

Technical assistance
(PHRD grant)

FOR

preparation of Vietnam power
source development project



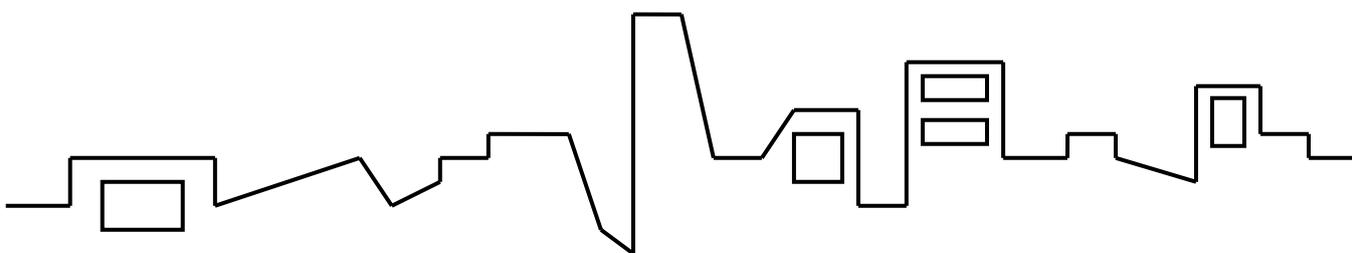
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Package XH-01

Social and economic survey and assessment report

Trung Son hydropower Project



Hanoi, June 20, 2008

*Subject: Report of Package XH-01: Social and economic survey and assessment
Trung Son Hydropower Project
Technical Assistance (PHRD grant) for preparation of
Vietnam Power Source Development Project*

**TO: TRUNG SON HYDROPOWER PROJECT
MANAGEMENT BOARD**

Development Research and Consultancy Center (DRCC) would like to submit the Social and Economic Survey and Assessment Report, Trung Son Hydropower Project, Technical assistance (PHRD grant) for preparation of Vietnam power source development project

We present scope and methods for the social assessment process are required before initiating field work in this plan.

Your consideration and opinions would be highly appreciated.

Yours truly,

Nguyen Hong Quang
Director,
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Abbreviation

EVN	Electricity of Vietnam
PPC	Province People Committee
DPC	District People Committee
SA	Social Assessment
BMP	Board Management Project
EM	Ethnic Minorities
WB	World Bank
NGO	Non Government Organization
EIA	Environment Impact Assessment
EMP	Environment Management Plan
RAP	Resettlement Action Plan
EMDP	Ethnic Minority Development Plan

PART I – INTRODUCTION

A. BRIEF INTRODUCTION TO THE PROJECT

The Ban Uon (now Trung Son) hydropower project is scheduled to be built on Ma River. The proposed dam will be situated in Trung Son commune, Quan Hoa district, Thanh Hoa province. The location is about 195 km northwest of Thanh Hoa city. The reservoir ends at about 5km from the Viet-Lao border. The correlative basin area of the dam coded PA4 is 13,175 sq.km.

1. Social-economic purposes, political meanings of the project

- To generate electricity connected to national grid with the capacity of 260 MW. The project will provide 1,044.12 millions KWh annually for the national grid; therefore, it will help reduce the shortage of power of the National grid.
- To prevent flood with the capacity of 136 millions m³.
- Besides, the project contributes to increasing water volume in dry season and pushing salt water out of the lowlands.
- The building of Trung Son hydropower project will contribute to the infrastructure, social-economic development for the mountainous areas of Thanh Hoa province. It has a great political meaning to eliminate hunger and reduce poverty, improve intellectual standards of people, and unite people. The reservoir will create good conditions to develop waterway traffic, aquaculture, which is one of the advantages to develop the economy of the mountainous districts in Thanh Hoa and Son La provinces in the future.

The project decided to build dam No. 4 corresponding to the normal water flow of 160m. The proposed project will possibly affect about 1,538.95ha of land of different categories, and inundate houses of 432 households with 2,187 people in 5 communes in Quan Hoa district (1 commune); Muong Lat district (3 communes) in Thanh Hoa province and 1 commune in Moc Chau district, Son La province.

2. The reservoir and main facilities of Trung Son hydropower project are situated in Muong Ly, Trung Ly and Tam Chung communes (Muong Lat district), Trung Son commune (Quan Hoa district) in Thanh Hoa province; Xuan Nha commune (Moc Chau district) in Son La province. The land is acquired permanently for the reservoir and main facilities. The area up to normal water flow surface and overflow corresponding to the flood peak P=1% will be counted as permanently acquired. To ensure their safety, all households resided in this site will be relocated and compensated for their land as well as their assets on land. The number of affected households in the reservoir basin is counted corresponding to the overflow of the water from the reservoir.

3. Mines, landfill and material gathering areas: A quarry is situated about 20km from the project site on the left bank downstream; stone reserves are sufficient and of good quality for making concrete and building dam. Soil-mines are available at about 10 km from the project site on the left bank downstream and a sand-mine is about 68km from the site on the downstream. Their reserves are sufficient and quality is good for construction. Other building materials such as iron, steel, cement and others will be transported from Hoa Binh town to the construction site. The soil-mines will be permanently acquired. The landfill areas outside the reservoir will be temporarily acquired during the construction process. After completion of the project, these areas will be leveled and planted with trees. The quarries and landfill areas

outside the reservoir basin are situated in unused areas, bare hills where there is no household residing and cultivating.

4. Workers' camps and auxiliary facilities: Proceeding from the actual construction site and construction needs, the auxiliary facilities are proposed as follow: The area on the left bank of the dam is rather even and flat; therefore, a roller compacted concrete workshop, storehouses and facilities for other purposes will be built there. A stone selecting station is situated at the quarry on the left bank downstream of the dam. The living and working quarter of Division A, Consultants is built on the left bank, close to Co Me village which is very accessible by traffic and convenient to manage the construction site. The area on the right bank, close to the river basin at the height of 100m is also even and flat. It is proposed to build dwelling-houses for workers and contractors and public facilities. The area acquired for dwelling houses of the consultants and project management unit will be permanently acquired because this area will be used for plant operation in the future. The land reserved for auxiliary facilities and dwelling-houses of construction contractors will be temporarily acquired in the form of leasing (they may lease the land from the people or economic organizations).

The Electricity Consultancy and Construction No. 4 and the Agricultural Planning & Designing Institute under the Ministry of Agriculture & Rural Development have developed a master plan on compensation and resettlement of households affected by the Trung Son hydropower project according to State regulations to ensure that in their resettlement area the affected households will have equal or even better living standards than those in their old place.

B. ROLE OF THE SOCIAL ASSESSMENT IN PROJECT DESIGN

1. The object of social assessment

The object of social assessment (SA) is to assist the project preparation group to design and carry out the proposed project in support and participation in activities of the ethnic communities who are likely affected directly by the project activities.

Consultation and participation are essentially used to:

- To ensure that ethnic minorities and all other stakeholders have their voice in decision making of all issues related to their own interests;
- To minimize adverse impacts caused by compulsory resettlement;
- To avoid possible conflicts during the project implementation.

Consultation and participation will base on the principles of respect and understanding of national culture, provide the instructor for discussion, appropriate place and time for discussion. Consultation and participation also respect the leadership patterns and religious beliefs as well as the traditional powerful personages. Lastly, they also respect different ideas of small groups of the communities. The consultation and participation will have to attract the participation of the women of the ethnic minority groups.

2. The purposes of social assessment

- To identify stakeholders such as ethnic communities, especially women and children or disable groups;
- To gather pertinent social, economic and cultural data such as comprehensive data set of socioeconomic information, tangible and intangible cultural heritages;

- To assess all types the impacts of the projects on beneficiary groups including cultural, social, economical as well as environmental ones;
- To ensure that views of such groups are included in project designs, for example, involving ethnic minorities in consultation and participation process; and,
- To prepare cultural-appropriate participation strategies and mitigation measures. It is important that these participation strategies and mitigation measures are acceptable to ethnic minorities.

3. Method and plan of implementation

3.1. Methods used to implement social assessment

The methods used are appropriate to the contents of social assessment.

3.1.1. Method of gathering and analyzing secondary data from the past events is a quick and easy way to localize the core of social assessment, identify the understanding of the development background, and establish an appropriate action framework as well as noteworthy social variables.

The data which is related to demography, society, economy and culture of the communities of the local who are affected by the project will be gathered from the statistics at different levels and from different institutions. The qualitative and quantitative analysis of the data will be carried out to find out the information of demography, society, economy and culture.

The main factors such as the cultural and customary changes of the ethnic groups will also be indicated in order to identify the important particular cultural traits or traditional customs which will probably be affected by the project.

3.1.2. Analysis of the stakeholders: This method is concerned with the important questions such as: who are the main stakeholders? What is their interest in the project? How is the difference in power among these stakeholders? What can they affect the project? The information can help identify organs and relationships, which can assist the project implementation if it is considered carefully; otherwise it can have negative impacts on the project.

This activity used to analyze the institution of government at national, regional and local levels and non-governmental organizations that interact with affected communities;

3.1.3. Using Harvard framework in gender analysis focuses on the understanding and description of the differences in gender roles, activities, needs, and opportunities in a specific situation. It clarifies the different roles and activities between male and female. These differences depend on culture, class, ethnic groups, income, knowledge and time; therefore, female is not considered as a homogeneous group according to gender analysis.

3.1.4. Rural rapid assessment, a method which has the participation of the inhabitant, focuses on native knowledge and activities. This method is used to assist the stakeholders to share information, make decisions, and make their own plans. It is very effective because it allows local people to set up community development plans. Rural rapid assessment with the participation of communities is used to analyze the potential economic, social and cultural impacts of the project. The PRA methods will be used in social assessment include:

- Venn diagram;

- Use mapping technique with local people;
- Crop schedule;
- Focused groups' discussions; and more.

3.1.5. *Beneficiary analysis* is used to examine systematically the conceptions of a sample representing the beneficiaries and other stakeholders. This analysis ensures that their concerns are mentioned and integrated during the project. In this method, the voice of the poor and other people who unusually have chance to express their ideas will be listened. Moreover, this method will point out the limitation of the participation of the beneficiaries and receive feedback about the intervention measures.

3.2. Sphere of social assessment implementation in Trung Son hydropower project

3.2.1. *With regard to space*, social assessment will be carried out in all areas related to the project, including

- i. dam and reservoir
- ii. ways to construction site
- iii. workers' camps
- iv. factory
- v. transmission lines
- vi. Areas at the lower section of the dam which probably can be affected by the change of flow.

3.2.2. *With regard to objective group*, social assessment in Trung Son hydropower project focuses on community level. In this context, community is considered as people who are directly or indirectly affected by the project implementation process.

It can be divided into two main groups:

3.2.2.1. The first group: includes people who have to resettle and people who do not have to resettle but lose their cultivated land.

3.2.2.2. The second group: includes households in the community in the resettlement area, people who have to share resources and other households which are not affected by this activity but parts of the social network or relationships affected and/or broken by resettlement activity.

Therefore, the community in this situation is identified according to each village where the objective groups above reside.

3.3. Action plan

Based on the requirements of social assessment, the consultants propose the steps to implement social assessment for Trung Son Hydropower Project as follows:

3.3.1. Office task

Examine available information including:

- (i) Consider legal documents and safeguard policy framework of World Bank, documents related to the project, and
- (ii) Gather, analyze and process quantitative data which were carried out by the Electricity Consultancy No.4 when setting up Resettlement Project for

Trung Son Hydropower Project in order to bring out the information of demography and economy of the community affected by the project.

3.3.2. Activities at filed work

Fieldwork is carried out in 6 affected communes in Muong Lat district, Quan Hoa, Thanh Hoa province and Moc Chau district in Son La province, including:

3.3.2.1. 6 communes affected by the main facilities, dam, reservoir and camps are:

- ✚ Trung Son commune in Quan Hoa district, Thanh Hoa province
- ✚ Tam Chung, Muong Ly and Trung Ly communes in Muong Lat district, Thanh Hoa province and
- ✚ Tan Xuan, Xuan Nha communes in Moc Chau district, Son La province.

3.3.2.2. The consultancy and social assessment activities are carried out in 2 communes affected by electricity network and road to Trung Son Hydro-power project area, which are:

- ✚ Trung Thanh and Thanh Son communes in Quan Hoa district, Thanh Hoa province.

3.3.3. Collecting information method

- Use maps and diagrams, mapping technique with local authorities and people to show the exact location of indigenous of people, communities or resettlement in relation to the proposed project area;
- Carry out focused groups discussions, gather statistical data at district/commune level and conduct semi-structured interviews in order to search and complete demographic, social, economic and cultural information of indigenous people;
- Use Crop Calendar tool, diagram or matrix of resources management and access in PRA tool in order to identify and complete information of means of subsistence and other sources of income relying on available resources in the area;
- Site visit, key informant interviews and focused groups discussions are used to identify any culturally important or sacred place and how they might be potentially affected by the project;
- Use Venn diagram, draw public services approach map of local people to find out about interactive relationships between the ethnic minorities and their kinships as well as available political social organizations in the area. Analyze institutions of government and other sides involved;
- Observation, double compare, groups' discussions and expertise poll are used to analyze potential economic, social and cultural impacts of the proposed project.

Details are as follows:

Table 1: Research Tools for Social Assessment for Trung Son Hydropower Project

Area	Activities	Objects ¹
District level	Focused group discussion	Local authorities and representatives of organizations of Quan Hoa, Muong Lat and Moc Chau districts.
Commune level	Focused group discussion	Commune authorities and representatives of organizations of Trung Son, Muong Ly, Tam Chung, Trung Ly, Tan Xuan, Xuan Nha, Trung Thanh and Thanh Son communes.
Affected villages	Focused group discussion	Male and female groups
	Use SWOT tool	Group including male and female
	Make diagram	Group including male and female – in >30 >40 age group.
	History and map of village	Group, combining with the in-depth interview with village patriarch
	Venn diagram	Female group*, male and youth group ²
	Mobile map	Female, male and youth groups*
	Couple comparison	Communities which have to move* and do not have to move
	Crop schedule	Female group and male group
	Management matrix, access to resources and market chains.	Male group, female and youth group
	Timetable	Male and married women
In-depth interview	Female, the elderly, and people who have voice in religious beliefs activities.	

3.3.4. Objects participating in Social Assessment

The group which carries out social assessment activity for Trung Son Hydropower Project has gone and discussed the resettlement activity of 14 villages in 6 communes affected by the project with all concerned parties.

3.3.4.1. Number of people participating in the survey research

The number of people participating in the social assessment activities shows the level of concern of affected households about the project. The details are as follows:

¹ About number of people and list of participated people, see appendix 1. Groups that are marked with * are paid more attention in the above activities

² Groups that are marked with * are paid more attention in the above activities

Table 2. Number of people participating in social assessment activities

Area	Total of affected households	Total of people	% male	% female
<i>Trung Son commune</i>				
Xuoc village	22	22	54,5%	45,5%
Quan Nhuc	5	5	100%	0%
Ta Ban	161	119	62,8%	37,2%
Chieng ³	12	17	70%	30%
Co Me		16	60%	40%
<i>Muong Ly commune</i>				
Nang 1	47	52	42,3%	57,7%
Tai Chanh	34	34	58,8%	41,2%
Muong 2	4	2	100%	0%
<i>Trung Ly commune</i>				
Lin	16	17	53%	47%
Chieng Ly	15	17	53%	47%
Pa Bua	4	1	100%	0%
<i>Tam Chung commune</i>				
Pom Khuong	6	16	65%	35%
Kha Ni	8	4	100%	0%
<i>Tan Xuan commune</i>				
East Ta Lao	110	110	60%	40%
West Ta Lao	62	62	53%	47%
<i>Xuan Nha commune</i>				
Pu Lau	5	5	100%	0%
Total	511	499		

- 499 people participated in social assessment activities at community level;
- 30 people participated in in-depth interviews in villages;
- 30 officials at commune level participated in focused group discussion;
- 27 officials at district level participated in consultancy sessions;

3.3.4.2. To attract local people as well as authorities at different levels to participate in Social assessment activity and to receive opinions from the communities, the Consultant group has based on the Report on General project on Migration and Resettlement for Trung Son Hydropower Project to bring out the basic information about: (i) method for migration and resettlement; (ii) the orientation of the life revival plan and (iii) some basic features of the resettlement policy of the Government of Vietnam. Besides, to gather information consistently among areas, the Consultant group has prepared (i)

³ Chieng village has 12 households living in Pieng Pong area that is the place where the resettlement area No.1 can be built. So, the meeting focuses on these households. .

Guidance for group discussion according to topic; (ii) Draft of statistics collection of the communes and (iii) some proposed PRA tools

3.3.4.3. The principles to carry out the community meetings, Rural Rapid Assessment with the participation of local people, Harvard framework and SWOT are requested to apply to the information collection at community level.

- The Social Assessment group has suggested local people to discuss raised issues and address themselves the issues which need clarifying;
- According to the activities, the female, male and youth groups are divided to discuss or work with PRA tools.
- The organizations of community meetings and group work have been assisted by the heads of the villages; however, some discussions in which the heads of the villages or commune authorities have not been presented to avoid pressure for local people.

PART II. SOCIAL ASSESSMENT ANALYSIS

A. DEMOGRAPHIC AND SOCIOECONOMIC STATE OF PEOPLE AFFECTED BY THE PROJECT

1. General introduction of areas where social assessment is implemented

1.1. Muong Lat district, Thanh Hoa province

Muong Lat district has natural area of 808.65 sq.km and population of 29,408 including 6 ethnic groups, namely Thai, Mong, Muong, Dao, Kho Mu and Kinh; among them, Thai and Mong are the majority.

Map of Quan Hoa and Muong Lat District, Thanh Hoa Province



Muong Lat is a highland frontier district in the west of Thanh Hoa province. The district was separated from former Quan Hoa district according to Decree No.72/ND-CP dated 18/11/1996 of the government. Muong Lat district is bounded by Vieng Xay and Xop Pau districts (Hua Phan province, Lao) in the west and the south, by Son La province in the north, and by new Quan Hoa district in the east.

The area of natural land is 80,865.06 ha. Agricultural land accounts for 3.8%, forestry land accounts for 52.7%, unused land makes up 42.9%, and the remaining is resident land. Since the Decision No.133-QD/TU dated 16/12/1996 was made by the Provincial Standing Committee and Decision No.2563-QDTC/UB dated 18/12/1996 was made by People's Committee of Thanh Hoa province, the politics, security and national defence situations have been stable, economy and society have had many positive changes.

1.2. Quan Hoa district, Thanh Hoa province

Quan Hoa district has area of 996.17 sq.km. Quan Hoa district, at the northwest of Thanh Hoa province, is 134 km away from Thanh Hoa city in the directions of Highway 47 and Highway 15A. The district is bounded by Son La and Hoa Binh provinces in the north, by Quan Son district in the south, by Ba Thuoc district in the east and by Muong Lat district in the west. Quan Hoa district has population of 42,474 people including 5 ethnic groups, namely Kinh, Thai, Muong, Mong and Hoa in 17 communes and 1 town. Quan Hoa district has 5km boundary in common with Lao People's Democratic Republic. This district is considered to have enormous potentiality for economic development.

1.3. Moc Chau district, Son La province

Map of Mocchau District – Son La Province



Moc Chau district is at the southeast of Son La province. Moc Chau is bounded by Mai Chau and Da Bac districts of Hoa Binh province, Quan Hoa and Muong Lat districts of Thanh Hoa province and Lao People's Democratic Republic in the southwest. It has Pa Hang border gate in Long Sap commune. Moc Chau plateau is famous for its milk cow and tea products. Moc Chau with an area of 2025.1 sq.km is the largest district in area and population of Son La

province. It has population of 139,805 people and the population density is 69 people per square kilometer. Moc Chau has 2 towns, namely Moc Chau and Moc Chau Farm, and 26 communes, namely Chieng Son, Tan Hop, Qui Huong, Suoi Bang, Tan Lap, Na Muong, Ta Lai, Song Khua, Lien Hoa, Chieng Hac, Hua Pang, To Mua, Muong Te, Chieng Khua, Muong Sang, Dong Sang, Phieng Luong, Chieng Khoa, Muong Men, Quang Minh, Long Sap, Van Ho, Long Luong, Chieng Yen, Xuan Nha and Tan Xuan.

Three districts in the project area are mountainous districts which have many ethnic groups such as Thai, Muong, Hmong and so on. The socioeconomic standard is lower than other areas of Son La and Thanh Hoa provinces due to the separated terrain, high mountains, and traffic problems, deficiency in infrastructure and difficulties in people's lives. The communities in 3 districts of project area are primarily Thai, Muong and Hmong; Kinh people account for very low percentage.

Table 3. Population situation in project districts

No.	District	Area of natural land (ha)	Population (people)	Population density (people/km ²)
1	Moc Chau	202,513	137,677	68
2	Quan Hoa	99,647	42,374	42
3	Muong Lat	80,865	28,996	36
	Total	383,025	71,507,677	

2. Communes in project area

Six communes in the project area are Trung Son (Quan Hoa), Muong Ly, Trung Ly, Tam Chung (Muong Lat), Tan Xuan and Xuan Nha (Moc Chau).

Table 4. Area, population of the communes

Area	Land area (ha)	Administrative units under commune level	Population			
			Households	People	Male	Female
Trung Son	7,680.66	7 villages	590	2,602	1,286	1,316
Tam Chung	12,127.56	8 villages	602	3,266	1,542	1,724
Muong Ly	8,508.39	16 villages	730	4,254	2,151	2,103
Trung Ly	19,290.32	16 villages	928	5,205	2,498	2,706
Xuan Nha	9,336.00	8 villages	714	3,317	1,680	1,637
Tan Xuan	15,819.00	9 villages	673	3,623	1,824	1,799
Trung Thanh	8,019.94	10 villages	533	2,628		
Thanh Son	5,543.1	8 villages	495	2,850	1,400	1,450
Total⁴	72,761.93	82 villages	5,265	27,745	12,381	12,735

Source: statistics provided by the People's Committees of the communes

⁴ The total data of male and female population is of only 7 communes. Trung Thanh commune does not provide this data.

Among 5 communes affected directly by Trung Son Hydropower Project, Trung Ly commune has the largest area and population. According to the statistics of area and population, we can realize that population distribution is not equal among these communes. In general, the project area is thinly populated.

2.1. Trung Son commune, Quan Hoa district

Trung Son commune has natural area of 7,680.66 ha which is divided into 7 villages, namely Ta Ban, Co Me, Chieng, Pao, Puon, Bo and Xuoc. The number of households is 590; the total population is 2,062 people in which male accounts for 1,286 people. The rate of natural population growth in 2007 was 0.6%. There are 3 ethnic groups in the commune in which Thai people have 349 households (1,539 people), Muong people have 236 households (1,041 people) and Kinh has 5 households (22 people).

The number of people in working age is 1,006 people in which male accounts for 506 people. Agriculture and forestry account for 60% of the economic structure of the commune. The percentages of industry and construction and services are 7.5% and 32.5%, respectively. The average income is VND 420,000 per person per month. The number of poor households is 296 households accounting for about 50% of the total households. The remaining which is considered as moderately good is 20% of the total. The percentage of the average households is about 30%. There is no rich household.

2.2. Tam Chung commune, Muong Lat district

Tam Chung commune, bordering on the town of Muong Lat district, has natural area of 12,127.86 ha and lies on 2 banks of Ma River. The total population is 506 households with 3,266 people including 4 ethnic groups. Thai people account for 319 households (1,642 people), Mong people have 222 households (710 people), Muong people have 29 households (283 people) and Kinh people have 2 households (5 people).

Mong people in Tam Chung commune reside in 4 separate villages in higher place; 3 other groups live together in 4 villages in lower place.

The commune has 107 Protestants households and all of these households are Mong people. The number of people in working age is 1,513 people in which there are 726 male and 797 female. The rate of natural population growth was 3.6% in 2007.

Agriculture and forestry account for 99.5% of the economic structure. The main crop plants are paddy, bamboo, and bead-tree. Animal husbandry focuses on many kinds of cattle and poultry serving as pulling power and meal for the families. The average income is VND 191,600 per month. The percentage of poor households is 91.7% in which 100% of Mong households are poor.

2.3 Muong Ly commune, Muong Lat district

Muong Ly commune, which is 28 km away from Muong Lat town, borders on Trung Son commune of Quan Hoa district. It is determined that the commune is affected by the reservoir basin of Trung Son hydropower. The commune has an area of 8,508.39 ha lies along the right bank of Ma River. The commune is 34km long and some of its places come up to 9 km wide. It has the total of 730 households with 4,254 people in 16 villages. Among them, Mong people account for the majority of 454 households with 3,500 people living in 4 separate

villages. Thai people have 166 households (452 people) and Muong people have 110 households (302 people) living together in other villages.

There are 229 Protestants and Christian households and all of them are Mong people.

The number of people in working age is 2,460 people in which 1,329 people are male and 1,131 people are female. The rate of natural population growth is 2.5%.

In Muong Ly commune, apart from about more than 10 households selling sundry goods and food as their sidelines, 100% of the households work in agriculture. They cultivate mainly paddy, maize and other kinds of fruit-trees. Breeding focuses on cow, pig and chicken. Some of the Thai households have ponds to keep fish in order to serve meal or in case the family has important things. The average income is VND 150,000 per person per month. The percentage of poor households is about 91%.

2.4. Trung Ly commune, Muong Lat district

The Trung Ly commune centre is 38 km away from Muong Lat town. The commune lies on the left bank of Ma River and is separated from Muong Ly by Ma River. It has an area of 19,290.32 ha and 16 villages. The farthest residential area is 35km away from the commune centre and people have to walk about two third of the way. This area is Chieng Ly in Co Cai village and is one of the areas where people have to resettle because of the influence of Trung Son hydropower.

There are 928 households with 5,205 people in which the percentage of male is 48%. The number of people in working age is 2,016 people. The rate of natural population growth is 3.6% and the physical growth of population is 4.5%/year.

There are 4 ethnic groups living in the commune. The majority is Mong people accounting for 64% of the total, Thai people make up 30%, the percentages of Muong people and Kinh people are 9% and 2%, respectively.

In the commune, there are 249 Mong households are Protestants and 72 Mong households are Catholic. The total number of people in these households is 1,986.

99% of the income of the commune is from agriculture and forestry and only 1% is from other kinds of services such as food and drink and motorbike for sale. The average income of Trung Ly commune is VND 187.500 per person per month; the percentage of poor household in the commune is 65%. Crop plants include paddy, maize and plum. However, plum plant and trade as well as other services only concentrate in Tao village in commune centre. Also, only two Tao and Kham villages close to provincial road have the national grid. Other households only cultivate paddy, maize and plant bamboo for sale.

2.5. Xuan Nha commune, Moc Chau district, Son La province

Xuan Nha commune has a natural area of 9,335 ha and total population of 3,317 people with 699 households. The total land area is 9,336.2 ha, in which the area for wet rice cultivation is 6.73 ha and forestry area is 142.25 ha. The commune has 8 villages, namely Pu Lau, Tun, Na Hieng, Chieng Nua, Chieng Hin, Thin, Na An and Muong An.

The rate of natural population growth is 0.3%, decreasing of 1.13% compared with that in 2006. The commune has 4 ethnic groups living separately or together in the same area, including Thai group (Thai Trang group) with 1,449 people, 1,846 Muong people, 32 Mong

people and 32 Kinh people in 3 households. People in this commune just worship corner ghost, ancestor; they do not have other religions. The average income is VND 4,500,000 per person per year. The number of poor households is 353 accounting for 61% of the total households. The number of average households is 451. There is no rich household as well as moderately good household.

Table 5. Population, Working age, and Gender in project area*

No	Commune	Labor						Percentage ⁵ (%)
		Working age			Total population			
		Male	Female	Total	Male	Female	Total	
1	Trung Son	506	500	1,006	1,286	1,316	2,602	38.66
2	Muong Ly	1,329	1,131	2,460	2,151	2,103	4,254	57.8
3	Trung Ly			2,016	2,498	2,706	5,205	38.72
4	Tam Chung	726	797	1,513	1,542	1,724	3,266	46.3
5	Xuan Nha				1,680	1,637	3,317	
6	Tan Xuan	917	1,018	1,935	1,824	1,799	3,623	53.4
7	Trung Thanh			882			2,628	33.56
8	Thanh Son			852			2,850	29.8
Total				10,664			24,428	43.65

Source: Statistics provided by the People's Committees in the communes

2.6. Tan Xuan commune⁶, Moc Chau district, Son La province

The commune has total natural area of 15,819 ha. It has just been established in 2007 and is bounded by Lao in the west and by Xuan Nha commune in the east. It consists of 9 villages, namely Buot, Nga, East Ta Lao, West Ta Lao, Sa Lay, Lay, Bun, Cot Moc and A Lang.

The commune has 673 households with 3,623 people. There are 1,824 male and 1,799 female. The number of people in working age is 1,935 people in which 917 people are male and 1,018 people are female. The number of people out of working age is 1,688 in which 1,513 people are under the age of 16 and 176 people are beyond 60. The commune has 4 ethnic groups, namely Thai, Muong, Hmong and Kinh. There are 356 households of Thai people (White Thai group) with 1,585 people; 69 households of Muong group with 326 people; 246 households of Hmong group with 1,706 people and 2 Kinh households with 6 people. People in this commune only worship corner ghost, ancestor; they do not have other religions such as Buddhism, Protestant and Catholic. The average income converting to rice is 300 kg per person per year, converting to cash is under 160,000 per person per month.

The number of households working in agriculture is 673. All of the economic activities are agriculture and forestry. The main crops are paddy, maize and cassava. Domestic animals are buffalo, cow, horse, goat, chicken and duck. At present, the infrastructure and head office of the Commune People's Committee are being built.

2.7. Trung Thanh commune has the natural area of 8,019.94 ha which is divided into 10 villages. The total population of the whole commune is 533 households with 2,628 people. Thai people account for 65%, Muong people occupy 30% of the total, Kinh account for 3%

⁵ The percentage does not include Xuan Nha commune because it has no data.

⁶ Because the commune has just been established, there is some insufficient data.

and the remaining is Mong group. In the commune, there are 52 people are Catholic and all of them are in Mong ethnic group of Buoc Hieng village.

The area of farmland is 860.86 ha of which the area of land for growing rice is 21.7 ha. With this area, people can grow 2 crops; the remaining area is for growing upland rice. The area of forestry land is 6,765.8 ha of which 4,000 ha belong to Pu Hu nature reserve which needs protecting strictly, the remaining is regeneration forest and production forest accounting for 289 ha. The poor households in the commune occupy 67% of the total households. The average income of the commune is VND 300,000 per person per month. 95% of the households in the commune work in agriculture sector with the main crops are rice, maize, cassava, bamboo...4% of the total household's trade in agricultural product and groceries.

2.8. Thanh Son commune is also one of the communes affected by the route from Co Luong crossroads to Co Me where Trung Son Hydropower Plant is being built. The commune is divided into 8 villages with the total area of 5,543.1 ha. The whole commune has 495 households with 2,850 people of which there are 1,400 male and 1,450 female. The number of people in working age is 852 accounting for 29.8% of the total population. There are 3 ethnic groups of which Thai people account for 80%, Muong and Kinh groups occupy 18% and 2%, respectively.

The number of rich households in the commune is 25, accounting for 5% of the total households, the percentage of poor households is 49.50%. The numbers of relatively good households and average households are 100 households and 125 households, accounting for 20.2% and 25.2% of the total, respectively. The average income of the whole commune is VND 390,000 per person per month. The main sector of economic structure of the commune is Agriculture-Forestry, occupying 99% of which 34% is agriculture sector and 65% is forestry. 1% is from services.

In general,

- In the communes in project area, the percentages of the households working in agriculture and forestry sectors are often from 75% (in Trung Son commune) to 95% of the total households.
- The percentages of people working in industry and services are small.
- In these communes, the average percentage of people in working age accounts for 47.1% of the total population. However, this percentage will change if we calculate in each commune. Among 4 communes which have data of this issue, Trung Son commune has the lowest percentage of people in working age, which only accounts for 38.66% of the total population. Next, Trung Ly commune has the percentage of 38.72%. Muong Ly is the commune which has the highest percentage of people in working age, accounting for 57.8% of the total.
- The average income per person per month of these communes is not similar. 3 communes in Quan Hoa district have the average income of VND 300,000 and above per person per month. However, 3 communes in Muong Lat district have the average income of VND 150,000 to VND 192,000 per person per month. There is much difference in the average incomes per person per month of 2 communes in Moc Chau district of Son La province. While Xuan Nha commune has the average income of VND 375,000 per person per month, Tan Xuan commune has the average one of VND 160,000. It can be explained that Tan Xuan commune is a new commune that has just been separated from Xuan Nha commune since 2007.

3. Villages affected by Trung Son hydropower project

It is determined that there are 14 villages directly affected by the building of Trung Son hydropower project. Among them, there are 5 villages having only from 4 to 5 households which have to move according to the method proposed by design consultants, namely Pu Lau village in Xuan Nha commune, Pom Khuong and Can villages in Tam Chung commune, Muong 2 village in Muong Ly commune and Pa Bua village in Trung Ly commune. Apart from Can village which has 4 Thai affected households in the residential area in Kha Ni stream, in 5 other villages, all of the affected households which will move on their own are of Mong people.

Among 14 villages, Ta Ban, Xuoc and Quan Nhuc villages in Trung Son commune, Tai Chanh and Nang 1 villages in Muong Ly commune, Lin village and Chieng Ly residential group of Co Cai village in Trung Ly commune are the villages in which the resettlement activity will be implemented. Also, Chieng village in Trung Son commune is affected because it is the place chosen to set up the resettlement area. Details as follow:

3.1. Slightly affected villages

3.1.1. Pom Khuong village⁷, Tam Chung commune

According to the data of design consultants in Pom Khuong village, there are 4 Mong affected households which have to move. These families have houses close to Ma River. However, according to the village and commune authorities, 3 more households have built houses here since 2004 and in 2005, Giang A Chu's household moved to Daklak; therefore, the number of affected households is 6.

3.1.2. Can village⁸ (Kha Ni), Tam Chung commune

The number of households in Kha Ni stream area of Can village is 8, increasing of 3 households compared to the study data of design consultants. These households are Thai people in Can and Lat villages. They built their houses there because it is convenient for them to take care of their fields and cultivation.

3.1.3. Muong 2 village, Muong Ly commune has 4 Mong households which are affected. There are only 2 households living in the affected area, 2 other households have moved and lived in hill-side plot but they still have their houses in the previous place.

3.1.4. Pa Bua village, Trung Ly commune does not have any change in the number of the households compared to the initial data of design consultants.

3.1.5. Pu Lau village⁹, Xuan Nha commune lies between Tun village and East Ta Lao village of Tan Xuan commune. Pu Lau village is about 12 km away from Xuan Nha commune center. The area of rice field is 15.9 ha (2 crops). The area of hill-side plot is 19 ha. The village has 2 ethnic groups, namely Muong and Thai. According to the statistics above, Pu Lau village has 91 households with 440 people, in which 5 households are required to move (moving up in the sphere of village). In the village, apart from Ha and Dinh families, there are Mui and Lo

⁷ Pom Khuong village was separated from on village in 1992 when carrying out "going down the mountain" policy to stabilize the life of Mong ethnic group.

⁸ Kha Ni Spring area (according the Report on General project – PEEC4) is in fact a place in Can village of Tam Chung commune.

⁹ Pu Lau means hill/mountain that have many bulbuls (co lau)

families. So far, Thai and Muong groups still live together; therefore, people in this village can speak Muong and Thai languages fluently. However, the numbers of Muong households and people are greater than those of Thai people, so the cultural factors of Muong are somewhat more distinguished and Muong language is used more widely. In agriculture, wet rice cultivation and hill-side plot cultivation are equal. The village has 15.9 ha of the area of two-crop-fields and 19 ha of hill-side plot. Among 91 households in Pu Lau village, there are 5 households moving up, namely Mui Vam Chom, Dinh Van Quan, Dinh Van Phong, Dinh Van Nguyen, and Lo Van Nghia. The area which will be inundated is mainly wet rice fields, some fruit-trees and bamboo along stream, which has land area of 25,580 square metres including garden, field and residential land.

3.2. Villages in which resettlement activities have to be implemented

3.2.1. Xuoc village¹⁰, Trung Son commune, Quan Hoa district

There are 22 households with 99 people in which 19 households are poor, 3 households are nearly poor. There are 50 male and 49 female, 30 main labours and 20 secondary labours. 100% of the people are Thai living in their traditional houses on stilts. Xuoc village lies on the right bank of Ma River, 8k away from Trung Son commune center. The terrain of this village is not even and flat. The total area of farming land is about 20 ha. People support themselves mainly by growing rice and bamboo. Each household has an average of 2 ha. People have not used electricity from the national grid yet. There are difficulties in traffic because 100% of the ways are pathway. Therefore, if people want to transport a great amount of goods, they have to use waterway. People use natural water source such as brook, stream. 100% of the households in Xuoc village have to resettle in a new place.

3.2.2. Ta Ban village, Trung Son commune, Quan Hoa district

There are 225 households. All of them are Thai people settling there for such a long time. The village lies along Poi Stream Valley which has a relatively wide terrain and is 6 km away from the commune centre. People use wide pathways which can be accessible by cars. People have not used electricity of the national grid yet. They use natural water sources such as brook and stream. 100% of people in the village live in their traditional houses on stilts. They do not have loudspeaker system.

3.2.3. Quan Nhuc village¹¹, Trung Son commune, Quan Hoa district

Quan Nhuc village, lies along the Quanh stream mouth pouring into Ma River, is in Ta Ban hamlet. According to design consultants, there will be 10 households with 39 people have to move. However, the Commune People's Committee thinks that there will be only 5 households including 2 Muong households and 3 Thai households with 20 people living there have to resettle.

3.2.4. Nang 1 village, Muong Ly commune, Muong Lat district has 47 households with 231 people. All of them are Thai people, increasing of 5 households and 6 people compared to the data of design consultants. This increase is due to young married people made their separate

¹⁰ Residential area for more accurate because it does not have enough number of households according to the regulations to become a village.

¹¹ There is no Quan Nhuc village; it only has 5 households (20 people). The small village Quan Nhuc (lies along the Quanh stream mouth pouring into Ma River) is in Ta Ban hamlet. The households in this residential area include: Dinh Cong Trang (Muong); Dinh Cong Trieu (Muong); Pham Ba Muon (Thai); Pham Ba Manh (Thai) and Pham Ba Mien (Thai).

home after the matrilineal custom of Thai people had been finished and natural population growth.

Among 227 people¹² of Nang 1 village, there are 111 male and 116 female. There are 83 children in the school-age from pre-school to high school. The number of children who under the age to go to pre-school is 8. The number of people participating in commune authorities such as postman, nurse, permanent official is 6. Other people are farmers involving in cultivation and breeding.

There are 22 people in the 0 to 5 age group, the number of people in school-age is 77; 49 people in the 19 to 30 age group; 34 people in the 31 to 40 age group; 19 people in the 41 to 50 age group and the remaining is 51 and above.

The education level of adults is mainly under primary school level and secondary school level, accounting for 178 people. The number of people who have high school level is 23 in which 13 people have the 12th grade level. Especially, only one female is pursuing university education.

3.2.5. *Village Tai Chanh* – has been divided into 2 small sub-villages – the higher sub-village (Nang Mon) included 18 family households, there are 34 family households current fixed residence at the lower sub-village (Tai Chanh). There are 245 people in total which take in account of 120 males and 125 females. Tai Chanh village had 2 ethnic groups living together: Thai group and Muong group. Tai Chanh village located adjoining to Ma River and about 5 km to the centre commune. The distance between 2 sub-villages Tai Chanh and Nang Mon is about 200m.

The people at Nang Mon had been separated from Tai Chanh at the years: 2005, 2006, 2007 and 2008 according to policy of suburban district and commune in order to avoid accidents caused by stone collapse and fall down while Tai Chanh village located at near to the ground zone right at the mountain's base.

Occupation framework of the villages divided into 2 groups: the farmers and the pupils. Number of pupils from first year of elementary to last year of junior high school is 39 pupils. All of them studied at Muong Ly commune's schools. Pupils who wish to go to high school need to take board and lodging at suburban district's town. There are 26 children at the kindergartens.

The age geographic at this area is very similar to other places. There are 26 children at the age 0 to 5 years old take about 10.6% of the total population. The biggest age group is the schools age (between 6 to 18 years old): 77 people in total and take 31% of population. There are 59 people between 19 to 30 years old; 25 people between 31 to 40 years old; between 41 to 50 years old are 26 people; and above 51 are 32 people.

Level of education at Tai Chanh village is no difference to level of education at Nang village. Only 1 pupil attends at intermediate, but the number of high school students at Tai Chanh village is far lower than Nang village, just 5 students. There are 62 pupils attending at elementary and the rest are secondary schools pupils.

¹² According to head of the village, there are 231 people but Mr. Tham only provided the list of 227 people.

3.2.6. *Lin Village – Trung Ly commune*

Lin Village at Trung Ly commune also divided into 2 sub-villages: Lin Trong and Lin Ngoai. Lin Ngoai includes 16 households-102 people will be affected by Trung Son hydropower project and required to move inside about 1 km in comparison with the current place. Lin Trong includes 14 households which recently separated from Lin Ngoai in 2000 because of lacking space for living and production.

There are 102 people living in total at Lin Ngoai, with 50 male and 52 female. Everyone at Lin village (both Lin Trong and Lin Ngoai) is Thai.

Level of education: except 21 children at kindergarten, there is only one person at Lin village acquired education training up to the second year of high school, the rest stopped at elementary or secondary schools. However, the number of people which actually studied at secondary schools is just 32 persons.

Occupation framework: Except pupils at schools and little children, everyone at the village are farmer by mean of cultivate and breed activities.

3.2.7. *Chieng Ly¹³, Trung Ly commune, Muong Lat district*

Chieng Ly is an inhabitant's zone of Village Co Cai of Trung Ly commune. This inhabitant's zone is living quite separate with the main village and its people come from both Muong and Thai nationalities living together. Totally, there are 15 households with 68 people living at Chieng Ly village which includes 5 Thai's families and 10 Muong families. Among of 68 Chieng Ly people, there are 29 males and 39 female.

Age geographic: there are 9 children under 5 years old. Number of people at the age 6 to 18 is 41. Number of people between 19 and 30 years olds is 13; from 31 to 40 years old are 9; number of people between 41 to 50 years old is 6 and above 50 are 13 people.

Level of education: group leader of Chieng Ly had university qualification. Number of people trained at high school is 3 people. There are 7 children at kindergarten age, and the rest is the group of people has qualification from elementary to secondary school. People who have elementary qualification or similarity are 58 people.

3.2.8. *West Ta Lao¹⁴, Tan Xuan commune, Moc Chau district*

According to the documents, West Ta Lao has 107 households-482 people which include Muong nationality: 358 people, Thai nationality 124 people. Within 107 households at West Ta Lao, **62 households will be required to move** to the new resettlement area. **Location** of the village: on the east side of Tan Xuan commune, near East Ta Lao village; speeded within the valley. Village is about 6 km to centre of Tan Xuan commune. Field area: 15.9 ha (2 harvests/year), hills-side plots: 19 ha. Nationalities: Muong and Thai. Village's families' bloodline: Dinh, Mui, Ha, Lo, Vi, Ngan.

¹³ *Chieng Ly group is in Co Cai village. The officials of Muong Lat district often call Outside Co Cai;*

¹⁴ *Previously, West Ta Lao and East Ta Lao were 2 parts of a big village which was called Ta Lao village. In fact, no one could remember the name of that village when it was established, the oldest name which people could recognize is To Lao which means: to resist/to fight/ to rival. At the XIII-XIV century, people in the village had accomplished a mission to defeat the army of Lord of Laos to protect the lands of Lord Xang. After the victorious, to remind the villagers merit, Lord Xang changed the old name of village (which could not discover) to To Lao. After a long period of time, To Lao changed to To Lao, the incident could due to people who wanted an easier pronunciation.*

3.2.9. East Ta Lao Village

Number of households: 110, People: 453 which includes Thai nationality: 72 household, Muong nationality: 28 households (2008). All of those **110 households** presented at the list which will be **required to move** to the new resettlement area. This village located at west of Tan Xuan commune, east of Xuan Nha commune and near West Ta Lao. Fields: 11 ha, fishpond: 2 ha, bamboo: 600 ha; hillside fields: 50 ha. Ethnicity: Thai people account for two third of the total, Muong. Families in the village: Ha, Lo, Luong, Vi, Ngan, Hoang.

Table 6: Population of affected villages¹⁵

No.	Area	Total households of the villages		Total of affected households (PEEC4)		Total of affected households	
		Households	People	Households	People	Households	People
	Trung Son commune			192	915		
	Ta Ban village	225		159	769	161	
	Xuoc village	23		23	107	22	90
	Quan Nhuc village	10	39	10	39	5	20
	Muong Ly commune			80	433		
	Tai Chanh village	52	245	34	183	34	183
	Nang village	47	231	42	227	47	231
	Muong 2 village			4	23	4	23
	Trung Ly commune			36	201		
	Lin village	30	163	16	95	16	102
	Chieng Ly group ¹⁶	15	68	16	78	15	68
	Pa Bua village	86	529	4	28	4	28
	Tam Chung commune			9	38		
	Poom Khuong village	55		4	22	6	
	Kha Ni Spring – Can village	64		5	16	8	
	Tan Xuan commune			151	741		
	East Ta Lao village	110	453	100	455	110	453
	West Ta Lao village	107	482	51	286	62	
	Xuan Nha commune			4	25		
	Pu Lau village	91	440	4	25	5	25
	Total			472		499	

¹⁵ The statistics in the middle column are provided by PPEC 4 in the Report on General Project on Migration and Resettlement for Trung Son Hydropower Project. The data in the last column is provided by the heads of the villages for social assessment consultants.

¹⁶ Chieng Ly group is in Co Cai village. Co Cai village has 86 households with 438 people. In this report, we still take the place-name as Chieng Ly.

Source: statistics of the Report on General project by PPEC 4 and of People's Committees of the communes and heads of the villages provided for social assessment group.

In fact, the number of villages affected by the construction of Trung Son Hydropower Project including main facilities and reservoir is 13 with 498 households which have to resettle. This data is different to the survey data in 2004 by PPEC 4, which is 24 households. Ta Ban village increases of 2 households, from 159 households to 161 households, Nang village increases from 42 to 47 households. Khani Spring area in Can village increases of 3 households, from 5 to 8 households, Pom Khuong village from 4 households to 6 households, Chieng Ly group decreases of 1 household, from 16 to 15 households, Quan Nhuc residential area decreases from 10 households to 5 households. West Ta Lao village of Tan Xuan commune has a highest increase of 11 households, from 51 to 62 households. These differences are because of not only the natural population growth rate but also physical population growth rate. Moreover, in Kha Ni Spring residential area in Can village, in fact it is not residential area but the place where people living in Can village erect houses to take care of their fields; therefore, the increase of houses in this area may not depend on these two factors above.

3.2.10. Communes affected by the route Co Luong – Co Me

According to the survey data in January 2008 of the design consultant group investigated the impacts of the route Co Luong – Co Me, the sphere of influence of the improvement and construction¹⁷ of the route is as follows:

Permanent acquisition: there are 71 households, 320 people of which Thanh Hoa province has 46 affected households with 206 people, accounting for 64.38% of the total and Hoa Binh province has 25 affected households with 114 people, occupying 35.63%.

Temporary acquisition: there are 43 households with 188 people. Thanh Hoa province has 38 affected households with 169 people, accounting for 89.89% of the total; Hoa Binh province has 5 affected households with 19 people, accounting for 10.11%.

In secure corridor: there are 150 households with 621 people. Thanh Hoa province has 106 affected households with 463 people, accounting for 74.56%. There are 44 affected households with 158 people in Hoa Binh province, which occupies 25.4% of the total.

There are 114 households of 508 people who have to resettle including the households in permanent and temporary acquisition areas.

In the scope of “temporary acquisition and permanent acquisition”: the number of households which have to move is 114 with 508 people of 3 main ethnic groups. Thai group has 60 households, accounting for 52.63% of the total, Muong group has 24 households, occupying 21.05% and Kinh group has 30 households, or 26.32% of the total. 100% of the affected households work in agriculture sector.

4. Ethnic Minority

There is about 75% of the ethnic minorities living in Northern Mountainous Area and a part of Tay Nguyen. The remaining is living in Southern provinces and urban areas.

¹⁷ Some parts of the route will be newly built.

Table 7. Population, ethnic group in 2 project provinces*Unit: %*

No.	Province	Average population (thousand people)	Kinh (%)	Ethnic groups (%)	Number of groups	Main groups
1	Thanh Hoa	3,680.4	85.6	14.4	28	Muong 9.4%; Thai 6% and Mong 0.38%
2	Son La	972,800	17.42%	85.28	12	Thai 54.7%, Mong 13%, Muong 8.15%
	Total	13,408.4	51.51	48.49%		
	Nationwide	84,155.8	86%	14%	54	

Source: Statistical Annual Publication 2006 and data of Committee for Ethnic Minority and Mountainous Area.

The percentage of ethnic minorities in 2 provinces is about 50%, much higher than the nationwide rate, which is 14%. The main ethnic groups in these areas are Thai, Muong and Mong. The data of ethnic groups in project districts is as follows:

Table 8. Ethnic groups in project districts*Unit: %*

Area	Total ¹⁸	Thai group	Muong group	Mong group	Kinh group	Dao group	Others
Quan Hoa	8,664	65.4%	24.3%	1%	9.03%		
Muong Lat	35,000	45%	17.3%	40%	0.82%	0.8%	1.05%
Moc Chau	131,000	33%	15.5%	13.5%	30.2%	6.05%	1.17%

Source: data provided by the People's Committees of Quan Hoa, Muong Lat and Moc Chau districts.

According to the investigation and statistic documents provided by the regional, general information about population at the social assessment areas could show by the table 9.

There are 3 main ethnic minorities, which are Mong, Thai and Muong living within the project's area. Thai nationality in this area is classified as the white Thai branch. After investigated the village's history of the village which required to resettlement, almost all of Thai's people at communes Trung Ly, Muong Ly and Trung Son had same accents which emigrated from commune Xuan Nha of Moc Chau suburban district.

¹⁸ The data provided by the districts is different. Quan Hoa district provided the number of households in 2007 and Muong Lat district provided the number of people in 2007, and the data of Moc Chau district is in 2006. Therefore, we use the percentage %.

Table 9. Nationality's composition at communes within the project area (by households)

Nationality	Trung Son	Muong Ly	Trung Ly	Tam Chung	Xuan Nha ¹⁹	Tan Xuan
Thai	59.15%	22.73%	29.09%	52.99%	66.19%	54.23%
Muong	40%	15.06%	4.10%	9.80%	33.80%	10.25%
Mong		62.19%	65.02%	36.87%		36.55%
Kinh	0.84%		1.49%	0.33%		0.29%

Source: data provided by the People's Committee of the communes

Mong people in project area are living at 4 communes including Tan Xuan (Moc Chau suburban district), Tam Chung, Trung Ly and Muong Ly of Muong Lat suburban district. At those communes, all of Mong people are emigrant from other region which mainly from Cao Bang, Bac Kan and Lao Cai. Mong people are classified as white Mong branch. Within the villages which directly affected by the project, there are 14 families which resettle on their own at Muong 2 village (Muong Ly commune), Pom Khuong village (Tam Chung commune) and Pa Bua village (Trung Ly commune) are Mong people.

Muong people living here are also the emigrants from the ancient time and have accentors at Bi village at Hoa Binh province. Muong people at Trung Ly commune and Muong Ly commune had been displace from Xuan Nha – Moc Chau and live together with Thai people. After the process of living together between Thai people and Muong people, it very hard to identify Muong people by their clothes at the present time.

5. Poverty and emigration

5.1. Poverty

According to World Bank, the income of USD 1 per day in accordance with the equivalent purchasing power of the locality compared with the world dollar to satisfy the needs of life is general standard for absolute poverty.

In Vietnam, there are some poverty standards brought out by MOLISA at different times. Recently, according to the Decision No.170/2005/QD-TTg made by the Prime Minister on July 8th 2005 about promulgation of poverty standard applied for the period 2006-2010, in rural areas, the households which have the average income of VND 200,000 per person per month (or VND 2,400,000 per person per year) and below are considered poor households; in urban areas, the households which have average income of VND 260,000 per person per month (or VND 3,120,000 per person per year) and below are considered poor households.

Poverty distributed by geographical regions in the whole country

Poverty is clearly characterized by regions. In the mountainous areas, remote areas or areas where ethnic minority groups living, the rate of poverty is quite high. 64% of poor people is living in Northern Mountainous area, the North of Central Region, Tay Nguyen and Coastal Central Region. These areas have difficult living conditions, in separated regions, the access

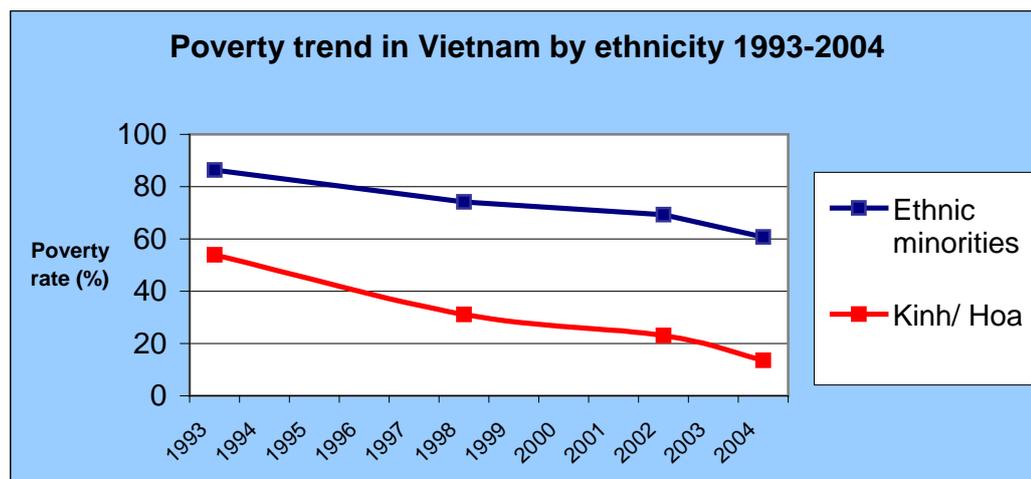
¹⁹ Data of households in Xuan Nha is from 5 villages: Tuon, Chieng Nua, Thin and Na An. Other villages have no data.

to production and services is still limited, the infrastructure is underdeveloped and weather conditions are adverse with many natural calamities.

Poverty rate among groups

The ethnic minorities groups in Vietnam account for 14% of the country's total population but occupy 29% of poor households in Vietnam according to the statistics in 1999. In general, the economic life of ethnic groups in Vietnam is not as developed as the economic life of Kinh people. Also, there are differences in economic growth level among these ethnic groups. The nationwide average income per capita is VND 484.004 per month.

Graph 1: Poverty trend in Vietnam by ethnicity



Source: Survey of households living standards in Vietnam in 1993 and 1998, Survey of households living standards in Vietnam in 2002 and 2004 by General Statistical Office.

The gap of poverty between ethnic minority and Kinh and Hoa groups tends to increase from 32.5% to 47.2% in 2004. The rate of poverty reduction of ethnic minority is also slower than that of Kinh and Hoa people even when they live in the same area such as in the same commune. According to Update Poverty Report 2006, in terms of average income, expenses of the households and other indicators of access to sanitation facilities and energy, the ethnic minority always tend to lag behind Kinh and Hoa groups. In order to reduce the gap between ethnic groups and between regions, The Government have had various of development programs and projects which pay special attention to impulse the development ethnic minority groups. These programs include many areas such as healthcare, education, culture and society and economy. The most remarkable programs recently are the following:

- Program 135 as to build small infrastructure for poor and extremely difficult communes. Besides, the program also develop some activities to encourage agricultural and forestry expansion and to apply advanced technology in these sectors in order to equip people with knowledge and skills to impulse their production;
- Program 134 to eliminate thatched cottages;
- Other programs of school-fee free for ethnic minority children, examine and treat medically for ethnic minority people free of charge, settlement is carried out on a large scale for ethnic minority groups.

According to the statistic information provided by people’s committee, the percentage of poor household within this area is quite high. The lowest among the communes is Trung Son commune, however, the percentage of poor household is still more than 50%, and the highest number is 92% come from Tam Chung commune. There is a clear link about number of poor households directly proportional to occupation structure of the commune

Table10. Classified household at commune within project area

Unit: %

No.	Commune	Poor	Average	Moderately good	Rich	Total
1	Muong Ly	90.68 %	0	9.31 %	0	100%
2	Trung Ly	65 %	26.17 %	8.83 %	0	100%
3	Tam Chung	91.69 %	7.14 %	1.16 %	0	100%
4	Trung Son	50.16 %	29.49 %	20.33 %	0	100%
5	Xuan Nha	61%	49 %	0	0	100%
6	Tan Xuan ²⁰	<i>No data</i>				
7	Trung Thanh	65.9%				
8	Thanh Son	49,5%	25.3%	20%	5%	100%
Total		67.69 %				100%

Source: data provided by the People’s Committees of the communes

The percentage of household classified based on the standards: poor, average, moderately good and rich at the table above show a relatively sombre state of economy of people at 7 communes within project area. Special noticeable is the number of poor household dominated at 2 communes where many Mong people living: Tam Chung (91.69%) and Muong Ly (90.68%). The households which could classified as Rich only present at Thanh Son commune where many Muong people living with 5%.

5.2. Migration

In the last decades, from 1975 to 1997, the percentage of ethnic minority groups from the North flocked to Tay Nguyen and provinces in the east of the South region due to “the economic prospects” was 88.3% (Vietnam Immigration Examination – VIE project 95/004). Free migration in provinces, among provinces or even emigration to other countries were rather popular. Unlike Kinh people, the ethnic minority groups often migrate in family, family group or even village as the following kinds:

- ✚ Shifting cultivation: the shifting cultivation often appears in some small ethnic minority groups as to find arable land to till the fields. This kind of migration is not leaving for far places but often the neighbouring provinces.

²⁰ *Tan Xuan is a recently established commune, therefore no information could found.*

- ✚ Migration or emigration: this kind often appears among the ethnic minority groups in the Northern mountainous areas with exhausted land and steep slope. The groups such as Mong, Dao, Thai, Tay, Nung...tend to migrate to the provinces in Tay Nguyen and the east of the South region.



Photo: the meal of an ill woman with sticky rice and bitter egg-plants and “cham cheo” ²¹

Since 1989, at Thanh Hoa province, Mong people who belonging to the south communes who included: Lao Cai, Son La, Lai Chau, Yen Bai made a mass illegal emigrate and residence at Muong Lat and Quan Hoa suburban districts. To the first quarter of 2002, there are 1,463 households with 9465 people living at 5 communes-27 villages of 2 suburban districts. Quan Hoa suburban district had 2 villages, 2 communes with 113 households, 709 people. Muong Lat had 3 communes, 25 villages with 1,350 households-8756 people. At the recent years, there are some case of immigrate to Neighbour country Lao, or immigrate to the Central Highland or back to their previous places appeared.

Therefore, the community of Mong people at 3 communes of Muong Lat suburban district had just lived in this area at the beginning 90s of 20th Century. Currently, at three communes: Tam Chung, Muong Ly and Trung Ly, some of Mong people continue immigrating to Laos, the other village and vice versa. The Government is working on the project which is to make the living of Mong people in Muong Lat become more stable and total amount of money for the project is about 291 billion Vietnam dong

B. ECONOMY AND SOCIETY

1. Land and Utilizing land

According to the report of the environmental effects of Trung Son hydropower, the current utilization of lands at area of the project is followed:

²¹A special spice made from salt and forest peppercorn of Thai ethnic group

Table 11. Using land situation in the districts of project area

No.	District	Total natural land area(ha)	For Agriculture (ha)	For Forestry (ha)	No use (ha)
1	Moc Chau	202513	34830	81359,21	76598,6
2	Quan Hoa	99647	7819,94	65100,36	26726,78
3	Muong Lat	80865	3046,2	42983,52	34835,34
	Total	383.025	45.696,14	189.443,09	138.160,72

Source: Statistic of Muong Lat year 2002, 2003

The natural area at the villages of project's area is quite large – 72,761.93 ha, however the total land for agriculture is small and most of the land is used for forestry.

Table 12: Using land situation in the communes of project area

Area	Agriculture		Lands for perennial plant	Forestry	
	Wet rice-growing area	Hills-side plots area		Natural forest	Forest for production
Trung Son	54.14	350.6	6.72	2,774.3	2,818.0
Muong Ly	10	450		1,768	2,100.39
Trung Ly	33	879	219	7,526	6,500
Tam Chung	62.6	270	20	2,361.8	2,571.8
Xuan Nha	6.73		66.08		142.25
Tan Xuan	71.81	397	45.97		

All the 6 villages don't have a large amount area for growing wet rice and the wet rice growing area of villages Ta Ban, East Ta Lao and West Ta Lao could grow in two crops. The area for hills-side plots is either not so much compares to the total nature area and has high slope. Most of them can only grow one crop a year and the main foods are rice corn and cassava.

The forestry area takes a large percent of natural lands of the communes. Except the nature forests, the forests for production usually used to grow bamboo or bead-trees. Majority of households have hills-side plots areas set up on forestry areas.

Granting certificate of land usage has been processed at Muong Lat and Quan Hoa suburban districts since 1999 after the separate of Muong Lat from Quan Hoa. Nowadays, the land tenure households had the certificate of land usage and the boundaries of forestry lands have been established and given permission to households. The activities of granting certificate of land usage also processed at Xuan Nha commune.

2. Infrastructure

2.1. Electricity

Families at villages of project's area are currently using the electricity from mini hydroelectric power and not every family can have it. The number of families can use national network electricity is small; only 404 families which equal to 10% of total families in villages use network electricity. They focus on two villages: Trung Ly and Tam Chung where have geographical advantage compare to the other villages: near Muong Lat town and a province road cross through the centre of the village. Families use mini hydroelectric power are 2376 which hold 56% and 1457 families still use other method for lighting such as candle, oil lamp...

The statistic of using electricity of villages:

Table 13: Number of households using electricity in the communes

Unit: household

Area	Total of households	Using small hydroelectric machines	National Grid	Other sources
Trung Son	590	540	0	50
Muong Ly	730	593	0	137
Trung Ly	928	460	220	248
Tam Chung	602	237	184	181
Xuan Nha	714	142	0	572
Tan Xuan	673	404	0	269
Trung Thanh	533	373	0	160
Thanh Son	495	346	0	148
Total	5,265	3,095	404	1,765

Source: data provided by the People's Committees of the communes

2.2. Transportation

The communes which have most advantage in transportation, based on the criterion of having road to centre of communes, is Trung Ly commune, Trung Son, Xuan Nha and Tan Xuan. People from 2 other communes Tam Chung and Muong Ly could only arrive to centre of communes by motorcycle. However, with the resettlement communes, it's not that easy. People from Nang 1 village, Tai Chanh village (Muong Ly commune) could only come to suburban district's town by motorcycle with about 28 km of mountain pass and full of obstacles and only can go by this vehicle if it does not rain. In the other hand, the distance between Lin village, Chieng Ly and centre communes is 38 km in which people have to walk for more than 10 km and the distance prolonged to 76 km if come to the centre of suburban district



Picture 2. Route into Muong Ly commune

The entire transportation network between villages was constructed with money investment from source of capital 135 and 134 or people built on their own (Lin village, Chieng Ly-Trung Ly commune), however, due to the nature terrain, the roads are usually small and hard to use.

2.3. Clean Water: within the communes, people usually use water come from the mountain (mó water). In general, water use in living activities within communes at the social assessment areas are mó water or river's water.

2.4. Broadcasting

All the communes have loudspeaker system except for Muong Ly and Tan Xuan communes. The broadcast is carried out two times a day, in the morning and in the afternoon. However the station only serves some villages at the centre of the communes. Therefore, in the villages which have to resettle, the header of the village has to spread by word of mouth or call for people to disseminate information. At Tam Chung commune, there are 70 families had telephone line, at Trung Son, there are 12 and at the remaining communes there are about one or two public telephone each. Especially, Tan Xuan commune does not have any telephone and it is very difficult to communicate with.

The ratios of having TV each village are: Trung Son 480/590, Muong Ly 109/730; Trung Ly: 30%; Tam Chung: 246/602; Xuan Nha: 80%.

2.5. Market

All the villages don't have market. Tam Chung village is 2 km far from town market and the other is 24 to 74 km far. Inside the village there are some families sell the necessary good however because of the inconvenient transportation, the price of good is higher while the good, which is produced by the people in the villages, is sold cheaper at town market.

2.6. Education

Most of the villages have kindergarten, primary and secondary school. Statistic of schools, teachers and student of villages in project's area:

Table 14. The education status in the project communes

Target	Trung Son	Muong Ly	Trung Ly	Tam Chung	Xuan Nha	Tan Xuan
Facilities						
Kindergarten	0	20	19	14	6	0
Primary	28	40	34	14	1	21
Secondary	10	5	4	6	1	
Teachers	46	69	89	54	96	36
Students	442	871	975	536		555

Source: data provided by the People's Committees of the communes

Almost all of the students are attending at kindergarten and primary education. Because of the poor material base, most of the class rooms only have table and chair and lack teaching equipment. Moreover, the living standard here is very low and it is difficult for students to continue studying Secondary. At Xuan Nha commune, Primary and secondary schools are organized as half day living at school model. There are houses for teachers and far students.



Picture 3. The tent of pupils

The teachers are most male and Kinh. The number of ethnic minority teachers is not so many. For example, at village Tan Xuan, there are 22 out of 36 teachers are male and there are only 13 are ethnic minority teachers. At Muong Ly village, there are 45 out of 69 teachers are male and 50% of total is ethnic minority teachers. The same with Trung Ly village, the number of male teacher is 76% of the total and the ethnic minority teachers have only 23.5%.

Table 15. Number of pupils and number of pupils leaving school

The number of pupils	Trung Thanh	Thanh San	Trung Son	Muong Ly	Trung Ly	Tam Chung	Tan Xuan²²	Total
Primary school	418	192	260	598	620	476	493	2857
Secondary school	257	185	167	250	315	250	62	1486
High school	20	18	15	20	40	0	0	113
In service-College-University	10	9	6	3	9 (In-service)	10		47
Left school			0	67	47		4	

- *There is no number of students at all level in Xuan Nha*

There are 170 illiterate people in Trung Son Commune, Quan Hoa district (Thanh Hoa), in which 102 females accounting for 60%. The alliteration is very serious in Muong Ly Commune where many H'Mong people living together. In all commune, there are 2534 illiterate people, accounting for 59.56% (1308 males, 51.61% and 1226 females, 48.38%). In Trung Ly commune, there are 55% illiterates. There are 802 illiterate people in Tam Chung commune, in which 345 males accounting for 43.015 and 457 females with 56.98%.

2.7. Health:

Except for Tan Xuan that does not have medical station, all 5 remain communes have got stable or semi-stable medical station but the medical personnel, facilities and medicines also lack. There is no doctor and each commune has a physician, from 1 to 2 nurses and most of them has not got midwife. According to the commune's report, the inoculation against an epidemic and the family planning have been implemented well. The level of children who are taken inoculation achieves 100%. The serious diseases have to change into the district hospital. The most widely diseases are marsh fever, petechial fever, liver cancer and renal.

However, the most attention in these six communes is drug addition and the number of people who suffer from HIV, AIDS. Based on the People's Committee statistic on number of addict, there are 30 addicts in Trung Son, 21 ones in Thanh Son, 23 in Trung Thanh and 6 people are on HIV. They are all men and householders at the age of 25- 35. There is a death due to AID. In Muong Lat district, there are 33 addicts in Muong Ly, 23 ones in Tam Chung, especially for Trung Ly, there are 126 addicts, in which 10 females and 3 people are on HIV and 4 deaths from shocking. The number of people who use drug in Xuan Nha is 11 persons (Thai, Muong, all men). There is no HIV/AIDS.

²² *Xuan Nha commune could not provide data of pupils*

Table 16: Number of medical personnel in the communes carried out social assessment

Area	Doctor	Physician	Nurse	Midwife	Distance (Km) ²³
Trung Son	0	1	4	1	9
Muong Ly	0	2	1	0	23
Trung Ly	0	5	16 ²⁴	0	34
Tam Chung	0	3	5	0	18
Xuan Nha	0	1	2	0	10
Tan Xuan	Do not have medical station				
Trung Thanh	0	2	3	0	8
Thanh Son	0	3	1	0	12

Source: data provided by the People's Committees of the

Among male victims died by drugs injection, according to the opinions of commune authorities, there might be HIV victims; therefore, the social assessment group has asked about sending victim's wife and children to test for HIV. However, HIV test is beyond the competence of the commune medical stations; moreover, maybe due to their psychology, being afraid of discrimination or other reasons, wives and children of the above-mentioned victims never go to test or do not intend to go for blood test to find out about the issue above²⁵.

3. The people's production system and means of subsistence in the project area.

3.1. The people's production system and means of subsistence

They are agricultural communes belong to 135 program in the remote areas of Muong Lat district, Thanh Hoa province. The poverty and hungry level is high with 70%. The means of subsistence mainly based on agriculture-forest production and breeding. He survey result on means of subsistence shows that the households' income bases on 4 main sources as follows: (i) planting: rice, corn, manioc and Soya, (ii) Breeding: cow, pig, poultry, (iii) from forest, bead tree and (iv) harvesting products from forest, catching fish and craft industry.

3.2. Agricultural production

3.2.1. Planting

The agriculture is the main activity in production. The income that is from planting tree accounts for 40% of total income of agricultural households in above communes. The traditional cultivation methods are water farm and fields in the mountains with rice, corn and manioc. We can see that in economical production, the rice monoculture is very clear because it plays a main role. Every production activities focus on rice.

²³ Distance from the farthest residential area to the commune medical station

²⁴ The data is of nurses living in the villages

²⁵ When the consultancy group proposed the issue of HIV test for wives and children of the HIV victims, most of the commune authorities said that this problem could not be said to these households. Moreover, they thought that if they mentioned this problem to these families, they would get angry and "abuse" on the commune officials or would cause not good reactions in the communities.

3.2.2. Water rice

The farm with one harvest is mainly because the dry season lacks of water. There is a tradition of irrigation: ditch and is positive with water source, the farms that are near to streams can cultivate 2 harvests. However, the fertilizer has not been invested; the rice productiveness is not high.

3.2.3. Fields in the mountains

Because the field area is small, the cultivation is quite popular. Each household often has 2-3 ha fields. However, the forest area is more and smaller, the population increase quickly, the cultivation method of (cut- burn- break through and sow seeds) in the alternation of crops with closed cycle of 5-6 years as before is not maintained, there is now a kind of fields with using plough. Because there is no use of fertilizer (only using protein for corn), the production system on sloping land with the land use level is low, only 1 harvest/ a year.



Picture 4. The local people's piece of upland rice

The planting tree structure is very simple with main kinds of trees such as rice, corn, manioc and soya. The average rice productivity is low, only achieves 1.2 – 1.7 ton/ ha/ harvest, the corn productivity is only 4.0- 4.5 ton/ ha based on each area. Because of long- term cultivation, many areas such as Chieng Ly- Trung Ly commune, the LVN 10 corn productivity is only 2.5 ton/ ha/ harvest. The fresh manioc productivity achieves about 36-40 ton/ha/ year. The soya has been planted in Nang 1 with unremarkable area, about 4 ha; the productivity is about 2.5 – 3.0 ton/ha/ harvest.

3.3. Breeding

Thai and Muong people living in above villages have tradition of breeding cattle and poultry (cow, buffalo, pig, chicken, dog, cat, duck...). The aim of breeding is having offering for ceremonials (wedding, funeral, new house and others) and improving the demand of nutrition in the daily meals. In breeding, the aim of doing business has not been thought of. The breeding method is mainly to let wander with small scale in the family. In 2007, because of cold weather and epidemic diseases, the whole cattle died and now there is no solution. In the beginning of 2008, Thanh Hoa has blue-ear pig epidemic and in order to prevent the expansion of the disease, Thanh Hoa province instructed to forbid to slaughter pigs and transport out of the province area, so the number of bred pigs has not increased as well as could not be sold.

3.4. Forest

It is mainly on jet tree and China tree on the forest area. Besides, people harvest the non-wood products such as bamboo shoots and other kind of bamboo shoots at the free time of agriculture from April to July every year with productivity of 20-40 kg dry bamboo shoot/ household/ year. Other products such as bee's honey and wild animals like turtle and salamander...etc. also have been exploited at the free time of agriculture but the productivity is not remarkable. Because the forests around the village have been given to households and the specified and protective forests are managed by the government, the forest is not much. The planting China tree movement develops well at the local; the household's income is mainly on buying china wood and exploiting species of bamboo which grows naturally. The wainscot also has been planted, but with small area, it has not brought to income.

With people in the project area, the jet planting play an important role for their means of subsistence. In the area with high slop, it is not convenient for developing fields, especially lacks of area for water farm. Thus, people here develop jet forest to eliminate hungry and decrease the poverty, help solve problems on their means of subsistence. The money from selling jet tree, they use to buy rice that accounts for 50-60% the food expense of the local people. Besides, the worth facilities such as motorbike, house, bed, ward and production tools are from money of selling jet. In Ta Lao Dong, Tan Xuan Commune, Moc Chau district, there are 110 households with 600 ha forest, in which only 50 ha farm land, 11 ha water farm and 2 ha fish pond. We can see the important of the jet forest to ward this area. In two years recent, beside jet tree, people here develop the high- productivity manioc to buy to the market. Except for Thong Co Me, Trung Son commune, Quan Hoa district, in 2007, each household get 20 million VND from selling manioc. Especially for 7 households that buy manioc and sell, each household get from 70-80 million VND/ harvest in 2007.

3.5. Catching aquiculture: There is fishpond in some households, mainly catching fish on the stream and river. The fish which is in the cage as Trung Son (Quan Hoa) is not many. Mainly supporting to people life, the catching season begins from dry season, February, March to July and August every year with some main kinds of fish such as mud carp, amur and homburgs.

3.6. Craft and services production

The traditional crafts of Thai and Muong at the local are mostly lost in oblivion.



Picture 5. The brocade – a traditional handicraft of Thai people

Textile industry is one of the family craft which quite developed of Thai and Muong, but today, it has been lost in oblivion. Some families weave brocade to meet the demand of family and traditionally, prepare for their daughter get married (Muong Ly). There is no market for this kind of product. Similarly to the weave industry, there is no weave production which becomes goods. Although the market economy has strong influence on people's life, there are only several stores which buy groceries (noodle, sweet, cake, cigarette, agricultural tools...). This is a special and typical characteristic of Thai, in general. They have habits of buying, not selling and no capability of trading.

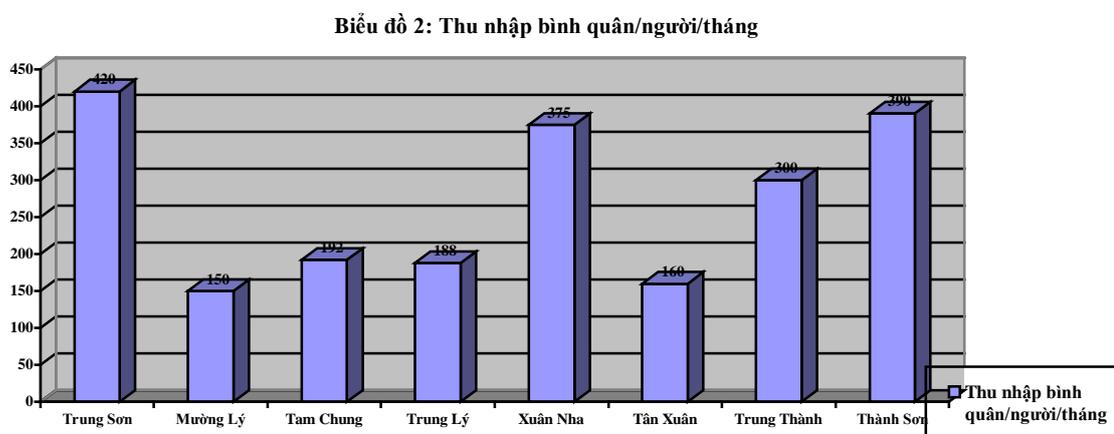
3.7. Income and income structure of agricultural households

The survey result in communes shows that the average income in the project area is very low, under the poor standard compared with the present average income. The statistic of average income per capita in 2007 of the communes and per household (the statistics of people per household in the communes) are as follows:

Table 17: Average income per year of people in the project communes

Area	Average income per person per year	Average income per household per year
Trung Son commune	VND 5,040,000	VND 22,227,254
Muong Ly commune	VND 1,800,000	VND 10,489,315
Trung Ly commune	VND 2,250,000	VND 12,619,881
Tam Chung commune	VND 2,299,200	VND 12,473,732
Xuan Nha commune	VND 4,500,000	VND 20,905,462
Tan Xuan commune	VND 1,920,000	VND 10,336,047
Trung Thanh commune	VND 3,600,000	VND 17,750,093
Thanh Son commune	VND 4,680,000	VND 26,945,454

Source: data provided by the People's Committes of the communes



Source: data provided by the People's Committes of the communes

The estimation of income structure of households in the project area shows that the planting occupies from 70 to 90% of total income, breeding from 5-20%, forestry from 5-15% and others with 2-5% of total income.

Table 18: Households' income structure*Unit: %*

Income source	Tam Chung Commune		Muong Ly Commune			Trung Ly Commune	
	<i>Pom Khuong</i>	<i>Suoi khani</i>	<i>Tai Chanh</i>	<i>Nang 1</i>	<i>Muong 2</i>	<i>Chieng Ly</i>	<i>Lin</i>
Planting (%)	90 %	80 %	70 %	75 %	70 %	80 %	90%
Breeding (%)	10 %	15 %	10 %	13 %	20 %	5 %	5%
Forestry (%)	0 %	5 %	15 %	10 %	10 %	15 %	3%
Others (forest & aquiculture)	0 %	0	5 %	2 %	0 %	0 %	2%

Note: Estimated data from households.

3.8. Some factors which affect to people means of subsistence

➤ Land for agricultural production

Most of them are farm land accounting for 90% of agricultural cultivation land with the slopping level of 15-30%. The surface is strongly eroded in the rain season, the fertility of soil decrease quickly after 2-3 cultivation years continuously. Many land areas have been degenerated which can not meet the demand of agricultural production. This is the biggest difficulty for agricultural production when the land resource is tending to degenerate.

➤ Inputs for production

With the production method of self-provision, the traditional cultivation technology as cutting and burning is the most popular one. The extensive farming without fertilizer, the planting trees are mostly rice, manioc and soya which have been used for many years, now is degenerated, except for LVN10 corn provided by individual and district agricultural encouragement officials every year.

➤ People awareness standard

It is considered as the important resource indicator for developing the people means of subsistence. However, the survey result shows that the level of people who cannot read and write is quite high; Tam Chung with 24.6%, Muong Ly 59.6% and Trung Ly with 55%. There is no labour force that is trained; the training programs for farmers are not paid much attention to. The agriculture-forest production based on mainly native knowledge and there is no application of science-technology into production.

➤ The role of social organizations

There are enough organizations in each commune (agricultural encouragement organization, Farmer's Union, Women's Union, Veteran's organization, Fatherland Front and Youth's Union). However, the contributions of these organizations also maintain limitations. At the present, people only can loan capital from Farmer's Union and Policy bank to develop production with 5-7 million VND/ household.

➤ *The support policy for developing means of subsistence*

Now, there are some policies and project support programs to develop people means of subsistence such as 135 program, 134 program, 661 program, the support project for Mong, and agricultural credit...However, based on people evaluation, the effectiveness of these for agriculture-forest production is low compared with practical demand of the local.

➤ *Products and products market*

After harvesting, based on each kind of agricultural products, people decide to use or sell to the market. (See table 2). Because of the characteristic of mountainous communes, slopping terrain, inconvenient for transport, no road for car, the unique way to approach to these villages is by motorbike or on foot. In the communes without market, the products are mainly bought to private businessman with the price which only equals 2/3 price in the district centre. The statistic on goods exchange of people in Lin shows that it has been performed in a small market and this is common to other villages.

Table 19: The post-harvest products and the market

No	Products	Use (%)	Sell (%)	Place for selling
1	Rice	70 %	30 %	In village – for private businessman
2	Corn	10 %	90 %	In village – for private businessman
3	Manioc	30 %	70 %	In village – for private businessman
4	Soya	0 %	100 %	In village – for private businessman
5	Cow	20 %	80 %	In village – for private businessman
6	Pig	80 %	20 %	In village – for private businessman
7	Chicken	50 %	50 %	In village – for private businessman in the village
8	Alcohol	70%	30%	In village – for private businessman
9	Bamboo shoot	70 %	30 %	In village – for private businessman
10	Fish	100 %	0 %	To eat
11	Other forestry products	20%	80%	In village – for private businessman
12	Jet	30%	70%	In village – for private businessman

3.9. Forecasting the risks for people's means of subsistence in resettlement area

The practical survey on Muong Lat district and the analysis result on means of subsistence of the ethnic minority in three communes show that the main activities for subsistence of the local ethnic minority (Thai, H'mong) based on the agriculture-forest production consisting of planting on slopping land, breeding, forestry such as harvesting from the non-wood products (bamboo shoots, bee's honey, hunting wild beast) which potentially have many dangerous risks.

➤ *Degeneration of land resource*

The native architect and traditional cultivation technology are one of the main reasons why the land is eroded and degenerated. The land fertility decreases quickly after 2-3 years of cultivation. Now, there are many areas which cannot be cultivated because of its poverty, so it needs more time to recover.

➤ *Limitation on water resource*

The lack of water and long drought have and have being affected seriously to the planting trees and create the desertize problem.



Picture 6. Main rope bought but not buys

➤ *Degeneration on seed structure*

Except for LVN10, the rice, manioc and Soya seed tend to degenerated because people make seeds by themselves, so the level of suffering from disease is high and the productivity is low.

➤ *Conflict on using the natural resource between ethnic groups*

Mong's free migration is the main reason for natural forest destruction and conflict between ethnic groups on using the natural resource. Now, all level of authorities has not solution for this problem yet.

➤ *Degeneration on human resource*

The social human resource has been degenerated because of addict and HIV. Based on the statistic in March 2008, there are 53 people who serve for drugs, in which 23 addicts are being managed by the People's Committee, 30 people are being trained in the prison related to drugs. In recent five years, there are 30 deaths of drug and HIV, in which in the first four months of 2008, there are 8 deaths. Although it is remote commune, Muong Ly has 36 addicts in prison. There are 126 ones in Trung Ly. Moreover, the spread of HIV in the community, especially for women and children, they suffer from HIV through sex or from the mother. If the social organizations at the local have no solution for this problem, in the next years, there will not have human resource for developing production (quantity and quality).

3.10. Gender issues

3.10.1. Gender and labour allocation in the family

The agriculture-forest production is the main activity for people's mean of subsistence. The discussion and interview result show that the labour allocation in the family mostly bases on

traditional labour allocation model, the hard works such as digging hole or transporting are done by man and lighter works as burning farm, cutting bamboo shoots are done by woman. Others activities in agriculture-forest production such as clearing land, sowing seed, cutting grass, harvesting and planting are taken by both man and woman.

Both of them participate into creating the materials but the working time in a day of woman is often more than man, about 2-3 hours. The woman's time for production during the harvest is often from 9-11 hour/ a day. The man's time is about 7-8 hours each day.

The time outside the harvest, even woman spend from 5-8 hours for breeding, preparing food for breeding, gaining wood and processing manioc, corn...man only work about 2-5 hours a day, mainly on seeing cow and buffalo on the farm, a very few participate into feeding pig and chicken.

Besides taking part in production, the ethnic woman plays a role of rearing and reproducing the labour force. Because of limited time capital, during the harvest, woman often spends 2-3 hours each day to do housework such as cleaning, washing, taking care of children and cooking. In free time, woman also has use 4.5 -8 hours for doing housework.

The man often does less housework. Because of custom, housework is spent for woman, very few ethnic man share housework with their wife, especially for Mong people. Many women have to work and carry her child pick-a-back astride.

Burden of housework have huge influences on health, chance of going to school and taking part in social activities of women. Little women participate in community activities except for those who are householders. Women often represent for whole family to go to meetings of the commune only when men are busy and this only happens in area of Thai and Muong people. Mong's women almost never take part in activities like commune meeting due to the language barrier.

3.10.2. Gender and the access and control of resources

The statistics figures on population of relocated and resettled people in communes affected by Trung Son hydroelectricity project reflects the low qualification standard especially women's. Most of ethnic minority women do not graduate primary school, many Mong women do not know to read and write. Pursuant to the report of head of Women association in Tam Chung commune, there are total 4 villages of Mong people but only in Poom Khuong village do women go to school and this seldom happens in others. In these villages, many women do not know Kinh language even the head of women association is illiterate. The illiteracy of women is often resulted from poor family condition and burden of housework; they do not have time for study. The other reason is that the distance from house to school is too far, it cause difficulties to pupils especially girls.

In a family, women play a main role in bringing up and taking care of children. Lack of study limits women' social knowledge; hence it directly affects the quality of bringing up and taking care of children. This is one of reasons why women in remote areas get poorer and difficult in the approach and control resources.

The access to resources of women in the communes in the sphere of influences of Trung Son Hydropower Project is not as equal as that of men. The land-use rights certificate has been issued and granted for people since 1999 but majority of households are men so the control and usage of material capital like land, houses of women are limited and dependent. The

chairman of Trung Ly commune People's Committee says: "cadastral register is now carried out. No woman has the right to register the land ownership because providing that husbands are dead, they are still the owner of that cadastral register"²⁶.

When being interviewed, many ethnic minority women say that they often discuss family capital usage together with their husband and they are people who directly manage finance and give decision on which products (price, selling time, selling location. etc) to sell. Nevertheless, reality shows that women have no right to decide even when they manage fund and on the contrast, despite the fact that husband do not directly manage money but they are person to decide. Wife of a village leader says: "Women make decision on buying small things for family daily life only and husbands make decision on expensive ones which are of millions VND".

3.10.3. Gender, health and reproductively are the issues which needs to be paid much attention to in the area where the resettlement activity will be carried out. Although there have been many reproductive health care campaigns in remote areas, some asked villages still cannot improve the fact that they get married so soon and have a lot of children (Thai woman has 3 or 4 children and usually get married at the age of 17; Mong woman has 4 or 5 children, they get married very soon but do not go to The Committee for marriage registration until they are 18). According to the chairman of Tam Chung commune women association, reproductive health care activities for Mong women are hard because Mong women don't know national language and rarely go for a medical examination, especially reproductive health.

Due to the "clean bag" reproduction program, women's reproduction in communes has been considerably improved. However, almost all women still have home birth except difficult birth that makes them go to hospital (When Mong woman has birth, her husband will deliver; Thai and Muong women usually have experienced elder help them). Some causes of the above situation are²⁷: (i) the ethnic minority has custom that they have home birth, (ii) traffic is difficult to move, distance from the commune to medical station is so far and it's hard to use mechanical transport in rainy season and (iii) almost all the communes affected by Trung Son hydroelectric project have medical stations but don't have nurses.

Even though agricultural economic is autarky; commodity economic has not developed, production activities of Thai and Muong people are diversified. As mentioned above, main economic activities are growing wet rice (1 to 2 crops), maple cultivation, breeding of small scale, and hunting and gather fruits; do traditional handicrafts, and grow forest. The labour distribution according to sex has been changed thanks to the high qualification and living standard. Nowadays, the major economic means of living is agriculture- forestry combination; cattle and poultry breeding is main income. Except for husk of households, agro-industry and others have not yet developed much. Kinds of service start to develop to serve essential commodity items as oil, salt, confectionary products and cigarettes.

4. The consume models and characteristics

The production in the communes is self-provision, especially for villages which are affected by the Trung Son hydroelectric project. There is seldom trading activities at this local. The

²⁶ Because the issue of land-use rights certificates has been carried out since the separation of the district (1999) so if the husbands are dead, it will not be changed. In case when issuing the certificate after the time the husband had passed away, the son of the family will register for the land-use right certificate. There is a few case that the women register for the certificate.

²⁷ See the above "Health" part.

affected villages are often near Ma River with difficult traffic condition, so the agricultural products of these households are depend on private businessman from Co Luong to change. As above table- Post-harvest products and the market, the main products like rice mostly are bought, it is only to meet the demand of the families' food. The products which are spent to sell are manioc, corn and forest tree together with some cattle and poultry.

The manioc is harvested and processed (cutting into pieces and drying). People sell about 70% of total manioc which they harvested; the 30% remaining are used to make alcohol and breeding. The dry manioc is sold with 17 thousand VND/ kg. A household can draw above 10 million VND/ a year by selling manioc, however, in Mong community; the manioc is planted in a small area because they do not like growing it.

The manioc alcohol is made for goods and consume in the community. Each litter of alcohol costs 8-9 thousand VND.



Picture 7. Thai women people was conducting to cause fermentation the manioc wine

The Thai, Mong and Muong all plant corn (VN 10) and this is a good point in this community. The corn has high productivity and people can buy over 2000 thousand VND. Each household spend a large area to grow corn.

The jet tree has been considered as the main kind of tree in Quan Hoa district and Muong Lat district; however, in affected communes of Muong Lat, there are only Tai Chanh and Chieng Ly which can sell the jet. Because the traffic road is difficult, both road and water road, it is difficult for them to sell this kind of tree. The private businessman from Co Luong often buy the jet with the cost of 500 thousand VND/ a tree while, in lower communes, even Tai Chinh village, people can buy up to 8000VND/ a same tree.

The breeding has not been developed in recent years because of epidemic diseases. Now, there are not any chicken in Thai and Muong community. Mong people also raise some to improve their life and buy, exchange goods.

The pig has been raise by traditional way of free walking. Although the household make cage to raise pig, they are free to walk. People only keep pig in the age when it us dark because if keeping it all day, it may be die or suffer from epidemic diseases. In 2007-2008, there is

Green Pig' ears epidemic, most of pig in the commune has not been developed. Now, people cannot sell pig because it is banned to transport and consume.

The cow has been raise much (most people here loan money from the bank to raise cow), each household has from 2 to 4 cows. They are also free to walk on the farm and people keep them by feeding them salt. The children have main responsible for taking care of cow. In general, cow can be sold from 5-7 million VND/ a big one.

Basically, there are not activities to produce goods, all economy is self-provision. People use garden around their house to grow fruit-trees to meet the demand of the family and spend a small area to grow vegetable. The kinds of vegetable for the family's dishes are not diversity; most of them grow pumpkin and looped. The green vegetables have not been used much, even they use "cà gai" instead of vegetable, they do not use fresh vegetable such as purslain and amaranth...etc.

There are several Thai and Muong households that have water surface to breed fish. However, the fish is caught from Ma River. In some Tai Chanh households, they buy small fish but it is not effective because they do not have food source for fish. Moreover, only few households have water surface in the garden, the remaining dig pond on the farm. When burning the farm, fish will die because of heat and when it rains heavy, fish will go with rain water.

The households which have been changed their household and resettled cannot approach the national electric. They all use a small hydroelectric mechanic and only use to bright and watch TV. The energy which people in the project area use consists of three main kinds: i) traditional energy for everyday life, mainly for cooking and heating but in cold season, they use wood and coal from the forests around their houses. Each household in Ta Ban village, Trung Son coomune, Quan Hoa district (Thanh Hoa) consumes about 10m³ coal each day. Nowadays, when forest coal has been limited, people tend to use redundant wood of jet tree to cook. This kind occupies about 1/3 of total coal that people consume. ii) the second energy has been used widely for lightening and running some electrics, it is small electric which is exploited from the river and stream around their houses. Each year, each household consume from 750.000 to 1.500.000 VND. iii) The third energy has been used to transport by motorbike, mechanical boat, and run grinder. It is petrol and diesel. Each household consume this kind of energy with the cost of 2.500.000 to 3.000.000 VND/ year.

There are typical characteristics on energy consuming model of Thai and Muong at this local as follows:

Table 20: Energy using model

Energy	Source	Aims	Labour allocation
Coal	Exploit from the forest	Cooking	Male, female
Torch	Garden, Forest	Burning	Female
Petroleum	Buying	Lightening	
Water electric	Buy machines and set in the stream	Lightening, radio, TV. Etc.	Male

Source: results of PRA tools

5. Society and social relationships of communities

5.1. Local capacity and institution

In all communes, there are Thai cadres. Their qualification is at the level of secondary and high school graduation; all cadres including village leader have graduated from primary classes of politics training. Very few commune cadres are of other ethnic groups. For young cadres like cadastral ones or accountant, they all have primary qualification, newly graduated and these cadres have not got much experience.

All commune budgets are granted by district and province. Nowadays in 4 communes of Muong Lat district: Muong Ly, Tam Chung, Trung Ly and Pu Nhi, there is the project of basic investment in order to stable Mong people's life with the total value is 291 billions VND and it is implemented in 5 years. This program aims at the construction of projects of infrastructure investment and production orientation for Mong community in this area is being prepared by Ethnic Department.

Farmers Association is the organization to mortgage and lends members 5 to 10 millions VND per household to invest in breeding. This association also helps Women association to manage loans mortgaged by Women association.

Women Association only carries out effective activities in areas where Thai and Muong people are living. Due to language barrier, association's activities related to Mong community are little implemented.

There are farm encourage cadres and activities to encourage agricultural and forestry expansion in the communes but they are not effectively carried out in surveyed communes. For communes who have to resettle, almost no activity of farm encouragement is found there. The main reason leads to ineffective activities is that most of the communes have large areas with difficult terrains such as Lin village, Chieng Ly group in Trung Ly commune, which is 20 to 30 km away from the commune centre. This is the main reason why the cadre cannot work effectively in each village.

Activities related to cotton grow in Muong Ly commune are the result of material area establishment of an outside unit.

With respect to villages far from commune centre like Xuoc village of Trung Son commune, Lin village, Chieng Ly group in Trung Ly commune, local people hardly see commune cadres.

5.2. Culture and religion factors related to the project

5.2.1. Ethnic minority groups affected by the project

5.2.1.1. Thai Group

Thai Group's population in Viet Nam is 1,000,000 people who live mainly in Lai Chau, Son La, Hoa Binh, Thanh Hoa, Nghe An province. Thai people mainly use the following last names: Bac, Be, Bua, Bun, Ca (Ha, Kha, Mao, Sa), Cam, Chau, Chieu, Deo, Dieu, Ha, Hoang, Kham Leo, Leo, Lem (Lam, Lim), Ly, Lo (Lo, La), Loc, Lu, Luong (Luong), Manh, Me, Nam, Nong, Ngan, Nguu, Nho, Nhat, Panh, Pha, Phia, Quang, (Hoang, Vang), Quang, Sam, Ta, Tay, Tao (Dao), Tao, Tong (Toong), Vang, Vi (Vi), Xa, (Sa), Xin.

Thai people speak languages belonging to origin Thai – Kadai language system including Thai of Thailand, Laos of Lao, Shan in Myanmar and Choang in Southern Chinese. In Viet Nam, 8 ethnic minorities including Bo Y, Giay, Lao, Lu, Nung, San Chay, Tay, Thai are grouped into Thai language system.

Thai group have many experience in digging gullies and building ditches to get water for farming. Wet rice especially sticky rice is the main foodstuff. Thai people also cultivate in terraced fields to grow rice, crops and other plants. Every family raises cattle, poultry, and knit, weave fabric and ceramics production in some areas. Famous product of Thai people is brocade with unique patterns, bright colours and durable quality.

Thai people has the matrilocal custom, some years later, until husband and wife have children, they move to husband house but now this custom does not exist except in the case that wife's family is too poor. They have conception that "die in this world is live in the next world". Hence, funeral is the ceremony to see off the dead to "Muong heaven".

Project area is the long-lasting residence of Thai people; it may be 400 to 500 years of length. After that, Muong communities relocate from Muong Bi, Muong Vang, Muong Thang, Muong Dong in Hoa Binh to that place a little bit later (about 300 years). Next come to Mong people. Because of that characteristic, each group has their own tradition of emigration history and different methods of community tie. However, they all have a common thing that is maintain the solid community friendship as they do with relatives. It is this relationship that leaves the clearest mark in Thai, Mong and Muong community here. *Piét Mưòng* (Muong story telling) of Thai Muong Xang people in Moc Chau tells that: In the 14th century, during the period of land finding for their kingdom and widening the power of Tao family, when coming this area, Thai people faced the resistance of local people who are generally called Xa. After that, Xa people lost and they had to emigrate to Lao giving up their land to Thai people.

5.2.1.2. Muong Group

According to the survey result of The General Directorate of Statistics in 1999, the Muong population is 1.137.515 people, after Kinh, Tay, Thai, Hoa and Khome. Muong people, also called **Mol, Muai, Moi, Moi bi, Au tá, Ao tá** is a group which living on the Northern mountain in Vietnam. They are crowd most in Hoa Binh province and mountainous districts of Thanh Hoa province.

Muong people settle in the mountain where has many land for production, near to the traffic road and convenient for trading. Muong people have been worked on the farm for a long time. Water rice is the main planting tree. Ago, Muong plant more sticky rice than normal rice and it is the main food everyday. The economical resource depends mainly on exploiting the forest products such as perfume mushroom, cat's ear, bastard cardamom, stickle, cinnamon, bee's honey, wood, bamboo, rattan...The typical crafts are textile, plait and unravel silkworm cocoons. Many Muong women knit and weave fabric very skilfully.

The wedding custom of Muong is quite similar to Kinh (paying a plighting visit, attending a betrothal ceremony, wedding and meeting the bride and bringing her home). When having people who give birth in the family, Muong hedge the main stair by bamboo wattle. When the child is one year old, he is named. The funeral is organized by monk. The interval of mourning method is not different from Kinh. However, the daughter-in law who goes into mourning of the grand and parents has separate cloth called set of ghost burn-up. Muong

people lives in houses on stilts, but their house is different from others. Muong do not look much up to building house on which direction as long as suitable for production. Thus, the Muong village is similar and mess, overlap and unique on direction. The house that is built in the hill, its back against on the hill, the door directs to the valley space or opposite field. The house which is near to the river, its face can orient to the river or direct inside.

5.2.1.3. Mong people

The 1999 statistics show that H'mong people with the population ranking the 8th among Vietnam ethnic minorities usually live 800 to 1,500m over sea level in Northern mountainous areas bordering China and Vietnam-Laos border. H'mong people immigrated into Vietnam 300 years ago for the earliest and 100 years ago for the latest. Basing on ethnologic and linguistic characteristics, H'mong people is divided into various groups including Mong Trang (Mong Do), Mong Hoa (Mong Lenh), Mong Do (Mong Si), Mong Den (Mong Du), Mong Xanh (Mong Nuo), Na Mieu (Meo Nuoc. However, it is also suggested that Mong Hoa and Mong Do are the same. H'mong language belongs to the Mieu-Dao (or Mong-Mien) branch without writing.



Picture 8: Mong people in Pom Khuong village, Tam Chung commune

Most of H'mong people live on burnt-over land, some of them live on rice field in the form of terraced fields thanks to the rich in water resources with corn and rice as the major products. Plum is the key fruit in the region. While flax for cloth making is not planted in the region, buffalo, cow, pig and chicken are key cattle here.

5.2.2. Social and relative organization

5.2.2.1. Household structure

Basically, the household structure of ethnic minorities in the project-affected region has changed. Traditional households with 3 to 4 generations with several nuclear families living together or extended families do not exist any more in Thai, H'mong or Muong people. Among various reasons, the economic factor is considered the most outstanding when land is now under the state control and has been assigned to every household. Consequently, it is the separation into smaller households that brings people the change of owning more land. Moreover, nuclear family often has better economy than the time when they are in an extended one. It is the reason why Ta Ban hamlet, Trung Son commune, 20 years ago, used to

have 46 households with 7 mouths in each household on average; however, at this time, it has more than 100 households with 4 mouths/ household on average.

5.2.2.2. Family structure

Family structure of Thai, Muong and H'mong people in the project-affect region has changed a lot along with the disappearance of extended families. Nowadays, land explored and owned and families belong to the state leading to the disappearance of land inheritance. Land division among former extended families has great impacts on the connection between families, especially, with Thai and H'mong people. For H'mong people, what remains the relative relationship is more sacred than any other relationships. Each H'mong family has specific features in the ceremony and worship to keep the connection among the families. Although these ceremonies are being remained nowadays; they are not mystical as in the past. However, H'mong people are successful in keeping ancient customs including the “sting connection” in which the younger brother can get married to the sister-in-law after the older brother has died.

5.2.2.3. Community relationship

Customs of Thai and Muong communities in the region are similar to those of White Thai people in the North-West; however, there are some slight differences between females' costume among these people. There is almost no difference in the funeral ceremony and marriage among these people. The custom of not moving the remains is still available in Thai people; they have to worship the land king when they want to leave the hamlet to ask for the permission and leaving and entering the hamlet.

Worshipping the hamlet deity aims to pray for good things for everyone such as having proper rain, wind or bumper crops. The worship lasts for 2 days in which every household in the hamlet share pig, chicken, wine and sticky rice. There are two prayers, one worships ghost of all kinds in the hamlet gate such as tree ghost, forest ghost, rock ghost, ect (spiritual things) while the another worships in the hamlet-deity house. The first prayer does not require a lot of experiences and he may be young; however, the second prayer must be old and experienced. Nang hamlet still has the leader of Vi family, one of the oldest families in the hamlet works as the chairperson.

In hamlets where both Muong and Thai are living, the worship is more complicated when both Thai and Muong prayer are needed to pray for having proper raining and wind for both 2 people while there is only one deity-house for these two peoples.

Praying hamlet deity is remained at Nang hamlet (Muong Ly) and Tan Ban hamlet (Trung Son) while it has disappeared in other hamlets when their “hamlet deity” has been collapsed but has not been repaired due to the lack of money and more importantly, the lack of suitable prayer.

People in these hamlets, through community meetings, express their hope to be supported for building hamlet-deity house on moving to another place and preparing for hamlet-deity worship. According to the leader of Vi family in Nang hamlet, moving the hamlet-deity house and 2 worshipping times for hamlet leaving and entering cost VND 50-60 million. Moreover, hamlet-deity house should be built the beginning of the hamlet and next to the water resource. Thai people has custom of not moving the tomb; however people in moving-needed hamlets say support for moving tombs by themselves is needed in case of moving the whole cemetery.

They do not want their tombs moved by others as they are afraid of facing unfortunate things when their customs are not followed.

These hamlets are separated by Ma River only; thus, moving, getting married among various peoples have developed diversified relationships among households living here. Although Thai people at Muong Ly, Trung Ly people's hamlets are free immigrants, most of them are from Xuan Nha commune (Moc Chau, Son La) and they often join meetings in Xuan Nha and vice versa, their relatives often go there to help their relatives.

In hamlets where the family relation is loose without large family and family meetings, the solidarity is considerable. The results of public meetings show that people are willing to give up land to others; importantly, there is no land dispute in this region (land using power has been clearly identified). Although dispute still happens between H'mong and Thai people; Thai and Muong communities in Tai Chanh, Nang, Lin and Chieng Ly hamlet are free from dispute. However, according to people in the inner Lin hamlet and Tai Chanh-Nang hamlet, they are not really happy with the moving of people in the outer Lin hamlet and Tai Chanh hamlet with the fear of not receiving compensation for crops in the resettling region. They do worry anything in case of receiving compensation for every asset.

H'mong in Muong Lat and Pu Nhi commune live for a long time here while other Mong Hoa groups have just immigrated from Cao bang, Bac Kan, Lao Cai and Son La province. According to the reports by district people's committee and commune people's committee, the free immigration of H'mong to Trung Ly, Muong Ly and Tam Chung commune started in 1995 and has been popular since the 90s. Presently, H'mong community in these communes still keeps their customs. People having the same family name do not get married with each other. Additionally, their funeral ceremonies are simplified suitable to the new life style. Females have child bearing in their households with the support of husbands or relatives. They only go to the commune or district medical stations in case of have difficult bearing.

Most of H'mong people in these communes believe in protestant and some of them believe in cross (with an emphasis in Muong Ly commune). Religioners do not often pray their ancestors, eat blood, animal's hearts or drink wine. At present, H'mong religioners often have meetings in religion spots. People's immigration has reduced over the past few years thanks to the gradual increase of the socio-economy.

H'mong people are successful in keeping their tradition; that is they are considered to be relatives in case of having the same family name regardless to where they come from. They are willing to protect and help mutually. In Phom Khuong hamlet, H'mong people are willing to share their land with the person connected to their family, household. If these H'mong immigrants have the same family name or they do not have intention of residence, H'mong households in the hamlet are willing to divide their land again to make the new-comer have land for making house and production.

At Tam Chung, Muong Ly and Trung Ly commune, regulations have been issued with the support of district' ethic minority office; however, all the punishments are based on the traditions and decided by the community and the family's leader. Marriage is in the line of tradition in which the male will take the girl to her family to inform that "she has had a place to live and drink water" to make her family not look for her and then bring wedding presents to her house after 3 days.

H'mong at Muong hamlet, Pom Khuong and Ba Pua still freely immigrate to Laos and other provinces or communes (mainly among Trung Ly, Muong Ly and Pu Nhi). The immigration

dose not happen on the large scale but it does regularly. According to those hamlets' leaders, some households in the region still have intention of moving to Laos because of the impoverishment (H'mong people have the habit of living in a certain region until their capsicum they plant is not hot anymore and then change to another region)

5.3. Awareness of project's stakeholders

During the implementation of the social assessment activity in the areas affected by Trung Son Hydro-power plant project shows that along with project-directly affected communities because of land withdrawal, there are groups at secondary impact level of this project.

5.3.1. Main stakeholders of Trung Son Hydro-power plant project include

- People in the project-affected regions including affected people (the poor or unpoor, main ethnic minorities and vulnerable people such as females, poor household owners, etc)
- Borrower: including Vietnam Government
EVN;
Trung Son Hydro-power project management board
- Other related sides
Sponsors (WB)
Social organizations (women association, Fatherland front, mountainous people's committee at provinces)
People's committees at all levels (province/district/commune)

Mainly-related sides include: farmer households have to move and Trung Son Hydro-power plant management unit- directly implementing unit with Electricity of Vietnam (EVN) as the investor.

Table 21. Stakeholders analysis framework

Classification of relation	Main related sides	Social features and status, allocation and organization capability	Commitments and publicity
Lending	WB	Poverty reduction support through sponsorship for developing energy resources to meet power requirement.	Pay attention to development projects through the support for power-generating resources
Plant makers	Government and EVN	The borrower, is responsible for developing infrastructure of power-generating resources to provide enough electricity for production and daily life	Pay much attention to providing enough electricity for the national industrialization and poverty reduction
Implementation unit	Trung Son Hydro-power plant unit	EVN controlled unit takes responsible for implementing the project (building number) and resettling, ethnic minorities and environmental issues	Mainly notice on the success of the project and building number

Other relevant sides	District people's committee	Take main responsibility in compensating and resettling for project-affected households	At this time, have no accurate or detailed information about compensation plan, resettling and unready for compensation, ground withdrawal and resettling
	Commune people's committee	Take responsible for hydro-power plant development and coordinate in implementing resettling and recovering people's life.	Have been awareness of the comprehensive plan on moving the people. However, they have no exact information about compensation and resettling of the project
	Households directly affected by the project	Lose land and other assets because of living and production sites are flooded	They have information about resettling; however, they do not know whether they receive compensation therefore, worry about losing assets Households in Chieng Ly hamlet who will resettle in the place chosen by design consultants worry about the lack of running water; thus, they want to move to another place
	Households indirectly affected by resettling plans	Households in the inner Lin hamlet, Tai Chanh will have to share land and lose assets on the lands which will be used for resettling households	They have no accurate information about whether receiving compensation for assets on lands used for resettling.
	Associations and social organizations in district/commune	They are units assisting district/commune people's committees in resettling encouragement	These organizations do not have sufficient project-related information; thus they have not hold necessary activities
	Pu Hu forest management unit	Management unit for Pu Hu national reservation where a lot of scarce animals listed in the red-book which need to be protected...	It is essential to assess the impact when considering the resettling to have proper methods to minimize its impacts

5.3.2. *Regards on the concern and influence of related parties*

5.3.2.1. WB, sponsor

The growth rate of Vietnam's GDP has been considerably high recently and in order to ensure this growth speech, it is necessary to have an abundant and stable source of energy supply. WB' support is given to develop programs of industrialization, modernization and to eliminate hunger and reduce poverty by finding sources of electricity production. For example, WB was ready to provide Viet Nam with the capital assistance in building hydroelectric projects like Trung Son Project. However, during the project implementation process, WB particularly concerned about social and environmental matters. This organization has carried out many policies applied to capital loan projects offered by WB so

that community and local people affected by this project got achievements from its development and to ensure that life of community especially ethnic minorities after the project is better or at a minimum, equal to the one before

5.3.2.2. Government, EVN and Management Committee of Trung Son Electricity Project

Viet Nam is potential for electricity growth; nevertheless, beside benefits, hydroelectricity also leads to unforeseen environmental and social consequences particularly the one related to ethnic minorities' resettlement due to hydroelectricity construction. Favourable locations for hydroelectricity factories are often the one where many ethnic minority groups live; their cultivation is of traditional type and their community spirit is very solid. Vietnamese government usually highly appreciate the guideline that "resettlement must offer local people better life or at least equal to the one before". This is also the target which is advocated by the sponsor.

5.3.2.3. Other groups concerning about public projects

Thanh Hoa People's Committee, People's Committee of districts, and organizations, and associations are also interested in the construction of Trung Son hydroelectricity factory. The construction of hydroelectricity with the purpose of electricity production and flood prevention, the hydroelectricity will give a favourable industrial and agricultural condition Thanh Hoa Province. The Province People's Committee and District People's Committee are responsible for implementing policies of compensation and resettlement. Complying with the Decree No 197 about compensation and resettlement of the Government, District People's Committee will be in charge of organizing and implementing the resettlement of Trung Son hydroelectricity factory on the basis of compensation and resettlement regulations for the project only. Therefore, the corporation and direction of Province People's Committee given to District People's Committee is very important so as to carry out the policy of compensation and resettlement as well as the plan for ethnic minority development.

5.3.2.4. Beneficiaries

Beneficiaries of the project include households and enterprises, etc. Those who get benefits from better electricity service will be able to increase their income by reducing input expense for production which is in need of electricity. Project also offer other indirect benefits such as better quality of education and health or people have chance to access technology, science and information of culture and society thanks to the widened network and means of communication using electricity. Life quality is heightened, labour force is released (especially for women) will be the benefits which given to people by electricity distribution. In addition to that, they will together come in for development achievement of the whole area.

5.3.2.5. Affected people

Affected people of the project are those whose land is withdrawn, trees and farm products are affected during site clearance progress (temporary or permanent). Due to the project's characteristic, the land occupation for containing lakes or basic projects and permanent land occupation are very large. Those consequences will be compensated in accordance with the project policy and for affected infrastructures, they will rebuilt together with programs of production assistance, jobs training, farm encouragement, forestry encouragement that will be

implemented to make sure that the local people's income will be not affected badly. Compensation for house relocation will be provided following the method of replacing price and market price.

5.3.2.6. Women and the participation of women into the project

Women are one of group that is strongly influenced by the project of hydroelectricity construction. Hence, they are supposed to pay more attention so that families whose householder is woman will not be in poor situation and not to increase hard labour for women. Jobs training and credit supply to support production and rebuild life should take women into consideration. It is suggested to give woman chances of accessing scientific knowledge and better conditions of production and breeding.

5.3.2.7. Ethnic minority

There are 3 main ethnic groups affected by the project construction, they are: Thai, Mong and Muong. Each ethnic group in the project area has their own cultural characteristic. Nevertheless, traditional cultural activities of ethnic minority will be not affected by project activities. Activities of resettlement are basically implemented in old communes to prevent the probability of breaking their relative relationship as well as their traditions and customs. Construction activities will be concerned so as to avoid taboo areas of ethnic minority groups. Gathering of workers in ethnic minority groups' hamlets may results in the unexpected effects as relationship between ethnic minority and outside labours. Thai people in the project area have open conceptions and behaviours in terms of sex; thus, probability of HIV transmittance and drugs usage is very high when outside labour force come there. These influences need considering while making the ethnic minority acting plan.

5.3.2.8. Participation

Vietnamese government has issued democratic regulation in light of "People know, people discuss, people do and people examine" that reflects the participation level of people in country's development process. The policy issued by WB also has regulations on participation of beneficiaries and people affected by development project. The participation of ethnic minority groups in stages of the project will offer disadvantages due to (1) their qualification is low; (2) language barrier especially of Mong women; (3) geography distinguish and finally the institution of implementation units. Considering the participation of affected groups, woman and the elderly are put at the greatest disadvantage because of literacy rate of these 2 groups is especially lower than others.

Table 22. Participation Frame

Activities	Kinds of participation			
	Concerned groups	Time	Output	Details
Project design	WB; EVN, Trung Son PMU is implementation unit.	Report on investment is written by Design Consultant employed by Trung Son PMU.	Report on Investment in Trung Son Hydro power project.	Identify the concerned parties of the project, level of investment, amount of construction and areas affected by the project through different categories.
Community consultancy	WB, Trung Son PMU	In the time the investment report is being written.	Results of consultancy	Affected communities and concerned parties are consulted to ensure the principle of information dissemination widely before the project.
SA preparation	Main communities of the localities. People's Committee at all levels and Trung Son PMU will be in charge of assistance and outputs.	In the time the investment report is being written.	SA report	Common report for all project areas, including communities in 14 villages, 6 communes affected by the main facilities of Trung Son Hydropower project
RP and /EMDP preparation	Affected people include common communities and ethnic minority communities. People's Committee at all levels and Trung Son PMU will be in charge of assistance and outputs.	Begin from the determination of the project to the last phase of the consultancy services.	Detailed RP; socio-economic situation of affected people and resettlement policy framework; ethnic minority development plan.	The demand for resettlement is big. The affected communities are all ethnic minority groups. The negative impacts of resettlement are minimized due to local resettlement and it does not break much the traditional pattern of relations and production. Impacts of land loss are serious which need to have a detailed and sufficient plan to revive livelihood.
Prepare for socio-economic report	Main communities of the localities where the sub-projects will be carried out. People's Committee at all levels and Trung Son PMU will be in charge of assistance and outputs.	According to designated activities	Guideline monitoring for and evaluation.	Schedule is determined, list all difficulties and define the problems of the areas and groups affected by the project.
Prepare for project implementation	WB, Trung Son PMU	According to determined components of the project and fixed schedule.	Project Implementation Plan.	Schedule is fixed. Identify categories which need to be implemented before such as determination of moving and resettlement phase of the affected households in accordance with the project progress and some construction categories which must be ensured the rate of progress corresponding to

				weather conditions.
Prepare for EIA and EMP reports	WB, PMU, (carried out by different consultancy contracts)	Begin after the pre-feasibility and feasibility period of the design consultancy services and approved by WB.	EIA and EMP reports	Schedule and sources are fixed. Difficulties in community consultancy and environment impacts. Should consult with occupation associations.
Project implementation, monitoring and evaluation.	Trung Son PMU completes the project with the assistances from the People's Committee at all levels.	Throughout the implementation process	The categories of the projects constructed including main facilities and resettlement areas.	<p>Time and resources, difficulties and problems of areas and groups affected by the project, including the groups affected at secondary level.</p> <ul style="list-style-type: none"> ▪ The information dissemination and consultancy are carried out during the project implementation; ▪ The information brochures are given and printed in languages of ethnic groups as regards the ethnic minority groups; ▪ Process of carrying out the movement of the communities. ▪ Process of paying compensation and carrying out resettlement. ▪ Carry out methods to support income, ability to rehabilitate of the vulnerable groups. ▪ Ethnic minority Action plan. ▪ Integration into community. ▪ Evaluate the impacts of movement and life stabilization. ▪ Complaint and complaint solving. ▪ Opinions about social issues and organs which will carry out monitoring and evaluation.
	Include beneficiary (local community) and groups affected by site clearance and resettlement.	<p>Disseminate detailed information about the project activities.</p> <p>Carry out consultancy during the project implementation as to minimize negative impacts during this time.</p> <p>The participation of local communities during the project implementation as to create jobs and increase income for local people.</p>	Monitoring report	
Project monitoring and evaluation	PMU, PC at all levels, local communities affected by the site clearance and resettlement, other concerned parties such as healthcare, education, farm encouragement, Women Association, Youth Union, Fatherland Front...	Households' Socio-economic survey, focused group discussion with the communities and other people affected at the time of monitoring and evaluation according to the guideline. PAPs monitoring and evaluation is also defined in RAP.	Monitoring and Evaluation Report	

5.3.3. Awareness of project's stakeholders

Those who have to relocate from their hamlets are clearly aware of the relocation location but they do not have any ideas of time as well as the probability of getting compensation for what they have to relocate. For the restart of means of living, people think that the destination land is not too far from the old one; thus, it does not cause many difficulties for their production. The thing that they most wonder about is that parties should give out reasonable accommodation arrangement and they do not want the government to build houses according to the existing forms. They want to relocate their house themselves to make use of materials and to build houses following their traditional customs.

As for people in Chieng Ly and Lin hamlet who live near Pu Hu forest, they understand that if they relocate to the area that is near Pu Hu forest, it is not good for Pu Hu reserve because of the fact that the wage paid for forest protection has been cut, thus, the probability of trespass on Pu Hu forest of people is higher.

For hamlets where there are fewer households affected and self-relocate resettlement method may be applied in Pa Bua hamlet, Muong 2 hamlet, Pom Khuong hamlet and Pu Lau hamlet, the general survey showed that local people here were willing to cede their land to these households. For households in Kha Ni stream of Can hamlet, Tam Chung communes, affected areas mostly are their huts to watch their fields in the mountain. They all have main houses in Can hamlet, Lat hamlet.

All levels of government have known about the relocation and resettlement of hamlets. However, in fact, so far all official pieces of information from the project have not been disseminated so leaders of Moc Chau district, Muong Lat district as well as communes have not fully got knowledge of the whole project process and they have got no preparation for the resettlement of local people.

Also because of above reason, organizations, associations and authorities of Muong Lat district and Moc Chau district completely do not have ideas of resettlement plan of Trung Son hydroelectricity. Only three people who are district chairman, chairman of district people's council and vice head of department have take part in the meeting about design present and consultancy but now they get preliminary plan. They do not retransmit neither detailed information nor general information to others people. Generally speaking, there is no preparation or plan for the resettlement of Trung Son hydroelectricity project in Muong Lat and Moc Chau district.

5.3.4. Success probability of stakeholders

District authority is an important factor to resettlement plan and a main party to corporate and participates in this plan. They play considerably important role in all steps like review to draw experience, land planning, change of land usage purpose, and restart means of living for people. Through the second talk with district authority, vice chairman of Muong Lat People's Committee said that the thing he concerned most was that people would cause bad effects on Pu Mu forest. There is no preparation for restarting of means of living and other activities due to the fact that they district people's committee had no plans or policies of it.

For commune authority, the passiveness and weakness of social associations and organizations will be the big obstacles for the success of resettlement and restart of means of living. Community of directly or indirectly affected people all wants to get reasonable compensation for their relocation. Due to the fact that relocated area is not so far in

comparison with the old one and water is sufficiently supplied, they are willing to relocate. If activities related to traditional customs like rebuilding temple of hamlet's god, exhumed and moved to other places are done well; it will be the factor to encourage people to resettle. With respect to the restart of means of living, people have given out many methods for changing farming structure. The only one that wants to convert all assistance funds into cash is Lin hamlet. They also do not want to receive support in learning production experience and using of new rice. For local community, the public exposure of information, the policy of compensation and support will be a decisive factor for the project success.

6. Monitoring and Evaluation

6.1. Project's institution

During the construction time, it is essential to have an organization to monitor and evaluate the environmental and social aspects regardless of capital. Annual reports from all sides provided a general view of social economic conditions of the project. But these reports did not provide enough detailed information about multilateral community and groups which gain benefit directly from the project. Social evaluation report includes building an outline of description before the report is carried out. This will help Trung Son Project Management Unit develop appropriate solutions to decrease potential negative effects, build some strategies assuring equally power distribution and attaining specific objects and create good conditions to further supervision and evaluation.

Supervision and evaluation work will create good conditions for Trung Son PMU, EVN and other related organizations to carry out the following tasks:

- Evaluate the success in the project's objects.
- Determine effective or ineffective activities to achieve specific goals (e.g. promote economic development, provide access for ethnic minority, solution to decrease potential negative effects...) and

In order to carry out monitoring and evaluation work throughout the project and to guarantee to find appropriate solutions to decrease negative effects, especially resettlement activity, the consultancy suggests establishing a "Social and resettlement department" in Trung Son PMU. This department is independent of others and has the following tasks:

- Consider all social issues, not only in resettlement activity.
- Help the PMU manage contracts related to resettlement (e.g. Trung Son PMU need to sign and manage a contract with the Compensation and Resettlement Committee (according to 197/2004/ND-CP decree))
- Co-ordinate with independent monitoring units for resettlement and land acquisition of the project
- Evaluate the effect of the project by continuously supervising and evaluating after the construction is finished (the best is to work periodically) when the affects of the project (e.g. enhance economic activities and improve living conditions in the area and living conditions of resettlement people) are obviously seen.
- Create a database for supervision and evaluation work in this project and for planning and carrying out further projects better.
- This department needs to (i) be trained to realize social aspect of the project that may be used in suggesting solution to decrease potential negative effects and (ii) report directly to Trung Son PMU manager and be arranged a number of experienced officials in monitoring, evaluation and resettlement.

6.2. Institution at local level

In the surveyed communes, there are social and political organizations such as Women Association, Farmer Association and Veteran Association, etc. in the communities of each village/commune, there is a traditional institution existing beside People's Committee at commune level and heads of villages and the social organizations mentioned above and depending on each institution that has different impact levels on the communities. The combination of traditional and non-traditional institutions at district and commune levels is a good framework to carry out community monitoring as regards the project implementation process, especially in social and environmental aspects. The problem is that there is a need for a mechanism to impulse and attract communities to participate in monitoring and evaluation through the consultancy and information dissemination widely and consistently during the project implementation. Besides, the participation of the representatives of affected people and ethnic minority groups in the Compensation Committee at all levels should be considered as one of the most important factors to foster the process.

6.3. Independent Monitoring

During the project implementation process, the monitoring system of the organs such as the monitoring function of the People's Committee at all levels, and Department of Natural Resources and Environment of the provinces...and the political and social organizations such as Fatherland Front is assigned in the documents of the Government as to ensure the objectiveness of an independent monitoring organ that carries out monitoring activities periodically on environment and social issues. This unit will be in charge of monitoring and evaluation of the activities relevant to Resettlement, life revival according to the Resettlement Plan of the project and monitoring of the progress of Ethnic Minority Development Plan...

6.4. Monitoring Indicators

The indicators of monitoring and evaluation should be built clearly and in details relevant to:

- ✚ Can proposed objectives of Resettlement Action Plan be achieved;
- ✚ Can the timetable and resources need for this activity be ensured as required;
- ✚ Can potential environmental and social issues be recognized, considered and solved or minimized;
- ✚ And other related issues.

PART III. MAIN CONCLUSIONS AND PROPOSALS FOR THE PROJECT IMPLEMENTATION

1. Potential benefits for stakeholders

The construction of Trung Son hydroelectricity will help to rearrange some resident areas and change some infrastructures. The project will also contribute to promote industrial activities and change the tree structure in affected communes thanks to the project support activities. People's living standard will be higher, better traffic will help the goods regulation to be better, and that promotes society and economy in this area.

2. Potential negative effects on stakeholders

- People in Nang hamlet are arranged to relocate to nearer place in comparison with Mong's of Muong 2 hamlet. This can result in the small conflict because they till the land of each other.
- People need more wood to rebuild their houses after resettlement. This can cause them to cut down wood illegally and cause bad effects on riverhead forests. To prevent this situation, all levels of government and foresters must set up plans and methods to protect forest and allow people to exploit one part of forest to build house.

3. Methods to reduce negative effects

- Relocate people to the area they want
- Propagandize and disseminate information to authority and affected people so that they can get more knowledge of location, resettlement plan as well as technical solutions related to housing land arrangement, production land, running water and programs of restarting means of living
- Training activities to increase capacity of all levels of government about resettlement compensation
- Build plan of restarting means of living for located people
- Publicize information of the policy of compensation, resettlement to local people, social organizations, commune and district authority to get the supervision from social organizations and all levels of government
- Resurvey the amount of households, land area, and area of land growing specifically and exactly. The survey of affected assets must be carried out following the data before relocation but not following the survey date in 2004.
- Set up specific plan. Relocate in each different stage, each hamlet. It is necessary to pay attention to relocation points.
- Apply the compensation rate in accordance with the government regulation; increase the support and firstly give top priority to earning activities to settle the life.

4. Requirements of local community towards the project

- Attract youth in the affected area to the manual work in construction sites.
- Pay attention to job training activities, promote farm encouragement activities to create new farming structure, increase the income and recover the economy of relocated people.
- Give people chances to see models of resettlement

5. Some proposals for the income restoration of people in the project area

5.1. For resettlement area

- Ensure the social development infrastructure for people. This including electricity, school, roads, clinics and public meeting places

5.2. Policy of compensation and implementation

- Ensure the reasonable compensation rate for what people have lost
- Compensation before relocation, the value of compensation is at least equal to what they have lost

- The value of compensation must be in accordance with the recent market price at the time of compensation
- Have separate and reasonable policy of compensating for trees
- Have document commitment of compensation procedures and that commitment must be fully and properly obeyed
- Clearly publicize priority policies for resettled people
- Directly compensate for each household. It is the best way to compensate in cash for people to build house and pay for other economical items themselves.

5.3. Develop means of living, recover the income

- Keep on growing upland rice to meet the demand of the daily life and market, there must be new race for change
- Keep on growing maize (LVN10) to meet the demand of breeding and market supply to improve the people's life
- Supply high-productivity races of beans which is suitable to the recent land condition
- Support capital for breeding of cows, cross-bred pigs, chickens
- Support capital for developing cotton trees and making brocade
- Support grass race for developing cattle
- Support capital and technique to breed cage-fish in Ma river
- Support capital to reclaim virgin soil and make terraced fields
- Supply races of perennial for forestry development
- Organize training classes for people in the hamlet about technique of agriculture and forestry production

6. Proposals

- Thai people should not be resettled near Mong people;
- Need compensate for some temples of hamlet's god of affected hamlets.
- The relocation of cemetery (if any) must be informed early to people so that they can choose the method of relocation
- Promote the corporation among related parties in order to prepare better for the resettlement of the project
- After carrying out the social regard on affected communes in project area, consultant group realize that socio-economical effects of the project will affect the ethnic minority in the project area and may result in considerable influences due to chaos of resettlement. Thus, to minimize the negative effects and to increase the benefit of ethnic minority groups in this area, consultant group advise that sponsor and management board of Trung Son hydroelectricity project should establish a plan for developing ethnic minority in the project area.

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ANNEXES

APPENDIX 1

PHOTOS OF PEOPLE PARTICIPATING IN CONSULTANCY ACTIVITIES OF SOCIAL ASSESSMENT

Youth group



Women group



Men group



In-depth interview



Official group

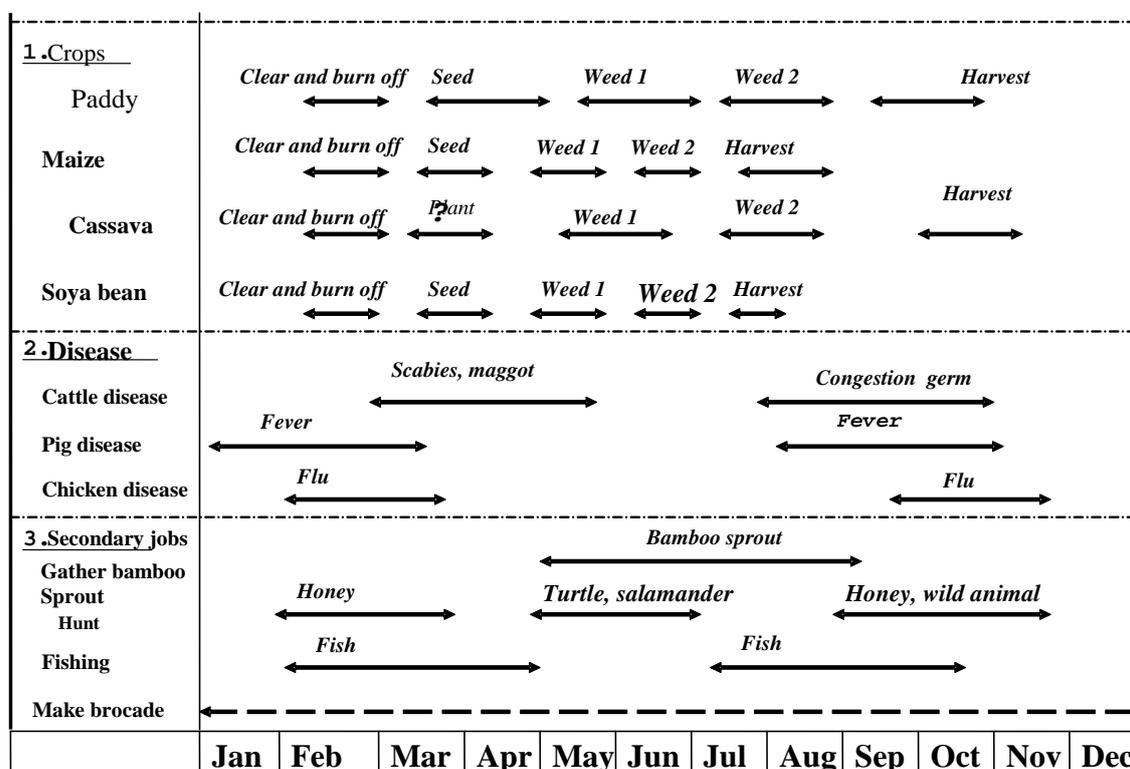


Communal meeting

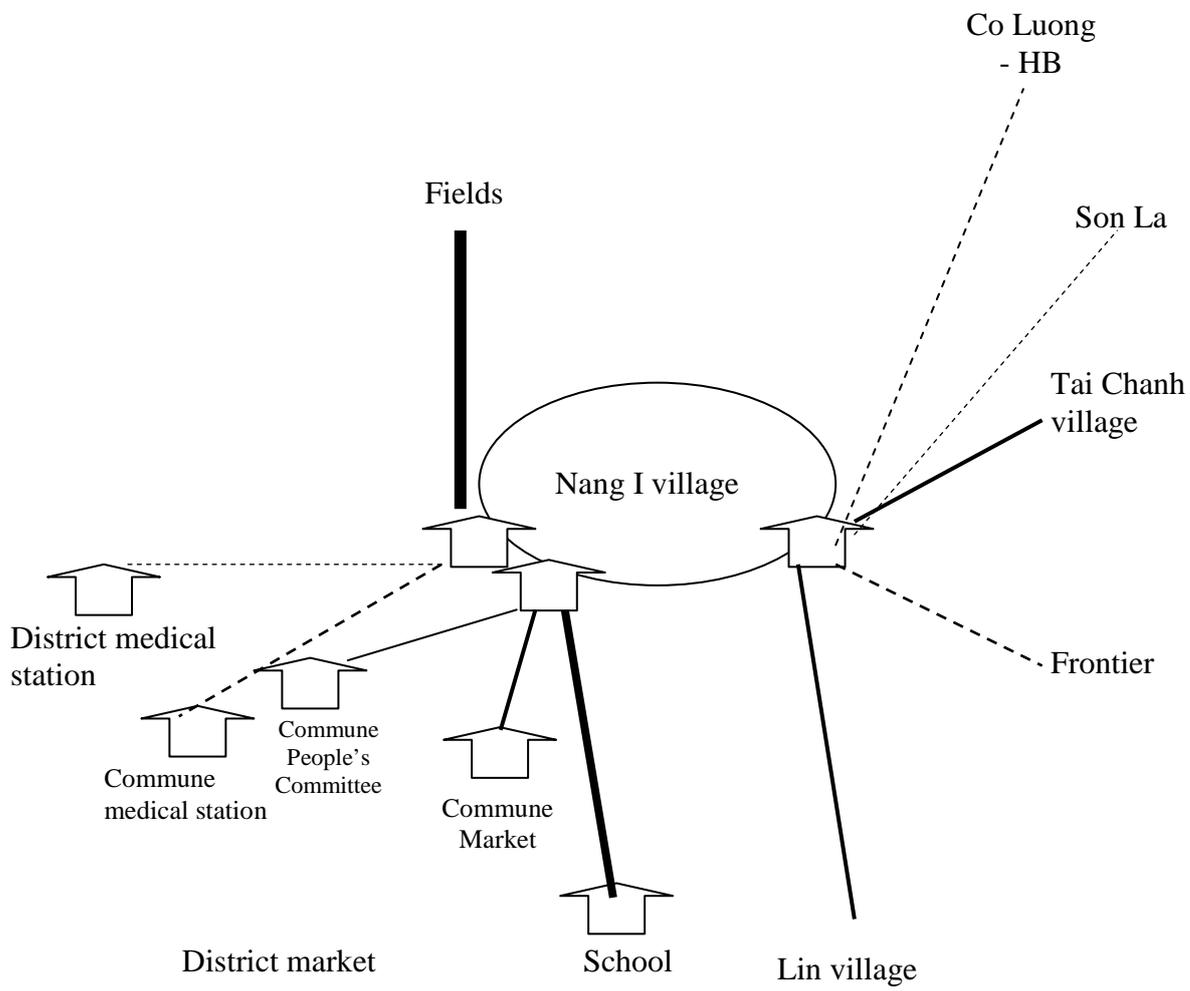


	weed, spray insecticide, prevent cattle from damaging, harvest, carry home		
4	<u>Plant bamboo:</u> Choose land, dig holes, choose seed, cut off, weed, exploit	1	1
5	<u>Fruit-tree:</u> Choose seed, dig holes, put down fertilizer, take care, harvest...	1	1
6	<u>Plant vegetables:</u> Make land soft, make beds, seed, take care, put down fertilizer, harvest, sell	1	1
7	<u>Breeding:</u> Buy breeder, take care, fed, cook mash...	2	3
8	<u>Take care of children</u> Bath, wash clothes, buy new clothes, teach...	1	1
9	Customs: Wedding, funeral, engagement party...	1	1
10	Social activities: Meeting, training	1	1

CROP CALENDAR – TAI CHANH VILLAGE



TRANSPORTATION MAP OF PEOPLE IN NANG 1 VILLAGE

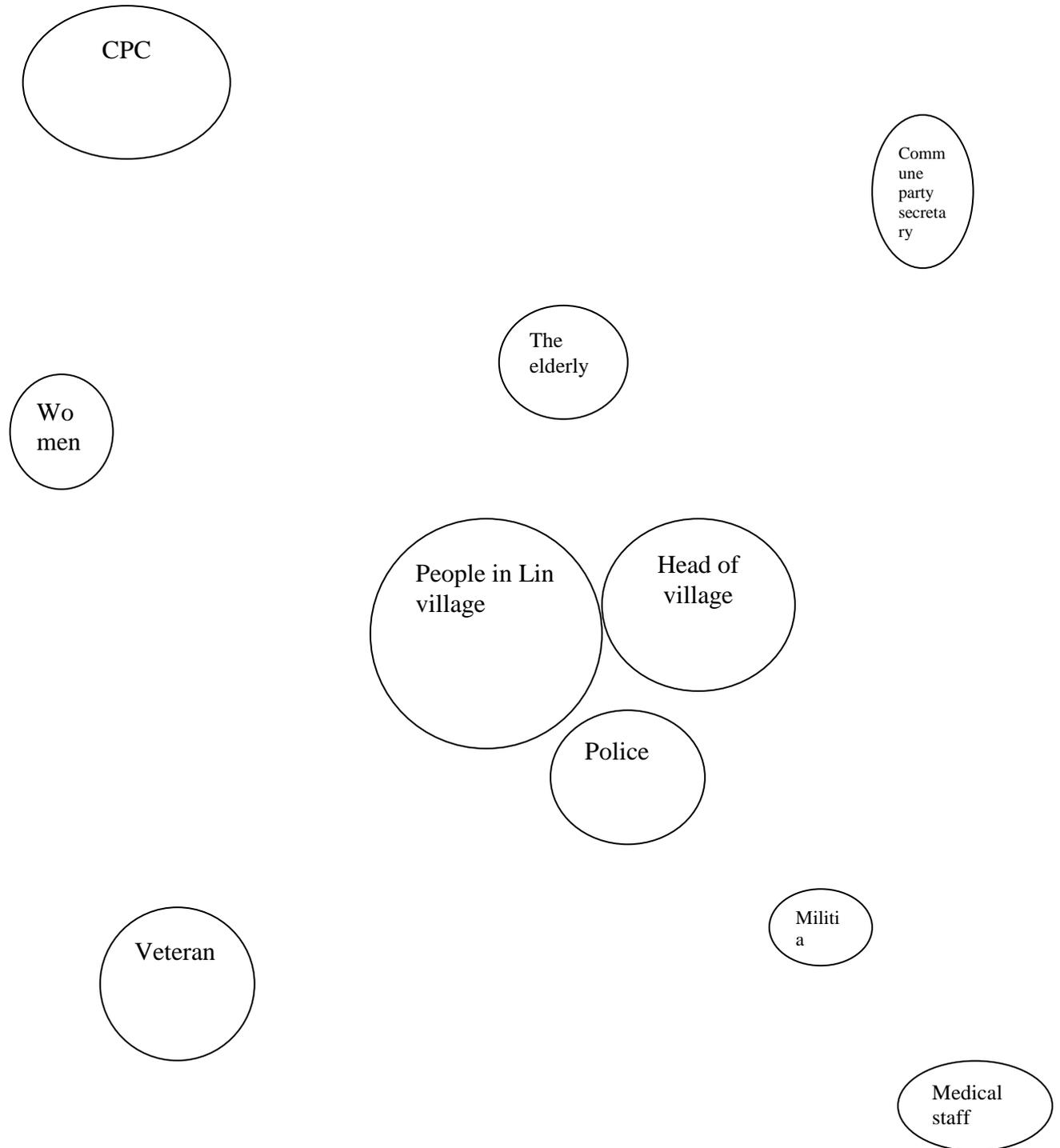


Task	Frequency	
_____ CPC	Holidays	5' walking 2 times/ year
----- Commune medical station	Meeting	5 minutes walking, 1-2 times/ month
_____ Commune market	Go to CPC	30'(walking), 15' (by motorbike): 1 time/month
----- District center	Trade in district	3 hrs (by motorbike), 3 times/year
	Trade in neighbour areas (Co Luong)	5 hrs by motorbike 1 time/year
	Trade in commune	30'(walking), 15' (by motorbike): 1 time/week
	Go for medical examination	By motorbike 1 time/year
_____ Go to hill-side plot		
_____ Nang village	Go for medical examination in commune	Walking, by motorbike 2 times/ year
----- Co Luong-HB	Go to fields	30' walking, everyday
	Visit relatives, go to Nang 2 village	15' walking 2 times/week
_____ Tai Chanh village		
_____ Muong Ly Commune	Visit relatives, go to Lin village	20' (walking and by boat) 1 time/week
_____ Son La	Visit relatives, go to Tai Chanh village	50' walking 1 time/week
----- go to school	Visit relatives, go to ML village	1 hr walking 2-3 times /year
	Visit relatives, go to Son La	6 hrs walking, 3 hrs by motorbike: 1 time/year
	Go to primary and secondary schools	30' walking, everyday
	Go to high school and above	6 hrs by motorbike, 2 times/year

VILLAGE MAP – TA BAN VILLAGE



VENN DIAGRAM OF PEOPLE IN LIN VILLAGE



Note: there is an institution that people in Lin village put out of the Ao paper size, it is farm encouragement and one institution that put half inside half outside is Youth Union because the influences of these two institutions are too insignificant to them.

APPENDIX 3: THE FOCUS GROUP DISCUSSION GUIDE

APPENDIX 3.1. GUIDELINE FOR GROUP DISCUSSION

- o Number of people;
 - o Gender element in group;
 - o Household size;
 - o Occupation;
 - o Income and assets resource;
 - o Academic standard and education approach;
 - o Health and health service approach;
 - o Cultural and ethnic specifics.
- The quantity and quality of services providers of beneficiary group, costs, approaches, quality and the service level
- Assess the knowledge, attitude and the actual situation that may affect the project's method and the level
- Determine necessary behavioral changes that customers can approach and maintain the project's benefits
- Assess the capacity and the changeability of the beneficiary group in terms of motive for change, educational level, skill, experience, the social attachment level and limitations
- The difference between the consciousness, demand and the role of both males and females in receiving the result of the activities
- The difference in the approach to the project's result, chance to be trained and to get jobs (including both males' and females' limitations)
- Groups can be negatively affected, including the groups that can remove, lose their land, income and their health can be negatively affected;
- Determine the potential conflicts in using basic resources, such as water and land;
- Impacts of the price fixing policies on the services distribution and approach as well as financial measures to ensure that poor people can approach these services stably;
- Determine the basic changes in the groups' lifestyles;
- Determine the options for preventing, minimizing or compensating for groups that can be negatively affected by the project.

APPENDIX 3.2. ACCESS AND CONTROL OF RESOURCES – HAVARD FRAMEWORK

Resources	Access		Control	
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
Resources				
Land				
Equipment				
Labour				
Production				
Reproduction				
Capital				
Education/Training				
Benefits				
Outside income				
Assets ownership				
Material goods (food, clothes, housing...)				
Education				
Political power/ prestige				
Others				

SAMPLES TO GATHER INVENTORY DATA AT THE PROJECT COMMUNES

GUIDELINES TO GATHER DATA AT THE FIELD SITE

(Data in 2006 or 2007)

Commune.....District.....Province.....

I. Socio-economic situation

1. Area

Total natural area:ha (km²)

Administrative unit (village, administrative under commune).....

Name of unit:.....

2. Population - employment

Total number of households in the commune:households;

Total population:persons

In which: Male:.....persons

Female:.....persons

Total employment from 16 to 60 years olds:persons

Male:.....persons

Female:.....persons

Total employment under 16 years old and over 60 years old:persons

Under 16:persons

Over 60:persons

3. Group

Seq.	Group	Number of HHs (%)	Number of persons (%)	Position where is the most concentrated
1				
2				
3				
4				
5				

4. Religion (Number of households or % of households)

Seq.	Religion	Number of HHs (%)	Number of persons (%)	Position where is the most concentrated
1	None			
2	Buddhism			
3	Protestantism			
4	Catholicism			
5	Others			

5. Household classification according to living standard

The average income

- Convert into paddy.....kg/person/month
- Convert into money.....VND/person/month

Seq.	Kinds of households	Number of HHs	No of persons
1	Rich HHs		
2	Welfare HHs		
3	Average HHs		
4	Poor HHs (poverty)		

6. Land:

Seq	Kinds of land	Area (ha)
1	Total land area	
2	Land for growing yearly plants	
3	Land for growing rice	
	1 season	
	2 seasons	
	3 seasons (crops, vegetables)	
4	Land for growing perennial plants	
5	Forestry land	
	Natural forest	
	Productive forest	
6	Area of water face	
	May be develop aquatic	
7	Specialized land	
	Residential land	
	Specialized land for public works	
8	Unused land	
	May be reclaim into productive land	
	May be develop forestry Wild land	

II. Infrastructures

1. Transportation

How far from the commune to national road is it?km

How far from the commune to the centre of the district is it?.....km

How far from the commune to district hospital, health center is it?.....km

How far from the commune to the nearest car-park is it?km

Do coaches enter the commune? Yes: No:

Are coaches able to enter villages? Yes: No:

2. Electricity:

How many households in the commune use electricity?.....households

Network power:.....households

Small hydroelectricity:households

3. Schools

Schools	Total	No. of rooms			
		Temporary houses	Semi-solid, bricked house of one storey	Multi-storey houses	Library
Kindergarten					
Primary school					
Secondary school					
High school					

No of teachers:persons

Ethnic teachers:.....persons

Grade I.....persons

Ethnic teachers:..... persons

Grade II.....persons

Ethnic teachers:..... persons

Grade III.....persons

Ethnic teachers:..... persons

In which: Male..... persons

Female..... persons

No of pupils persons

Grade I..... persons

Grade II..... persons

Grade III..... persons

University, college, intermediate school..... persons

In which: Male..... persons

Female..... persons

Ethnic pupils:.....persons

No of school-off pupils:persons

No of drop out of pupil in the commune.....persons

In which: Male..... persons

Female..... persons

No of illiterate persons in the communepersons

In which: Male..... persons

Female..... persons

No of children of 6 – 15 years old haven't ever gone to school

In which: Male..... persons

Female..... persons

4. Health station

Solid-built:

Area:.....m²

Semi-solid built

Family Planning station Yes:

Area:.....m²

No:

The most far residence zone to health station: km

How many are there sick-beds?beds

Doctors:.....persons
 Physicians: persons
 Nurses persons
 Mid-wives:..... persons
 Pharmacists:..... persons
 Mid-wives (not working in the health station):..... persons
 Healers:..... persons
 No of persons examine their health in the year persons
 Adults:..... persons Children (under 17 years old):.....
 persons

Kind of popular diseases in commune
 a.
 b.
 c.
 d.

How many people use drugs in commune:.....people

How many patient were infected HIV.....people

No. of death newborn (under 1 year) in 2007:.....children
 Popular cause:

- a.
- b.
- c.

No. of malnutrition children.....children (%):.....%
 Level 1:.....children
 Level 2:.....children
 Level 3:.....children

No. vaccination in commune.....children (%):.....%

5. Radio, communication

Is there broadcasting station: Yes: No:

Broadcasting from... to

No of households have television:.....households

No of households have radio:..... households

No of telephones

 Public ones:.....

 Private ones:.....

Are there post offices?: Yes: No:

Is there a culture house? Yes: No:

Is there an entertainment zone for children? Yes: No:

6. Markets

Daily trade

Market-days

*If there is not any market in the commune, how far is it from nearest market to the centre of the commune?.....km

7. Houses

Seq.	Kinds of houses	No of households
1	Multi-storey building	
2	One-storey bricked house of tiled roof or flat roof	
3	Wood house, or bricked house of cottage roof	
4	Thatched cottage, temporary tents	
5	No house	

8. Clean water

Seq.	Water resource	No of HHs	No of persons
1	Tap-water		
2	Drilled well		
3	Digging well, deep well,		
4	River and springs, ponds and lakes		
5	Rainy water		
6	Others		

III. Economy

1. No of households classified according to production category (*according to main occupation of the household or householder*)

Seq.	Production category	No of households	No of persons
1	Total households		
2	Agriculture		
3	Forestry		
4	Pisciculture		
5	Industry and small handicrafts		
6	Construction		
7	Commerce		
8	Service		
9	Others		

2. Density of communal economic structure

Agriculture:.....%

Forestry:.....%

Industry:.....%

Service:.....%

Names of mainly grown trees:

Names of mainly bred poultry and cattle:

Names of main handicrafts:

Names of main service trading activities:

IV. Program for social development, projects have been implemented at the locals

Seq.	Projects/ Programs	Purpose of the projects/ programs	Implementation year	No of HHs are beneficiaries

Information provided people