

IPP343

V3

Laos People's Democratic Republic

Laos Transport Sector Program

Improvement of National Road 6A Subproject

Ethnic Communities Development Plan

Ministry of Public Works and Transport

Department of Roads

January 27 2009

1. Introduction

This Ethnic Communities Development Plan (ECDP) is prepared to ensure equitable sharing of the project benefits and mitigation measures by the concerned ethnic communities and individuals¹ in the project area of the National Road 6A Subproject, which is part of Laos Transport Sector Project in Laos PDR. The ECDP for NR 6A Subproject is based on the initial environment and social assessment report, resettlement action plan report, and consultation with ethnic minority villages, and local provincial and district government agencies. A summary of distribution and socioeconomic characteristics of ethnic groups in the project areas, ranging from project province, districts to affected villages, will be the context for such assessment. Based on review of social and poverty conditions of ethnic groups in relevant districts and villages, adequate provisions to enhance the economic conditions of minority groups have been integrated in project design. Provisions for special mitigation measures have been included in the resettlement action plan, which will help ensure that ethnic groups adversely affected by resettlement will also benefit from the project. Current government policies and programs for ethnic groups further help to protect and enhance project benefits to ethnic groups. This plan targets the ethnic groups in the project area, which account for over 84% of the total population in the project areas.

1.1 Overview

Under proposed Laos Transport Sector Program, upgrading of National Road 6A is the subproject selected for the first year implementation. The subproject is located in Houaphanh Province starting from Hang long village in Viengxay District and Ban Dan village in Et District with 124 Kilometer, passing through Sop Bao and Xiengkhor Districts. Houaphanh Province has been identified as having the largest percentage of total population in non-road-served areas, and Road 6A is one of the final remaining unpaved sections on a road linking Vientiane with a Provincial Capital. There are total 105 villages of 4 districts located along the road corridor, including 52 villages along the road and 53 villages located within 5 kilometers of road alignment. There are 7,433 households and 43,112 people in these 105 villages, with 86% of total villages, 81% of total households and 84% of total population as ethnic groups.

The upgrading or pavement of National Road 6A is anticipated to have positive impacts on ethnic groups living along the road or near the road, which will greatly improve accessibility for the during rainy season. As some ethnic groups in the Project areas are culturally, socially and economically distinct from more dominant groups. They are vulnerable to be disadvantaged in the development process, especially those who are living far away from the big cities, far from the main road or no road access at all.

¹ Ethnic groups refer to those groups that are different from the majority ethnic group—the Lao.

The GOL is thus required to prepare an Ethnic Communities Development Plan (ECDP) to ensure that all the ethnic groups will benefit from the Project in a manner that is culturally, socially and economically appropriate to their particular circumstances.

This ECDP lays out the development strategy and program for the involvement of different ethnic groups in the project areas of NR 6A subproject. It aims to ensure that development progress fosters full respect for their dignity, human rights and cultural uniqueness. It furthermore aims to ensure compliance with the GOL policies concerning ethnic groups, as well as the World Bank's policy on Indigenous Peoples (OP 4.10).

More specifically, it is to ensure that they do not suffer adverse effects during and after the development process. The basic strategy for addressing the issues pertaining to ethnic groups will be based on the informed participation of the ethnic groups themselves, which include identifying local preferences through direct consultation and incorporation of ethnic groups' knowledge into project planning and implementation process.

In the development process, there is a small risk that some villagers could lose assets or access to resources that needs to be compensated under the compensation policy of the government and the Bank. Besides the compensation, the Project will assist villagers with the village small scale development projects to be based upon the village development potentials and the village preferences. This is to help them enhancing their capacity of income generation and improving their livelihood.

These ethnic peoples are more numerous in the more remote, upland forest areas than the lowland areas. These peoples are already disadvantaged in terms of greater poverty, less access to development (such as roads, schools and health clinics) and have a lower Lao literature than do the Lao and related Tai-Kadai ethnic groups.

The Project has been designed to take into account of these differences seriously through its extension and training strategies to the concerned villagers and their leaders. The institutional arrangements will include social and anthropological experts' inputs. The department of Ethnic Affairs of the Lao Front for National Construction (LFNC) will be included in the inter-ministerial Project Steering Committee as well as in the monitoring of the Project social impacts. The Water Resources and Environment Administration (WREA) will be the counterpart of LFNC with regard to technological and environmental impacts.

The LFNC at province, district and village levels will be involved where appropriate in the implementation of the Project activities, especially in the participatory process. This will ensure the success of the GOL Ethnic Policy and enhance the sustainability of the village development projects.

1.2 Transport Improvement and Rural Development

In the remote rural areas of Lao PDR, where the ethnic groups are living, access to benefits from the national development programs is very limited or lacking. For centuries,

development projects have been constrained by the lack of adequate basic infrastructures such as road system and electricity.

One of the national programs to reduce the rural people's poverty is to develop transport access in order to promote other rural development projects within these rural poorest areas. Along with increase income from marketing various agricultural products, the villagers can also engage in some small-scale market oriented businesses. Along with road improvement, rural electricity will become feasible, which could bring irrigation to the project areas by installing pumps along the rivers to convey water to the agricultural land. Domestic water supply could also be improved to enhance the people's hygiene and health. Women and children do not need to get the water from far away for their family consumption. They can invest their time and efforts doing other income-generating activities such as weaving and looking after the home vegetables garden etc.

Forest nursery can be established to support the community forestry in the long term. In some places, fruit trees are worth to try. However the villagers need to cope with all the changes that need time and strong support from the government and private sector.

1.3 Ethnic Peoples' Development Plan

The subproject is anticipated to have positive impacts on all ethnic groups living along the road. The project sponsor has to prepare an ECDP to ensure that vulnerable ethnic groups do not suffer adverse impacts of the Project and that they receive benefits from the Project appropriate to their particular circumstances.

This ECDP describes the legal, cultural and socio-economic context surrounding ethnic groups in the project areas. The plan describes measures, institutional arrangements that address the particular needs and circumstances of ethnic groups being vulnerable to the development process as defined below.

The plan prescribes a process during project implementation that provides for:

- (1) collection of more site specific information on ethnic peoples through participatory methods;
- (2) the informed participation of all members of ethnic peoples covered by this plan;
- (3) identification, in close cooperation with the given ethnic groups, of their specific needs and priorities to be incorporated into site specific community development activities;
- (4) procedures for participatory monitoring and evaluation of project activities and their benefits and impacts on ethnic groups; and complaint mechanisms.

2. Background

2.1 Project background

Under proposed Laos Transport Sector Program, upgrading of National Road 6A is the subproject selected for the first year implementation. The subproject is located in Houaphanh Province starting from Hang long village in Viengxay District and Ban Dan village in Et District with 124 Kilometer, passing through Sop Bao and Xiengkhor Districts. Houaphanh Province has been identified as one of provinces having the largest percentage of total population in non-road-served areas, and Road 6A is one of the final remaining unpaved sections on a road linking Vientiane with a Provincial Capital. There are total 105 villages of 4 districts located along the road corridor, including 52 villages along the road and 53 villages located off the road but within 5 kilometers of road alignment. There are 7,433 households and 43,112 people in these villages, which account for 33.7% of total villages, 40.2% of total households, and 38.4% of total population in these four districts. Among the total population and villages along the road corridor, 86% of villages, 81% of households and 84% of population are ethnic groups,

Between July and November 2008, under the comprehensive arrangement and coordination of MPWT, the project survey team made of staff from SD&XP and relevant provincial and district PWTD staff carried out consultation and impact survey for the proposed Road 6A. They were supported by key officials from local districts and villages and the affected people. The survey and consultation included holding meetings in villages along the road and identification of potential benefits and impacts by the proposed project. In order to analyze the potential project impacts and develop viable and practical RAP and ECDP, under the coordination of MPWT, the survey team conducted detailed social and economic survey on the project affected areas, which combined the collection of all the existing social economic data with sample household survey.

The existing social economic data were collected for both Houaphanh Province and four districts, as well as affected villages along the road alignment. Sample household survey was carried out among affected people, which was designed to obtain basic social economic profile of residents in the project affected area, including both Laos and ethnic groups. Based on the obtained data through investigation, the local social economic situation and the potential impact on the livelihood of the affected people were analyzed.

2.2 Ethnic Groups National Profile and Classification

Lao PDR is a cultural diverse country. In order to adapt to the new changes and bring forth unity among various ethnic groups in Lao PDR, the Lao Front for National Construction (LFNC) has identified 49 ethnic categories and well over 160 ethnic sub-groups.

Since the 1991 Constitution, the official terminology uses for describing the diverse population of the Lao PDR has been “ethnic groups”, while the term “ethnic groups” is used to classify the non Lao ethnic groups.

The “Indigenous Peoples” as described by World Bank is not commonly used in Lao PDR, but for the purpose of this report it is taken to be one and the same as “ethnic peoples”. In this development plan, the official terminology- Ethnic Group, defined in the Lao Constitution is used throughout the plan.

The Lao ethnic groups are categorized into four ethno-linguistic groups as below:

The “Lao-Tai” (also referred to as “Tai-Kadai”), which includes the dominant “Lao ethnic group” and the “lowland Tai” speaking groups. The “Lao-Tai” consists of 8 ethnic sub-groups as in Table 2-1. In the project areas, there are 46 Taideng and 24 Tai Dam group villages (sub group of Tai), accounting for 72% of total ethnic population in project areas.

Table 2-1: List of Ethnic Groups under Lao-Tai Linguistic Group

| | Sub-Ethnic | | Sub-Ethnic | | Sub-Ethnic |
|---|------------|---|------------|---|------------|
| 1 | Lao | 4 | Tai | 7 | Phutai |
| 2 | Leu | 5 | Nhuane | 8 | Yang |
| 3 | Xaek | 6 | Tai neua | | |

The second linguistic group is “Austro-Asiatic, also called Mon-Khmer” group, which consists of 32 ethnic sub-groups. There are 9 Khmou group villages in the project areas, accounting for 5.1% of total ethnic population in the project areas.

Table 2-2: List of Ethnic Groups under Mon-Khmer Linguistic Group

| | Sub-Ethnic | | Sub-Ethnic | | Sub-Ethnic |
|----|------------|----|------------|----|------------|
| 1 | Khmou | 12 | Phong | 23 | Bid |
| 2 | Pray | 13 | Thene | 24 | Lamed |
| 3 | Xingmoon | 14 | Eudou | 25 | Samtao |
| 4 | Katang | 15 | Makong | 26 | Taoey |
| 5 | Yru | 16 | Triang | 27 | Katu |
| 6 | Yae | 17 | Brao | 28 | Kriang |
| 7 | Hahak | 18 | Oey | 29 | Suay |
| 8 | Jeng | 19 | Kadang | 30 | Pako |
| 9 | Nhaheun | 20 | Lavy | 31 | Nguane |
| 10 | Kmer | 21 | Toum | 32 | Tri |
| 11 | Moy | 22 | Kree | | |

The “Hmong-lumien” group which consists of 2 ethnic sub-groups: Hmong and lumien. Here, Lumien is also called Yao. There are 7 Yao villages and 4 Hmong village in the project area, accounting for 7.4% of total ethnic population.

Table 2-3: List of Ethnic Groups under Hmong-Lomien Linguistic Group

| | Sub-Ethnic | | Sub-Ethnic | | Sub-Ethnic |
|--|------------|--|------------|--|------------|
|--|------------|--|------------|--|------------|

| | | | | | |
|---|-------|---|--------|--|--|
| 1 | Hmong | 2 | Iomien | | |
|---|-------|---|--------|--|--|

The “Chinese-Tibetan” (also referred to as “Sino-Tibetan”), which includes the Chinese and Tibeto-Burman ethnic group and consists of 7 ethnic sub-groups. None of them are found in the project area.

Table 2-4: List of Ethnic Groups under Chinese-Tibetan Linguistic Group

| | Sub-Ethnic | | Sub-Ethnic | | Sub-Ethnic |
|---|------------|---|------------|---|------------|
| 1 | Akha or Ko | 4 | Phounoy | 7 | Lolo |
| 2 | Sila | 5 | Lahou | | |
| 3 | Hor | 6 | Hayi | | |

Although the Lao language is the official language, the other ethnic languages are still used among themselves. Most ethnic groups do not have the written language. Traditional customs and religious beliefs vary according to the ethnic groups they belong to. Buddhists form the big majority and they mainly belong to the Lao ethnic groups.

2.3 Government Policy, Plans and Program

A. GOL Plan for Poverty Reduction

The Lao PDR's Five Year Plan from 2005-2010 has the aim to eradicate the poverty and set the goal that 50% of the poverty households should be eradicated by 2010 and up to 2020 the poverty should be eradicated throughout the whole country. To achieve such objective, the Lao Government Social and Economic development Plans have central relevance to ethnic groups in relation to poverty reduction. These include: (i) support for food security, (ii) commercial agriculture production, (iii) rural development, (iv) infrastructural development, (v) external economic relations, (vi) access to services. In 2000, in PM01, the government prepared a plan for decentralisation of poverty alleviation efforts that calls for establishment of the province as the strategic unit, the district as the planning unit, and the village as the implementation unit. In addition to these functions, villages are responsible for data collection on the living condition of families. The National Growth and Poverty Eradication Strategy (NGPES) is based on analysis of poverty and its causes in Lao PDR. It states that the Mon-Khmer and Hmong-Mien and Sino-Tibetan ethnic groups are the poorest in the country and identifies several causes of poverty including problems pertaining in land availability for food production and income generation. The NGPES spells out support for multi ethnic development through support for poor district development, participatory development, capacity building of rural populations and local government for participatory planning. It identifies poor districts for targeting of poverty reduction programmes in the country as a whole. The project area is covered by these poor ethnic groups.

B. GOL Policy and Legislative Framework on Ethnic groups

The 1991 Constitution defined Lao PDR as a multi-ethnic state, with “equality among all ethnic groups” as described under Article 8 of the Constitution below:

“The State pursues the policy of promoting Unity and Equality among all ethnic groups. All ethnic groups have the rights to protect, preserve and promote the fine customs and cultures of their own tribes and the nation. All Acts of creating Division and Discrimination among ethnic groups are forbidden. The State implements every measure to gradually develop and upgrade the economic and social level of all ethnic groups”.

The 1992 ethnic policy, *Resolution of the Party Central Organization concerning Ethnic Affairs in the new Era*, focuses on gradually improving the living conditions of the ethnic groups, while promoting their ethnic identity and cultural heritage. The general policy of the Party concerning the ethnic groups can be summarized as follows:

- Build National Sentiment (national identity);
- Realize Equality among ethnic groups;
- Increase the Solidarity Level among ethnic groups as members of the greater Lao family;
- Resolve Problems of Inflexible and Vengeful thinking, as well as economic and cultural Inequality;
- Improve the living Conditions of the ethnic groups step by step;
- Expand, to the greatest extent possible, the good and beautiful Heritage and ethnic Identity of each group as well as their Capacity to participate in the affairs of the nation.

Various organizations responsible to implement the above policies are as follows:

- The “Ethnic groups Committee” under the National Assembly, is in charge of drafting and evaluating all legislation concerning ethnic groups, lobbying for its implementation and the implementation of its socio-economic development plans.
- The “Institute for Cultural Research” under the Ministry of Information and Culture, is responsible for carrying out all ethnic research activities.
- The “Lao Front for National Construction (LFNC)” as the mass (political) organization, is the lead institution for ethnic affairs.

Despite the efforts made by the above institutions to improve the ethnic peoples situations under the 1992 policy laid down, many ethnic peoples still lag behind the Lao ethnic group such as the poverty rates, literacy and health. Many ethnic groups still cannot speak and read Lao language and thus unable to effectively make use of schools and health clinics, which have only Lao speaking staff. Most of the ethnic peoples are staying in the far remote areas of the country difficult to reach for proper village development like the Lao ethnic group villages.

During the LFNC seminar in 1996, a new work plan addressing specifically the ethnic group issues was adopted. The 1996-2000 National Socio-Economic Development Plan (NSEDP) aimed at alleviating poverty among ethnic populations in remote areas.

The present NSEDP (2001-2005) still focuses on poverty reduction in the poorest areas and links poverty reduction to stop “pioneer shifting cultivation or slash and burn new forest area”

which affects the ethnic People very much. However, the “rotational cultivation” may still be maintained. The sustainable land and forestry development programs are promoted by the GOL.

The Constitution of Lao PDR was passed in 1991 as a consolidation of the rights and responsibilities of the State and the people. Throughout the Constitution the term "citizens of all ethnicity" is used. The Constitution states that all citizens have rights in education, health, land use and ownership, domicile of choice, and economic development regardless of sex, religion, social status, education, or ethnicity; as well as freedom of religion, freedom of speech; freedom to peacefully assemble and to protest. All citizens have the right to work and carry out their chosen livelihoods. Articles 8 and 22, guarantee that there will be no discrimination on the basis of ethnicity or gender.

Articles in the Constitution where ethnic People are specifically mentioned are as follows:

Article 1 – Lao PDR is a nation unified and indivisible of all ethnic groups.

Article 2 - all power is of people, by people, and for the use of the multiethnic people.

Article 3 - the right of a multi-ethnic people to be owners of the nation is exercised and guaranteed by the political system.

Article 7 - mass organizations are the focal point for the solidarity and mobilization for citizens of all backgrounds and ethnicity as participating members in the safeguarding and edification of their rights and interests.

Article 8 - the State will carry out a policy of unity and equality among the various ethnic groups. All ethnic groups have the right to preserve and improve their own traditions and culture and those of the nation. Discrimination between ethnic groups is forbidden. The state will carry out every means in order to continue to improve and raise the economic and social level of all ethnic groups;

Article 13 - the economic system is for the purpose of improving the standard of living, materially and spiritually, of a multi-ethnic people;

Article 19 - the State and the people will collaborate to build schools of all levels in order that a complete education system will be available to all, especially areas inhabited by ethnic People; and

Article 22 - all Lao citizens, regardless of their sex, social position, education, beliefs or ethnicity, are equal before the law.

C. Other GOL Related Policy and Legislation

The 1997 Land Law: The GOL considers Land as the National Community Property that is administered by the State for use and as a mean for all Socio-Economic Development. All the lands must be used effectively and to be based on the macro-level and micro-level development planning. There is no personal ownership of land, but the citizens are allowed to use it and have a customary right to its resources.

The Land Law also stipulates that, in case of public infrastructure development projects cause damages to trees, crops or buildings of the private owners, the land owners have the

rights to be compensated for the damages...

Ethnic groups maintain land tenure use rights equal to all Lao citizens with certain specifications (see Section 3.1.5.1) and even preferential access and customary use rights to certain forest products (Forestry Law, Article 30; MAF Regulation 535; MAF Orders 54 and 377). Customary rights on land use among the ethnic groups are passed down from generation to generation. Traditionally, no land titles were involved and no boundaries were officially demarcated. In remote rural areas, these customary rights are still practicing widely by the local authorities.

The GOL has developed a “Land and Forest Allocation” program with the aim to allocate the land to individuals and to demarcate the village forest and land boundaries for proper land use planning and forest management in a sustainable way. The land and forest allocation program has two main components. Firstly the allocation of potential agricultural land and degraded land to households, on a three-year temporary land use certificate, for crop cultivation, tree planting or grazing; satisfactory performance permitted households to gain the land title. Secondly, the allocation of forests within the village boundary to village community for sustainable management, village forest is classified for use, protection, rehabilitation, etc. and agreements on rules managing each forest type are signed. The main objectives of the land and forest allocation program are: (i) to promote crop production to replace shifting cultivation through allocation and titling of production land, (ii) to protect forest through forest classification and, (iii) to utilize the allocated forests on sustainable basis.

Many ethnic groups have traditionally recognized certain areas of forest as sacred forest sites. In addition, among ethnic groups, individuals or households were considered to be the owners of specific trees, such as those used for resin-tapping or that may have ancestral spiritual significance. These are important aspects of village cultural and economic life that need to be investigated and strictly respected.

There are also other related policies and laws / regulations such as the GOL Resettlement and Compensation policies, the World Bank guidelines on the same issues. These aim at ensuring that the losses incurred by affected people are redressed such that Affected Persons share project benefits, are assisted to develop their social and economic potential in order to improve or at least restore their incomes and living standards to pre-project levels.

D. World Bank Policy on Indigenous People

Indigenous Peoples (OP 4.10): These instruments represents the World Bank's commitment to poverty reduction and sustainable development by enshrining respect for the cultures, environments, economies and rights of indigenous peoples. Under the OP and BP, projects affecting indigenous peoples (IP) must ensure:

- IPs are engaged in an a process of free, prior and informed consultation
- The consultation process results in broad community support for the project
- Social analysis is undertaken to ensure potential impacts on IPs are identified

- An IP plan is developed to ensure IPs receive culturally appropriate project benefits, and that adverse impacts are avoided, minimized, mitigated, or compensated.

The OP and BP also mention that where IPs are the sole or overwhelming majority of project beneficiaries, a separate IP Plan is not required, and that requirements outlined above be integral to the project documents (Resettlement Action Plan (RAP) and SIA).

3. Ethnic Groups in Project Areas

3.1 Methodology

The ECDP is based on a process of extensive consultation with different ethnic villages in the project area, and a combination of different approaches and methods, which included key informant interviews, participatory focus group discussions, survey among small sample households, and the collection and analysis of secondary data.

1) Free, Prior and Informed Consultation with Ethnic Villages

In the process of preparing ECDP and RAP, extensive consultations had been carried out by the project team among villages in the project area. Most consultation meetings were participated by staff of provincial and district public works and transport departments, district Lao Front for Construction, and staff of sub-district government which familiar with local ethnic languages. The consultation meetings often started with introduction of the road improvement project, scope of work, and implementation schedule, which was followed by free expression by villagers with their comments and opinions on potential benefits, impacts, concerns and suggestions. For those villages involved with potential resettlement impacts, detailed impact survey and discussion of compensation and rehabilitation options were also carried out. It is based on such extensive consultations that the local communities expressed their strong support of the Project along with some concerns and suggestions.

2) Interviews with Key Informants

In addition to village consultation, the consulting team also collected a great deal information from interviewing key informants, which include key provincial and district agencies, all village chiefs, and small shop owners. The emphasis was placed on (a) inclusion of the agencies concerned with addressing poverty issues, ethnic minority issues and gender issues, and (b) inclusion of the agencies or businesses that are likely to be directly affected by the construction of the proposed project.

3) Participatory Focus Group Discussion

Participatory rapid appraisal activities were conducted among different stakeholders in order to assess the general social and economic conditions of the affected communities and to identify any key social issues that are of concern to the affected people, especially among the male and female residents in villages along the road. A total of 42 focus group discussions were conducted among 21 villages along the road.

4) Household Survey

This was conducted for 38 households, covering all affected households and sample households from affected villages that will lose some collective owned farmland. About 20 households or 53% are ethnic households. The purpose of the household survey was to understand general social economic conditions of the affected households and obtain their views and ideas of potential benefits and impacts by the proposed subproject.

5) Secondary Data Collection

In order to facilitate the social analysis, a great deal of information was collected by the consulting team. This included reference to the statistical yearbooks to obtain key information on the province and districts, including socio-economic data, ethnic groups data, and poverty reduction information. A summary of these consultation activities, including key informant interviews, focus group discussions and sample household surveys is presented in Table 3-1.

Table 3-1: Public Consultation and Participation for Social Analysis Study

| Target Groups | Assessment Method | Location | No. of Participants |
|--|-----------------------------------|-----------------------------------|----------------------------|
| Provincial Planning Department | Interviews | Xamneua District | 3 |
| Provincial Lao National Front | Interviews | Xamneua District | 3 |
| Village committee of different economic conditions and ethnic background | Questionnaire and Interview | 20 villages in 4 districts | 60 |
| Men and women groups | Semi-structured group discussions | 20 villages in 4 districts | 99 |
| owners of all 9 affected shops | interviews | 7 villages in 2 districts | 18 |
| Provincial Public Works and Transport | Interviews | Xamneua District | 4 |
| Provincial Lao women union | Interviews | Xamneua District | 1 |
| District PWTD | Interviews | 4 districts in Houaphanh Province | 4 |
| District Lao women unions | Interviews | 4 districts in Houaphanh Province | 4 |
| District Lao National Front | Interviews | 4 districts in Houaphanh Province | 13 |

3.2 Ethnic Groups in Lao PDR

3.2.1 Definition and Categories

The Lao PDR is a multi-ethnic country with 49 ethnic groups divided into four main languages groups: Lao Tai, Mon-Khmer, Sino-Tibetan and Hmong-Mien. Scholars have classified up to 132 ethnic groups and sub-ethnic groups with the Lao PDR. The latest official ethnic group classification for was compiled by the Department for Ethnic Affairs of Lao Front for National Construction (LFNC) in 2002. Information regarding these main ethnic groups is presented below.

- 4 Tai-Lao groups reside primarily in the lowland regions of the country and for the most part cultivate paddy crops, practice Buddhism and are integrated into the national economy (as groups referred to as Lowland Lao or Lao Lum). This group includes the Tai-Lao, which is the dominant group, and various other related ethnic groups such as the Tai-Dam, Tai Lue, Phuan and other Tai speaking groups. The Tai-Lao groups represent approximately 50% of the population in the Lao PDR.
- 5 The Mon-Khmer groups, often called Upland or Lao Theung, live at mid-slope elevations on hillsides. These groups practice swidden agriculture and are reliant on forest products. Mon-Khmer groups are relatively isolated from the dominant lowland culture, although there has been assimilation and integration with other ethnic groups

in the country. The Khmu, Makong, Kata, Laven and other smaller groups are the original inhabitants of mainland Southeast Asia. They presently make up approximately 35% of the population in the Lao PDR.

- 6 The Sino-Tibetan groups, referred to as highland Lao or Lao Soung, dwell for the most part in highland areas and practice slash and burn agriculture. These groups include the Akha, Lahu, Lisu, and Pounoy among others, and are recent arrivals from Southern China and form about 5% of population in the Lao PDR, residing mainly in northern areas of Laos.
- 7 The Hmong-Mien groups, including the Hmong and Yao, are also referred to as Lao Soung since they tend to inhabit highland areas in the northern and central provinces of Laos. They also practice swidden agriculture. These groups are also recent arrivals from Southern China and comprise about 10% of population in the Lao PDR.



Figure 1: Ethnic Distribution in Laos

3.3 Ethnic Minorities in Houaphanh Province

Houaphanh Province is located in the northeast part of the country bordering with Vietnam. It has the jurisdiction over 8 districts and 801 villages with 16,500 square kilometers of land areas. The total population was 281,908 by 2008, with an average population density being 17 persons per square kilometers. There were 43,096 households in the province, with

average household size being 6.6 persons. Among them, 11.8% are residing in urban areas, and 88.2% are living in rural areas. Among total rural population, only 58% have access to road, and 42% without access to roads. About 67% of villages are poverty villages and 22% of households are poverty households.

Since 2000, Houaphanh Province experienced rapid economic growth and GDP has increased from \$39.31 million in 2000 to \$80.86 million in 2007, increasing by 105.7%, averaging 13.2% per year. By 2008, the average per capita GDP reached to \$392 per capita. Among total GDP, about 66% of the income came from agricultural production, 15% from handicraft and industry, and 19% from service sector. The province had a total of 43,616 ha of farmland, averaging 0.16 per capita. Total grain production was 84,271 tons in 2008, averaging 295 kg per capita, which is 16% less than sufficient grain consumption level for the country (350 kg per capita). Located in the remote regions, there are a large number of population are ethnic groups. According to the provincial data, there are as many as 62% of households and 72% of population of are ethnic groups. Table 3-2 provides basic social and economic data of Houaphanh Province and four project districts.

Table 3-2: Basic social and economic data for Project Province and Districts

| Item | Unit | Province | Viengxay | Sop Bao | Xiengkhor | Et |
|--|------------------------|----------|----------|---------|-----------|--------|
| 1. Number of Districts | Piece | 8 | 1 | 1 | 1 | 1 |
| 2. Number of Villages | Piece | 801 | 107 | 68 | 59 | 78 |
| 3. Total household No. | HH | 43,069 | 5,457 | 4,470 | 4,148 | 4,394 |
| 4. Total population | Person | 281,908 | 33,146 | 27,371 | 24,585 | 27,129 |
| 5. Ethnic village | villages | 592 | 92 | 64 | 55 | 61 |
| 5a. Percent of Total Villages | Percent | 73.9% | 86.0% | 94.1% | 93.2% | 78.2% |
| 6. Ethnic households | HH | 26,609 | 4,482 | 4,136 | 3,448 | 3,037 |
| 6a Percent of Total Households | Percent | 61.8% | 82.1% | 92.5% | 83.1% | 69.1% |
| 7. Ethnic Population | Person | 201,570 | 27,653 | 25,685 | 21,599 | 19,431 |
| 8. Percent of total Population | Percent | 71.5% | 83.4% | 93.8% | 87.9% | 71.6% |
| 9 Female population | Person | 141,287 | 16,126 | 13,708 | 12,629 | 13,358 |
| 10. Male Population | Person | 140,621 | 17,020 | 13,663 | 11,956 | 13,771 |
| 11. Number persons per household | Person | 6.6 | 6.1 | 6.2 | 5.9 | 6.2 |
| 12. Geographic area | km ² | 16,500 | 1542.8 | 1,594 | 1,473 | 1,330 |
| 13. Number of Person per km ² | Person/km ² | 17.3 | 23.7 | 16.5 | 17.9 | 20.3 |
| 14. Number of Poverty Villages | Piece | 516 | 73 | 21 | 13 | 66 |
| 15. Percent of Poverty Villages | % | 65.6% | 68.2% | 30.0% | 22.0% | 84.6% |
| 16. Number of Poor Households | HH | 9,500 | 2,374 | 1,119 | 715 | 1,818 |
| 17. % of Poor Households | % | 21.9% | 43.5% | 25.0% | 17.2% | 41.4% |
| 18. GDP per Capita | \$USD | 392 | 312 | 292 | 301 | 299 |

| | | | | | | |
|---|----------|--------|--------|--------|--------|-------|
| 19. % of GDP for Agriculture | % | 66% | 61% | 59% | 62% | 67% |
| 20. % GDP for Industrial and Handicraft | % | 15% | 11% | 17% | 20% | 9% |
| 21. % GDP in Services | % | 19% | 28% | 24% | 18% | 24% |
| 22. Farmland area | Ha | 43,616 | 3,346 | 2,800 | 2,146 | 2733 |
| 23. Grain production volume | Ton | 84,271 | 13,164 | 10,920 | 12,584 | 9,565 |
| 24. Per capita grain ownership | Kilogram | 295 | 370 | 413 | 476 | 354 |
| 25. Per capita farmland | Ha | 0.16 | 0.09 | 0.11 | 0.08 | 0.10 |

3.4 Ethnic Groups in Project Districts

Vieng Xay District is located in the North of Houaphanh Province. It is bordering with Xamneua District to the south, Sop Bao District to the East, and Viet Nam to the North and west. The district has a total area of 1542.8 square kilometers. By the end of 2008, the district had 107 villages, 5,457 households and 33,146 persons. Female population accounted for 49.2%. Among them, 86% of villages are ethnic villages. Among total households and population, 82.1% of households and 83.4% of population are ethnic groups. Among total villages, 73 are poverty villages, accounting 68.2%. Among total households, 2374 households or 43.5% are poverty households, with per capita income below \$120 per year. By the end of 2008, the district had 3,346 ha of farmland, averaging 0.09 ha per capita. The grain production was 13,164 tons, averaging 370 kg per capita. Its major agricultural produce includes rice, corn, soy beans, vegetables and fruit trees.

Sop Bao District is located in the north part of Houaphanh Province. It is bordering with Vieng xay district to the south, Xieng Khor District to the East, and Viet Nam to the North and west. The district has a total area of 1,402 square kilometers. By the end of 2007, the district had 68 villages, 4,470 households and 27,371 persons. Among them, as much as 94.1% of villages are ethnic villages. Among total households and population, 92.5% of households and 93.8% of population are ethnic groups. Female population accounted for 49.9%. The average population density was 17. Among total villages, 21 are poverty villages, accounting 30%. Among total households, 1,119 households or 25% are poverty households. The average GDP per capita was \$292. By the end of 2008, the district had 2800 ha of farmland, averaging 0.11 ha per capita. The grain production amounted to 10,920 tons, averaging 413 kg per capita. Its major agricultural produce includes rice, maize, soy beans, vegetables and fruit. Due to warm climate, more fruits and various crops were planted in Sop Bao, Xieng Khor and Et districts compared with that in Vieng Xay District.

Xieng Khor District is located in the north part of Houaphanh Province. It is bordering with Vieng Sop Bao district to the south, Et District to the East, and Viet Nam to the North and west. The district has a total area of 1,470 square kilometers. By the end of 2007, the district had 59 villages, 4,148 households and 24,585 persons. Among

them, 93.2% are ethnic villages; among total households and population, 83.1% of households and 87.9% of population are ethnic groups. Female population accounted for 49.2%. The average population density was 18. Among total villages, 13 are poverty villages, accounting 22%. Among total households, 715 households or 17.2% are poverty households, with per capita income below \$120 per year. The average GDP per capita was \$301 in 2008. The total farmland in the district was 2146 ha, averaging only 0.08 ha per capita. The grain production volume was 12,584 tons and the per capita production volume was 476 kilograms. Its major agricultural produce includes rice, corn, soy beans Non Timber Forest Products (NTFPs), vegetables and fruits.

Et District is located in the north part of Houaphanh Province. It is bordering with Xieng Khor district to the south, Luang Prabang Province to the East, and Viet Nam to the north and west. The district has a total area of 1,259 square kilometers. By the end of 2007, the district had 78 villages, 4,397 households and 27,013 persons. Among them, 78.2% of villages are ethnic villages, and 69.1% of households and 71.6% of population are ethnic groups. Female population accounted for 49.2%. Among total villages, 66 are poverty villages, accounting 84.6%. Among total households, 1,818 households or 41.4% are poverty households. The average GDP per capita was \$299 per year. By the end of 2008, the total farmland in the district was 2733 ha, averaging 0.10 ha per capita. The grain production volume was 9565 tons and the per capita production was 354 kilograms. Its major agricultural produce includes rice, corn; soy beans Non Timber Forest Products (NTFPs), vegetables and various fruits.

In total, among four project districts, there are 312 villages, 18,469 households and 112,231 persons. Among them, Lao-tai group account for 214 villages, 13,985 households and 81,490 persons. The main ethnic groups include Taideng and Tai Dam from Lao-Tai Group. For Mon-khmer and Hmong-mien groups, they account for 98 villages, 4,484 households and 30,741 persons. The main ethnic groups are Khmou from Mon-Khmer Group, Hmong and Yao from Hmong-mien group. Among them, Khmou, Hmong and Yao ethnic groups appeared to have relatively lower incomes and higher poverty ratio compared with other Lao-Tai ethnic groups. For example, among Khmou and Hmong and Yao households, the poverty households accounted for 53%, which was two times of the poverty ratio among the Lao-Tai group households or 26%. Located in mountainous areas with poor access, low education and limited farmland all contributed to relatively poor conditions among these ethnic groups. Although some of older Khmou and Hmong people in remote villages still speak their own languages, most of them can speak Lao fluently. This is particularly true for young people. In most of village consultation meetings most participants – man and women, elderly and young, were able to voice their opinions freely in Laos.

Table 3-3: Ethnic Groups in Project Districts

| Language groups | Number of Villages | Number of Households | Population | Females |
|-----------------|--------------------|----------------------|------------|---------|
| Lao-tai | 214 | 13985 | 81490 | 40369 |

| | | | | |
|--------------|-------|-------|--------|-------|
| Mon-khmer | 58 | 2717 | 19692 | 9751 |
| Hmong-mien | 40 | 1767 | 11049 | 5701 |
| Sino-Tibetan | 0 | 0 | 0 | 0 |
| Total | 312 | 18469 | 112231 | 55821 |
| % of Lao Tai | 68.6% | 75.7% | 72.6% | 72.3% |

3.5 Ethnic Minorities in Project Area

The project area refer to the area along the NR 6A corridor includes both villages along the 124 km of road and those villages located within 5 km of distance from the road. There are 105 villages along the road corridor with 52 villages along the road and 53 villages off the road but within 5 km of alignment. Among them, there are 15 villages from Viengxay District, 33 villages from Sop Bao District, 31 villages from Xiengkhor District and 26 villages from Et District. According to the survey, among 105 villages, there are a total 7,433 households and 43,112 persons with 21,529 females or 49.9%. There are 5,890 ha of farmland in these 105 villages, including 37% of upland rice and 63% of low land paddy. In average, each household has about 0.79 ha of farmland with 0.5 ha of low land paddy and 0.29 ha of upland rice. In addition, there are 3,848 ha of economic crops, which mainly planted with corn, bean, and peanut, 480 ha of forest land, and 1,684 ha of other land. In 2008, the total rice production in the affected villages was about 18,000 tons, averaging 417 kg per capita. Compared with average rice sufficiency level estimated in Lao PDR of 350kg per person per year, average consumption of the affected villages have rice surplus of 67 kg per person per year, or an equivalent of 2,900 tons per year. Such condition was much better than the average level in Houaphanh Province, which averaged 295kg per capita.

The main occupation of the people is shifting cultivation, producing subsistence rice, corn, cash crop, vegetables and cassava for household consumption and for animals with surplus sale to the markets. In addition, farmers also get their income from collecting Non-Timber Forest Products (NTFP's), such as bamboo shoots, and wild mushrooms, providing migrant labors, and engaging in small trade. Although all these villages have access to road and water supply, they are not connected by electricity grid. Almost all villages have elementary school, and only those villages in sub-district town have secondary school, and those in district town have high school. Among total villages, 39 villages or 37.1% are poverty villages, and among total households, 1,632 households or 22% are poverty households.

In the areas along National Road 6A, majority of villages and population are ethnic groups, although most of them belong to Lao-Tai group. For example, among total 105 villages 90 of them or 86% are ethnic villages; and among total households and population, 81% of households and 84% of population are ethnic groups. The main ethnic groups include Taideng (48.3%), Tai Dam (23.2%), Khmou (5.1%), Yao (3.8%) and Hmong (3.6%). Lao accounts for 16.0% of total population in the project area. See Table 3-5 for detail.

Table 3-4: Ethnic Groups Distribution in Project Affected Area

| District | Villages | Ethnic Villages | Total Household | Total Ethnic HHs | Percent | Population | Total Ethnic Population | Percent |
|-----------|----------|-----------------|-----------------|------------------|---------|------------|-------------------------|---------|
| Viengxay | 15 | 13 | 829 | 710 | 85.6% | 5006 | 4332 | 86.5% |
| Sop Bao | 33 | 31 | 2,409 | 2184 | 90.7% | 13,929 | 12924 | 92.8% |
| Xiengkhor | 31 | 27 | 2568 | 1868 | 72.7% | 14546 | 11560 | 79.5% |
| Et | 26 | 19 | 1627 | 1250 | 76.8% | 9631 | 7390 | 76.7% |
| Total | 105 | 90 | 7433 | 6012 | 80.9% | 43112 | 36206 | 84.0% |

In spite of high proportion of ethnic groups (84%), majority of ethnic groups or 70% are Lao-Tai group with only 12.5% being Mon-Khmer and Hmong-Mien groups. In addition, because most of villages are located along the road with relatively easy access, the economic condition appears to be better than the provincial or district average. For example, among total household in the 105 villages corridor, about 22% of households are poverty households. Such proportion is considerably lower than most of four project districts average, or 32.6%. If only includes those 52 villages along the road, such percentage is even lower than that.

Table 3-5: Key Ethnic Groups in Project Affected Area

| Key Ethnic Groups | Villages | Households | % of Total Households | Population | % of Total Population | % of Poverty Households |
|-------------------|----------|------------|-----------------------|------------|-----------------------|-------------------------|
| Lao | 15 | 1421 | 19.1% | 6906 | 16.0% | 16.2% |
| Taideng | 46 | 3552 | 47.8% | 20842 | 48.3% | 22.6% |
| Tai Dam | 24 | 1643 | 22.1% | 9988 | 23.2% | 17.4% |
| Khmou | 9 | 363 | 4.9% | 2200 | 5.1% | 43.8% |
| Yao | 7 | 227 | 3.1% | 1623 | 3.8% | 33.0% |
| Hmong | 4 | 227 | 3.1% | 1553 | 3.6% | 34.8% |
| | 105 | 7433 | 100.0% | 43112 | 100.0% | 22.0% |

Among different ethnic groups, those Khmou, Yao and Hmong groups appeared to have relatively high concentration of poverty households than other ethnic groups. Among these three groups, those households under the poverty line account for 43.8%, 33.0% and 34.8% respectively, which is significantly higher than the average poverty ratio in the project areas. Located in mountainous areas with poor access, harsh climate, low education and limited paddy all contributed to relatively poor conditions among these ethnic groups. Level of poverty appeared to be directly link with level of accessibility of the villages. Among the villages located away from the road but within 5 kilometers of corridor have relatively higher poverty ratio or 25.5% than those villages located along the road or 19.4%. Here, lack of access is one of key factor in contributing poverty in those poor communities.

3.6 Ethnic Distribution in Project Affected Villages

In terms of ethnic group distribution among project affected villages, the proposed Road 6A Improvement Subproject would involve land acquisition and resettlement impacts for 20 villages from 4 districts in Houaphanh Province. They include 8 villages in Vieng Xay District, 4 Villages in Sop Bao District, 5 villages in Xieng khor District and 3 villages in Et District. In

2008, there were 1,751 households and 10,520 persons in these 20 villages, averaging 6.01 persons per household. Female population accounts for 49.5% of total population.

Since most of villages are located in mountainous areas, except for those in Nam Ma Valley of Vieng Xay District, there is certain proportion of ethnic minorities. Among total 20 affected villages, 14 of them are ethnic villages. About 45% of households and population of 20 villages are ethnic minorities, which include Tai Deng, Tai Dam, Khmou and Yao ethnic groups. See Table 3 for details.

Table 3-6: Demographical Profile of Affected Villages

| No. | Village | Household | Population | Female | Ethnic Population | Name | Percent |
|-------------|-------------------|--------------|---------------|--------------|-------------------|----------------|--------------|
| I. | Vieng Xay | 401 | 2,445 | 1,000 | 308 | | 76.8% |
| 1 | B Namao | 33 | 205 | 98 | 33 | Tai deng | 100% |
| 2 | B. Kaleun | 31 | 186 | 85 | 31 | Tai deng | 100% |
| 3 | B Mouang Pua | 93 | 532 | 294 | 0 | Lao | 0.0% |
| 4 | B Phong Thong | 70 | 412 | 197 | 70 | Tai deng | 100% |
| 5 | B Pung Pua | 43 | 285 | 148 | 43 | Tai deng | 100% |
| 6 | B.vanxeng | 37 | 235 | 112 | 37 | Tai deng | 100% |
| 7 | B. Homephanh | 47 | 340 | 172 | 47 | Yao | 100% |
| 8 | B. Nasa | 47 | 250 | 124 | 47 | Tai deng | 100% |
| II. | Sop Bao | 335 | 2,060 | 1,039 | 223 | | 66.6% |
| 9 | Phonxay | 77 | 487 | 253 | 77 | Tai deng | 100% |
| 10 | B. Naguoa | 73 | 446 | 216 | 73 | Tai deng | 100% |
| 11 | B. Mouang han | 110 | 660 | 338 | 0 | Lao | 0.00% |
| 12 | B. Natham | 75 | 467 | 232 | 75 | Tai deng | 100% |
| III. | Xieng Khor | 757 | 4,491 | 2,204 | 239 | | 31.6% |
| 13 | Ta On | 112 | 718 | 353 | 112 | Taideng etc. | 100% |
| 14 | Sop Mone | 136 | 809 | 404 | 50 | Taidam & Khmou | 35.8% |
| 15 | Sop Xay | 77 | 472 | 227 | 0 | Lao | 0.0% |
| 16 | Xieng Khor | 355 | 2,020 | 990 | 0 | Lao | 0.0% |
| 17 | Phiang Yam | 77 | 472 | 230 | 77 | Tai deng | 100% |
| IV. | Et | 258 | 1,524 | 735 | 17 | Tai dam | 6.6% |
| 18 | B. Sot | 113 | 681 | 335 | 17 | Tai dam | 15% |
| 19 | B. MouangVanh | 53 | 301 | 143 | 0 | Lao | 0.0% |
| 20 | Ban Dan | 92 | 542 | 257 | 0 | Lao | 0.0% |
| | Total | 1,751 | 10,520 | 5,208 | 787 | | 44.9% |

Source: Statistic Center of Houaphanh Province and Planning Department of each District

There are 1765 ha of farmland in these 20 villages, including 61% of low land paddy and 39% upland rice. In average, each household has about 1 ha of farmland with 0.61 ha of low land paddy and 0.39 ha of upland rice. In 2008, the total rice production in the affected villages was 5,325 tons, averaging 506 kg per capita, which was 45% more than the average rice sufficiency level estimated in Lao PDR or 350kg per person per year. Such condition was much better than the average level in Huoaphanh Province and four districts, which

ranged from 295 to 476 kg per capita. In addition, there are 1303 ha of various economic crops, with 817 ha of corn averaging 6 tons per ha. Most of produced corns are used for animal feed or sold to Vietnam for cash.

In these villages, low land paddy is collectively owned, while upland rice and land for economic crops are held by individual households. The main occupation of the people is shifting cultivation, producing subsistence rice, corn, cash crop, vegetables and cassava for household consumption and for animals with surplus sale to the markets. In addition, farmers also get their income from collecting Non-Timber Forest Products (NTFP's), such as bamboo shoots, and wild mushrooms, and providing labors for roads maintenance and house construction.

All villages have access to road and water supply, and most of them or 94% of households have access to electricity connected by EDL grid. There is an elementary school in each village.

3.7 Ethnic Distribution among Affected Households

In terms of affected households, there are 26 households will be affected by resettlement, including 24 households to be affected by house demolition or shop removal, and 2 households to be affected by removal of fence or rice store. Among them 16 households or 62% are Taideng, 4 households or 15% are Tai Dam, 2 households or 8% are Yao, and 4 households or 15% are Laos. In addition, a total of 10 villages would be affected by loss of collectively owned farmland, totaling only 1.33 ha, and 22 transmission poles and 102 trees.

In order to better understand the project's impacts on individual households, the ECDP preparation team conducted a sample survey within the project affected villages. A total of 38 households were selected including 26 affected households, accounting for 100% of the total affected households, and 10 households from those 10 affected villages losing collectively owned farmland. See Table 3-7 for the specific allocation of sample households.

Table 3-7: Distribution of Sample Households in Affected Villages

| No. | Village | Affected Household | Ethnic HH | Sample Households | Sample Proportion | Ethnic Names |
|------------|--------------------------|--------------------|-----------|-------------------|-------------------|--------------|
| I. | Viengxay district | | | | | |
| 2 | B. Kaleun | 2 | 2 | 2 | 100% | Tai deng |
| 3 | B Mouang Pua | 4 | 4 | 4 | 100% | Tai deng |
| 4 | B Phong Thong | 2 | | 2 | 100% | Lao |
| 5 | B Pung Pua | 2 | 2 | 2 | 100% | Tai deng |
| 6 | B.vanxeng | 1 | 1 | 1 | 100% | Tai deng |
| 7 | B. Homephanh | 1 | 1 | 1 | 100% | Tai deng |
| 8 | B. Nasa | 2 | 2 | 2 | | Yao |
| | Sub-Total | 14 | 12 | 14 | 100% | |
| II. | Sop Bao District | | | | | |
| 9 | Phonxay | 2 | 2 | 2 | 100% | Tai deng |
| 10 | B. Naguoa | 1 | 1 | 1 | 100% | Tai deng |

| | | | | | | |
|----|----------------------------|-----------|-----------|-----------|-------------|-----------------|
| | Sub-Total | 3 | 3 | 3 | 100% | |
| | Xieng Khor District | | | | | |
| 13 | B.Ta On | 3 | 3 | 3 | 100% | Taideng &Taidam |
| 14 | B.Sop Mone | 3 | 3 | 3 | 100% | Taidam |
| 15 | B.Sop Xay | 1 | | 1 | 100% | Lao |
| 16 | B.Xieng Khor | 1 | | 1 | 100% | Lao |
| | Sub-Total | 8 | 6 | 8 | 100% | Tai deng |
| | Et District | | | | | |
| 20 | Ban Dan | 1 | 1 | 1 | 100% | Tai dam |
| | Sub-Total | 1 | 1 | 1 | 100% | |
| | Grand Total | 26 | 22 | 26 | 100% | |

To have a better understanding of basic social economic profile of affected households, the ECDP preparation team conducted detailed social economic survey among 38 sample households. Among them 20 households are ethnic groups, accounting for 53% of total samples. Table 3-8 lists the results of these sample households.

(1) Family structure and employment

The 38 sample households have 230 people in total. Every household has 6.1 people in average. Among them, 20 households and 125 persons are ethnic minorities, which account for 54% of total population. All of them are Khmou, Taidam, Yao, and Taideng ethnic groups. Among total sample population, there are 114 adult labors (ages between 17 and 55), 17 elderly (ages above 55 years old) and 99 children with age below 17 years old.

(2) Agricultural production

According to the investigation, there are basically no enterprises in the project affected area. Farmers mainly work in crop production and small trade. Due to closeness to the roads, 9 households have income from small shops. Most farmland grows grain crops, including low land rice, upland rice and corn for their self consumption. In total the sample households have 37 ha farmland and the per capita farmland is 0.16 ha. In 2007, the annual grain production volume was about 115.6 tons and per capita grain volume was 502 kg. Because the existing production facilities are not well developed, and the irrigation conditions are not good, the current rural resource development and utilization level is not high. There is still room for further improvement of the farmland productivity.

Table 3-8: Basic information on the sample households in Project Affected Areas

| Investigation indicator | Unit | Ethnic | Lao | Investigation indicator | Unit | Ethnic | Lao |
|---------------------------------------|-------------|---------------|------------|--------------------------------|-------------|---------------|------------|
| I. No. of Sample Households | HH | 20 | 18 | 2. Transport and communication | | | |
| 1. Total Population | Person | 125 | 105 | (1) Mobile phone | Piece | 15 | 16 |
| Including: women | Person | 55 | 52 | (2) Fixed telephone | Piece | 0 | 0 |
| 2. Total No. of labor forces in HH | Person | 66 | 48 | (3) Motorcycle | Piece | 24 | 16 |
| Including: women | Person | 8 | 9 | (4) Truck | Piece | 4 | 9 |
| 3. Average dependents per labor force | Person | 0.89 | 1.19 | V. Annual total income | US\$ | 42,382 | 33,882 |

| | | | | | | | |
|--|--------|-------|-------|------------------------------|------|--------|--------|
| II. Agricultural production | | | | (1) Income from Planting | US\$ | 16,399 | 12,624 |
| 1. Farmland | Ha | 23.2 | 13,6 | (2) Income from Animal | US\$ | 7,671 | 4,235 |
| 2. Per capital farmland | Ha | 0.19 | 0.13 | (3) Income of NTFP | US\$ | 1,659 | 671 |
| 3. Total Grain Production | Tons | 60.3 | 55.3 | (4) Income of Shops | US\$ | 3,325 | 459 |
| 4. Per capita Grain Production | Kg | 482 | 527 | (5) Small Trade & Other | US\$ | 13,329 | 15,894 |
| III. Persons working in non-farm sectors | Person | 16 | 10 | VI Annual total expenses | | 25,722 | 15,852 |
| % in the total labor forces | % | 24.2% | 20.8% | (1) Food | US\$ | 12,053 | 6,412 |
| Including: (1) small shops | Person | 13 | 5 | (2) Health Care | US\$ | 1,882 | 1,388 |
| (2) teachers | Person | 0 | 3 | (3) Education | US\$ | 2,918 | 2,706 |
| (3) small trade | Person | 3 | 2 | (4) Social Welfares | US\$ | 1,182 | 1,035 |
| IV. Durable consumer goods of HH | | | | (5) Clothing | US\$ | 1,700 | 1,153 |
| 1. Home electric appliance | | | | (6) Transport & Other | US\$ | 706 | 953 |
| (1) TV set | Set | 12 | 10 | (7) farm input | US\$ | 5,281 | 2,205 |
| (2) DVD\VCD | Set | 9 | 11 | VII Annual Per Capita Income | US\$ | 297 | 302 |
| (3) Electric fan | Set | 0 | 0 | | | | |

(3) Living environment and housing conditions

All sample households are located along the existing road and have relative easy access to the outside, although quality of roads are difficult during rainy season. There are shuttle buses to district center or Samneua – the capital city of Houaphanh/ Province.

(4) Household income structure

According to our survey statistics on economic income of the sample households, in 2007, the annual per capita income of the sample households was \$332, including \$126 per capital from agricultural production, accounting for 38.1%; \$62 per capita from animal husbandry and forest products, accounting for 18.7%; \$101 per capita from shops, accounting for 30.3%; and \$42 from other sidelines or non-farm activities, accounting for 12.7% of total income.

(5) Household consumption structure

According to our investigation on 38 sample households, in 2007, the annual per capita expense of the sample households was \$181, including \$23 per capita agricultural production expense, accounting for 12.5%; \$158 per capita daily life consumption, accounting for 87.5%. Among total expenses, the food and beverage consumption expense was largest with \$80, accounting for 44.4%. It followed by education expense with \$24 per capita or 13.5%, and medical expense with \$14 per capita or 7.9%. The remaining per capita expenses are clothing with \$12 or 6.9%. The household consumption structure indicates that the daily life consumption level of the residents in the project affected area is still low. People's consumption is basically concentrated in basic consumption.

(6) Per capita net income

According to the analysis of the economic income and consumption expenses of the sample households, by the end of 2007, the per capita net income of sample households was \$309, with \$297 per capita for ethnic households and \$302 per capita for Laos households. There is no visible disparity of income level between Lao people and ethnic people. The household with highest per capita net income among the sample households was \$1059 and the household with the lowest income was \$88 per capita per year. There are only two households with per capita income below the poverty line or \$120 per capita, accounting for 5.2% of total affected households.

3.5 Ethnic Groups and Their Distribution

The following are some detail described of the ethnic minority groups in the affected villages of the project area.

3.5.1 Tai Deng-Tai Dam

Taideng and Taidam are subgroups of the Tai group. The ancestor of these groups came from Bolikhamxay and Khammouane provinces. The Tai languages are in the Austro-Thai family. Certain groups have old scripts for writing, but many of them have been forgotten. The total population of Tai in Laos is 215,254, or 3.8% of total population in the country based on 2005 census.

Most of the Tai groups practice Buddhism, how ever not all of them. The TaiDam do not follow the Buddhism, but instead practice animism.

All of the Tai groups incorporate animism into their beliefs, worshipping spirits that represent the district, the village, the household, forests, water, the heavens and many other things.

Families are the most important social unit. Family will live together and the oldest male are the head of the household.

Tai Dam are organized in political and familial groups call "Sing" member of these groups consider themselves descendents from a founding ancestor. There are different levels of status among "Sing".

There are differences among the groups in housing, but most houses are similar like sitting on stilts and in a rectangular shape. They are usually made from woven bamboo with the floor wood planks and the roof from thatch. Inside will be divided into living and sleeping quarters, with a small heart for cooking.

Agriculture and livelihood of the Tai minorities are generally farmers, growing both glutinous rice and regular rice. They are also skilled at growing vegetables such as sweet potato, cassava. For use of labour and sacrifices purpose, they breed cows, buffalos, pigs, dog and others. TaiDam are well known as their waving skills, they also handy with handicraft.

3.5.2 Khmou

Khmou language is classified into the Mon-Khmer language group of the Austro-Asiatic language linguistic family, the branch is Khmuic branch. There are distinct regional dialects

among the language. Khmou also like to learn the languages of other ethnic groups. In 1980s, linguists carried out some studies and used Latin alphabets to write in Khmou dialect. This alphabet still exists and is being used. The total population of khmou in Laos is 613,893, or 10.9% of total population in the country based on 2005 census.

Khmu's Villages are administratively managed according to the official system, which a village chief, a committee and mass organization. A traditional council of elder plays an important social and cultural role. The shifting cultivators are often organized in working groups, which took a somewhat different from during the co-operative period, for highland paddy cultivation work. These groups of approximately ten families are re-organized on an annual basis according to neighborhood relationship and land allotments.

Khmou like to build their houses on low wooden stilts, about 1 to 1.5 meters above the ground. A family which just ensures regular food sufficiency contents itself with a bamboo mat walled house with no windows and roof made of thatch or bamboo tiles.

Both men and women also have sacred textiles, which they have collected over the span of a lifetime and keep stored either in large ceramic jars or metal trunks. This sacred textiles, mainly tube-skirts are woven for the Khmu by in large tapestry designs. The Khmu wear such textiles during rituals, for instance a burial, healing rites and a number of religious ceremonies. In addition to those textiles they also use sacred garments to place on altars or cover a coffin.

Kmou generally have practiced slash and burn agriculture for growing dry-land rice. They also grow crops such as cassava, maize, peanuts and some vegetable. They also grow tobacco. They have some buffalo, goats, pigs and chickens. They also like to fish and hunting, In addition, they also collect non-timber forest products for sale and exchange. They also skilled in metal works and weaving bamboo and rattan to make basket, fish trap and some other tools for household use or sometime sell.

3.5.3 lu mien (Yao)

lu mien is also known as Yao. Lu Mien are having 3 subgroups of Lanten, Yaophommaideng and Yaokhao. The language of this ethnic group is classified into Hmong-lumien Language family. They are original migrated down from China and spread into Vietnam, Lao, Burma Myanmar and Thailand. They are live in the northern provinces and down to Vientiane province. lu mien use Chinese written language to write, they have been able to preserve their custom and culture very well. The total population of lumien in Laos is 27,449, or 0.5% of total population in the country based on 2005 census.

lu mien village are situated between 500-1,500 meter about sea level. The houses are one story and sit on the ground. Lu Mien are wear trousers, a large turban on the head and a long robe that has sash.

lu mien use Chinese written language to write, they have been able preserve their custom and culture very well. They believe of animistic spirits that are part of daily life. They believe in seven principle spirits that represent human, animals, fields, forests, sky, water and earth.

Traditionally slash and burn cultivation of dry-land rice, plus the cultivation of wet rice was the mainstay of lu mien agriculture. They also grow maize, cassava, sweet potato, beans, cotton and spices. They are skilled at breeding animals such as cattle, buffaloes, horse, goat, pig, chicken and ducks.

lu mien women do not weave much anymore, but they are skilled at making garments from cloth. Men are skilled in blacksmith and silversmith, producing jewelry, tool and pipe for their family and some for sell.

3.6 On Going Minority Development Programs

Since ethnic groups account for 80% of total population in Houaphanh Province or 84% in project areas, most of provincial development programs are targeting ethnic group population in the province. The unique status of high concentration of ethnic groups in the province allows Houaphanh Province to obtain additional central government support for the ethnic group population. The province has its own master plan and sector development plans support the development of ethnic groups. The sector development plans include:

- ⌘ poverty reduction and development plan
- ⌘ agricultural and forestry development plan;
- ⌘ industrial development plan;
- ⌘ women's development plan;
- ⌘ children's development plan;
- ⌘ educational development plan;
- ⌘ transport development plan;
- ⌘ public health development plan; and
- ⌘ Others.

These plans are often linked with various programs, e.g., land conversion program is linked with forestry development plan and food for work program in linked with poverty development plan. Budgets for implementing these plans, as well as for other activities, are pre-determined and specified. In other words, there is hardly any flexible money available for additional activities imposed by such project like this World Bank Road Development Project².

In addition to the sector development programs, there are specific ethnic group development programs in the project province that are administrated by Houaphanh Provincial Lao National Front. These programs are formulated based on the needs of each district through bottom-up and top-down approaches. Ethnic development programs include the provisions of social infrastructures (primary/secondary school, health center, village enhancement with fencing around village or sub-village, and recreation facilities), infrastructures improvement (rural road, water supply and electricity connection), and capacity building (training on farming, and other income-generating activities). The ethnic development programs often join hands with poverty reduction programs. Table 3-9 provides a preliminary list of on-going programs for the ethnic villages in the project districts.

² Specifying budget uses is also an anti-corruption measure.

Table 3-9: Ethnic Development Programs in Houaphanh Province (2007-2008)

| No | Description/Programs | Sponsor and Project Owner | Total Amount (US\$) | Foreign sponsor/International Organization | Percent of Foreign Support |
|----|--|--|---------------------|--|----------------------------|
| 1 | Poverty Reduction fund with subprojects in infrastructure, capacity enhancement, agricultural production training etc. | Poverty Reduction Fund, covering 216 villages in 4 project districts | 1,001,349 | World Bank and others | 100.0% |
| 2 | Provincial Vocational Training Center | Provincial Education Department | 1,123,529 | Germany | 99.5% |
| 3 | Ethnic Group College/dormitory Project | Provincial Education Department | 647,059 | Viet Nam | 90.9% |
| 4 | Hospital facilities Project | Provincial Health Department | 494,118 | ADB | 90.5% |
| 5 | Water supply in Xamtai District | Provincial Public Works and Transport Dept. | 482,353 | ADB | 97.6% |
| 6 | Access Roads in small Town | Provincial Public Works and Transport Dept. | 178,824 | ADB | 94.7% |
| 7 | High school in Xiengkhor District | Provincial Education Department | 611,765 | | 0.0% |
| | Rural Road Access program in Sop Bao, Et and Xiengkhor districts | Houaphanh PWTD and Sweden Grant | 419,297 | Sweden Grant | 53.7% |
| | Ethnic Children Education Support in Viengxay, Et, Sop Bao, and Xiengkhor Districts | Provincial Education Department | 854,215 | ADB and foreign countries' grants | 72.5% |
| | Livelihood Fund for livestock support and irrigation repairs in Viengxay, Et, Sop Bao, and Xiengkhor Districts | Provincial Agricultural Department and NCMI | 554,635 | Foreign Private donations | 86.9% |
| | Health and Vaccination in Viengxay and Et Districts | Provincial Health Department | 158,941 | WHO/UNDP/Red Cross | 84.9% |
| | Rural Electrification in Viengxay and Xiengkhor Districts | EDL branch office in Houaphanh Province | 87,294 | | 0.0% |
| | | Total | 6,613,379 | | 79.5% |

Source: Houaphanh Planning and Investment Department.

8 Project Benefits and Impacts

8.1 Approach and Process

The proposed NR 6A is the part of section linking Vientiane and Houaphanh Province. In order to minimize any potential social impacts and reduce project cost, the upgrading of the existing NR 6A will be based on existing right of way with only 7.5 to 8.5 meters. In order to have a better understanding about the proposed Project and ensure adequate consultations with affected villages, during the preparation of initial social assessment, resettlement action plan and Ethnic Communities Development Plan, a series of meetings were held with key provincial and district government agencies and affected villages. The government agencies include provincial planning department, provincial public works and transport department, provincial Lao Front for Construction, and Provincial Lao Women Union, as well as similar institutions in the 4 project districts. More importantly, a series of consultation meetings were held in all 21 villages along the road in order to identify project impacts, and consult with affected people on their potential concerns.

The consultation meetings were participated by village committee members, village chiefs, village representatives, and affected households. They began with meetings with village committee members and followed by group discussions with males and females villagers. There were two meetings in each village. One meeting took place before the impact survey. It was participated by the survey team, local government officials and villagers. The main content of the meeting was to introduce the project, the object, and proposed survey and consultation activities. After impact survey, the team met village representatives again in small group discussions to discuss issues concerning land acquisition and resettlement as well as other concerns. The survey team made of staff of consultants, ethnic agencies in district and province, and public works and transport departments in provincial and district levels. Following group discussions, individual interviews were carried out with those households to be affected by land acquisition and resettlement. It is through such extensive discussions and consultations, the potential project benefits, impacts and concerns were identified and various mitigation measures to enhance project benefits and reduce potential impacts were explored.

4.2 The Benefits of the Project

The National Road 6A with a total 124 kilometers is located in Houaphanh Province. It starts from Hang long village in Viengxay District and ends in Ban Dan village in Et District, passing through Sop Bao and Xiengkhor Districts. The road is unsealed road constructed in the 1990s, officially classified as gravel but the surface is a mixture of gravel, stone, earth. Although it is regarded as all-weather road open for 12 months of the year and the overall condition is considered to be fair to good by an unsealed road. However, in some sections the road is difficult in rainy season, especially for conventional light vehicles. The first 40Km section is in mountainous terrain. The remainder of the road is along Nam Ma River Valley. A number of minor roads connect with NR 6A, all of which have earth surface.

Discussions with local officials and villagers indicated that the people of Houaphanh Province, especially the project districts are often suffered from poor accessibility during the rainy seasons, and serious dust in the dry season. Such problems hinders the economic growth in the region by limiting trade of agricultural products and also causes potential health risks for those villages along the road.

Therefore most of villagers expressed the strong support for the project, which will install pavement on the existing road. All of them requested the Project to start as soon as possible. The villagers said that if the road needs more land along the road, the villages would be willing to make contribution to the project. The reason for such strong support is that most of them can see clearly what benefits the proposed road project could bring to their communities. Even those affected households were ready to move out as long as there are fair compensations. The proposed NR 6A subproject will benefit all people in Houaphanh Province, which include urban and rural, male and female residents, industrial managers, staff of the enterprises and institutions, local government officials and small shop owners. Majority of project beneficiaries are ethnic groups.

For most local villagers, the implementation of the Project will create many temporary and long term employment opportunities for road construction and maintenance, which could help them build their savings and improve the poverty conditions. According to estimate, the construction of NR 6A would require 286,000 day person temporary employment in 3 years, which could bring \$1.14 million dollars of wage income to local villagers. At least 80% of labors and \$915,200 of wages will go to ethnic groups in the project areas. Such amount could allow close to 1,600 individuals working for 6 months. Each unskilled labor could earn at least \$720 during the construction, which is more than two times of that their current annual income.

In addition, some villagers could also benefit from providing commercial activities during the construction, which include provision of food and accommodation services, as well as provision of construction materials to the contractors. Such commercial activities could enable most ethnic villagers to obtain more cash income from the Project.

When the road construction is completed, additional \$43,400 of maintenance fund will be spent each year along the road. Assuming that one villager will be assigned to maintain 1 km of the road maintenance, at least 109 villagers will be selected to carry out road maintenance activities, which could earn about \$250 per year for those benefited households.

In addition to employment benefit, the improved transport condition will lead to increase agricultural production in the region by reducing transport cost and increasing farm input, and increase of non-farm economic activities by encouraging tourist activities and outside investment. All of them will direct benefit local villages, including most ethnic villages.

For business and enterprises, the improved Road 6A subproject will mean the reduction of cost or time caused by poor road condition, which will result in higher profits for the companies, more wages for the employees and more tax revenues for local governments.

In addition to economic benefit, group discussions among stakeholders also identified a range of non-economic benefits by the Project, which include: (1) a better living environment along the road with improved drainage and reduced dust; (2) an improved transport and access for local villagers, and (3) an enhanced non-farm employment capacity through participating in Project construction, and job skill training for affected communities. Even for those people outside the road corridor, improvement of accessibility mean less interruption of transport and market activities, and less interruption of government programs and services, which are critical for most rural poor.

The project itself is an ethnic minority people's development project because it will directly strengthen connection to the political, economic and commercial center of Houaphanh Province with country capital. Table 4-1 lists main benefits of the project listed by key stakeholders in the project areas.

Table 4-1: Positive Impacts Identified by Different Groups of Beneficiaries

| Stakeholders | Potential Project Benefits |
|---------------------------------|--|
| Male villagers along the road | <ul style="list-style-type: none"> • Protect lives and houses from dust • Improve traffic along the road • Increasing business and make more income • Create more temporary jobs during construction so that they could earn more cash income for their households • To achieve that, contractor should give local villagers priority for hiring unskilled labors. • More job opportunities for road maintenance after completion |
| Female villagers along the road | <ul style="list-style-type: none"> • Improve sale of agricultural products with new road • Livestock shipment will be easier with new road • Reduce cost of transport with less trip and less time • Reduce dust with road pavement and improve health conditions for their families. • Will have more reliable transport to see doctor and for children to go to school |
| Bus drivers and traders | <ul style="list-style-type: none"> • Reduce fuel and maintenance cost with new road • Reduce transport time • Increase traffic volume and passengers and more income could be made from improved transport activities. • Less broken down of cars and reduction of maintenance cost |
| Shop Owners along road | <ul style="list-style-type: none"> • No dust impact and better working environment • Can build a permanent business house or house structure since no need to worry about relocation again • The shops along the road will have more business due to increase traffic; |
| Government Officials | <ul style="list-style-type: none"> • Unpaved roads require a great deal of government budget for routine maintenance and repairs; which amounted to 1.5 billion kip per year; • With new roads, the land slide and road broken could be avoided or minimized during rainy seasons, so that no interruption of road traffic in the project areas; • The new road with better transport will attract more investors to the area for future development. • The new road will improve the access for the local population; • The improved road with all season access will enable agricultural products including livestock to transport quicker and less cost for the local villagers; |

4.3 Potential Negative Impacts of the Project

During the consultation and focus group discussions held in the selected villages, different groups of individuals also identified a range of potential negative impacts to be brought by the proposed subproject based on their own interests. Among these potential negative impacts, the land acquisition, demolition of houses and relocation of population were considered the major negative impacts by the project. However, since the upgrading of NR 6A will be based on existing alignment, the potential resettlement impact will be quite limited.

According to the detailed impact survey, the construction of NR 6A will acquire a total of 1.45 ha of land areas, including 1.35 ha of farmland and 0.1 ha of housing land. All acquired farmland are collectively owned by 10 villages. Along with land acquisition a total of 1,109 square meters of structures will be demolished, including 612 square meters of houses and 497 square meters of shops. A total of 24 households would be relocated with 13 of them losing houses and 8 losing shops, and 3 losing their housing plots. Two households would be affected by losing certain attachments. In total, there are 26 households to be affected.

In general the land acquisition and demolition impacts will be limited. After extensive consultation with affected villages, the house demolition and property removal impacts could be mitigated by providing affected people compensation funds based on replacement value, and alternative housing land by the affected villages and paid by the Project. After resettlement, all affected people will be able maintain their previous living standard and can continue their farming or trade activities. For temporary land occupation, efforts will be made to avoid occupying farmland or adequate compensations will be paid to affected people for their lost yields and the project owner will be responsible to restore the land areas into their original condition after construction.

Following the World Bank requirements, a resettlement plan has been prepared by the project sponsor. According to national laws and regulations and based on consultation with affected people a set of compensation rates has been adopted for the Project. For land compensation (including farmland and housing land), the compensation is set at \$3 per square meter, which is about 20 times of annual crop value of the lost farmland. For house demolition, the compensation will be set at \$40 per square meter for concrete structure, \$35 per square meter for wooden concrete houses, and \$30 per square meter for wooden structures. Along with compensation for affected structures, replacement housing plots and moving allowance will be provided. For attachments, the compensations at replacement value will be provided, so that affected assets and village facilities could be restored into original conditions. For temporarily occupied land, if productive land is involved, the affected villages or individuals will be provided compensation for the lost yield, plus compensation for restoring them into original conditions.

However, since the RAP has not yet been disclosed to the local communities and affected people, some people interviewed did not have clear idea about the potential land acquisition and resettlement impact to be brought by the Project. They express desire to have more information regarding compensation policies and potential negative impacts. It seems that

during next stage of resettlement planning more meaningful participation should be organized with affected communities and individuals, and more disclosure should be carried out in order to improve basic understanding of the resettlement preparation for the Project and address concerns raised by the project affected people.

Apart from land acquisition and resettlement, the villagers also identified other potential negative impacts during and after the road construction. They are mainly referring to temporary environment impacts during road construction and potential safety concerns when the new road is completed. For example, the villagers voiced some concerns regarding potential noise and dust impacts during road construction, increasing traffic around their villages, and possibilities of water pollutions caused by soil erosion and wastewater discharged from construction sites. In addition, villages and local officials also mentioned potential safety concerns after road construction with increasing traffic volume and increasing speed. For these types of concerns, detailed mitigation measures have been developed and included in the project design documents, as well as project environment management plan and project safety component. More specific concerns raised by different stakeholders are summarized in Table 4-2.

Table 4-2: Potential Negative Impacts Identified by Different Stakeholders

| Stakeholders | Potential Project Impacts |
|---------------------------------|---|
| Male villagers along the road | <ul style="list-style-type: none"> • Loss of houses or attachments due to road construction • Lost the time to move the house or property to be affected • Increase dust and noise by heavy trucks during construction • The good road will lead to increasing speed and traffic on the road, which might cause more accidents for children or livestock • Dangerous of fast drive cars or trucks • Dust and trafficking will cause problem during construction |
| Female villagers along the road | <ul style="list-style-type: none"> • The improved road could lead to increase traffic speed along the roads, which might create more accidents for children and animals. • During construction, the dust and pollution might cause some impacts on villages living along the road, and having some environment and health impacts; • More serious impacts are land acquisition and house demolition as well as removal of assets • The relocation of houses will create hardship and inconvenience for affected households. |
| Bus drivers and traders | <ul style="list-style-type: none"> • Inconvenience or interruption of road traffic during construction, which might increase operation cost and reduce profit for the transport business operators. • During construction, the existing roads and drainage might be damaged, which might create problems vehicles. |
| Shop Owners along road | <ul style="list-style-type: none"> • More serious impacts are lost of shops, and relocation of shops would result in loss of income and profit. • The improved road could lead to increase traffic speed along the roads, which might create more accidents for local villagers and animals. • During construction, the dust and pollution might cause some impacts on shops along the road, and having some environment and health impacts; |
| Government Officials | <ul style="list-style-type: none"> • Take time to restore the business or reconstruct house caused by road construction. • lost time for other activities to do • Large number of construction workers and increase traffic might bring some disease in the project areas, including HIV, more education is needed; • Sometime there might be conflict between constructor's workers and villagers due to misunderstanding. |

- | | |
|--|---|
| | <ul style="list-style-type: none">• The improved road could lead to increase traffic speed along the roads, which might create more accidents for children and animals. |
|--|---|

4.4 Expectations and Concerns

In general based on extensive consultations with local ethnic communities, majority of villagers expressed their strong support for the proposed improvement of NR 1B subproject. To most villages along the road, the implementation of the subproject will greatly improve transport condition to the local communities, particularly during rainy seasons, which will reduce transport cost and increase flow of goods and people in the project areas. The pavement of existing road will reduce dust during dry season, which will create more health environment for villages along the road. More importantly, the proposed subproject will create both short term and long term employment opportunities, which would bring significant amount of cash income for local ethnic communities.

During the consultations, local villagers also identified a number of potential negative impacts brought by the subproject. They include limited amount of land acquisition and house demolition, potential construction impacts on local water supply, access, and health environment. For potential land acquisition and demolition impacts, detailed resettlement action plan has been developed based on consultation with affected people in order to restore their livelihood and income to the levels before the project. For other temporary construction impacts and road safety impact after road completion, detailed environment management plans and road safety education program have been developed, which will address all these potential impacts identified by local villages.

With such understanding, all the groups interviewed expressed their earnest desire to carry out the road improvement project as soon as possible, as the project will direct benefit to the region and different communities. In expressing their support and concerns, the stakeholders also provided their comments and suggestions regarding proposed road improvement project, which include:

- During the construction, detailed environment programs and social action plans should be made to address various concerns and enhance potential benefits for the Project;
- The project sponsor should organize construction in such a way that proper traffic flow will be maintained and local economic activities will not be affected.
- During construction, environment management plan should be carefully implemented, which include measures such as regular watering and spreading to minimize the dust, setting up proper safety and warning signs near village areas, consulting villages prior before construction, and limiting speed of heavy trucks.
- The project sponsor and contractors should employ more local unskilled labors and try to use more local materials and supplies so that more economic benefits could be obtained by local villages including many ethnic villages.

9 Action Plan

5.1 Specific Measures/Activities

Table 5-1, Table 5-2 and Table 5-3 present the proposed measures, targets, budget and implementation timing. The proposed measures consist of the following three categories:

- Measures to avoid or mitigate adverse impacts
- Measures to enhance positive impacts
- Measures to ensure project benefits accrue to affected minority populations in a preferential or in an equitable manner.

The scale and scope of the proposed measures are subject to modification from time to time depending on the finalization of project design and various other factors. For the mitigation measures (Table 5-1), most of them will be directly funded by the Project but included in separate programs. For example, for land acquisition and resettlement impacts, detailed compensation and rehabilitation measures are included in the RAP. For construction related impacts, most of them will be included in civil contracts, which will be closely monitored in the environment management plan. For road safety education program, it will be funded by the Project and carried out along with project implementation. In terms of community enhance measures indicated in Table 5-2, most of them are on-going programs funded by the governments or foreign donors, except for skill training program, which will target to villages along the road in order to enhance their income earning capacity. For project benefit measures (Table 5-3), they are mainly referring to employment benefits brought by the Project. For temporary employment, they will be carried out by individual civil contractors to be monitored by project sponsor and external monitoring agencies. For road maintenance employment, they will be carried out by provincial public works and transport department to be monitored by external monitoring agency.

Overall, there are only two specific measures to be accomplished under ECDP due to limited impacts. They include road safety education and skill training, which will be carried out in local languages in villages along the road. Nevertheless, ECDP through its monitoring program will play an instrumental role to ensure that all identified measures will be implemented in accordance to relevant plans or programs and the basic needs and requirements of local ethnic communities will be addressed during project implementation.

5.2 Mitigation Measures

Construction-related Disturbances. The construction of the proposed NR 6A subproject will directly affect 52 villages along the road. To some extent the construction might also have impact on another 53 those villages off the road but within 5 kilometers from the alignment. Some disturbances might occur during project implementation. The total ethnic population who might be affected by construction noises and other hazards will be 90

villages, 6,012 households and 36,206 persons. The project environmental impact assessment and environment management plan considers and addresses all these potential environment concerns and health hazards identified. For instance, nighttime construction is prohibited thereby mitigating the issue of excessive noise for people living close to the expressway construction sites. Regular spreading of water is required along the construction road, particularly near villages to minimize potential dust. The proper treatment of solid waste and wastewater by construction camps to avoid any pollution to stream water near the villages. The construction of crossings and warning signs will address the concerns of road safety. The restoration of damaged irrigation and drainage systems will preserve surface water sources of local people from pollution caused by construction. All required environment measures will be implemented by relevant contractors to be paid by the Project. In addition, the cost for monitoring environment management plan is also included in the total project budget.

HIV/AIDS and STIs Awareness and Prevention. Although Houaphanh Province is not a high risk area for HIV/AIDS, in order to ensure that Houaphanh Province will continue free of HIV/AIDS, Provincial CDC (Centre for Disease Control), in accordance with the Lao PDR Law on Prevention and Treatment of Epidemic Disease, will take measures to prevent the spread of HIV/AIDS and other STIs. The project sponsor and the contractors will support CDC to take prevention measures for workers and local communities during construction and to transport operators and truck drivers during operation of project facilities such as establishment of health clinic at construction camps, HIV/AIDS and STIs prevention posters, HIV/AIDS and STIs education programs in local languages, and implementation of the international anti-AIDS programs.

Gender Equality. In order to ensure the fair distribution of the project benefit to the women, women's participation in terms of decision making will be secured in accordance with government laws and regulations during the implementation of Ethnic Communities Development Plan. The Lao Women Union, which has a mandate to advocate women and children rights, and disseminate information of livelihoods improvement through newsletter and regular group meeting, will extend their activities in the project affected area as a part of their regular activities and organize the woman representatives to participate in Resettlement committee and grievance committee

Road Safety. The Project include a road safety component, which include both engineering measures in the road construction design, and road safety education program to be implemented by provincial public works and transport department among villages along the road and villages throughout project districts. While most of engineering aspects of road safety measures will be included in the project construction, the road safety education program for those villagers living along the road and school children will be implemented by Houaphanh Provincial Public Works and Transport Department prior to the completion of NR 6A subproject, which will be carried out in local ethnic languages by both district and subproject officials who could speak local ethnic languages.

Resettlement. The resettlement implementation responsibilities belong to the project sponsor and local governments. In order to ensure successful resettlement implementation, a Provincial Resettlement Committee (PRC) will be established in Houaphanh Province. The officials from Houaphanh Provincial Public Works and Transport Department, Lao Front, Lao Women, and other key agencies, as well as relevant district officials will be the members of PRC. Its main responsibility is to strengthen the leadership of the project, formulate resettlement policies, smooth the resettlement implementation, and coordinate among departments. A resettlement office will be set up within PPWTD for the Project, which is responsible for coordinating overall resettlement planning and implementation activities for the proposed project. Their responsibilities includes (1) conducting inventory and social economic surveys, and providing assistance in preparing RAP; (2) signing compensation agreement with affected households and villages; (3) allocating compensation funds to concerned parties; and (4) coordinating and supervising resettlement implementation.

They will work closely with local district governments and concerned villages in conducting site survey, keeping records, organizing consultation, developing and implementing RAP, managing and allocating the resettlement funds, training resettlement staff, signing compensation agreements with affected households and villages, and being a main channel of grievance for the resettlers. In the affected villages, compensation committees will be established, which will work closely with provincial and district resettlement offices for carrying out resettlement implementation for the project.

The costs to of land acquisition are included in the overall budget of the Project. The total costs of land acquisition and resettlement are estimated to be \$108,668, of which \$43,575 for land compensation, \$31,855 for house and shop compensation and rehabilitation, and \$12,560 for affected attachments. The land acquisition and resettlement will be implemented in two years. The cost estimate for land acquisition includes provision of contingency set at 14% of total amount of compensation budget.

Following the compensation standards and policies set up in the RAP, the project resettlement office of MPWT will sign compensation agreements with Houaphanh Provincial Compensation Committee, which will sign compensation agreements with concerned villages and households for both house demolition and impacts on attachments, as well as temporary land occupation. The delivery of compensation funds will go from the provincial resettlement committee to affected villages or households. To ensure that resettlement funds will be used effectively and exclusively, the different levels of governments will carry out auditing on the use of resettlement funds each year.

In terms of resettlement implementation schedule, it will be closely related with construction progress. Land acquisition for both of the gas exploration and transmission components will be completed one month before the start of the civil work construction. The proposed schedule is expected to ensure that all affected persons, prior to their actual losses: i) will have been adequately consulted about the Project, its impacts and compensation

entitlements; ii) will have received compensations in a timely manner; and iii) have been provided with means to establishing livelihood.

Table 5-1: Mitigation Actions

| Proposed Measures | Targets/Indicators | Beneficiaries | Budget (CNY) and Funding Source | Timing |
|---|--|---|--|---------------|
| Protection of ethnic villages from construction disturbances: | Implementation of EMP, including prohibiting nighttime construction, restoring damaged irrigation and drainage systems, and mitigating other environment impacts | All 43,112 persons in 105 villages, including 36,206 ethnic people from 90 villages | All environment measures are included in contractor budget, and cost of monitoring EMP totals \$168,000 to be included in the total project cost. | 2009-2012 |
| Control of transmissible diseases | Health clinics in construction camps HIV/AIDS and STIs prevention posters HIV/AIDS and STIs education programs Implementation of the international anti-AID programs | Ethnic residents in project area especially along the road alignment. Over 300 construction workers | Included in the project Compulsory requirement to contractors to take action under the supervision of county CDCs (Center for Disease Control) | 2009-2012 |
| Road Safety Education Program | 105 meetings in 105 villages with 105 to be carried out in local languages provided by district and sub-district officials | 43,112 persons from 105 villages, including those 36,206 ethnic persons in 90 villages along the road corridor | Included in project cost to be implemented by Houaphanh Provincial Public Works and Transport Department | 2010-2013 |
| Special support to resettlement affected people | Special assistance to vulnerable people, including \$150 per household for house reconstruction, and \$30 per household for transfer assistance. Options of rehabilitation for relocated households and respect to specific tradition Employment skill training by minority trainers | Among 26 affected households, 4 households are vulnerable households account for 15.3%. 24 households would be affected by lost houses or shops. Another 2 households would be affected by lost attachments, such as fence, rice stores, and so on. | Compensation at replacement value will be paid to all affected households. Total resettlement budget is \$108,668 with 1% total budget for vulnerable support. | 2009-2011 |

5.3 Enhancement Measures

Poverty Reduction Fund. Poverty Reduction Fund is a new initiative of the Lao government to support the national imperative of reducing poverty villages level poverty by 2020. A credit with the World Bank has been used to set up the fund, which has been used to build capacity and empower poor villages in poor districts to plan, manage, and implement their own public investments in decentralized and transparent manner; strengthen local institutions to support participatory decision making and conflict resolution process at village, sub-district and district levels, involving a broad range of villagers, including women, the poor and ethnic minorities; and assist villagers technically and financially to develop community infrastructure and gain improved access to services. Between 2003 and 2008, Houaphanh Province has been one the few provinces receiving support from Poverty Reduction Fund. In 2007 alone, the four project districts received a total of \$1.18 million dollars support from

PRF covering 216 villages with 68% of poverty villages. It is expected that same level of support will be obtained for these four districts during the project implementation.

Technical Advice and Training. As components of the resettlement action plan for income recovery, PPWT sectors will provide special technical advices and training to 20 project affected villagers (men and women) on cash cropping, livestock management, and non-farm skills. Skill training will also be provided to enable ethnic people take employment opportunities from construction of NR 6A subproject.

Rural Road Improvement Program. The Provincial Rural Road Improvement Program has on going support to provide rural access roads or improve district roads in four project districts, the source fund as show in table below.

Education Support Program. The Provincial Education Department with support from foreign country grant and ADB loan has on-going education support program, which include building 40 primary schools and 1 secondary school in four project districts. The source fund is show in table below.

Provincial Livelihood Fund Program. The Provincial Livelihood Fund Program with focus on providing support for livestock development and irrigation improvement covering many villages in four project districts; the source fund as show in table below.

Provincial Heath and Vaccination Program. The provincial health and vaccination program includes providing vaccination and building a local Red Cross office in project districts; and the source of finance is shown in the table below.

Table 5-2: Enhancement Measures

| Proposed Measures | Targets/Indicators | Beneficiaries | Budget (US\$) | Source | Timing |
|---|---|--|----------------------|---|-------------------|
| Poverty Reduction Fund | Focus on villages in poor districts with subprojects in infrastructure, capacity enhancement, agricultural production training etc. | covering 216 villages in 4 project districts, including 68% of poor villages | 1,001,349 | World Bank and others | 2007-2008 |
| agricultural techniques and no-farm skills training | All 1751 households in 20 affected villages along the road | 790 ethnic households | 8,000 | PWTD in Houaphanh Province | Year 2009 to 2010 |
| Rural Road Improvement Program | Sop Bao, Et and Xiengkhor districts | Village access roads and repair of district roads | 419,297 | Houaphanh PWTD and Sweden Grant | Year 2007 to 2008 |
| Education Support Program | Viengxay, Et, Sop Bao, and Xiengkhor Districts | 40 primary schools and 1 middle schools | 854,215 | Provincial Education Department, ADB and foreign grants | Year 2008 to 2009 |

| | | | | | |
|--|---|---------------------------------|---------|---|-------------|
| Livelihood Fund for livestock support and irrigation repairs | Viengxay, Et, Sop Bao, and Xiengkhor Districts, | Villages in project districts | 554,635 | Provincial Agricultural Department and NCMI | 2008 – 2009 |
| Health and Vaccination | Viengxay and Et District | Villages in these two districts | 158,941 | WHO/UND P/Red Cross | 2008 - 2009 |

5.4 Project Benefit Measures

Employment Measures. It is suggested that employment of local ethnic people as unskilled labors for the construction of NR 6A as a potential contract item between Houaphanh Province PMO and contractors. The contract will specify that contractors should employ at minimum, 75% of local unskilled labors. Full wages will be paid to local people employed for the construction of the NR 6A. On-the-job training will be provided for workers and special attention will be paid to the illiterate workers by project sponsor and contractors.

Table 5-3: Project Benefit Measures

| Proposed Actions | Targets/Indicators | Beneficiaries | Budget (US\$) | Timing |
|--|---|---|---|--------------|
| Employment of groups as unskilled labors for construction of the flood related works | Over 9,533 person-months unskilled labor, 80% are to be awarded to ethnic population Contractors use 75% of local labors minimum | Close 1,600 or 1,270 ethnic labors (6 months each in average) | About \$1.144 million Included in civil works contracts | 2009-2012 |
| Employment of groups at maintenance and other associated activities | 124 positions for hire, of which 80% would be groups | 99 ethnic villagers | About \$43,400 each year Included in operating budget | 2013 onwards |

5.4.1 Budget and Financing Sources

The sources or funding for the various activities will need to be determined during loan negotiation between WB and the Government (MPWT). Depending on the structure of the loan, funding for some ECDP activities could be made available as a specified budget item from the Project, such as funds covering local employment, resettlement compensations, road safety measures and environment mitigation measures, while other enhance measures for local ethnic villages will be mainly funded by defined government sources or donor agencies.

5.4.2 Implementation Arrangement

Ministry of Public Works and Transport through its implementation agency – Houaphanh Provincial Public Works and Transport Department and contractors, will play a leading role in implementing most of the construction-related measures previously presented. Specifically, Houaphanh Provincial PWT D will be directly involved in construction of NR 6A subproject through finance provision and construction supervision.

Local provincial and district governments will take the leading role in implementing the supportive measures such as technical training, tourism promotion and micro-credit. These actions, routine work of local governments, will undoubtedly be implemented regardless the project. Several government agencies will be involved including provincial LFNC, provincial resettlement committee, provincial Lao Women Union, and relevant district and sub-district governments.

5.4.3 Monitoring and Evaluation

Monitoring and evaluation (M&E) of the ECDP is required to ensure the plan is implemented properly and meets the objectives specified. The final M&E plan will be formulated shortly before project implementation. The World Bank will assist MPWT PMO in formulating the M&E plan.

The objectives of the monitoring are (i) to ensure that the adverse impacts identified in the ECDP; (ii) to monitor whether the time lines are being met; (iii) to assess if the mitigation and enhancement measures are sufficient; (iv) to identify problems or potential problems; and (v) to identify methods of responding immediately to mitigate problems.

Implementation of the ECDP will be regularly supervised and monitored by the provincial public works and transport department. The findings will be recorded in quarterly reports to be submitted to MPWT, which will summarize into the project progress reports to be submitted to the WB every six months. Such internal monitoring and supervision will:

- Oversee that the ECDP is implemented as designed and approved;
- Verify that funds for implementing ECDP are provided in a timely manner and in amounts sufficient for their purposes and that such funds are used in accordance with the provisions of the ECDP; and
- Record all claims and their solutions and ensure that complaints are dealt with in a timely manner.

An independent monitoring organization (IMO) is to be retained by project sponsor to carry out external monitoring and evaluation of the implementation of the resettlement plans, this agency could be engaged to monitor the ECDP. The independent agency will be an academic or research institution, NGO or an independent consulting firm, all with qualified and experienced staff and terms of reference acceptable to WB. The external monitoring agency will visit a sample of ethnic households to:

- Determine whether the procedures for community participation and implementation of the activities has been done in accordance with this ECDP;
- Assess if the objectives of ECDP have been met;
- Gather qualitative of the social and economic impact of the project implementation on the ethnic communities; and
- Suggest modification in the implementation procedures of the ECDP, as the case may achieve the principles and objectives of policies of ECDP.

The external monitoring reports will be submitted directly to WB and project sponsor.

