup>41</sup> | 400           | 79,5       |
| People from other places      | 103           | 20,5       |
| <b>Total</b>                  | <b>503</b>    | <b>100</b> |
| <b>7. Members of family</b>   |               |            |
| Below 4 people                | 234           | 46,5       |
| From 5 to 10 people           | 264           | 52,5       |
| Above 10 people               | 5             | 1,0        |
| <b>Total</b>                  | <b>503</b>    | <b>100</b> |

<sup>41</sup> Was born and grew up in the same district

## BIBLIOGRAPHY

- Arie, Sam and Leaning, Jennifer (2000) *Human Security: A Framework for assessment in conflict and transition*, downloaded on 10 December 2005 from <http://www.certi.org/publications/policy/human%20security-4.PDF>
- Acharya Amitav (2001) *Human Security: East Versus West?* Working Paper, Institute of Defence and Strategic Studies, Singapore, September 2001
- ADB [Asian Development Bank] (2002) *Indigenous Peoples/ Ethnic Minorities and Poverty Reduction in Vietnam*, ADB Report, Manila, Philippines, June 2002
- Alkire, Sabina (2003) *A Conceptual Framework for Human Security*, CRISE [Center for research on Equality, Human Security and Ethnicity] working paper, Queen Elizabeth House, University of Oxford
- Bajpai, Kanti (2000) *Human Security: Concept and Measurement*, Joan B. Kroc Institute for International Peace Studies
- Be Viet Dang (ed.) (1993) *Economic and cultural changes in the northern mountain provinces (Những biến đổi về Kinh tế- Văn hoá ở các tỉnh miền núi phía Bắc)*, Hanoi: Social Science Publishing House
- Be Viet Dang (ed.) (1996), *Ethnic minorities in the socioeconomic development in highland areas (Các dân tộc thiểu số trong sự phát triển kinh tế - xã hội ở miền núi)*, National Political Publishing House, Cultural Ethnicity Publishing House, Hanoi
- Bladh, Ulkira & Nilsson Eva –Lena (2005) *How to plan for Involuntary Resettlement? The Case of the Son La Hydroelectric Power Project in Vietnam*, Master Thesis, The Royal Institute of Technology, Stockholm
- Bob, Baulch., Truong, Chuyen K., Haughton, D., Haughton, J. (2001) *Ethnic Minority Development in Vietnam: A Socio-Economic Perspective*, downloaded on 11 December 2005 from <http://www.bu.edu/econ/ied/neudc/papers/Haughton-Final.doc>
- Bui, M. Dao (2002) *Povety alleviation in Vietnamese ethnic minorities areas in Doi Moi years (Giảm nghèo ở vùng dân tộc thiểu số Việt Nam trong những năm Đổi Mới: chính sách, thực hiện và đánh giá)* paper presented at Workshop on Participatory Poverty, Reduction Planning with Ethnic Minorities in Vietnam, December 10-12, 2002, Vung Tau, Vietnam
- Cao, T.T. Yen (2003) *Towards Sustainability of Vietnam's Large Dams: Resettlement in Hydropower projects*, M.A Thesis, Royal Institute of Technology, Stockholm, Sweden
- Cam Trong, Phan Huu Dat (1995) *Ethnic Tai's culture in Vietnam (Văn hoá Thái Việt Nam)* The Ethnic Culture Publishing House, Hanoi, 1995
- Castles, Stephen (2006) *Global Perspective on Forced Migration*, Asian and Pacific Migration Journal, Vol. 15, No.1, p.7 -28
- Cernea, M. and Guggenheim, Scott E. (1993) *Anthropological Approaches to Resettlement: Policy, Practice, and Theory*. Boulder, Westview Press.
- Cernea, M.M (1990), 'Poverty Risks from Population Displacement in Water Resources Development', Development Discussion No.355, Cambridge, Massachusettes, Havard University Institute for International Development

- Cerneia, M.M (1999), 'Why Economic Analysis is Essential to Resettlement: A Sociologists's View', in Cernea, M.M. (ed) *The Economics of Voluntary Resettlement: Questions and Challenges*, Washing, DC, the World Bank
- Coles, P. (2000) *Large Dam, The end of an Era*, downloaded on March 30, 2005 from: [http://www.findarticles.com/p/articles/mi\\_m1310/is\\_2000\\_April/ai\\_62382639](http://www.findarticles.com/p/articles/mi_m1310/is_2000_April/ai_62382639)
- CHS [Commission on Human Security] (2003) *Human Security Now*, downloaded on December 10<sup>th</sup>, 2005 from <http://www.humansecurity-chs.org/finalreport/index.html>.
- CRES [Center for Natural Resources and Environmental Studies] (2001) *Study into impact of Yali Falls Dam on Resettled and downstream communities* – Report Prepared by the, Vietnam National University, February, 2001
- CRES [Center for Natural Resources and Environmental Studies] (1997) *Development Trends in Vietnam's Northern Mountain Region*, National Political Publishing House, Hanoi, Vol. 1
- Dang Nghiem Van, Chu Thai (Tai) Son and Luu Hung (1993), *Ethnic Minorities in Vietnam*, The Gioi Publishing House
- Dang, Nguyen Anh (2006) *Forced migration in Vietnam: Historical and Contemporary Perspective*, Asian Pacific Migration Journal, Vol. 15, No.1, p.159-173
- Decree No. 29/CP* dated 1<sup>st</sup> May 1998 of the Government on implementation of democracy regulations at wards, communes and district towns
- Decree No. 79/2003/ND-CP* dated 7<sup>th</sup> July, 2003 in replacement of the Decree No. 29
- Decree No. 197/ 2004/ND-CP* dated 13<sup>th</sup> December, 2004 of the Government of Vietnam on Compensation, Assistance and Resettlement when State Recovers Land
- Decision No. 459/QĐ – TTg* of Prime Minister on compensation and resettlement in Son La Hydropower Project dated 12 May 2004
- Decision No. 01/QĐ-UB* of Son La People's Committee in concretization Government laws and policies on compensation and resettlement of Son La Hydropower Project dated 9 January 2005
- Donovan, D., Rambo, Terry A., Fox, J., Le, Trong Cuc & Tran Duc Vien (1997), *Development Trends in Vietnam's Northern Mountain Region – An Overview and Analysis (Volume I)*, National Political Publishing House, Hanoi, 1997
- Downing, Theodore E. (2002) *Avoiding New Poverty: Mining – Induced Displacement and Resettlement*, The report commissioned by MMSD (Mining, Mineral and Sustainable Development) project of IIED (International Institute for Environment and Development)
- Downing, T.E. (1996), 'Mitigating Social Impoverishment when People are involuntarily Displaced', in Mc Dowell, C. (ed) *Resisting Impoverishment-Tackling the Consequences of Development-Induced Impoverishment*, Oxford, Berghahn Books.
- Dwivedi, Ranjit (2002) *Models and Methods in Development – Induced Displacement*, Development and Change, Volume 33, No. 4, p709-732
- Gish, O. (1982) *Economic dependency, health services, and health: The case of Lesotho*. Journal of Health Politics, Policy & Law 6(4):762–779.
- Goldsmith, E., and Hildyard, N. (1984) *The Social and Environmental Impact of*

- Large Dams*. Wadebridge: Wadebridge Ecological Centre.
- Goodland (2000), 'Social Environment Assessment to Promote Sustainability', Environment Paper 74, Washington, DC, World Bank
- Goodland, R. (1995) *The environmentally sustainable challenge for the hydro industry*. Hydropower and Dams 1:37–42.
- Gatzky, Adelle (2004), *Human Security, Dams and Indigenous People: damming their fates?* Graduate Essay, Department of Geography, University of Victoria
- Global Security Newspaper [An Ninh Thế Giới], *Resettlement of Son La Hydropower Project (Tái định cư thủy điện Sơn La)* No. 473 on 30 July 2005
- Hardy, Andrew and Turner, Sarah (2000) *Migration, markets and social change in the highlands of Vietnam*, Asia Pacific View Point, Vol. 41, No. 1, April 2000
- Human Rights Watch Report (2002) *Conflicts over Land and Religion in Vietnam's Central Highlands*, downloaded on August 15, 2004 from <http://hrw.org/reports/2002/vietnam/>.
- IDA/WB P075407-VN Report (2005) *Policy Framework for Land Acquisition, Compensation, Assistance and Resettlement for SWAp [Sector Wide Approach]*– Final Report prepared by Roughton International, June 2005
- Institute of Ethnology (1998) *Report on socio economic and ethnological issues of ethnic minorities groups of Son LA Hydropower Project – Feasibility Study*, Hanoi
- Institute of Ecological Economy (2004) *Assessment on Living Conditions and potential economic development for people at resettlement sites of Son La Hydropower, Tan Lap site, October 2004 (Original: Đánh giá chất lượng cuộc sống và tiềm năng phát triển kinh tế cho nhân dân vùng tái định cư dự án thủy điện Sơn La từ nghiên cứu điểm Tân Lập)*
- Institute of Geography, Vietnam Institute of Science and Technology (2005) *EIA (Environment Impact Assessment) Report*
- Jamieson, Neil L., Le, Trong Cuc.& Rambo, Terry A. (1998), *The Development Crisis in Vietnam's Mountain, East –West Center Special Report, Number 6*, November 1998, East – West Center, Honolulu
- Kampe, Ken and McCaskill, Don (1997) "Development Opportunities and Threats to ethnic minority groups in Vietnam", in *Development or Domestication- Indigenous Peoples of Southeast Asian*, Silkworm Books, p.471-487
- King, Gary and Murray, Christopher J. (2001) *Rethinking Human Security*, Political Science Quarterly, Volume 116, Number 4, 2001
- Khong Dien (1995) *Population and Ethnic Population in Vietnam (Dân số và dân tộc người ở Việt Nam)*, Hanoi: Social Science Publishing House.
- Lawrence, Freedman (1998) *International Security: Changing Targets*, Foreign Policy, No. 110 (Spring 1998), p. 48-55
- Lee Shin-Wa (2004) *Promoting Human Security: Ethical, Normative and Educational Frameworks and Educational Frameworks in East Asia*, Korea National Commission, Seoul.
- Lindskog, Lind Eva & Vũ Ngọc Long (2004) *Evaluation the resettlement process of multi purpose Song Hinh Hydropower Project, Phu Yen Province, Vietnam (Báo cáo đánh giá quá trình tái định cư của dự án đa mục tiêu thủy điện Sông Hinh, tỉnh Phú Yên, Việt Nam)* Final Report, April 2004

- McCully (1996), *Silenced Rivers the Ecology and Politics of Large Dams*, London: Zed Books.
- Muggah, Robert (2003) *A tale of Two Solitudes: Comparing Conflict and Development – induced Internal Displacement and Involuntary Resettlement*, International Migration Vol. 41(5), p.5-31
- McLeod, Mark W. (1999) Indigenous Peoples and the Vietnamese Revolution, 1930-1975, Journal of World History, Volume 10, Number 2, p. 353-389
- Michaud, J. (2000) *The Montagnards and the State in Northern Vietnam from 1802 to 1975: A Historical Overview*, Ethnohistory, Volume 47, Number 2, p.333-368
- Nakayama, M., Gunawan, B., Yoshida T., Aseada T. (1999) *Resettlement Issues of Cirata Dam Project: A post – project Review*, Water Resources Development, Vol. 15, No.4, 443-458, 1999
- Neef, Andreas Friederichsen, J. Rupert Sangkapituc, Chapika and Nguyen, Thi Thac, (2002) *Sustainable Livelihoods in Mountainous Regions of Northern Vietnam: From Technology – Oriented to People – Centered Concepts*, Paper presented at the Montane Mainland Southeast Asia (MMSEA) III Conference, 25-28 August 2002, Lijiang, China
- NIAPP [National Institute of Agricultural Planning and Projection], Ministry of Agriculture and Rural Development (2003) *Report on Resettlement Planning of Son La Hydropower Projects* (Translation: Viện quy hoạch và thiết kế nông nghiệp: Báo cáo tóm tắt quy hoạch tổng thể di dân tái định cư định canh dự án thủy điện Sơn La)
- NIAPP [National Institute of Agricultural Planning and Projection] Ministry of Agriculture and Rural Development (2004) *Report on Resettlement Planning of Son La Hydropower Projects* (Translation: Viện quy hoạch và thiết kế nông nghiệp: Báo cáo tóm tắt quy hoạch tổng thể di dân tái định cư định canh dự án thủy điện Sơn La)
- Ngo The Dan and Tran An Phong (1993) *Good exploitation and conservation of our midland and mountain region (Khai thác và giữ gìn tốt vùng đất trung du và miền núi nước ta)* in Viện quy hoạch và thiết kế nông nghiệp (NIAPP), Hanoi: Agriculture Publishing House
- Ogata, Sadako (1999) *Human Security: A refugee Perspective*, Keynote speech at the Ministerial Meeting on Human Security Issues of the ‘Lysoen Process’ Geoup of Governments, Bergen, Norway, 19 May 1999, downloaded on December 10, 2005 from <http://www.unhcr.ch/cgi-bin/texis/vtx/print?tbl=ADMIN&id=3ae68fc00>
- Ogata, Sadako (2001) *State Security – Human Security*. The Fridtjof Nansen Memorial Lecture, 12 December, Tokyo, United Nations University downloaded on December 10, 2005 from <http://www.humansecurity-chs.org/doc/Nansen.html>
- Owen, Taylor (2004a) *Challenges and opportunities for defining and measuring human security*, downloaded on 10 December 2005, from <http://www.unidir.org/pdf/articles/pdf-art2138.pdf>
- Owen, Taylor (2004b), *Human Security – Conflict, Critique and Consensus: Colloquium Remarks and a Proposal for a Threshold – Based Definition*, Security Dialogue, vol. 35, no.3, September 2004
- Parasuraman, S. (2001) *Impact of Dams on Natural Resources dependent and vulnerable Communities*, Discussion Paper for the Session: Impact of

- Development Policies and Projects on Human Rights, at the 5<sup>th</sup> Annual Asian Human Rights Training and Study Session, 17<sup>th</sup> October 2001
- Paris, Roland (2001) *Human Security: Paradigm Shift or Hot Air*, International Security 26:2, 87-102
- Penz, P (2002) "Development, Displacement and Ethics" in *Dilemma of Displacement – Induced Displacement*, Forced Migration Review, No. 12, January 2002
- Poverty Task Force (2002) *Promoting Ethnic Minority Development*, downloaded on January 20th, 2006 from <http://www.undp.org.vn/undp/docs/2002/vdg/ethnic2002.pdf>
- Press Release: Son La Hydropower Project: More details needed in the government's plans, download on 15 April 2005 from: [http://www.rivernet.org/prs01\\_19.htm](http://www.rivernet.org/prs01_19.htm)
- Rajagopal Balakrishnan (2002) *Hydropower, forced resettlement, and blood on the hands*, download on 31 March 2005 from [http://www.worldpaper.com/archive/2002/january\\_02/january1.html](http://www.worldpaper.com/archive/2002/january_02/january1.html)
- Robinson, Courtland W., (2003) *Risks and Rights: the Causes, Consequence, and Challenges of Development – Induced Displacement, An Occasional Paper*, The Brookings Institutions – SAIS Project on Internal Displacement, May 2003
- Report No. 41/BC-BQLDA (dated 28 October 2005) of Resettlement Board of Lai Chau Province on "The implementation of resettlement of Son La Hydropower Project in Lai Chau province in 2005, the way forwards in 2006"
- Report No. 10 – KH/BDV (dated 15 July 2005) on campaign for resettlement of Son La Hydropower Project
- Report No. 1425/CP-CN (dated 12 November 2002) of Government submitted to National Assembly at the XIth, session 2 of National Assembly Meeting on scale plan of Son La Hydropower Project
- Salemink, Oscar (2000), *Sedentarization and Selective Preservation among the Mongtanards in the Vietnamese Central Highlands*", in *Ethnicity and Ethnic Relations in Vietnam and Southeast Asia – A Reader*, training course funded by the Ford Foundation in Vietnam, at Vietnam Museum of Ethnology, Hanoi, 17-26 June 2005
- Scudder, T.(2005) *The Future of Large Dams Dealing with Social, Environmental, Institutional and Political Costs*, London: Earthscan.
- Scudder, T. (1997a). *Social impacts: In: Water Resources: Environmental Planning, Management and Development*, A.K. Biswas (ed). New York: McGraw Hill.
- Scudder (1996), 'Development-Induced Improverishment, Resistance, and River
- Shinoda, Hideaki (2004) "Chapter 1: The Concept of Human Security: Historical and Theoretical Implications" in *Conflict and Human Security: A Search for New approaches of Peace – building*, IPSHU English Research Report Series No.19
- Sunderlin, William D. and Huynh Thu Ba (2005) *Poverty Alleviation and Forests in Vietnam*, Center for International Forestry Research, Jakarta
- Stanley, Jason (2003) *Financing Matters: Where funding arrangements meet resettlement in three Mexican dam projects*, Refugee Studies Centre Working Paper No. 14, October 2003
- Tadashi, Yamamoto (2003) *Human Security: From concept to action, a challenge for Japan*, paper presented at International Conference on Human Security in East Asia, 16-17 June 2003, Seoul, Republic of Korea

- Thomas, Caroline (2001) *Global Governance, development and human security: exploring the links*, Third World Quarterly, Vol. 22, No. 2, pp. 159-175
- Thomas, Kevin J.A (2002) *Development projects and involuntary population displacement: The World Bank's attempt to correct past failures*, Population Research and Policy Review (21) 339-349.
- Trinh, Quoc Tuan (ed.) (1996) *Ethnic equality in our country nowadays – problems and solutions (Bình đẳng dân tộc ở nước ta hiện nay - Vấn đề và giải pháp)*, The National Politics Publishing House, Hanoi
- UNDP [United Nations Development Programme] (1995), *Strengthening capacity in policy formulation and management of ethnic minority development in Vietnam*. Project Document. UNDP
- UNDP [United Nations Development Programme] (1994) *Human Development Report*, downloaded on 10 December 2005 from <http://hdr.undp.org/reports/global/1994/en/>
- UNICEF [United Nations Children's Fund] (2000) *Vietnam: Children and Women – a situation analysis*, Hanoi: United Nations Children's Fund
- Wongboonsin, P., Pongsapich, A., Chantanavich, S., Sookkhee, C. (2006) *Promoting Human Security in APEC countries*, Published as a part of the Research Project on Human Security in the Global Cities Network, Institute of Asian Studies, Chulalongkorn University
- WCD [World Commission on Dams] (2000a) *Dam and Development, A New Framework for Decision Making – The Report of the World Commission on Dam*. London, Earthscan
- WCD [World Commission on Dams] (2000b) *Dams, Indigenous Peoples and Ethnic Minorities – Prepared by Marcus Colchester – Forest Peoples Programme*.
- WHO [World Health Organization] (2003) *Health and Ethnic Minorities in Vietnam*, downloaded on January 10, 2006 from <http://www.un.org.vn/who/docs/engwho.pdf>,
- Yang, Dayu, *Three Gorge: Resettlement and Marginalization*, downloaded on December 11, 2005 from [http://www.probeinternational.org/pi/documents/three\\_gorges/threegorgesresettlement.html](http://www.probeinternational.org/pi/documents/three_gorges/threegorgesresettlement.html)
- Yokio, Ikemoto (2003) *Poverty, Capability and Rights*, paper presented at the International Symposium on “Publicness Towards the 21 Century”, Risumeikan University, Kyoto, 2 June 2003