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DIRECTORATE FOR ROADS OF VIETNAM

PROJECT MANAGEMENT UNIT 3

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VIETNAM ROAD ASSET MANAGEMENT PROJECT

SOCIAL IMPACT ASSESSMENT

Prepared by:

HA NOI BRANCH OF INVESTMENT AND ENVIRONMENT PROTECTION CONSULTATION COMPANY E.P.C

Office: Plot 6, Block 2, Collective zone of economic police bureau, Xuan La ward, Tay Ho district, Ha Noi

Phone: (84).46.673.5808 - (84).43.748.0373

Email: hanoiepc@gmail.com

DIRECTORATE FOR ROADS OF VIETNAM
PROJECT MANAGEMENT UNIT 3

SOCIAL IMPACT ASSESSMENT

VIET NAM ROAD ASSET MANAGEMENT PROJECT (VRAMP)

COMPONENT C: ROAD ASSET IMPROVEMENT

THE CLIENT **PROJECT MANAGEMENT UNIT 3**

THE CONSULTANT

Hanoi, June - 2013

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List of Acronyms

CEMMA	Committee for Ethnic Minorities and Mountainous Areas
CPC	Commune People's Committee
DPI	Department of Planning and Investment
DOLISA	Department of Labor, Invalids and Social Affairs
DOST	Department of Science and Technology
DONRE	Department of Natural Resource and Environment
EIA	Environmental Impact Assessment
EM	Ethnic Minority
EMDP	Ethnic Minority Development Plan
GOV	Government of Vietnam
GSO	General Statistical Office
Ha	Hectare
HERP	Hunger Eradication and Poverty Reduction Program
MOLISA	Ministry of Labor, Invalids and Social Affairs
MPI	Ministry of Planning and Investment
MOT	Ministry of Transport
NCFAW	National Committee for the Advancement of Women
NGO	Non-Governmental Organization
OP	Operational Policy
PDOT	Provincial Department of Transport
PMU3	Project Management Unit 3
PPC	Provincial People's Committee
PRA	Participatory Rural Appraisal
RP	Resettlement Plan
SIA	Social Impact Assessment
VND	Vietnamese Duong
VOC	Vehicle Operating Cost
WB	World Bank
WU	Women's Union
SPA	Statistical Publishing House
STD	Sexually Transmitted Disease
VASI	Vietnam Agricultural Sciences Institute
VLSS	Vietnam Living Standards Survey
VMC	Village Management/Maintenance Committee

EXECUTIVE SUMMARY

1. The Project and Social Impact Assessment

The Government of Vietnam expects to have a credit from the World Bank for the implementation of Viet Nam Road Asset Project (VRAMP). The purposes of the project is to establish a financial basis, sustainable institutional arrangements in order to manage and upgrade the road system, develop for the economy in the North and Central regions of Viet Nam.

The project would be implemented in Thai Binh, Hai Duong and Hung Yen Provinces and include of four components:

1. ***Component A***: Road Asset Management

This component aims to setting-up of the road database framework, development of comprehensive road asset management system.

2. ***Component B***: Road Asset Preservation.

The Project will finance for the road preservation program including NH 2, NH 5, NH 6, NH 18, and NH 48 with diversified contract forms including Traditional maintenance Contracts, Performance-based maintenance Contracts. Some Performance-based maintenance Contracts have been implemented in the Road Network Improvement Project (VRAMP). The project also finance for completion of PBC legal framework and comparing the effectiveness of maintenance methods.

3. ***Component C***: Road Asset Improvement

The project will finance the improvement of some key national highways in the north including NH38, NH39, NH39-1 and 04 bridges of over 25m on NH38B those have already been in the investment list under VRAMP but have not been implemented due to a shortage of funds. Comprehensive investment on these bridges will help to increase the effectiveness of routes that have been upgraded through VRAMP.

4. ***Component D***: Institutional Strengthening Program.

Component D will finance the necessary technical assistances for the reforms and renovation of human resource for DRVN, Implementation of Road Fund, and Development of standard drawings on infrastructure facilities. This component also includes audit services for the project.

In which, the component C- Road Asset Improvement would require land acquisition for the project construction, other components would not require land acquisition.

The project will finance for maintaining the national roads no. 2, no.5, no.6, no. 18 and no.48; upgrading for the national roads no. 38, no.39, no 39-1 and four bridges with the length of about 25 km of the road no. 38 B.

An initial social impact assessment (SIA) is required for a development project and should be undertaken as early stage in the project cycle. The main purpose of SIA is to help individuals, communities, as well as government authorities understand and to be able to anticipate the potential social consequences on human populations and communities of project developments.

The SIA for the project using different social methods in gathering data and information, the SIA report provided an overview of the socio-economic information in the project provinces, districts and communes. The SIA describes about the processes of analysing, effort of minimizing the socially adverse impacts, process and mechanisms of consultation and participation of stakeholders as well as monitoring and managing the mitigation measures. Furthermore, the SIA report also develops the institutional arrangement including the involvement of local NGOs such as Women Union, Fatherland Front, etc.

2. The potentially social impacts

The potential social impacts by the project would include of:

- Land acquisition for the project and involuntary resettlement. Details on land acquisition impacts and resettlement are prepared in the project Resettlement Plans
- Other potential social impacts would be from the project construction activities such as safety issues, dust and noise impacts, and disease transfer by concentration for workers for the project construction. Potential negative impacts would be in phase of the project operations such as accidence.
- Positive impacts after the roads are improved such as for better economic development, better transport conditions etc. The potentially environmental impacts by the project in a construction phase and operational phase are described in the project Environmental Impact Assessment (EIA).

3. Mitigation measures for the socially adverse impacts

The potentially adverse impacts by the project are identified through land acquisition and resettlement plan, Environmental Impact Assessment. The potential impacts and mitigation measures are proposed as well as the monitoring and evaluation of the implementation of RPs and EMP are based on the public consultation with and participation of stakeholders from the different levels of society, especially from the provincial to the community levels.

The mitigation measures for the social and environmental impacts are studied and planed for phases of the project preparation, construction and operation. The mitigation measures would be minimization of land acquisition and resettlement, if land acquisition and resettlement are unavoidable, a livelihood restoration/ improvement plans would be developed in order to make sure that the project affected persons would not be worse off at least or otherwise would be improved with their living standards compared to before displacement; the potentially environmental impacts

are also described in EIA and with the implement an Environmental Management Plan (EMP) to mitigate the impacts through the construction and operation phases. The EIA and EMP were developed with the participation and consultation process, monitoring and evaluation as well as mechanism for complaint and grievances.

The project applied the following indicators for the route analysis and selection:

Design of the route was the first study on the route map of the project and site survey to make sure that the project route will be minimized for the socially and environmentally adverse impacts and especially minimize impacts resettlement to the individual households and to the collectives and republic works. The project will have with less because the route will be mainly followed with the existing road.

The route selection is based on the considerations on the social, economy and environmental aspects and ranked with the points as below:

(a) With social considerations

Points	**Social impacts**
0	Very high
1	
2	High
3	
4	Medium
5	
6	
7	Low
8	
9	Very low
10	

The point ranking for the social impacts would be based on the cost for the measures related to social impacts

(b) With environmental considerations

Points	Environmental Risks
0	Very high
1	
2	High
3	
4	Medium
5	
6	
7	Low
8	
9	Very low
10	

The distributions of points to each aspect to be considered for the feasible routes is as below.

Aspect	Distribution of points
Economic	50 %
Social	30 %
Environment	20 %
Total	**100 %**

With these indicators it was proposed with the project that to upgrade mainly based on the existing road with the road type III and combined with a by pass to avoid passing through the density population areas. The earth works and concrete works would be with reasonable scale.

4. Consultation and participation

According to World Bank guidelines/Policies (OPs on Environment and Social safeguards) and the Laws, Decrees, Circulars of the GOV related to Social and Environmental Impacts, the Project Affected People and other stakeholders need to be adequately informed and consulted to enable their active participation in the planning and implementation of RP, EIA, EMP etc. The project stakeholders will participate throughout the various stages of the planning and implementation of the socioeconomic survey, inventory of losses, the detailed measurement survey and preparing of resettlement plan as well as EIA and SIA. The consultation and participation of stakeholders in order to make sure that the potentially adverse impacts are identified and the feasible mitigation measures are proposed as well as a right institutional arrangement is developed to make sure that the SIA and other plans for the project will be implemented smoothly.

5. Monitoring and evaluation

The Social Mitigation Plans, Resettlement Plan and EMP implementation will include both internal and external monitoring and evaluation.

The PMU3 and the local authorities at all levels are responsible for the internal monitoring and supervision of the Social Mitigation Measures, RP and EMP. The findings of the internal supervision and monitoring will be recorded in a quarterly report to be submitted to the relevant Agencies of GOV and the World Bank.

Internal monitoring and supervision will include: verification of baseline information; overseeing that RP, EMP and Social Impact Mitigation Measures are implemented; verification that funds are dispersed; and record grievances and their resolution.

An independent agency has been retained to carry out external monitoring and evaluation of the implementation of Social Mitigation Measures. Independent monitoring and evaluation involves verification of the internal supervision and monitoring quarterly reports.

6. Schedule and Budget

The total cost is estimated for SIA and mitigation plan is about 240,000 USD.

The SIA preparing and implementation is scheduled as below.

(i). First Draft SIA: March, 2013

(ii). First draft SIA reviewed by the World Bank, MOT, PMU3 and Provincial authorities: April, 2013

(iii) Revised SIA based on the comments of the World Bank, MOT, PMU3 and Local authorities: May 2013

(iv). Approvals for SIA: June to July, 2013.

(v). Mobilization and Implementation of SIA: From October, 2013.

1. INTRODUCTION

1.1. The Project

The Government of Vietnam expects to have a credit from the World Bank for the implementation of Viet Nam Road Asset Project (VRAMP). The purposes of the project is to establish a financial basis, sustainable institutional arrangements in order to manage and upgrade the road system, develop for the economy in the North and Central regions of Viet Nam.

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3. ***Component C***: Road Asset Improvement

The project will finance the improvement of some key national highways in the north including NH38, NH39, NH39-1 and 04 bridges of over 25m on NH38B those have already been in the investment list under VRAMP but have not been implemented due to a shortage of funds. Comprehensive investment on these bridges will help to increase the effectiveness of routes that have been upgraded through VRAMP.

4. ***Component D***: Institutional Strengthening Program.

Component D will finance the necessary technical assistances for the reforms and renovation of human resource for DRVN, Implementation of Road Fund, and Development of standard drawings on infrastructure facilities. This component also includes audit services for the project.

In which the component C would require land acquisition for the project construction, other components would not require land acquisition.

The project will finance for maintaining the national roads no. 2, no.5, no.6, no. 18 and no.48; upgrading for the national roads no. 38, no.39, no 39-1 and four bridges with the length of about 25 km of the road no. 38 B. Maps of project routes is shown as figure 1 to figure 4 below.

Figure 1: Location of Project

Figure 2: Map of the section Trieu Duong – Hung Ha

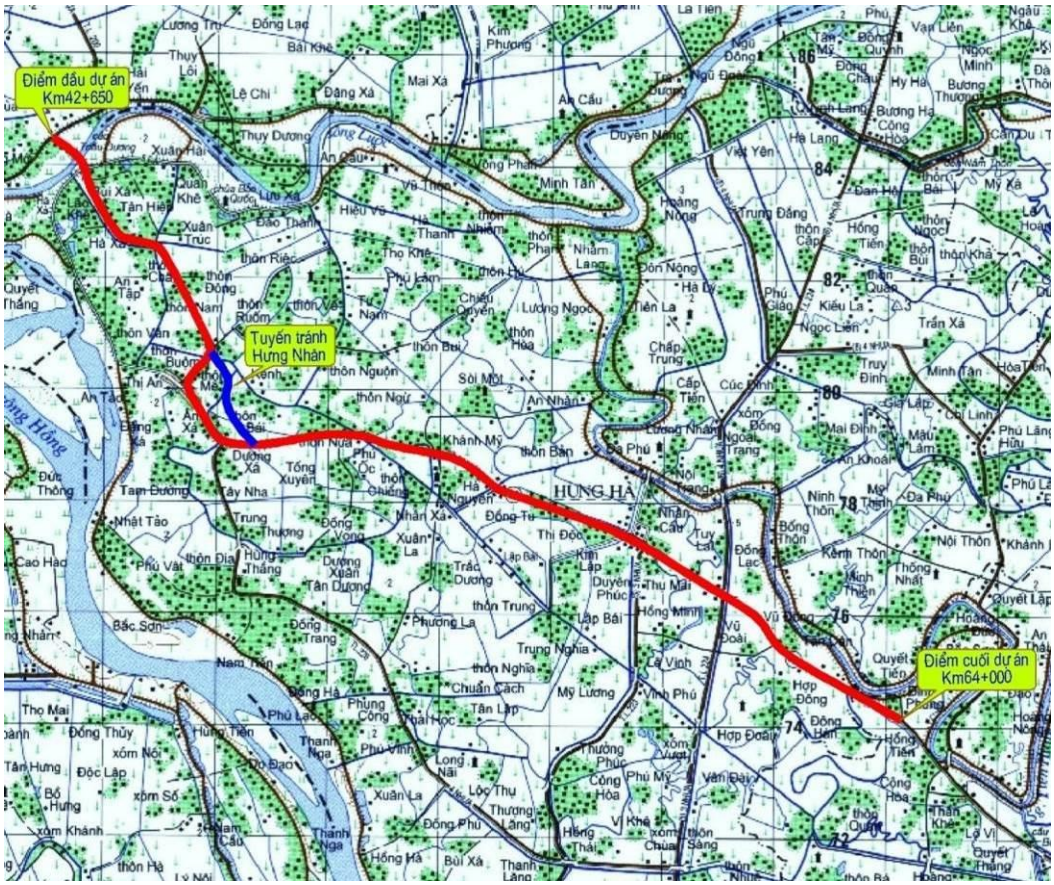


Figure 3: Map of the section Vo Hoi – Diem Dien

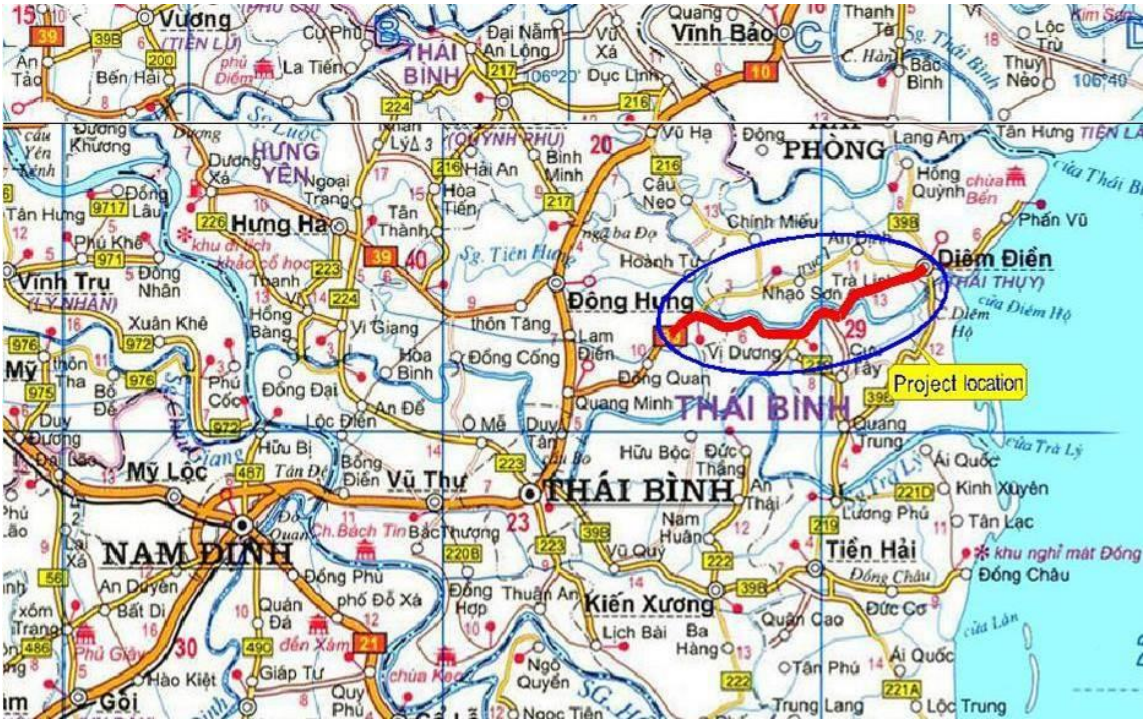
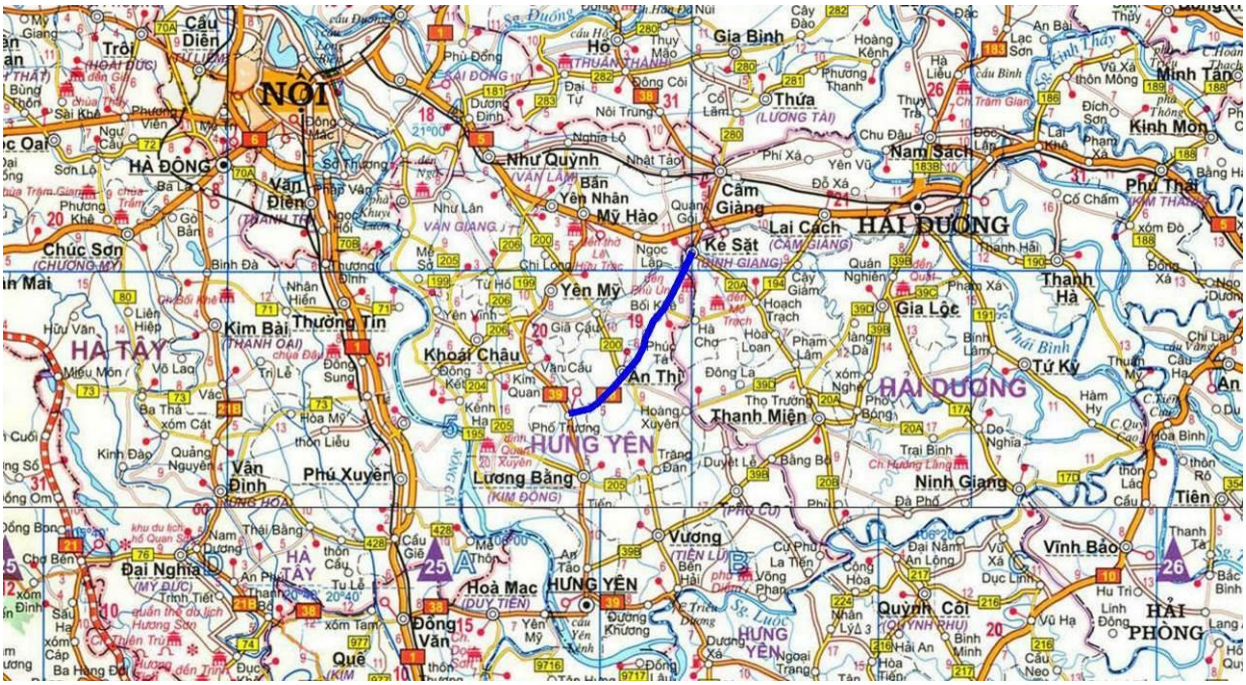


Figure 4: Map of the section Quan Goi – Yen Lenh



The names of the communes, districts and provinces which the project would be developed as described as in table 1, 2, 3 below.

Table 1: The Province, Districts and Communes in a section Trieu Duong – Hung Ha

#	Province/ District	Commune	Distance in Commune	Dist-Ance (m)	ROW Area (W=m)	Note
I	**Hung Yen**					
I.1	Tien Lu	1. Thien Phien	42+628-43+300	672		Roads and Bridge
II	**Thai Binh**					
II.1	Hung Ha	2. Tan Le	43+950-45+200	1,200	16.5	Roads and Bridge
		3. Hung Nhan town	45+200-48+000	2,800	18.0; 16.5 and 14.5	Roads and intersections
		4. Tan Hoa	48+000-48+300	300	16.5	Roads
		5. Lien Hiep	48+300-53+000	4,700	16.5	Roads and intersections
		6. Phuc Khanh	53+000-54+700	1,700	16.5	Roads
		7. Thai Phuong	54+700-55+600	900	16.5	Roads

#	Province/ District	Commune	Distance in Commune	Dist-Ance (m)	ROW Area (W=m)	Note
		8. Hung Ha town	55+600-58+600	3,000	16.5 and 18.0	Roads
		9. Minh Khai	58+600-60+500	1,900	16.5 and 18.0	Roads
		10. Hong Linh	60+500-62+800	2,300	16.5 and 18.0	Roads
II.2	Dong Hung	11. Minh Tan	62+800-64+000	1,200	16.5	Roads

Table 2: The Province, Districts and Communes in a section Vo Hoi – Diem Dien

Province	District	Commune	Distance in Commune	Distance (m)	Note
Thai Binh	I. Dong Hung	1.Dong Phong			"Go" Bridge
		2. Dong Kinh	91+100-91+700	600	Roads Left
		3. Dong Tan	91+000-93+553	1953	Roads Right
	II. Thai Thuy	1. Thai Giang	93+553-95+800	2,247	Roads
		2. Thai Son	95+800-97+000	1,200	Roads
		3. Thai Duong	97+000-100+000	3,000	Roads and intersections
		4. Thai Thuy	100+000-101+400	1,400	Roads and bridge
		5. Thuy Lien	101+400-105+698	4,298	Roads and bridge
		6. Thuy Ha	105+698-107+400	1,702	Roads
		7. Diem Dien town	107+400-107+522	122	Roads and intersections

Table 3: The Provinces, Districts and Communes in a section Quan Goi – Yen Lenh bridge

Province	District	Commune	Distance in Commune	Distance (m)	Note
I. NH 38					
1. Hung Yen	1. My Hao	1. Minh Duc	00+000-00+080	80	Roads and intersections
2. Hai Duong	1. Binh Giang	1. Hung Thinh	00+080-00+520	440	Roads
		2. Vinh Tuy	00+520-01+840	1,320	Roads
		3. Vinh Hong	01+840-02+600	760	Roads
		4. Trang Liet	02+600-03+840	1,240	Roads
		5. Thuc Khang	03+840-04+400	560	Roads and intersections,

Province	District	Commune	Distance in Commune	Distance (m)	Note
					bridge
3. Hung Yen	1. An Thi	1. Phu Ung	04+400-07+901	3,301	Roads and bridge
		2. Bai Say	07+901-10+101	1,900	Roads
		3. Tan Phuc	10+101-13+101	2,000	Roads
		4. Quang Vinh	13+101-15+301	2,200	Roads and bridge
		5. Hoang Hoa Tham	15+301-15+401	100	Roads and bridge
		6. An Thi Town	15+401-17+771	2,370	Roads and intersections, bridge
		7. Quang Lang	17+771-20+171	2,400	Roads
	2. Kim Dong	1. Nghia Dan	20+171-21+371	1,200	Roads and bridge
		2. Toan Thang	21+371-24+771	400	Roads and intersections, bridge
II. NH 38B					
1. Hai Duong	1. Gia Loc	1. Doan Thuong	16+300-17+515	1,215	Trang Thua bridge
		2. Dong Quang	17+515-18+600	1,085	Trang Thua bridge
	2. Thanh Mien	1. Thanh Mien Town	22+300-23+337	1,037	Cong Neo bridge
		2. Tu Cuong	23+337-25+640	2,303	Cong Neo bridge
		3. Cao Thang	29+650-29+860	210	Trang bridge
2. Hung Yen	1. Phu Cu	1. Quang Hung	29+860-30+150	290	Trang bridge
		2. Doan Dao	35+860-36+200	340	Cap bridge

1.2. Aims and Objectives of the Social Impact Assessment

Social Impact Assessment (SIA) will provide an integrated framework for incorporating participation and social analysis into the Bank's operational and analytical work. There are many social variables that could potentially social impact by the project both positive and negative ways. Therefore, the SIA needs to be selective and strategic and focus on issues of operational relevance. Deciding what issues are critical and how they can be addressed requires consultation with stakeholders and other forms of information collection and analysis.

Gender, ethnicity, social impacts, and institutional capacity are among the social factors that need to be taken into account in development operations. Social Impact Assessment developed by the World Bank's Social Policy Thematic Team and provides a comprehensive, participatory framework for deciding what issues have priority for attention and how operationally useful information can be gathered and used. The steps in this SIA are consistent with World Bank procedures and existing operational directives/policies.

The Social Impact Assessments are carried out in a project context, including of the following:

- Identify key stakeholders and establish an appropriate framework for their participation in the project selection, design, and implementation.
- Highlight the potential impact of the project (through construction and operations) on the prevailing social conditions along the proposed project corridor, with particular reference to poverty, gender, and other socio-economic conditions.
- Establishing a participatory process by ensuring that project objectives and incentives for change are acceptable to the range of people intended to benefit and that gender and other social differences are reflected in the project design.

1.3. Scope and Methodology

In order to understand the socioeconomic conditions of the project area, a Social Impact Assessment (SIA) was conducted along the proposed route of the project. This SIA provides an overview of the information collected on socio-economic conditions in the Province, Districts, interview a sample of the project affected people, the project affected communities (who would be affected on land acquisition for the project and would be affected by other activities related to the project construction and operations. The survey identifies the potential social impacts and proposes feasible mitigation measures to make the project as a sustainable development.

The SIA prepared based on the consultation with participation of stakeholders to get their feedback related all aspects of the project development. The SIA is also linked to the EIA and RP of the project to have a broad picture of the project potentially impacts on social area. The SIA proposes with an institutional arrangement to make sure that the mitigation measures for the social adverse impacts will be effectively implemented and in a timely manner.

For ensuring an iterative and interactive process of information gathering, and developing recommendations for the implementation plan this Social Impact Assessment used with the following steps:

- **Data Gathering:** Gathering of information focused primarily on issues of operational relevance and was undertaken with as much local participation as possible.
- **Identification of Stakeholder Groups**: Key stakeholder groups were identified based on the view of Project information and goal, as well as available secondary sources.
- **Identification of Social Factors:** Operationally relevant social issues were defined that may affect project delivery and outcomes by listening to affected groups, social experts, and government officials, leaders of local authorities; local NGOs who have knowledge of the larger socio-cultural, political, and economic context that can affect project design and implementation.

- **Stakeholder Analysis:** The Social Impact Assessment analyzes the relevant stakeholder groups, their interests, influence, and power, and how they were affected by the project.
- **Data Analysis and an Assessment of Priorities:** The data analysis focused on answering operational questions and gathering action-oriented recommendations.
- **Stakeholder Consultations** – The fieldwork for the SIA served as an opportunity to conduct consultation with stakeholders during January to April-2013. In particular, with the local communities that would be affected by the Project. This will ensure that conclusions and recommendations are appropriate and that enough time and resources will be allotted to the results of the SIA and their implications.
- **Development of Mitigation and Poverty Reduction Plans:** The data analysis provided a set of recommendations which focused on the prevention and mitigation of adverse impacts.

In fulfilling the above requirements, the consultant used the tools and methods that provide the essential information to support for the analysis. These include of:

- Socio-economic Survey (through IOL for the RP and collecting relevant information the Project Provinces, District etc.)
- Meetings/Interviews with Stakeholders on other aspects need for the SIA
- Focus Group Discussion

1. Socioeconomic Review

The resources including:

- Documents supplied by public organizations (from different levels centre to local organization, such as: General Statistics Office, Provincial, District and Communal documents, reports, etc.)
- Documents provided by private or non-government organizations.
- Documents collected by previous studies on the same study site.
- Data and Documents from Websites of the Government and others.

2. Surveys - Socioeconomic Household, Vehicle Operator, and Passenger Surveys

The SIA survey team carried out surveys and collected data on samples of the households and people in the project area.

The surveys were conducted in the districts along the alignment of the project route. Each type of survey provides information critical to performing SIA and to providing ideas about the best development strategies and mitigation measures for potentially adverse impacts. Specifically, the Socioeconomic Household Survey provides detailed data on the households that are potentially affected by the proposed Project, including their demographic composition, education status, and income levels and sources (The sample questionnaire is presented in **Annex 1**). This survey, together with focus group discussions and discussions with the commune - and village-levels.

3. Meetings/Interviews with Stakeholders

The SIA survey team conducted meetings/key informant interviews at various administrative levels in each province. Those interviewed included the officials of PCs at the provincial, district, and commune levels, and leaders at the villages.

The key informant interviews serve multiple purposes. A key feature is that by engaging the potential beneficiaries, the survey team found how much the informants support the Project and what concerns they have about the Project. Next, the interviews show the relative importance of other concerns held by the beneficiaries. The interviews also provide an efficient way to gather basic socioeconomic information on the provinces, and selected districts, communes, and villages.

The information gathered through key informant interviews included: population; number of households and average household size; ethnic distribution; availability of public transport; availability of, and average distance to, primary social facilities such as schools, health facilities, and centers of economic activities, and access to electricity and running water; major economic activities and main income sources; average income; and the educational status of the population.

4. Focus Group Discussions

The survey team conducted focus group discussions in communes and villages in order to assess: the villagers' perceptions on poverty; economic and living status of village population; major income sources and expenditure items; the degree of the control on the market and people's lives exercised by the government; major issues of concern; and potential impact of project on the economic and social development of the village; the priorities for development and poverty reduction from villagers' perspective; and villagers' willingness to support the Project.

There were 3 types of participants in FDGs, included small business households, female-headed households, and those households that will be affected by land acquisition. The villagers were very willing to participate in discussions, and the proposed project received with the positive feedback from people. Detailed results obtained from these discussions are provided later in this report.

The PRA was used for consultation with local people to learn about their priorities and perspectives on the project. The importance of PRAs lies in their capability of serving as an effective means of facilitating shared decision making and empowerment of communities, and contributing to an equal distribution of the project's benefits among the most-needy. The PRA included informal interviews of sample population and beneficiary groups and focus group discussions.

The PRA helped in the identification of stakeholders and strengthening of local organizations, which took over a good deal of the responsibility for implementation and monitoring of community-level activities. The results were used for the sections headed Socio-economic Baseline Data and Stakeholder Analysis.

2. SOCIOECONOMIC CONDITIONS

2.1. Introduction

2.1.1. Objectives of the Socio-economic Baseline Profile

This chapter assesses the macro-level socioeconomic profile of the population in the Improvement Project delineations concentrating on:

- Demographic Organization
- Economic and Social Organization
- Social Infrastructure

This section includes the baseline profile on the affected communities and beneficiary population of the selected road components to be used for the future evaluation of the Improvement Project to determine whether the program's objectives have been achieved. This baseline data will also be used for monitoring of Improvement Project implementation activities and social changes that the project may have caused.

The information gathered here originated from secondary source, as well as from 1st hand field observation and informal interviews.

2.1.2. Delineation of Study Area

Overall demographic statistics for Vietnam can be summarized as:

 Population: 87,840,000 pers (2011 est.)

 Age structure:

- 0-14 years: 24%

- 15-64 years: 69%

- 65 years and over: 7% (2011 est.)

 Population growth rate: 9.7‰ (2011 est.)

 Birth rate: 16.6 births/1,000 population (2011 est.)

 Death rate: 6.9 deaths/1,000 population (2000 est.)

 Sex ratio: 97.9 males/100 females (2011 est.)

Infant mortality rate: 15.5 deaths/1,000 live births (2011 est.)

Life expectancy at birth:

- male: 72.9 years

- female: 76.8 years (2010 est.)

 Total fertility rate: 2.00 children born/woman (2010 est.)

 Religions: Buddhist, Taoist, Roman Catholic, indigenous beliefs, Muslim, Protestant,

Cao Dai, Hoa Hao

 Languages: Vietnamese (official), Chinese, English, French, Khmer, tribal languages (Mon-Khmer and Malayo-Polynesian)

 Literacy:

- definition: age 15 and over can read and write

- total population: 92.5% (2008 est.)

2.2. General socioeconomic conditions of Viet Nam and status in the first 4 months of 2013 and of the project provinces.

Table 4: Indicators of statistic for Vietnam

#	Indicator Name	2007	2008	2009	2010	2011	2012
1	Agricultural land (sq. km)	100,626	102,408	102,920	107,680	108,420	
2	Arable land (hectares)	6,309,600	6,282,500	6,300,000	6,437,000	6,500,000	
3	Arable land (hectares per person)	0.07	0.07	0.07	0.07	0.07	
4	Land under cereal production (hectares)	8,305,085	8,842,030	8,528,027	8,617,434	8,734,566	
5	Permanent cropland (% of land area)	10.03	10.70	10.80	11.90	11.93	
6	Land area (sq. km)	310,070	310,070	310,070	310,070	310,070	
7	Cereal production (metric tons)	40,247,525	43,304,647	43,323,649	44,614,201	47,017,798	
8	Population density (people per sq. km of land area)	271.62	274.53	277.44	280.36	283.29	
9	Population in largest city	5,608,602.00	5,789,665.00	5,976,051.00	6,167,090.00	6,361,319.00	
10	Consumer price index (2005 = 100)	116.30	143.19	153.29	166.87	198.04	
11	Inflation, consumer prices (annual %)	8.30	23.12	7.05	8.86	18.68	
12	Roads, goods transported (million ton-km)	24,646.90	27,968.00	31,587.20	36,179.00		
13	Roads, passengers carried (million passenger-km)	49372.1	54221.1	61508.8	69197.4		
14	Railways, goods transported (million ton-km)	3,881	3,910	3,807	3,901	4,101	
15	Railways, passengers carried (million passenger-km)	4,659	4,659	4,129	4,378	4,571	
16	Rail lines (total route-km)	3,147	3,147	2,347	2,347	2,347	
17	Telephone lines	11,165,617	14,767,629	17,427,365	14,374,438	10,174,849	

#	Indicator Name	2007	2008	2009	2010	2011	2012
18	Telephone lines (per 100 people)	13.13	17.18	20.05	16.36	11.46	
19	Internet users (per 100 people)	20.76	23.92	26.55	30.65	35.07	
20	Exports of goods and services (% of GDP)	76.90	77.92	68.30	77.53	87.02	
21	Imports of goods and services (% of GDP)	92.75	93.13	78.65	87.81	91.23	
22	Trade (% of GDP)	169.64	171.05	146.95	165.34	178.25	
23	Agriculture, value added (% of GDP)	20.36	22.21	20.91	20.58	22.02	
24	Manufacturing, value added (% of GDP)	21.38	20.35	20.09	19.68	19.28	
25	Industry, value added (% of GDP)	41.48	39.84	40.24	41.10	40.79	
26	Services, etc., value added (% of GDP)	38.18	37.95	38.85	38.33	37.19	
27	GDP (current US$)	71,015,592,863	91,094,051,435	97,180,304,813	106,426,845,157	123,600,141,396	
28	GDP growth (annual %)	8.46	6.31	5.32	6.78	5.89	
29	Primary education, pupils	7,041,312.00	6,871,795.00	6,745,016.00	6,922,624.00	7,048,493.00	
30	Primary education, pupils (% female)	47.80		47.93	47.26	47.35	
31	Pupil-teacher ratio, primary	20.44	19.93	19.52	19.90	19.63	
32	School enrollment, primary (% gross)	102.20	104.13	104.10	106.22	106.33	
33	School enrollment, primary, female (% gross)	99.87		102.14	102.81	103.11	
34	School enrollment, primary, male (% gross)	104.42		105.97	109.48	109.40	
35	Trained teachers in primary education, female (% of female teachers)	98.78	99.89	99.76	98.46	99.28	

#	Indicator Name	2007	2008	2009	2010	2011	2012
36	Trained teachers in primary education, male (% of male teachers)	94.37	94.31	99.21	97.90	99.39	
37	Trained teachers in primary education (% of total teachers)	97.79	98.63	99.64	98.33	99.30	
38	Primary education, teachers	344,547.00	344,853.00	345,505.00	347,840.00	359,039.00	
39	Primary education, teachers (% female)	77.66	77.33	77.97	77.88	77.12	
40	Children out of school, primary		54,276.00	67,060.00	121,297.00	38,663.00	
41	Secondary education, general pupils	9,329,737.00	8,928,507.00	8,467,012.00	8,100,135.00	7,803,327.00	
42	Secondary education, general pupils (% female)	49.15	49.78	49.92	50.86	49.82	
43	School enrollment, tertiary (% gross)	17.98015	18.5875	19.74543	22.2903	24.38244	
44	School enrollment, tertiary, female (% gross)	17.96959	18.39764	19.65994	22.31103	24.53494	
45	School enrollment, tertiary, male (% gross)	17.99046	18.77217	19.82837	22.27024	24.23514	
46	Tertiary education, teachers (% female)	44.42804	45.00178	47.58294	47.12493	47.4126	
47	Mortality rate, under-5 (per 1,000 live births)	25.6	24.5	23.5	22.6	21.7	
48	Mortality rate, under-5, female (per 1,000 live births)	22	21	20.2	19.4	18.6	
49	Mortality rate, under-5, male (per 1,000 live births)	29.1	27.8	26.7	25.7	24.6	

#	Indicator Name	2007	2008	2009	2010	2011	2012
50	Mortality rate, neonatal (per 1,000 live births)	13.6	13.1	12.7	12.3	11.9	
51	Immunization, DPT (% of children ages 12-23 months)	92	93	96	93	95	
52	Immunization, measles (% of children ages 12-23 months)	83	92	97	98	96	
53	Tuberculosis case detection rate (%, all forms)	57	56	55	54	56	
54	Incidence of tuberculosis (per 100,000 people)	202	201	200	199	199	
55	External resources for health (% of total expenditure on health)	2.84	2.63	3.15	3.25	3.13	
56	Health expenditure per capita (current US$)	58.40	70.47	78.56	82.79	94.81	
57	Health expenditure, private (% of GDP)	4.20	4.35	4.29	4.30	4.06	
58	Health expenditure, public (% of total health expenditure)	39.98	34.59	38.89	37.13	40.35	
59	Health expenditure, public (% of government expenditure)	9.20	8.04	8.52	7.75	9.43	
60	Health expenditure, public (% of GDP)	2.79	2.30	2.73	2.54	2.75	
61	Health expenditure, total (% of GDP)	6.99	6.65	7.02	6.83	6.81	
62	Employment to population ratio, ages 15-24, female (%)	57.30	56.40	55.90	55.80	55.80	

#	Indicator Name	2007	2008	2009	2010	2011	2012
63	Employment to population ratio, ages 15-24, male (%)	61.80	61.00	60.50	60.50	60.50	
64	Employment to population ratio, ages 15-24, total (%)	59.60	58.70	58.30	58.20	58.20	
65	Employment to population ratio, 15+, female (%)	71.30	71.10	71.10	71.20	71.30	
66	Employment to population ratio, 15+, male (%)	79.50	79.30	79.30	79.40	79.50	
67	Employment to population ratio, 15+, total (%)	75.30	75.10	75.10	75.20	75.30	
68	GDP per person employed (constant 1990 PPP $)	5,333	5,516	5,654	5,877	6,110	
69	Labor force participation rate for ages 15-24, female (%)	60.40	59.60	59.10	59.00	59.00	
70	Labor force participation rate for ages 15-24, male (%)	64.80	64.00	63.60	63.50	63.50	
71	Labor force participation rate for ages 15-24, total (%)	62.60	61.90	61.40	61.30	61.30	
72	Labor force participation rate, female (% of female population ages 15-64)	78.20	78.10	78.00	78.10	78.20	
73	Labor force participation rate, male (% of male population ages 15-64)	84.60	84.50	84.40	84.50	84.60	

#	Indicator Name	2007	2008	2009	2010	2011	2012
74	Labor force participation rate, total (% of total population ages 15-64)	81.40	81.20	81.20	81.20	81.40	
75	Labor participation rate, female (% of female population ages 15+)	73.20	73.10	73.00	73.10	73.20	
76	Ratio of female to male labor participation rate (%)	90.15	90.25	90.12	90.14	90.15	
77	Labor participation rate, male (% of male population ages 15+)	81.20	81.00	81.00	81.10	81.20	
78	Labor participation rate, total (% of total population ages 15+)	77.10	77.00	76.90	77.00	77.10	
79	Labor force, female (% of total labor force)	48.69	48.62	48.57	48.52	48.49	
80	Labor force, total	48,319,139	49,288,104	50,190,072	51,140,464	51,998,588	
81	Vitamin A supplementation coverage rate (% of children ages 6-59 months)	95.00	98.00	99.00	95.39	99.00	
82	Adolescent fertility rate (births per 1,000 women ages 15-19)	26.85	26.02	25.18	24.35	23.51	
83	Birth rate, crude (per 1,000 people)	17.13	17.05	16.91	16.70	16.42	
84	Death rate, crude (per 1,000 people)	5.21	5.22	5.23	5.23	5.24	
85	Contraceptive prevalence (% of women ages 15-49)	79.00	79.50			77.80	
86	Mortality rate, infant (per 1,000 live births)	20.40	19.50	18.80	18.10	17.30	

#	Indicator Name	2007	2008	2009	2010	2011	2012
87	Life expectancy at birth, female (years)	76.15	76.38	76.62	76.86	77.09	
88	Life expectancy at birth, total (years)	74.17	74.39	74.61	74.83	75.05	
89	Life expectancy at birth, male (years)	72.28	72.48	72.69	72.90	73.11	
90	Fertility rate, total (births per woman)	1.88	1.86	1.85	1.82	1.80	
91	Population ages 0-14 (% of total)	25.59	24.80	24.13	23.60	23.22	
92	Population ages 15-64 (% of total)	68.49	69.25	69.89	70.40	70.75	
93	Population ages 65 and above (% of total)	5.92	5.95	5.98	6.00	6.03	
94	Population growth (annual %)	1.08	1.06	1.05	1.05	1.04	
95	Population, total	84,221,100	85,122,300	86,025,000	86,932,500	87,840,000	
96	Population, female (% of total)	50.67	50.64	50.60	50.58	50.55	
97	Rural population	60,196,357.46	60,310,681.75	60,414,841.35	60,511,105.28	60,578,328.96	
98	Rural population growth (annual %)	0.22	0.19	0.17	0.16	0.11	
99	Rural population (% of total population)	71.47	70.85	70.23	69.61	68.96	
100	Urban population growth (annual %)	3.29	3.22	3.17	3.12	3.13	
101	Urban population	24,024,742.54	24,811,618.25	25,610,158.65	26,421,394.73	27,261,671.04	
102	Urban population (% of total)	28.53	29.15	29.77	30.39	31.04	
103	International tourism, number of arrivals	4,229,000.0	4,236,000.0	3,747,000.0	5,050,000.0	6,014,000.0	
104	International tourism, receipts (current US$)	3,750,000,000.0	3,930,000,000.0	3,050,000,000.0	4,450,000,000.0	5,620,000,000.0	

2.2.1. Socio-economics situation of Vietnam in four beginning months of 2013

Agriculture, forestry & fishery

Agriculture

As of April 15, 2013 the country had 3,120,400 ha of spring rice cultivated, equaled 101.4% from the same period last year, of which provinces in the North completed 1,138,100 ha, equaled 99.2% and provinces in the South 1,982,300 ha, equaled 102.7%. As of mid-April, provinces in the South harvested 1,690,800 ha of winter-spring rice, equaled 98.4% from last year' same crop, of which the Mekong Delta harvested 1,568,700 hectares, accounting for 98% of the cultivated area and equaled 103%. According to preliminary reports, the region's rice yield reached estimated 10.8 million tons, rose 8,500 tons from last year' same crop mainly due to increase in cultivated area of 19,000 ha.

Together with this, provinces in the South also sowed summer rice seeds for 839,500 ha, equaling 145.9% from last year' same crop, of which the Mekong Delta sowed summer rice seeds for 824,800 ha, equaling 145%. Some provinces had high sowing summer rice seeds area as Dong Thap (173,000 ha); Kien Giang (117,000 ha); An Giang (114,000 ha); Long An (88,000 ha).

As of this period, the country cultivated 445,400 ha of maize, equaling 98.5%; 81,800 ha of sweet potato, equaling 96.4%; 154,800 ha of peanut, equaling 99%; 60,000 ha of soybean, equaling 113.4% and 484,700 ha of vegetables, equaling 109.4% against the same period last year.

The waterless status in provinces of the Central Highland had serious impact on over 56,000 ha of crops (over 32,000 ha of coffee), of which 5,000 ha of rice and vegetables were in complete loss.

According to preliminary reports, the flock of buffalos and oxen reduced to 3-4% from the same period last year due to narrow area of grazing and slow time of reproduction. Raising pigs met difficulty due to low selling price and breakout of epidemic disease. Blue ear disease in some provinces killed over 6,000 pigs. Foot and mouth disease was happening complicatedly with the appearance of new variety of virus but there was no vaccine to protect. As estimated, the country's flock of pigs in the month decreased by about 2-3% and the flock of poultry by 2-3% from last year' same period.

As of 21st April, 2013, bird flu has been controlled, other diseases within 21 days in some locals including: foot and mouth cattle disease in Ha Tinh, blue ear pig disease in Bac Ninh, Nam Dinh, Thai Binh, Thanh Hoa, Nghe An and Ha Tinh.

Forestry

Dry weather in many areas of the country has affected forestry production, especially in the afforestation. New concentrated forestation area estimated 6,300 hectares, equaling 66.3% in the same period last year, number of scattered forest trees reached 17.6 million, rose 1.1% and a yield timber reached 414,000 m3, rose 7.3% and a yield of firewood extraction 2.8 million ste, rose 2.6%.

Generally the country's forest concentrated area in the first four months of the year reached 14,700 ha, equaling 82.1% against that in the same period last year; dispersed planted trees reached 81.6 million, rose 2.8%; wood production 1,544,700 m3, rose 7.9%; firewood production 10.2 million Ste, rose 2.9%.

Damaged forest area was 534 ha, declined 33.3% from last year' same period, of which 446 ha was burnt area, decreased by 37.1% and 88 ha was destroyed area, decreased by 4.5%.

Fishery

Fishery production in April estimated 409,800 tons, rose 0.4% from last year' same period, of which fish production reached 321,300 tons, decreased 0.5%; shrimp production reached 36,600 tons, rose 4% and other aquatic products output reached 51,900 tons, rose 3.4%.

Aquaculture production in April estimated 187,300 tons, down 4% from last year' same period, of which fish production reached 148,400 tons, down 6%; shrimp production reached 27,500 tons, rose 4.2% and other aquatic production reached 11,400 tons, rose 5.6%.

Generally, estimated fishing production in 4 months reached 1,561,000 tons, rose 0.9% from last year' same period, of which farmed products reached 687,300 tons, slowed down 2.7%; caught products reached 873,700 tons, rose 4%. Of which, sea caught products reached 825,000 tons, rose 4.3% from the same period in 2012 with 633,000 tons of fish, rose 4.4% and 35,900 tons of shrimp, rose 3.5%.

Industry

Industrial Production Index (IPI) in the first four months of 2013 rose 5% from last year' same period (lower than the 5.9% growth rate in the same period in 2012), of which the mining and quarrying rose 2.1% (the growth rate in the same period last year was 3%); the manufacturing by 5.5% (6% in last year' same period); power generation and supply by 9% (12.9% in last year' same period); water supply and wastes treatment by 8.8% (equal to the growth in last year' same period).

Of 5% general growth, the mining and quarrying contributed 0.4 point percent, the manufacturing 3.9 points percent, the power generation and supply 0.6 point percent and the water supply and waste treatment 0.1 point percent.

Consumption index for the manufacturing in the first three months of 2013 rose 4% from last year' same period. Stock index was 73.4% in March 2013 and 77.8% in the first three month.

Employment index for industrial enterprises in April 2013 rose 0.92% from March. Compared to the same period last year, April's employment index rose 0.1%, of which the state owned businesses sector rose 0.4%; the non-state sector declined 3.8% and the FDI sector rose 2.5%.

Investment

Generally, four months' realized investment capital from the state budget reached 51,374 billion dong, equaling 25.7% of the yearly plan and decreased 3.9% from the same period in 2012.

Of which, capital under central management reached 10,984 billion dong, equaling 23.2% and reduced by 17%; capital under local management obtained 40,390 billion dong, equaling 26.4% and increased by 0.4%.

Attraction of FDI from the beginning of the year to 20/4/2013 reached 8,219.1 USD million, rose 17% from the same period in 2012. Of which, registered capital of 341 newly licensed projects reached 4,873.1 USD million (decreased by 10.5% in projects and increased by 14.6% in capital against last year' same period); additional registered capital of 121 times of projects licensed from previous years was 3,346 USD million. Estimated realized FDI in 4 months of 2013 reached 3.8 USD billion, rose 3.9% from the same period in 2012.

In 4 months, 38 provinces and cities over the country had newly licensed FDI projects from 33 countries and territorial regions.

Government revenues and expenditures

Total Government revenues from the beginning of the year to 15/4/2013 were at an estimation of 201.4 trillion dong, equaling 24.7% of the yearly estimate, of which domestic revenues reached133.9 trillion dong, equaling 24.5%; from crude oil 34.6 trillion dong, equaling 35%; from export-import balance 32 trillion dong, equaling 19.2%. Of the domestic revenues, collecting from state enterprises was 40.1 trillion dong, equaling 23% of the yearly estimate; from FDI enterprises (excluding crude oil) 31.3 trillion dong, equaling 29.2%; from non-state industrial, commercial and service taxes 28.8 trillion dong, equaling 23.9%; from individual income tax 15.5 trillion dong, equaling 28.3%; from environment protection tax 3.4 trillion dong, equaling 23.6%; and from other fees 2.7 trillion dong, equaling 25.8%.

Total Government expenditures from the beginning of the year to 15/4/2013 were at an estimation of 258 trillion dong, equaling 26.4% of the yearly estimate, of which spending for investment development reached 47.7 trillion dong, equaling 27.2% (only spending for capital construction was 46.5 trillion dong, equaling 27.3%); spending for economic and social development, national defense and security (including spending for salary reform) was at an estimation of 182.1 trillion dong, equaling 27%; paying debts and aids was 28.2 trillion dong, equaling 26.8%.

Trade, price, service

Total retailed sales of consumer goods and services

Generally, four months' total retailed sales of consumer goods and services reached 849.9 trillion dong, rose 11.8% from the same period last year, if the factor of inflation were excluded, it would be 4.6%. Of which, the trade business gained 653.2 trillion dongs, represented 76.9% of the total and rose 10.6%; the hotel and restaurant 102.5 trillion dong, 12.1% and by 16.3%; the service 86.1 trillion dong, 10.1% and by 16.1%; the tourist 8 trillion dong, 0.9% and by 7.1% respectively.

Exports-Imports

Generally, four months' import turnovers reached 39.4 USD billion, rose 16.9% from last year' same period, of which the domestic economic sector reached 13.9 USD billion, raised 7%; the FDI sector (including crude oil) 25.5 USD billion, rose 23.2%.

Generally, four months' import turnovers reached 40.2 USD billion, rose 18% from last year 'same period, of which the domestic economic sector reached 18.4 USD billion, rose 10.5%; and the FDI sector gained 21.8 USD billion, rose 25.2%.

Four months' trade surplus reached 722 USD million, equaling 1.8% of total export turnovers.

Consumer price indexes (CPI)

April's CPI raised 0.02% from March. Among groups of goods and services, medicines and health care service had highest growth rate of 3.62% (health care service rose 4.51%). Groups with slight growth rates were transport by 1.2%; garments, hats and footgear by 0.45%; family appliances by 0.38%; culture, entertainment, tourist by 0.33%; drinks and tobacco by 0.1%; education by 0.05%. Remaining groups had decreased rates were catering and related service by 0.91% (grain food by 0.86%; foodstuff by 1.24%); housing and construction material by 0.44%; postal and communicational service by 0.15%.

This month's CPI growth mainly resulted from the impact of groups of medicines and health care service, and transport. Health care service charge contributed 0.2% to the country's general growth rate; 2.21% increase in gasoline price contributed 0.08% to the general CPI.

April' CPI rose 2.41 percent from 12/2012 and 6.61% from the same period last year. Average CPI in 4 months rose 6.83% compared to that in 2012' same period.

April's gold price index declined 2.56 percent from March, 7.17% from 12/2012 and 3.41% from last year' same period. April's USD price index rose 0.01% from March, 0.37% from 12/2012 and 0.47% from last year' same period.

Carriage of passengers and cargos

Four months' passenger carriage reached estimated 910 million arrivals, raised 4.4percent and 40 billion passengers-kilometers rose 4.1percent from the same period in 2012. Of which central transport reached 14.2 million participants, decreased by1.7% and 11 billion passengers-kilometers increased by 3.4%; local transport reached 895.8 million arrivals, rose 4.5percent and 29 billion passengers-kilometers rose 4.3%. Four months' passengers transport by land reached estimated 830.7 million arrivals, rose 4.6percent 28.1 billion passengers-kilometers rose 3.8percent from last year' same period. Similarly, by river: 68 million arrivals, rose 2.4percent and 1.5 billion passengers-kilometers rose 6.2percent; by airway: 5.5 million arrivals, rose 0.6percent and 9 billion passengers-kilometers rose 5.6percent; by sea: 2.1 million arrivals, rose 1.2percent

and 120.3 million passengers-kilometers rose 0.9percent; by rail: 3.7 million arrivals, decreased by 2.1% and1.3 billion passengers-kilometers by 2.5%.

Four months' cargo carriage reached estimated 328.6 million tons, rose 2.6percent and 59.4 billion tons-kilometers, slowed down 9.8percent from last year' same period, of which the domestic transport gained 317 million tons, increased by 3% and 26.7 billion tons-kilometers by 2.3%; overseas transport reached 11.6 million tons, decreased by 7.6% and 32.7 billion tons-kilometers by 17.7%. Land transport obtained 255.4 million tons, increased by 4.2% and 18.2 billion tons-kilometers by 2,1%; river transport 57.7 million tons, decreased by 1.3% and 4.8 billion tons-kilometers by 2.6%; sea transport 13.4 million tons, decreased by 7.9% and 34.9 billion tons-kilometers by 16%; rail transport 2.2 million tons, decreased by 2.7% and 1.2 billion tons-kilometers by 2%.

International visitors to Viet Nam

Estimated international visitors to Viet Nam in four beginning months of 2013 reached 2.4 million arrivals, declined 5.3percent from last year' same period. Of which, nearly 2 million arrivals came by air, decreased by 6.4%, 348,000 arrivals came by land, increased by 1.3% and 78,600 arrivals came by sea, decreased by 3.7%. Visitors coming for tourist purposes were 1.5 million arrivals, slowed down 3.8percent from the same period in 2012; for business purposes 406,400 arrival, decreased by 5.4%.

Social issues

Farmers food shortage

In April, the country had 59,500 households suffered from food shortage, represented 0.5% of total agricultural households and equaled to 255,200 hunger household members, represented 0.5% of total agricultural HH members. In comparison to the same period in 2012, hunger households decreased by 2.9% and hunger members by 2.1%. To overcome the problem, all administrative levels and sectors since the beginning of the year have provided difficult families with 16,100 tons of food and over 8.2 billion dong, only in April over 4,000 tons of food was provided.

Epidemic diseases and food poisoning

Generally, the country in 4 months had 18,000 cases of hand, foot, mouth disease (5 died); 11,200 cases of hemorrhagic fever (10 died); 53 cases of typhoid (1 died); 112 cases of virus encephalitis (2 died); 1 case of meningococcal disease and 1 case of A (H5N1) flu.

More 245 HIV-infected cases were found in the month, bringing the number of HIV infected persons over the country as of mid-April 2013 to 210,600, of which 54,400 turned to AIDS and 54,500 died of AIDS.

Generally, the country in 4 months had 23 cases of food poisoning, infecting 737 persons, of which 4 died.

Traffic accidents

Generally, the country in 4 months had 3,709 cases of traffic accident, killing 3,333 persons and injuring 2,349 others. In comparison to the same period last year, cases of traffic accident increased by1.3%; the death by 5.2%; the injured decreased by 13.4%. On average, the country in each day in 4 months had 31 cases of traffic accident, killing 28 persons and injuring 20 others.

Damage by natural calamity

Damage by natural calamity in the month mainly resulted from hails and whirlwinds that happened in provinces in northern mountainous region. Natural calamity killed and injured 59 persons; 118 were collapsed and swept away; nearly 23,000 houses were flooded and blown off; about 3,000 ha of rice and vegetables were damaged, of which 1,700 ha were in dead loss. Estimated total damage by calamity was 389 billion dong; damage by hails and whirlwinds only was 382 billion dong.

Environmental and fire protection

In April, functioning authorities discovered 406 environment violated cases in 36 provinces and cities. 226 cases were fined 352.6 billion dong.

The country in four months had 841 serious cases of fire and explosion, killing 46 persons and injuring 55 others. Estimated damage was about 291 billion dong.

2.2.2. The project Provinces

Table 5: Key information about socioeconomic conditions in 2011

TT	Indicator	Unit	Thai Binh	Hai Duong	Hung Yen
1	Rate of Birth	‰	14.20	15.88	16.20
2	Rate of Death	‰	8.90	7.70	7.80
3	Natural Rate	‰	8.30	9.46	8.37
4	Economic Structure				
4.1	*Agriculture, forestry and fishery*	*%*	37.26	23.00	23.00
4.2	*Industry and construction*	*%*	30.98	45.60	45.86
4.3	*Services*	*%*	31.76	31.40	31.14
5	Income in one ha of farming (VND)	School	NA	NA	118.50
6	School	School	604.00	605.00	376.00
7	Number of student	1,000 pupil	279.00	270.00	178.00
8	Health care	Health care Center	334.00	293.00	178.00

TT	Indicator	Unit	Thai Binh	Hai Duong	Hung Yen
9	Number of Nurses	Head	5,290.00	4,267.00	2,811.00
10	Poverty Rate	%	8.12	8.94	8.42
11	Rate of working people	1,000 people	1,134.20	1,071.00	707.10
12	Rate of working people	%	62.40	61.70	60.80
13	Rate of unemployment	%	1.74	0.97	1.08
14	Immigration	Head	4,154.00	13,429.00	9,036.00
15	Rate of immigration	‰	2.30	7.80	8.00
16	Migration	Head	12,885.00	9,432.00	6,504.00
17	Rate of migration	‰	9.40	5.50	6.10

Source: Statistics year of 2011

Table 6: Number of people with HIV/AIDS and died by HIV/AIDS

Province	Number of infected with HIV – newly found		Number with AIDS – newly found		Number with HIV still alive – accumulated to end of year		Number with AIDS still alive – accumulated to end of year		Number died by AIDS	
	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012
Hai Duong	231	261	48	67	3.846	3941	423	983	3	23
Hung Yen	122	91	69	40	1.196	1248	112	83	37	18
Thai Binh	278	195	114	73	3.666	3619	571	589	22	17

a) Thai Binh Province

Thai Binh includes of 7 districts and one city. A total area of the province is 1,570.03 km2 and with population of about 1,786,000 people. The average GDP growth in a period from 2011 -2015 is forecasted with about 13.5 % and from 2016 to 2020 would be about 13 %. Thai Binh plans to reduce the GDP from agriculture to 20% and increase for industry and basic construction up to 45% and trade-services up to 35%. The total export value is planned with about U$ 1.5 billion. Average GDP per capita is bout VND 74.4 million and the increasing rate of the population is about 0.37 to 0.72 % per year. Each year the poverty reduction is about 1 % in average. Some detailed information about Thai Binh Province is shown as table 7 and 8 below.

Table 7: Growth of the population in Thai Binh province

Year	Low	Medium	High
2015	1.812.580	1.825.254	1.837.995
2020	1.846.362	1.875.538	1.905.123
2025	1.880.773	1.927.206	1.974.702

Table 8: Natural area, population and population density by district

No.	City/District	Natural area (Km2)	No. of communes/ wards	Average population (person)	Population density (person/km2)	In which	
						Male	Female
1	Thai Binh city	67.71	19	184,520	2,725	88,570	95,950
2	Quynh Phu	209.61	38	233,090	1,112	111,883	121,207
3	Hung Ha	210.29	35	247,360	1,176	118,733	128,627
4	Dong Hung	196.05	44	234,060	1,194	112,349	121,711
5	Thai Thuy	265.84	48	247,670	932	118,882	128,788
6	Tien Hai	226.04	35	208,600	923	100,128	108,472
7	Kien Xuong	199.35	37	212,550	1,066	102,024	110,526
8	Vu Thu	195.14	30	218,450	1,119	104,856	113,594
Whole province		**1,570.03**	**286**	**1,786,300**	**1,138**	**857,425**	**928,875**

(Source: Statistical Office of Thai Binh province. Data updated to 31 December 2011)

Table 9: Turnover of transport, loading in Thai Binh province

Item	2007	2008	2009	2010	2011
Billion VND					
Total	**758.7**	**891.9**	**1,407.0**	**1,824.9**	**2,117.8**
1. By ownership					
- State	28.1	31.2	35.5	38.9	40.2
- Non-state	730.6	860.7	1371.5	1786	2077.6
- Foreign invested sector	-	-	-	-	-
2. By types of activity					
- Inland way	408.3	559	786	1021.5	1345.8
- Water way	350.2	332.7	621	803.4	772
- Storage	-	-	-	-	-
- Others	0.2	0.2	-	-	-
Structure (%)					
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
1. By ownership					
- State	3.7	3.5	2.5	2.1	1.9

Item	2007	2008	2009	2010	2011
- Non-state	96.3	96.5	97.5	97.9	98.1
- Foreign invested sector	-	-	-	-	-
2. By types of activity					
- Inland way	53.8	62.7	55.9	56	63.5
- Water way	46.2	37.3	44.1	44	36.5
- Storage	-	-	-	-	-
- Others	-	-	-	-	-

Table 10: Volume of passengers carried

Item	2007	2008	2009	2010	2011
Thous.person					
Total	**5,952**	**7,352**	**8,386**	**11,031**	**12,603**
1. By ownership					
- State	583	573	579	604	471
- Non-state	5,369	6,779	7,807	10,427	12,132
+ Collective	199	125	106	126	117
+ Private	1,634	2,038	2,421	3,485	4,105
+ Households	3,536	4,616	5,280	6,816	7,910
- Foreign invested sector	-	-	-	-	-
2. By transport activity					
- Inlad way	5,952	7,352	8,386	11,031	12,603
- River way	-	-	-	-	-
- Sea way	-	-	-	-	-
Index (*Previous year=100)-%*					
Total	**136.95**	**123.52**	**114.06**	**131.54**	**114.25**
1. By ownership					
- State	102.10	98.28	101.05	104.32	77.98
- Non-state	142.20	126.26	115.16	133.56	116.35
+ Collective	58.19	62.81	84.80	118.87	92.86
+ Private	152.43	124.72	118.79	143.87	117.83
+ Households	149.77	130.54	114.38	129.09	116.05
- Foreign invested sector	-	-	-	-	-
2. By transport activity					
- Inlad way	136.95	123.52	114.06	131.54	114.25
- River way	-	-	-	-	-
- Sea way	-	-	-	-	-

Table 11: Health establishments, beds and staffs by state management

Item	Unit	2007	2008	2009	2010	2011
1. Number of health establishments	**Unit**	**303**	**305**	**307**	**309**	**334**
- Hospital		16	18	19	21	22
- Polyclinics						
- Sanatorium, functional recover unit		1	1	1	1	1
- Lazarine leprosy treaty zone		1	1	1	1	1
- Maternity hospital						
- Health unit in commune, ward		285	285	286	286	286
- Other						24
2. Number of beds	**Bed**	**3,595**	**3,535**	**3,893**	**4,388**	**4,615**
- Hospital		2,540	2,488	2,875	3,330	3,505
- Polyclinics						
- Sanatorium, functional recover unit		120	135	100	120	120
- Lazarine leprosy treaty zone		80	57	60	80	130
- Maternity hospital						
- Health unit in commune, ward		855	855	858	858	860
- Other						
3. Medical staff	**Person**	**3,262**	**3,629**	**3,752**	**3,882**	**5,290**
- Doctor and post graduate		1,372	1,330	1,400	1,474	1,522
- Physicans		709	754	827	825	1,114
- Technical		129	187	157	207	787
- Nurse		802	999	983	979	1,215
- Midwives		250	359	385	397	652
4. Pharmaceuticial staff	**Person**	**1,093**	**1,189**	**1,250**	**1,301**	**2,248**
- High degree pharmacist		144	167	199	220	266
- Middle degree pharmacist		240	283	292	294	1,122
- Middle physician		240	245	245	252	280
- Assistant		469	494	514	535	580

Table 12: Number of pair used contraceptive method by ural, rural and by kind of method

Item	Unit	2007	2008	2009	2010	2011
Total	**Pair**	**259,283**	**261,410**	**271,826**	**271,775**	**274,170**
- IUD		189,479	191,176	204,501	201,166	202,582
- Condom		18,030	18,510	21,424	24,828	25,784
- Male sterilization		1,427	1,389	1,276	996	813
- Female sterilization		14,573	14,072	14,144	12,919	11,998
- Using pill medical		22,522	23,300	24,355	26,213	26,806
- Injection medical method		3,209	3,017	5,330	4,837	5,359
- Inoculate medical method		467	530	796	816	828
- Other		9,576	9,416	-	-	-

Table 13: Number of pair used contraceptive method by district

District	Unit	2007	2008	2009	2010	2011
Total	**Pair**	**259,283**	**261,410**	**271,826**	**271,775**	**274,170**
Thai Binh city		24,453	28,962	27,321	28,147	27,611
Quynh Phu		34,852	34,056	36,952	36,610	37,237
Hung Ha		34,761	34,971	36,056	36,740	36,583
Dong Hung		36,498	34,298	37,269	36,669	38,245
Thai Thuy		36,574	35,916	37,136	37,288	36,343
Tien Hai		30,811	30,947	31,635	31,703	32,186
Kien Xuong		30,178	30,588	31,664	31,982	31,852
Vu Thu		31,156	31,672	33,793	32,636	34,113

Table 14: Number of pair having third baby by district

District	Unit	2007	2008	2009	2010	2011
Total	**Pair**	**3,594**	**3,295**	**3,296**	**2,881**	**2,790**
Thai Binh city		69	110	132	111	115
Quynh Phu		453	489	361	357	352
Hung Ha		575	561	520	458	417
Dong Hung		490	402	414	333	350
Thai Thuy		550	422	468	388	397
Tien Hai		584	612	708	643	630
Kien Xuong		449	327	333	281	242
Vu Thu		424	372	360	310	287

Table 15: Number of schools, teachers, students

Item	Unit	2007	2008	2009	2010	2011
I. Number of schools, teachers, students of professional secondary education						
1. No. of schools	**School**	**4**	**3**	**3**	**3**	**3**
Public		4	3	3	3	3
Non-public						
2. No. of teachers	**Person**	**124**	**86**	**84**	**102**	**128**
By type						
- Public		124	86	84	102	128
- Non-public						
By professional qualification						
- Post graduate		12	13	17	20	22
- University and college graduate		103	73	67	82	106
- Other degree		9				
3. No. of students	**Person**	**5,206**	**5,583**	**6,118**	**6,458**	**6,812**
By type						
- Public		5,206	5,583	6,118	6,458	6,812
- Non-public						
By form of training						
- Full-time training		4,364	4,580	5,098	5,529	5,804
- Others		842	1,003	1,020	929	1,008
4. No. of students graduated	**Person**	**2,187**	**673**	**777**	**939**	
By type						
- Public		2,187	673	777	939	
- Non-public						
By form of training						
- Full-time training		2,065	329	421	524	
- Others		122	344	356	415	
II. Number of schools, teachers, students of college education						
1. No. of schools	**School**	**3**	**4**	**4**	**4**	**3**
Public		3	4	4	4	3
Non-public						
2. No. of teachers	**Person**	**330**	**368**	**438**	**445**	**382**
By type						
- Public		330	368	438	445	382
- Non-public						
By professional qualification						
- Post graduate		93	107	108	116	134
- University and college graduate		237	261	330	329	248
- Other degree						

Item	Unit	2007	2008	2009	2010	2011
3. No. of students	**Person**	**6,053**	**7,859**	**9,517**	**10,914**	**10,240**
By type						
- Public		6,053	7,859	9,517	10,914	10,240
- Non-public						
By form of training						
- Full-time training		4,932	6,549	7,917	8,417	8,512
- Others		1,121	1,310	1,600	2,497	1,728
4. No. of students graduated	**Person**	**1,242**	**1,307**	**1,837**	**1,854**	
By type						
- Public		1,242	1,307	1,837	1,854	
- Non-public						
By form of training						
- Full-time training		954	642	1,412	1,492	
- Others		288	665	425	362	
II. Number of schools, teachers, students of university education						
1. No. of schools	**School**	**2**	**2**	**2**	**2**	**3**
Public		2	2	2	2	3
Non-public						
2. No. of teachers	**Person**	**347**	**398**	**441**	**458**	**534**
By type						
- Public		347	398	441	458	534
- Non-public						
By professional qualification						
- Post graduate		170	183	201	206	211
- University and college graduate		177	215	240	252	323
- Other degree						
3. No. of students	**Person**	**4,220**	**5,566**	**6,513**	**6,945**	**7,412**
By type						
- Public		4,220	5,566	6,513	6,945	7,412
- Non-public						
By form of training						
- Full-time training		2,660	3,494	4,195	4,404	5,606
- Others		1,560	2,072	2,318	2,541	1,806
4. No. of students graduated	**Person**	**348**	**693**	**1,338**	**1,384**	
By type						
- Public		348	693	1,338	1,384	
- Non-public						
By form of training						
- Full-time training		157	366	812	825	
- Others		191	327	526	559	

(Source: Thai Binh Statistical Yearbook, 2011)

b) Hung Yen Province

Hung Yen includes of 9 districts and one city. A total area of the province is 926.03 km2 and with population of about 1,137,294 people. Some detailed information about Hung Yen Province is shown as table 16 below.

Table 16: Natural area, population and population density by district

No.	City/District	Natural area (Km2)	No. of communes/ wards	Average population (person)	Population density (person/km2)	In which	
						Male	Female
1	Hung Yen city	46.98	12	84,324	1,795	40,794	43,530
2	Van Lam	74.43	11	115,250	1,548	57,198	58,052
3	Van Giang	71.81	11	99,767	1,389	49,466	50,301
4	Yen My	92.50	17	135,180	1,461	66,773	68,407
5	My Hao	79.11	13	94,928	1,200	46,756	48,172
6	An Thi	128.72	21	128,043	995	62,621	65,422
7	Khoai Chau	130.92	25	182,285	1,392	90,082	92,203
8	Kim Dong	114.74	19	122,114	1,064	60,173	61,941
9	Phu Cu	93.86	14	77,345	824	38,012	39,335
10	Tien Lu	92.97	18	98,058	1,055	47,746	50,311
Whole province		**926.03**	**161**	**1,137,294**	**1,228**	**559,620**	**577,674**

(Source: Statistical Office of Hung Yen province. Data updated to 31 December 2011)

Table 17: Traffic accident in Hung Yen

Item	Unit	2006	2007	2008	2009	2010	2011
1. Number of cases	**Case**	**192**	**183**	**188**	**173**	**188**	**172**
- Number of fatalities	Person	145	146	139	131	183	174
- Number of injured	Person	141	140	137	108	103	107
2. Cause of traffic accidents	**Case**	**192**	**183**	**188**	**173**	**188**	**172**
-Related to car	case	50	21	28	25	29	37
-Related to motorbike	case	123	157	141	138	150	130
- Others	case	19	5	19	10	9	5
3. Number of violations of traffic safety	**Case**	**31,074**	**35,800**	**32,435**	**27,293**	**35,187**	**32,947**

Table 18: Volumn of passengers carried

Item	2006	2007	2008	2009	2010	Prel. 2011
	1,000 passengers					
Total	**3.163**	**4.32**	**4.588**	**4.943**	**5.715**	**6.434**
I. By ownership						
1.State						
2.Non-state	3.163	4.320	4.588	4.943	5.715	6.434
- Collective	44	105	42	37	43	45
- Private	1.332	1.821	2.054	2.294	2.791	3.246
- Household	1.787	2.394	2.492	2.612	2.881	3.143
3. Foreign invested sector						
II. By transport activity						
1. Inland way	2.465	3.916	4.046	4.332	5.481	5.768
2. River way	698	404	542	611	234	666
3. Sea way						
	Index (Previous year = 100) - %					
Total	**112,97**	**136,58**	**106,20**	**107,74**	**115,61**	**112,58**
I. By ownership						
1.State						
2.Non-state	112,97	136,58	106,20	107,74	115,61	112,58
- Collective	40,79	237,70	39,88	89,21	115,03	104,65
- Private	153,73	136,75	112,78	111,67	121,68	116,30
- Household	97,91	133,94	104,11	104,82	110,29	109,09
3. Foreign invested sector						
II. By transport activity						
1. Inland way	117,10	158,85	103,33	107,07	126,52	105,24
2. River way	100,47	57,92	134,03	112,81	38,28	284,62
3. Sea way	-	-	-	-	-	-

Table 19: Volume of freight

Item	2006	2007	2008	2009	2010	Prel. 2011
	1,000 tons					
Total	**6.863**	**9.691**	**10.407**	**11.467**	**13.416**	**14.392**
I. By ownership						
1.State	-	12	15	-	-	-
2.Non-state	6.863	9.679	10.392	11.467	13.416	14.392
- Collective	233	186	138	74	90	98
- Private	226	448	484	810	1.236	1.326
- Household	6.404	9.046	9.770	10.583	12.090	12.968
3. Foreign invested sector	-	-	-	-	-	-
II. By transport activity						

Item	2006	2007	2008	2009	2010	Prel. 2011
	1,000 tons					
1. Inland way	5.266	7.224	8.783	9.762	11.415	12.202
2. River way	1.596	2.467	1.625	1.705	2.002	2.190
3. Sea way	-	-	-	-	-	-
	Index (Previous year =100) -%					
Total	**114,78**	**141,21**	**107,39**	**110,19**	**117,00**	**107,27**
I. By ownership						
1.State	-	-	-	-	-	-
2.Non-state	114,78	141,04	107,36	110,35	117,00	107,27
- Collective	37,04	79,75	74,15	53,79	121,91	108,61
- Private	110,82	198,49	108,14	167,37	152,55	107,28
- Household	124,42	141,24	108,01	108,32	114,24	107,26
3. Foreign invested sector	-	-	-	-	-	-
II. By transport activity						
1. Inland way	99,21	137,18	121,57	111,16	116,93	106,90
2. River way	238,01	154,52	65,86	104,94	117,42	109,40
3. Sea way	-	-	-	-	-	-

Table 20: Results of the healthcare

Item	Unit	2006	2007	2008	2009	2010	2011
I. Indicators of local health							
1. Number of consultants	Admission /pers	445.336	405.355	570.816	681.133	645.509	791.529
2. Number of in-patients under treatment	Admission /pers	95.358	90.385	114.446	127.314	114.88	127.640
3. No.of inpatient treatment days	day	531.343	700.782	865.079	932.823	850.295	843.460
4. Number of surgery operations	operation	9.290	8.311	8.504	10.806	9.219	11.583
5. Number of tests	time	1.055	1.419	1.220	2.285	2.862	3.318
6. Number of X-rays	time	130.577	147.136	180.059	223.576	207.495	179.186
7. Number of ultrasound	time	78.096	110.871	114.765	122.880	141.345	165.044
8. Number of IUD persons	Person	29.231	27.354	29.455	27.919	30.158	27.468
9. Number of people used condom	Person	13.807	14.414	15.741	17.342	19.122	22.584
10. No. of sterilization people	Person	210	177	131	103	80	165
II. National program on health							
1. Expanded Programme on Immunization							
- No.of children received 6 basic vaccinations	Person	17.841	12.347	19.011	20.038	20.444	21.928
- Percentage of children received 6 basic vaccinations	%	99.95	65.56	97.60	100.00	100.00	100.00

Item	Unit	2006	2007	2008	2009	2010	2011
- No.of pregnant women received tetanus toxoid vaccine	Person	21.329	23.512	22.960	23.478	24.075	25.075
- Percentage of pregnant women received tetanus toxoid vaccine	%	99.86	99.78	99.48	99.90	99.90	100.00
2. Prevention of malaria							
- Insecticide treated net	unit	3.200		12.650	10.000	7.500	7.500
- No. of people protected by insecticide treated net	Person	25.384	24.670	25.300	20.000	15.000	15.000
3. Prevention of goiter							
- No.of people examined goiter	Person	14.160	14.550	13.731	15.261	1.417	-
- No.of people with simple goiter	Person	1.550	1.264	1.118	985	585	-
4. Prevention of tuberculosis							
- Number of tuberculosis patients just defecting	Person	1.350	1.156	1.215	1.051	1.228	1.182
- No. of patients treated successfully	Person	1.150	698	1.133	629	1.029	1.068

Table 21: Number of pair used contraceptive method by district

District	2006	2007	2008	2009	2010	2011
Total	**173.77**	**177.139**	**179.507**	**174.894**	**155.454**	**75.749**
Hung Yen city	11.135	12.266	12.987	12.216	12.898	7.836
Van Lam	17.494	17.737	17.014	15.786	9.030	3.983
Van Giang	14.883	14.845	15.438	15.332	12.106	4.898
Yen My	19.734	19.882	20.297	20.801	17.400	7.398
My Hao	13.590	14.213	14.134	14.344	11.200	6.689
An Thi	21.546	21.381	22.010	21.168	19.346	9.592
Khoai Chau	28.094	28.215	29.032	28.018	26.735	11.200
Kim Dong	19.184	19.599	19.756	19.250	18.307	8.251
Phu Cu	12.876	12.914	12.478	12.497	14.654	6.428
Tien Lu	15.232	16.087	16.361	15.482	13.778	9.474

Table 22: Number of drug addicts, HIV-infected and death by AIDS people

Item	2006	2007	2008	2009	2010	2011
1. Number of detected drug addicts and management records	**1.062**	**1.011**	**1.004**	**1.046**	**1.014**	**994**
a. By gender						
+ Male	1.054	1.007	1.002	1.044	1.012	988
+ Female	8	4	2	2	2	6
b. By occupation						
+ Officer, worker	11	8	7	5	5	2

Item	2006	2007	2008	2009	2010	2011
+ Teacher	-	-	1	1	1	1
+ Skilled labor	887	796	815	909	426	484
+ Student, pupil	-	2	-	-	-	-
+ Other	164	215	181	131	582	507
c. By age group						
+ Under 15 years old	-	-	-	1	0	-
+ From 15 to 25 years old	260	149	103	134	90	114
+ From 25 to 35 years old	560	499	543	595	452	519
+ From 35 to 45 years old	239	355	354	310	457	339
+ Above 45 years old	3	8	4	6	15	22
2. HIV-infected people	**117**	**115**	**115**	**131**	**118**	**131**
a. By gender						
+ Male	95	93	79	100	91	90
+ Female	22	22	36	31	27	41
b. By occupation						
+ Other	117	115	115	131	118	131
c. By age group						
+ Under 15 years old	1	2		2	2	1
+ From 15 to 25 years old	62	59	10	12	11	10
+ From 25 to 35 years old	29	28	76	82	68	65
+ From 35 to 45 years old	23	24	25	33	31	41
+ Above 45 years old	2	2	4	2	6	14
3. Number of death by HIV	**56**	**44**	**45**	**32**	**40**	**56**
a. By gender						
+ Male	53	40	37	28	39	47
+ Female	3	4	8	4	1	9
b. By occupation						
+ Other	56	44	45	32	40	56
c. By age group						
+ Under 15 years old	-	-	-	1	1	1
+ From 15 to 25 years old	-	-	2	-	1	1
+ From 25 to 35 years old	56	44	36	20	19	28
+ From 35 to 45 years old	-	-	6	10	17	22
+ Above 45 years old	-	-	1	1	2	4

(Source: Statistical Office of Hung Yen province, 2011)

c) Hai Duong Province

Hai Duong includes of 11 districts and one city. A total area of the province is 1,654.8 km2 and with population of about 1,718,895 people. Some detailed information about Hai Duong Province is shown as table 23 below.

Table 23: Natural area, population and population density by district

No.	City/District	Natural area (Km2)	No. of communes/ wards	Average population (person)	Population density (person/km2)	In which	
						Male	Female
1	Hai Duong city	71.4	21	215,566	3,019	101,394	114,172
2	Chi Linh	282.0	20	160,349	569	81,455	78,894
3	Nam Sach	109.1	19	112,558	1,032	55,209	57,349
4	Kinh Mon	163.5	25	159,534	976	79,239	80,295
5	Kim Thanh	115.2	21	122,782	1,066	61,292	61,490
6	Thanh Ha	159.1	25	154,414	971	74,661	79,753
7	Cam Giang	109.0	19	128,839	1,182	62,804	66,035
8	Binh Giang	104.8	18	105,535	1,007	52,765	52,770
9	Gia Loc	112.4	23	135,387	1,205	66,204	69,183
10	Tu Ky	170.4	27	158,769	932	77,541	81,228
11	Ninh Giang	135.5	28	141,677	1,046	68,907	72,770
12	Thanh Mien	122.4	19	123,485	1,009	60,959	62,526
Whole province		**1,654.8**	**265**	**1,718,895**	**1,039**	**842,430**	**876,465**

Table 24: Some main indicators of transport's outcome

Year	Volume of freight		Volume of passengers	
	Volume of freight (Thous.tons)	Volume of freight traffic (Thous.tons.km)	Volume of passengers carried (Thous. Pers)	Volume of passengers traffic (Thous.pers.km)
2000	4.541	216.605	1.329	90.673
2001	4.765	230.675	1.629	100.964
2002	5.262	259.979	1.822	117.912
2003	8.611	545.130	2.243	141.147
2004	13.971	829.819	4.022	228.664
2005	13.308	922.568	4.399	291.028
2006	16.566	1.168.015	5.529	377.525
2007	20.394	1.592.263	5.681	410.49
2008	24.035	1.821.413	8.227	530.95
2009	27.720	1.851.971	9.557	577.784
2010	33.092	2.774.023	11.964	718.054
Prel.2011	38.537	2.774.023	14.920	760.058
	Index (Previous year = 100) - %			
1998	115,5	129,5	102,7	97,9
1999	89,4	94,3	96,7	105,4
2000	109,2	126,9	99,3	94,1
2001	104,9	106,5	122,6	111,3

Year	Volume of freight		Volume of passengers	
	Volume of freight (Thous.tons)	Volume of freight traffic (Thous.tons.km)	Volume of passengers carried (Thous. Pers)	Volume of passengers traffic (Thous.pers.km)
2002	110,4	112,7	111,8	116,8
2003	163,6	209,7	123,1	119,7
2004	162,2	152,2	179,3	162,0
2005	95,3	111,2	109,4	127,3
2006	124,5	126,6	125,7	129,7
2007	123,1	136,3	102,7	108,7
2008	117,9	114,4	144,8	129,3
2009	115,3	101,7	116,2	108,8
2010	119,4	117,8	125,2	124,3
Prel.2011	116,5	127,2	124,7	105,8

Table 25: Traffic accidents

Item	2005	2007	2008	2009	2010	2011
Number of cases(case)	**277**	**358**	**312**	**286**	**241**	**154**
Roadway	263	339	283	263	222	144
Railway	7	9	8	12	3	2
Waterway	7	10	21	11	16	8
Number of fatalities (Per.)	**227**	**281**	**233**	**247**	**234**	**159**
Roadway	218	273	219	228	230	153
Railway	8	8	9	15	3	2
Waterway	1	-	5	4	1	4
Number of injured (Per.)	**220**	**282**	**215**	**191**	**108**	**74**
Roadway	220	280	207	183	108	73
Railway	-	2	7	7	-	1
Waterway	-	-	1	1	-	-
Structure (%)						
Number of cases	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**
Roadway	95,0	94,7	90,7	92,0	92,1	93,5
Railway	2,5	2,5	2,6	4,2	1,2	1,3
Waterway	2,5	2,8	6,7	3,8	6,7	5,2
Number of fatalities	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**
Roadway	96,0	97,2	94,0	92,3	98,3	96,2
Railway	3,5	2,8	3,9	6,1	1,3	1,3
Waterway	0,5	-	2,1	1,6	0,4	2,5

Item	2005	2007	2008	2009	2010	2011
Number of injured	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**
Roadway	100,0	99,3	96,3	95,8	100,0	98,6
Railway	-	0,7	3,2	3,7	-	1,4
Waterway	-	-	0,5	0,5	-	-

Table 26: General education by grade

Item	2005	2007	2008	2009	2010	2011
Number of schools (school)	**595**	**602**	**604**	**605**	**605**	**605**
- Primary	279	279	279	279	280	279
- Middle	273	273	273	273	272	272
- Secondary	43	50	52	53	53	54
Number of classes (class)	**8.857**	**8.687**	**8.577**	**8.604**	**8.704**	**8.779**
- Primary	4.186	4.129	4.131	4.160	4.327	4.396
- Middle	3.361	3.186	3.099	3.069	3.051	3.081
- Secondary	1.310	1.372	1.347	1.375	1.326	1.302
Number of teachers (Person)	**13.899**	**14.550**	**14.744**	**15.001**	**15.574**	**15.595**
- Primary	5.367	5.746	6.006	6.184	6.562	6.686
- Middle	6.366	6.354	6.204	6.180	6.057	6.163
- Secondary	2.166	2.450	2.534	2.637	2.955	2.746
Number of Pupils (pupil)	**318.912**	**299.051**	**285.432**	**279.664**	**272.645**	**270.066**
- Primary	122.809	119.154	116.639	117.058	117.645	117.258
- Middle	127.540	110.792	103.029	99.745	95.205	95.168
- Secondary	68.563	69.105	65.764	62.861	59.795	57.640

(Source: Statistical Office of Hai Duong province, 2011)

Immunization

Although the survey samples showed a relatively high child mortality rate, over 80 percent of household children under 12 had been immunized. With improved access to area health facilities after the road works, there could be an increase in the immunization rate among children, possibly reducing the child mortality rate. Close to 70 percent of household mothers had been immunized for tetanus when pregnant.

Tetanus injections are given to pregnant mothers to prevent neonatal tetanus, which occurs when women give birth in an unhygienic environment with un-sterilized instruments to cut the umbilical cord and the application of unclean materials on the cut cord.

Socioeconomic conditions of the project affected households.

2.3. Household Socioeconomic survey

The purpose of the socioeconomic survey from a sample of the affected DPs is to provide baseline data of DPs to assess resettlement impacts, to make sure that the proposed entitlements are appropriate (through livelihood development activities) to meet with the objectives and principles of OP 4.12 of the World Bank, and to be used for resettlement monitoring in the RP implementation phase. The main information collected through SES includes:

Household head: name, sex, age, livelihood or occupation, income, education and ethnicity;

Household members: number, livelihood or occupation, school age children and school attendance, and literacy, disaggregated by gender; vulnerable group, community health and community physical infrastructures and social services etc. Living conditions: access to water, sanitation and energy for cooking and lighting; ownership of durable goods; and Access to basic services and facilities.

Results of the SES survey for the households are described in the project RPs and summarized as **Annex 2 "Results of SES from the project affected households"** to this report.

3. Stakeholder and Institutional Analysis

3.1. Identification of Key Stakeholders

The stakeholders' identification related to SIA and its implementation considering based on the following questions:

- Who involve in the project identification and construction, including the financier and the borrower?
- Who will be making the decisions related to the different aspects of the project?
- Who will manage for the project operation and maintenance?
- Who may potentially benefit from the project?
- Who might be adversely impacted by the project?
- Who are the vulnerable groups?
- Who can influence, positively or negatively, the outcome of the proposed Project?
- Who will be implementing the project (construction, implementing EMP, RP, SIA etc).

- Who will be supervising, monitoring and evaluate for the implementation of the different aspects of the project development.
- What are the relationships among stakeholders?

Stakeholders are defined as those who have an interest or a stake in the Project, including "those who are likely to be affected by the project as well as those who may have an influence over the project". Form the above descriptions, the stakeholder groups identified and taken into consideration in this SIA are as follows:

- The Decision making Agencies from the Central Government to the commune levels (MOT, PMU3, PCs of the province to the commune; DOT; MONRE, DOF; District Compensation and Resettlement Committees etc.).
- Population of the communes along the project route of Thai Binh, Hung Yen and Hai Duong Provinces, including the land acquisition affected people and non-land acquisition affected people (but affected by others aspect of the project development) as well as vulnerable groups.
- The project consultants for survey, project preparation and construction and operations.
- Users of transport services, most notably non-owner end users at the village, commune, district and provincial level.
- Owners of motorized vehicles used for the transport of either freight or very rarely passengers.
- Operators of Passenger and Freight Vehicles – Public and Private.
- The lender and borrower for the project development.
- Local NGOs

Stakeholder analysis forms the one of an important part of the SIA and it is used to study about the alternatives of the project to mitigate for the adverse impacts and to prepare for a mitigation plan to the potentially negative impacts. Of these identified stakeholders, local communities make up the largest group, and they have been analyzed in detail including their socio-economic conditions as well as their absorptive capacity. The Consultant also sought to inform, consult, and carry out a dialogue with key stakeholders on matters regarding project design, objectives, and implementation features, including the formulation of development strategies, the identification of priorities, and social and environmental mitigation measures.

The list of stakeholders as described above have also discussed with the provincial authorities and sample of people along the project route they see that the identification of stakeholders by the SIA consultant is acceptable.

3.2. Assessment of Interests and Influence of Stakeholders

The matrix below summarizes the key stakeholders' characteristics, interests, and relative levels of influence:

Table 27: Assessment of Interests and Influence of Stakeholders

Stakeholder Categories	Relevant Stakeholders	Social And Institutional Characteristics	Interest	Influences
Financier	World Bank	International development organization tasked by member countries with improving livelihoods and reducing poverty.	Interest in developing projects that will improve the supply chain in the project area and thereby contribute to greater levels of economic growth and poverty reduction.	High
Government Policy-makers	Government of Vietnam (GOV) and MOT, MONRE, MOF; Project Provincial People Committees and PDOTs.	The Borrower and responsible for transport sector infrastructure (development and management).	Strong interest in new development and improvement of a transport network, stimulating further economic development, and assisting poverty reduction.	High
Project Implementing Agency and its consultants	PMU3 under MOT and Consultants for the project at all levels	The PMU3 under MOT, and its Consultants for survey, design, for safeguards etc, responsible for managing the implementation the project including construction resettlement, EMP, SIA .	Strong interest in effectively manage for the project: implement the project successfully and a scheduled and with environmental and social sound as sustainable development.	High
PC authorities and other Interested Groups in Public Sector	Provincial People's Committees (PPCs)	In charge of development planning, including that of transport sector within the province. Direct their relevant departments to coordinate with the PMU3 to prepare and implementing the RP, EIA as well as pay a role of settling for the complaints at the	Interest in receiving investment for the developmental in the locality including for a transport network which considered that will have a great contribution to economic development and poverty reduction.	High

Stakeholder Categories	Relevant Stakeholders	Social And Institutional Characteristics	Interest	Influences
		provincial level.		
	Provincial Departments (PDOTs, DONRE, DOF, DOC, DOC, DARD etc)	MOT: In charge of developing and managing the provincial transport infrastructure at their level, review and give feedback to RP, EIA for the project. Review and propose to the PPC to approve on land acquisition for the project, compensation plans, planning of the resettlement site and approve for bidding related to the resettlement sit construction. These departments also involving to design and implementing the income restoration activities; settling for the complaint at the provincial level. Supervise and monitor of implementing the EMP etc.	Interest in contributing to the project preparation and implementation as well as management the project in the operational phase. Interested in helping the project affected communities and affected households to access to the project benefits. Interested in managing the impacts on environment and social as sustainable way.	Medium
	District Authorities and their relevant Departments	Interested in working for the project in phases of preparation and implementation. Organization of their commune authorities and their relevant departments to participate to the project cycle especially to the areas of land acquisition, compensation, assistance and resettlement; mitigate for the construction and operations impacts and maximize of the project benefits to the districts. The district is also involve with settling for the complaint from the communities and from local people related to the project implementation	Interest in receiving investments to improve transport infrastructure in their districts to help with the economic development and poverty reduction..	Medium

Stakeholder Categories	Relevant Stakeholders	Social And Institutional Characteristics	Interest	Influences
		(implementing RP, EMP, construction etc)		
	Commune authorities and communities	This is a lowest administrative level, the communes are interested with the project development through their communes and the commune authorities is a key linked level between the stakeholders and their people. The commune will play an important role of organizing the consultation and participation of grassroot level as well and to help with land acquisition, resettlement, control the other adverse impacts in their localities and as the first level to deal with the complaints from their people.	Interest in receiving investments to improve transport infrastructure in their communes to help with the economic development and poverty reduction..	low
Beneficiaries/ Adverse Impacts	Local authorities, local communities	Already have a good system of rural road and other rural infrastructures through a program of new rural development of the Government. Still have the poor conditions of physical infrastructures in several communes. Potential of increasing the accidents. Impacts on land acquisition for the project. Impacts by the construction (dust, potential accidents, short term disturbance to the business and other activities)	Interested in gaining access to new roads and improvement roads for their economic development activities (more services, more opportunities of business etc) and for improving their standard of living. Interested in mitigation measures for minimizing the environmental and social impacts through phases of the project construction and implementation.	Low

Stakeholder Categories	Relevant Stakeholders	Social And Institutional Characteristics	Interest	Influences
	Users of Transport Infrastructure (Includes: users of transport services; owners of vehicles; and providers of transport services)	Mainly overlap with local community in general, but includes those who do not live in project area. Non-owner and-users, such as passengers and bus, truck services and public and private firms that use transport services. Non-owner operators (hired drivers for their buses, trucks etc). Owners of vehicles, including both owners of private vehicles and commercial vehicles (including enterprises that use their own vehicles for transport of inputs and products). Many users may not follow the transport regulation (such as do not wear the helmet; drive after drink beer or alcohol or bus and trucks are overloaded etc.	All interested in gaining access to better transport infrastructure. Interested in provision of cheaper, faster, safer, and more convenient transport services. Interest in improved transport infrastructure that will save their time and provide more comfort. Interested in improving a transport infrastructure that will save their operating costs.	Low
	PDOT joint stock companies.	Larger-scale enterprises operated by PDOTS to provide transport services	Interest in gaining access to better transport infrastructure but not necessarily to the lowering of transport costs.	Medium
Adversely Affected Persons	Those who will be affected by Resettlement and Land Acquisition among "Local Population in	Those who are located right along proposed project that will require resettlement or land acquisition. Characteristics vary depending on location, but general characteristics	Interested with fair compensation and assistance for the livelihood restoration/improvement. Interested in implementing for the	Low

Stakeholder Categories	Relevant Stakeholders	Social And Institutional Characteristics	Interest	Influences
	General", impacted by construction and operations as mentioned above.	are same as "Local Communities in General" mentioned above. Those who would be affected by the construction and operational activities such as noise, vibration, dust etc.	mitigation measures to the potentially adverse impacts.	
Local NGOs	Women Union, Farther Front, Famer Association etc.	Those are institutions formed from different groups and representative for the different groups of society.	They may involved in monitoring and evaluation of the social safeguards preparation and implementation as well as settling for the social conflicts.	Low

Through the public consultation, in general, all of the key stakeholder groups expressed their supports to the project, expressed their interest in improving for the transport infrastructure in the Project Provinces. A result of consultation will be described in a section below.

4. CONSULTATION WITH AND PARTICIPATION OF STAKEHOLDERS

The results of consultation and participation of stakeholders for the different aspects of the project preparation are described as below. The consultation with and participation of stakeholders to EIA and EMP is described separately in the project EIA and EMP.

From January to March-2013, series of meetings were held with the Provincial Departments, the District People's Committees, Leaders and members of affected commune officials, district compensation and Site Clearance committees, key district departments (environment and land management, agriculture, industry and commerce, labour, invalids and social affairs), farmer's associations, vocational training centres, agricultural extension centres, local banks or credit/loan institutions, some local NGOs etc. Members from the Viet Nam Women's Unions at the district level were also consulted specifically on economic restoration programs for the affected women and with regard to their capacity in planning and implementing economic restoration programs as well as gender issues related to the project development. Many meetings were also held with the DPs before the resettlement team carries out for the SES and IOL in each affected commune.

The objectives of consultation in phase of preparing for the RP and SIA were to initially inform and discuss with the authorities of the project provinces, districts and communes, affected districts and communes about the project, objectives and principles on land acquisition, compensation,

allowances and special assistance to poor and vulnerable groups according to the policies of Viet Nam and WB safeguards policy and requirements, preparation of resettlement plan, schedule for the socioeconomic survey, IOL and information needs for preparing the RP as well as to obtain the feedback of stakeholders about their behaviour to the project, concerns and suggestions. The meetings with the DPs, other stakeholders and Representatives of local authorities, communes focused on the following issues:

- General information on the project
- Show at the meeting a project map and disclose the list of the project affected districts, communes; scope of land acquisition and resettlement impacts.
- Potential of the project impacts on land acquisition, environment and social aspects.
- Objectives and principles of RP according to the requirements of GOV and the WB's policy on social safeguards.
- Schedules of socioeconomic survey and IOL
- Livelihood restoration
- Compensation and relocation modes (options to cash or in kind compensation)
- Gender issues in RP;
- Mechanisms of participation, complaint, monitoring and evaluation through all phases of RP preparation and implementation.
- Feedback on the mitigation measures for the potentially social adverse impacts and other potential impacts through the different phases of the project implementation.
- Plenary session and group discussion, Q&A

Copies of compensation and resettlement pamphlet for the first round of consultation were distributed to all participants (Pamphlet is attached to this report as **Annex 3**). Details of Consultation are given as in **Annex 4. Results of consultation.**

A summary of the issues discussed and main feedback from the meetings are as below:

- Most of people and communities in the project areas proposed that the project would be very positive impacts to the localities and communities. Especially for the economic development and poverty reduction.
- Need the project to be constructed soon because they heard about the project for a long time but no progress, making local people in a difficult situation, they are waiting and cannot make decision that they should or should not improve for their existing houses.
- Compensation need to be fair and need resettlement and income restoration assistance.

- Need assistance to the vulnerable groups such as the old people, disable, the women Headed Households.
- People proposed that the drainage system need to be improved and the project need to be constructed as schedule, not to delay the project construction to minimize social impacts to the project communities.
- The information related to the project need to be disseminated to the project communities such as the routes, schedule, contractors of the project, environmental and social impact mitigation measures, mechanisms of participation, monitoring and evaluation and grievances etc.

Based on meetings and interviewed held with the local authorities, below is the summary of potential planned programs in the area that the Project can use during an implementation phase of income restoration activities.

Potential Activities Raised by Households

As a result of consultation with the local authorities, various organizations and affected households, the following farm-based and non-farm based activities/programs are listed for consideration in the planning of a responsive income restoration program that will cater to the needs and preparedness of each eligible household:

- Piloting of selected production and income generating opportunities that are endorsed by the province and district. Vocational training and non-farm based employment should be first priority.
- Intensive agricultural production for farmers who still have remaining productive land.
- Skills training program for persons wishing to receive training on selected fields. The training should be on (i) vocational courses; (ii) intensive farming; (iii) animal husbandry; (iv) aquaculture; (v) managing small business.
- For households who wish to venture into small businesses, the Project will explore possible seminars on entrepreneurship (idea generation and visioning, basic sales, marketing and finance management).

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The environmental impact assessment and EMP are described in EIA and EMP of the project reports and not to be repearted in this SIA.

5. PROJECT IMPACTS AND ISSUES

5.1. Expected Impacts Due to Land Acquisition

5.1.1. Section Trieu Duong – Hung Ha

- There are 364 household are affected on residential land with a total area of 13,447 m^2.
- There are 8 households would be affected on garden land with a total area of 577 m^2.
- There are 229 households would be affected on productive land with a total area of 20,258 m^2
- There are 86 households would be affected with more than 10 % of the productive land.
- There is seven household would be fully affected on house and with a house area of 322 m^2
- There would be 20 households partially affected on houses with a total area of 203 m^2.
- The public works affected are described as in table 28 below.

Table 28: The public land and public works would be affected by the project

Commune	Affected Assets	Owner	Unit	Quantity
1. Thien Phien, Tien Lu district, Hung Yen province	Residential land	Commune PC	m^2	-
	Specific Use Land	Commune PC	m^2	365
	Religious land	Commune PC	m^2	-
	Cemetery land	Commune PC	m^2	-
	Other non-agricultural land	Commune PC	m^2	-

Commune	Affected Assets	Owner	Unit	Quantity
	Annual crop land	Commune PC	m^2	-
	Perennial crop land	Commune PC	m^2	-
	Fish pond land	Commune PC	m^2	-
	Irrigation canal land	Commune PC	m^2	-
	Electric pole	Tien Lu Power Service	Pole	-
	Power wire	Tien Lu Power Service	m	-
2. Tan Le, Hung Ha, Thai Binh	Residential land	Commune PC	m^2	-
	Specific Use Land	Trieu Duong Post	m^2	13.4
	Religious land	Commune PC	m^2	-
	Cemetery land	Commune PC	m^2	-
	Other non-agricultural land	Commune PC	m^2	-
	Annual crop land	Commune PC	m^2	23.7
	Perennial crop land	Commune PC	m^2	568.7
	Fish pond land	Commune PC	m^2	-
	Irrigation canal land	Commune PC	m^2	1,247.3
	Electric pole	Hung Ha Power Service	Pole	26.0
	Power wire	Hung Ha Power Service	m	80.0
3. Hung Nhan town, Hung Ha, Thai Binh	Residential land	Commune PC	m^2	125.8
	Specific Use Land	Commune PC	m^2	-
	Religious land	Commune PC	m^2	-
	Cemetery land	Commune PC	m^2	-
	Other non-agricultural land	Commune PC	m^2	-
	Annual crop land	Commune PC	m^2	1,376.7
	Perennial crop land	Commune PC	m^2	-
	Fish pond land	Commune PC	m^2	-
	Irrigation canal land	Commune PC	m^2	-
	Electric pole	Hung Ha Power Service	Pole	30.0
	Power wire	Hung Ha Power Service	m	120.0
4. Tan Hoa, Hung Ha, Thai Binh	Residential land	Commune PC	m^2	-
	Specific Use Land	Commune PC	m^2	-
	Religious land	Commune PC	m^2	-
	Cemetery land	Commune PC	m^2	-
	Other non-agricultural land	Commune PC	m^2	-
	Annual crop land	Commune PC	m^2	-

Commune	Affected Assets	Owner	Unit	Quantity
	Perennial crop land	Commune PC	m^2	-
	Fish pond land	Commune PC	m^2	-
	Irrigation canal land	Commune PC	m^2	-
	Electric pole	Hung Ha Power Service	Pole	29.0
	Power wire	Hung Ha Power Service	m	100.0
5. Lien Hiep, Hung Ha, Thai Binh	Residential land	Commune PC	m^2	-
	Specific Use Land	Commune PC	m^2	-
	Religious land	Commune PC	m^2	-
	Cemetery land	Commune PC	m^2	-
	Other non-agricultural land	Commune PC	m^2	-
	Annual crop land	Commune PC	m^2	-
	Perennial crop land	Commune PC	m^2	-
	Fish pond land	Commune PC	m^2	-
	Irrigation canal land	Commune PC	m^2	-
	Electric pole	Hung Ha Power Service	Pole	38.0
	Power wire	Hung Ha Power Service	m	160.0
6. Phuc Khanh, Hung Ha, Thai Binh	Residential land	Commune PC	m^2	
	Specific Use Land	Commune PC	m^2	
	Religious land	Commune PC	m^2	
	Cemetery land	Commune PC	m^2	
	Other non-agricultural land	Commune PC	m^2	
	Annual crop land	Commune PC	m^2	261.4
	Perennial crop land	Commune PC	m^2	
	Fish pond land	Commune PC	m^2	
	Irrigation canal land	Commune PC	m^2	
	Electric pole	Hung Ha Power Service	Pole	12.0
	Power wire	Hung Ha Power Service	m	60.0
7. Thai Phuong, Hung Ha, Thai Binh	Residential land	Commune PC	m^2	
	Specific Use Land	Commune PC	m^2	
	Religious land	Commune PC	m^2	
	Cemetery land	Commune PC	m^2	
	Other non-agricultural land	Commune PC	m^2	
	Annual crop land	Commune PC	m^2	628.0
	Perennial crop land	Commune PC	m^2	

Commune	Affected Assets	Owner	Unit	Quantity
	Fish pond land	Commune PC	m^2	
	Irrigation canal land	Commune PC	m^2	
	Electric pole	Hung Ha Power Service	Pole	30.0
	Power wire	Hung Ha Power Service	m	60.0
8. Hung Ha town, Hung Ha, Thai Binh	Residential land	Commune PC	m^2	
	Specific Use Land	Hung Ha Passenger Bus Station	m^2	114.0
	Religious land	Commune PC	m^2	
	Cemetery land	Commune PC	m^2	
	Other non-agricultural land	Commune PC	m^2	95.3
	Annual crop land	Commune PC	m^2	
	Perennial crop land	Commune PC	m^2	
	Fish pond land	Commune PC	m^2	616.5
	Irrigation canal land	Commune PC	m^2	
	Electric pole	Hung Ha Power Service	Pole	40.0
	Power wire	Hung Ha Power Service	m	90.0
9. Minh Khai, Hung Ha, Thai Binh	Residential land	Commune PC	m^2	
	Specific Use Land	Commune PC	m^2	137.0
	Religious land	Commune PC	m^2	
	Cemetery land	Commune PC	m^2	
	Other non-agricultural land	Commune PC	m^2	
	Annual crop land	Commune PC	m^2	294.8
	Perennial crop land	Commune PC	m^2	2.3
	Fish pond land	Commune PC	m^2	
	Irrigation canal land	Commune PC	m^2	
	Electric pole	Hung Ha Power Service	Pole	20.0
	Power wire	Hung Ha Power Service	m	50.0
10. Hong Linh, Hung Ha, Thai Binh	Residential land	Commune PC	m^2	
	Specific Use Land	Commune PC	m^2	
	Religious land	Commune PC	m^2	
	Cemetery land	Commune PC	m^2	
	Other non-agricultural land	Commune PC	m^2	
	Annual crop land	Commune PC	m^2	3,535.5
	Perennial crop land	Commune PC	m^2	3.0
	Fish pond land	Commune PC	m^2	

Commune	Affected Assets	Owner	Unit	Quantity
	Irrigation canal land	Commune PC	m^2	
	Electric pole	Hung Ha Power Service	Pole	40.0
	Power wire	Hung Ha Power Service	m	80.0
11. Minh Tan, Dong Hung, Thai Binh	Residential land	Commune PC	m^2	
	Specific Use Land	Commune PC	m^2	
	Religious land	Commune PC	m^2	
	Cemetery land	Commune PC	m^2	
	Other non-agricultural land	Commune PC	m^2	
	Annual crop land	Commune PC	m^2	640.0
	Perennial crop land	Commune PC	m^2	525.0
	Fish pond land	Commune PC	m^2	
	Irrigation canal land	Commune PC	m^2	122.0
	Electric pole	Dong Hung Power Service	Pole	
	Power wire	Dong Hung Power Service	m	

5.1.2. Section Vo Hoi – Diem Dien

- There are 135 household are affected on residential land with a total area of 5,271.9 m^2.
- There are 14 households would be affected on garden land with a total area of 4,326 m^2.
- There are 270 households would be affected on productive land with a total area of 63,445.2m^2
- There are 143 households would be affected with more than 10 % of the productive land.
- There are 9 households would be fully affected on house and with a house area of 358 m^2
- There would be 16 households partially affected on houses with a total area of 158 m^2.
- The public works would be affected describe as below:

Table 29: The public land and public works would be affected by the project

Commune	Affected Assets	Owner	Unit	Quantity
1. Dong Kinh	Residential land	Commune PC	m^2	None
	Specific Use Land	Commune PC	m^2	None
	Religious land	Commune PC	m^2	None
	Cemetery land	Commune PC	m^2	None
	Other non-agricultural land	Commune PC	m^2	None
	Annual crop land	Commune PC	m^2	1,000
	Rice	Commune PC	m^2	1,000

Commune	Affected Assets	Owner	Unit	Quantity
	Perennial crop land	Commune PC	m^2	None
	Fish pond land	Commune PC	m^2	None
	Irrigation canal land	Commune PC	m^2	300
	Electric pole	Dong Hung Power Service	Pole	6
	Power wire	Dong Hung Power Service	m	60
2. Dong Tan	Residential land	Commune PC	m^2	None
	Specific Use Land	Commune PC	m^2	None
	Religious land	Commune PC	m^2	None
	Cemetery land	Commune PC	m^2	100
	Other non-agricultural land	Commune PC	m^2	None
	Annual crop land	Commune PC	m^2	981
	Rice	Commune PC	m^2	981
	Perennial crop land	Commune PC	m^2	None
	Fish pond land	Commune PC	m^2	None
	Irrigation canal land	Commune PC	m^2	702
	110KV Substation	Dong Hung Power Service	m^2	5
	110KV Substation	Dong Hung Power Service	Site	1
	Electric pole	Dong Hung Power Service	Pole	22
	Power wire	Dong Hung Power Service	m	160
3. Thai Giang	Residential land	Commune PC	m^2	None
	Specific Use Land	Commune PC	m^2	None
	Religious land	Commune PC	m^2	None
	Cemetery land	Commune PC	m^2	None
	Other non-agricultural land	Commune PC	m^2	None
	Annual crop land	Commune PC	m^2	7,554
	Rice	Commune PC	m^2	7,554
	Perennial crop land	Commune PC	m^2	None
	Fish pond land	Commune PC	m^2	None
	Irrigation canal land	Commune PC	m^2	696
	Electric pole	Thai Thuy Power Service	Pole	10
	Power wire	Thai Thuy Power Service	m	100
4. Thai Son	Residential land	Commune PC	m^2	None
	Specific Use Land	Commune PC	m^2	None

Commune	Affected Assets	Owner	Unit	Quantity
	Religious land	Commune PC	m^2	None
	Cemetery land	Commune PC	m^2	None
	Other non-agricultural land	Commune PC	m^2	None
	Annual crop land	Commune PC	m^2	2,363
	Rice	Commune PC	m^2	2,363
	Perennial crop land	Commune PC	m^2	99
	Fish pond land	Commune PC	m^2	None
	Irrigation canal land	Commune PC	m^2	329
	Electric pole	Thai Thuy Power Service	Pole	10
	Power wire	Thai Thuy Power Service	m	60
5. Thai Duong	Residential land	Commune PC	m^2	None
	Specific Use Land	Commune PC	m^2	None
	Religious land	Vy Long Pagoda	m^2	3,433
	Cemetery land	Commune PC	m^2	None
	Other non-agricultural land	Commune PC	m^2	None
	Annual crop land	Commune PC	m^2	3,394
	Rice	Commune PC	m^2	3,394
	Perennial crop land	Commune PC	m^2	125
	Fish pond land	Commune PC	m^2	None
	Irrigation canal land	Commune PC	m^2	500
	Electric pole	Thai Thuy Power Service	Pole	6
	Power wire	Thai Thuy Power Service	m	90
6. Thai Thuy	Residential land	Commune PC	m^2	None
	Specific Use Land	Commune PC	m^2	None
	Religious land	Commune PC	m^2	None
	Cemetery land	Commune PC	m^2	None
	Other non-agricultural land	Commune PC	m^2	189
	Annual crop land	Commune PC	m^2	10,970
	Rice	Commune PC	m^2	10,970
	Perennial crop land	Commune PC	m^2	30
	Fish pond land	Commune PC	m^2	920
	Irrigation canal land	Commune PC	m^2	320
	Electric pole	Thai Thuy Power Service	Pole	6

Commune	Affected Assets	Owner	Unit	Quantity
	Power wire	Thai Thuy Power Service	m	50
7. Thuy Lien	Residential land	Commune PC	m^2	None
	Specific Use Land	Commune PC	m^2	None
	Religious land	Commune PC	m^2	None
	Cemetery land	Commune PC	m^2	None
	Other non-agricultural land	Commune PC	m^2	None
	Annual crop land	Commune PC	m^2	3,215
	Rice	Commune PC	m^2	3,215
	Perennial crop land	Commune PC	m^2	None
	Fish pond land	Commune PC	m^2	508
	Irrigation canal land	Commune PC	m^2	6,436
	Electric pole	Thai Thuy Power Service	Pole	13
	Power wire	Thai Thuy Power Service	m	119
8. Thuy Ha	Residential land	Commune PC	m^2	None
	Specific Use Land	Commune PC	m^2	None
	Religious land	Ngoai Trinh Pagoda	m^2	20
	Cemetery land	Commune PC	m^2	None
	Other non-agricultural land	Thai Thuy Passenger Bus Station	m^2	442
	Annual crop land	Commune PC	m^2	3,075
	Rice	Commune PC	m^2	3,075
	Perennial crop land	Commune PC	m^2	None
	Fish pond land	Commune PC	m^2	None
	Irrigation canal land	Commune PC	m^2	None
	Electric pole	Thai Thuy Power Service	Pole	19
	Power wire	Thai Thuy Power Service	m	90
9. Diem Dien	Residential land	Commune PC	m^2	None
	Specific Use Land	Commune PC	m^2	None
	Religious land	Commune PC	m^2	None
	Cemetery land	Commune PC	m^2	None
	Other non-agricultural land	Commune PC	m^2	None
	Annual crop land	Commune PC	m^2	None
	Perennial crop land	Commune PC	m^2	None
	Fish pond land	Commune PC	m^2	None

Commune	Affected Assets	Owner	Unit	Quantity
	Irrigation canal land	Commune PC	m^2	None
	Electric pole	Thai Thuy Power Service	Pole	3
	Power wire	Thai Thuy Power Service	m	40

5.1.3. Section Quan Goi – Yen Lenh

There are a total of 749 HHs would be affected; of which:

- There are 216 households are affected on residential land with a total area of 7,159.7 m^2.
- There are 5 households would be affected on garden land with a total area of 1,185 m^2.
- There are 536 households would be affected on productive land with a total area of 87,693.4m^2.
- There are 237 households would be affected with more than 10 % of the productive land.
- There is 11 households would be fully affected on house and with total area of 385 m^2. With 11 households who would be fully affected on residential land with houses on residential plots. Therefore, no resettlement site construction would be arranged, but cash compensation for residential land plus bonus to self-resettlement as per policies of GOV and the project provinces. The consultation with local people and commune authorities of the localities with the households who are fully affected on houses learned that the affected households could buy residential land in the commune to construct for their new houses.
- There would be 4 households partially affected on houses with a total area of 23 m^2.
- The public works affected are described as in table 30 below.

Table 30: The public land and public works would be affected by the project

Commune	Affected Assets	Owner	Unit	Quantity
1. Minh Duc	Residential land	Commune PC	m^2	
	Specific use land	Commune PC	m^2	
	Religious land	Commune PC	m^2	
	Cemetery land	Commune PC	m^2	36
	Other non-agricultural land	Commune PC	m^2	
	Annual crop land	Commune PC	m^2	
	Rice	Commune PC	m^2	
	Perennial tree land	Commune PC	m^2	
	Fish pond land	Commune PC	m^2	
	Irrigation canal land	Commune PC	m^2	26

Commune	Affected Assets	Owner	Unit	Quantity
	Electric pole	My Hao Power Service	pole	5
	Electric wire	My Hao Power Service	m	30
2. Hung Thinh	Residential land	Commune PC	m^2	
	Specific use land	Commune PC	m^2	
	Religious land	Commune PC	m^2	
	Cemetery land	Commune PC	m^2	
	Other non-agricultural land	Commune PC	m^2	
	Annual crop land	Commune PC	m^2	2,912
	Rice	Commune PC	m^2	2,912
	Perennial tree land	Commune PC	m^2	
	Fish pond land	Commune PC	m^2	
	Irrigation canal land	Commune PC	m^2	192
	Electric pole	Binh Giang Power Service	pole	6
	Electric wire	Binh Giang Power Service	m	50
3. Vinh Tuy	Residential land	Commune PC	m^2	
	Specific use land	Commune PC	m^2	
	Religious land	Commune PC	m^2	
	Cemetery land	Commune PC	m^2	
	Other non-agricultural land	Commune PC	m^2	
	Annual crop land	Commune PC	m^2	1,829
	Rice	Commune PC	m^2	1,829
	Perennial tree land	Commune PC	m^2	
	Fish pond land	Commune PC	m^2	
	Irrigation canal land	Commune PC	m^2	86
	Electric pole	Binh Giang Power Service	pole	5
	Electric wire	Binh Giang Power Service	m	40
4. Vinh Hong	Residential land	Commune PC	m^2	
	Specific use land	Commune PC	m^2	
	Religious land	Commune PC	m^2	
	Cemetery land	Commune PC	m^2	
	Other non-agricultural land	Commune PC	m^2	
	Annual crop land	Commune PC	m^2	339

Commune	Affected Assets	Owner	Unit	Quantity
	Rice	Commune PC	m^2	339
	Perennial tree land	Commune PC	m^2	
	Fish pond land	Commune PC	m^2	
	Irrigation canal land	Commune PC	m^2	289
	Electric pole	Binh Giang Power Service	pole	7
	Electric wire	Binh Giang Power Service	m	60
5. Trang Liet	Residential land	Commune PC	m^2	
	Specific use land	Commune PC	m^2	
	Religious land	Commune PC	m^2	193
	Cemetery land	Commune PC	m^2	
	Other non-agricultural land	Commune PC	m^2	
	Annual crop land	Commune PC	m^2	562
	Rice	Commune PC	m^2	562
	Perennial tree land	Commune PC	m^2	
	Fish pond land	Commune PC	m^2	
	Irrigation canal land	Commune PC	m^2	662
	Electric pole	Binh Giang Power Service	pole	5
	Electric wire	Binh Giang Power Service	m	40
6. Thuc Khang	Residential land	Commune PC	m^2	
	Specific use land	Commune PC	m^2	
	Religious land	Commune PC	m^2	
	Cemetery land	Commune PC	m^2	
	Other non-agricultural land	Commune PC	m^2	
	Annual crop land	Commune PC	m^2	1,299
	Rice	Commune PC	m^2	1,299
	Perennial tree land	Commune PC	m^2	
	Fish pond land	Commune PC	m^2	
	Irrigation canal land	Commune PC	m^2	238
	Electric pole	Binh Giang Power Service	pole	3
	Electric wire	Binh Giang Power Service	m	20
7. Phu Ung	Residential land	Commune PC	m^2	
	Specific use land	Commune PC	m^2	
	Religious land	Commune PC	m^2	

Commune	Affected Assets	Owner	Unit	Quantity
	Cemetery land	Commune PC	m^2	
	Other non-agricultural land	Commune PC	m^2	
	Annual crop land	Commune PC	m^2	2,075
	Rice	Commune PC	m^2	2,075
	Perennial tree land	Commune PC	m^2	592
	Fish pond land	Commune PC	m^2	
	Irrigation canal land	Commune PC	m^2	369
	Electric pole	An Thi Power Service	pole	6
	Electric wire	An Thi Power Service	m	50
8. Bai Say	Residential land	Commune PC	m^2	292
	Specific use land	Commune PC	m^2	70
	Religious land	Commune PC	m^2	
	Cemetery land	Commune PC	m^2	
	Other non-agricultural land	Commune PC	m^2	
	Annual crop land	Commune PC	m^2	1,896
	Rice	Commune PC	m^2	1,896
	Perennial tree land	Commune PC	m^2	
	Fish pond land	Commune PC	m^2	333
	Irrigation canal land	Commune PC	m^2	102
	Electric pole	An Thi Power Service	pole	12
	Electric wire	An Thi Power Service	m	80
9. Tan Phuc	Residential land	Commune PC	m^2	
	Specific use land	Commune PC	m^2	
	Religious land	Commune PC	m^2	
	Cemetery land	Commune PC	m^2	
	Other non-agricultural land	Commune PC	m^2	
	Annual crop land	Commune PC	m^2	
	Rice	Commune PC	m^2	
	Perennial tree land	Commune PC	m^2	
	Fish pond land	Commune PC	m^2	
	Irrigation canal land	Commune PC	m^2	300
	Electric pole	An Thi Power Service	pole	8
	Electric wire	An Thi Power Service	m	60

Commune	Affected Assets	Owner	Unit	Quantity
10. Quang Vinh	Residential land	Commune PC	m^2	
	Specific use land	Commune PC	m^2	
	Religious land	Commune PC	m^2	
	Transport land	Nursery in Hung Yen province	m^2	60
	Cemetery land	Commune PC	m^2	
	Other non-agricultural land	Commune PC	m^2	
	Annual crop land	CPC + Nursery in Hung Yen province	m^2	1,731
	Rice	Commune PC	m^2	1,731
	Perennial tree land	Nursery in Hung Yen province	m^2	1,521
	Fish pond land	Commune PC	m^2	
	Irrigation canal land	Commune PC	m^2	329
	Litchi tree	Nursery in Hung Yen province	tree	100
	Electric pole	An Thi Power Service	pole	6
	Electric wire	An Thi Power Service	m	30
11. Hoang Hoa Tham	Residential land	Commune PC	m^2	
	Specific use land	Commune PC	m^2	
	Religious land	Commune PC	m^2	
	Cemetery land	Commune PC	m^2	
	Other non-agricultural land	Commune PC	m^2	
	Annual crop land	Commune PC	m^2	682
	Rice	Commune PC	m^2	682
	Perennial tree land	Commune PC	m^2	
	Fish pond land	Commune PC	m^2	
	Irrigation canal land	Commune PC	m^2	93
	Electric pole	An Thi Power Service	pole	
	Electric wire	An Thi Power Service	m	
12. An Thi town	Residential land	Commune PC	m^2	
	Specific use land	Commune PC	m^2	
	Religious land	Commune PC	m^2	
	Cemetery land	Commune PC	m^2	
	Other non-agricultural land	Commune PC	m^2	
	Annual crop land	Commune PC	m^2	5,328

Commune	Affected Assets	Owner	Unit	Quantity
	Rice	Commune PC	m^2	5,328
	Perennial tree land	Commune PC	m^2	
	Fish pond land	Commune PC	m^2	
	Irrigation canal land	Commune PC	m^2	263
	Electric pole	An Thi Power Service	pole	8
	Electric wire	An Thi Power Service	m	60
13. Quang Lang	Residential land	Commune PC	m^2	
	Specific use land	Commune PC	m^2	
	Religious land	Commune PC	m^2	
	Cemetery land	Commune PC	m^2	126
	Other non-agricultural land	Commune PC	m^2	
	Annual crop land	Commune PC	m^2	4,657
	Rice	Commune PC	m^2	4,657
	Perennial tree land	Commune PC	m^2	
	Fish pond land	Commune PC	m^2	
	Irrigation canal land	Commune PC	m^2	758
	Electric pole	An Thi Power Service	pole	3
	Electric wire	An Thi Power Service	m	20
4. Nghia Dan	Residential land	Commune PC	m^2	
	Specific use land	Commune PC	m^2	
	Religious land	Commune PC	m^2	
	Cemetery land	Commune PC	m^2	
	Other non-agricultural land	Commune PC	m^2	
	Annual crop land	Commune PC	m^2	1,030
	Rice	Commune PC	m^2	1,030
	Perennial tree land	Commune PC	m^2	3,702
	Fish pond land	Commune PC	m^2	
	Irrigation canal land	Commune PC	m^2	98
	Electric pole	Kim Dong Power Service	pole	6
	Electric wire	Kim Dong Power Service	m	40
15. Toan Thang	Residential land	Commune PC	m^2	
	Specific Use Land	Commune PC	m^2	
	Religious land	Commune PC	m^2	

Commune	Affected Assets	Owner	Unit	Quantity
	Transport land	HT Industry - Agriculture Techniques Co. Ltd	m^2	70
	Cemetery land	Commune PC	m^2	
	Other non-agricultural land	Commune PC	m^2	
	Annual crop land	HT Industry - Agriculture Techniques Co. Ltd	m^2	5,405
	Rice	HT Industry - Agriculture Techniques Co. Ltd	m^2	5,405
	Perennial crop land	HT Industry - Agriculture Techniques Co. Ltd	m^2	3,293
	Fish pond land	Commune PC	m^2	
	Irrigation canal	HT Industry - Agriculture Techniques Co. Ltd	m^2	800
	Concrete canal	HT Industry - Agriculture Techniques Co. Ltd	m^2	800
	Longan tree	HT Industry - Agriculture Techniques Co. Ltd	tree	390
	Grape fruit tree	HT Industry - Agriculture Techniques Co. Ltd	tree	60
	Electric pole	Kim Dong Power Service	pole	9
	Power wire	Kim Dong Power Service	m	70

5.1.4. Section 4 bridges on NH 38B

There are a total of 223 HHs would be affected; of which:

- There are 114 households are affected on residential land with a total area of 2,334.7 m^2.
- There is no household would be affected on garden land.
- There are 108 households would be affected on productive land with a total area of 28,268.7m^2.
- There are 58 households would be affected with more than 10 % of the productive land.
- There is 2 households would be fully affected on house and with total area of 250m^2. With only two households who would be fully affected on residential land with houses on residential plots. Therefore, no resettlement site construction would be arranged, but cash compensation for residential land plus bonus to self-resettlement as per policies of GOV and the project provinces. The consultation with local people and commune authorities of the localities with the households who are fully affected on houses learned that the affected households could buy residential land in the commune to construct for their new houses.
- There would be 9 households partially affected on houses with a total area of 89m^2.

- The public works affected are described as in table 31 below.

Table 31: The public land and public works would be affected by the project

Commune	Affected Assets	Owner	Unit	Quantity
1. Doan Thuong	Residential land	Commune PC	m^2	None
	Specific use land	Commune PC	m^2	None
	Religious land	Commune PC	m^2	None
	Cemetery land	Commune PC	m^2	None
	Other non-agricultural land	Commune PC	m^2	None
	Annual crop land	Commune PC	m^2	None
	Perennial tree land	Commune PC	m^2	None
	Fish pond land	Commune PC	m^2	None
	Irrigation canal land	Commune PC	m^2	1,205
	Electric pole	Gia Loc Power Service	pole	5
	Electric wire	Gia Loc Power Service	m	40
2. Dong Quang	Residential land	Commune PC	m^2	None
	Specific use land	Commune PC	m^2	None
	Religious land	Commune PC	m^2	None
	Cemetery land	Commune PC	m^2	None
	Other non-agricultural land	Commune PC	m^2	None
	Annual crop land	Commune PC	m^2	None
	Perennial tree land	Commune PC	m^2	None
	Fish pond land	Commune PC	m^2	None
	Irrigation canal land	Commune PC	m^2	5,125
	Electric pole	Gia Loc Power Service	pole	9
	Electric wire	Gia Loc Power Service	m	120
3. Thanh Mien town	Residential land	Commune PC	m^2	None
	Specific use land	Commune PC	m^2	None
	Religious land	Commune PC	m^2	None
	Cemetery land	Commune PC	m^2	None
	Other non-agricultural land	Commune PC	m^2	None
	Annual crop land	Commune PC	m^2	562
	Rice	Commune PC	m^2	562
	Perennial tree land	Commune PC	m^2	None

Commune	Affected Assets	Owner	Unit	Quantity
	Fish pond land	Commune PC	m^2	None
	Irrigation canal land	Commune PC	m^2	1,246
	Electric pole	Thanh Mien Power Service	pole	6
	Electric wire	Thanh Mien Power Service	m	80
4. Tu Cuong	Residential land	Commune PC	m^2	None
	Specific use land	Commune PC	m^2	None
	Religious land	Commune PC	m^2	None
	Cemetery land	Commune PC	m^2	None
	Other non-agricultural land	Commune PC	m^2	None
	Annual crop land	Commune PC	m^2	986
	Rice	Commune PC	m^2	986
	Perennial tree land	Commune PC	m^2	None
	Fish pond land	Commune PC	m^2	None
	Irrigation canal land	Commune PC	m^2	1,026
	Electric pole	Thanh Mien Power Service	pole	3
	Electric wire	Thanh Mien Power Service	m	40
5. Cao Thang	Residential land	Commune PC	m^2	None
	Specific use land	Commune PC	m^2	None
	Religious land	Commune PC	m^2	None
	Cemetery land	Commune PC	m^2	None
	Other non-agricultural land	Commune PC	m^2	None
	Annual crop land	Commune PC	m^2	None
	Perennial tree land	Commune PC	m^2	None
	Fish pond land	Commune PC	m^2	None
	Irrigation canal land	Commune PC	m^2	None
	Electric pole	Thanh Mien Power Service	pole	6
	Electric wire	Thanh Mien Power Service	m	50
6. Quang Hung	Residential land	Commune PC	m^2	None
	Specific use land	Commune PC	m^2	None
	Religious land	Commune PC	m^2	None
	Cemetery land	Commune PC	m^2	None
	Other non-agricultural land	Commune PC	m^2	None
	Annual crop land	Commune PC	m^2	None

Commune	Affected Assets	Owner	Unit	Quantity
	Perennial tree land	Commune PC	m^2	None
	Fish pond land	Commune PC	m^2	None
	Irrigation canal land	Commune PC	m^2	None
	Electric pole	Phu Cu Power Service	pole	3
	Electric wire	Phu Cu Power Service	m	60
7. Doan Dao	Residential land	Commune PC	m^2	None
	Specific use land	Commune PC	m^2	None
	Religious land	Commune PC	m^2	None
	Cemetery land	Commune PC	m^2	None
	Other non-agricultural land	Commune PC	m^2	None
	Annual crop land	Commune PC	m^2	None
	Perennial tree land	Commune PC	m^2	None
	Fish pond land	Commune PC	m^2	None
	Irrigation canal land	Commune PC	m^2	None
	Electric pole	Phu Cu Power Service	pole	8
	Electric wire	Phu Cu Power Service	m	100

5.2. Project Risks

5.2.1. Negative Impacts on Project Area's Economic Activity

The general construction activities associated with Project implementation will also potentially disrupt economic activities within the Project area. Particularly, road construction is likely to disrupt productive activities in the Project area by:

- Requiring through traffic to take different routes or reducing the number of lanes that can be used;
- Limiting the sales of the stores, restaurants, and other businesses along the roads due to land acquisition;
- Impeding the flow of outside resources into the Project area; and
- Impeding the flow of products from the Project area to outside for sales;

The construction period may have more indirect negative impacts on the area's economic activities associated with the direct impacts mentioned above.

5.2.2. Gender

The Project impact relates to increased risks of exposure to HIV/AIDS and trafficking of women and children during construction and post construction phase due to large volumes of transit

traffic along the road. Women are at bigger risk to be posed by HIV/AIDS, road safety and possible human trafficking than man. Additionally, poor women and female-headed households in the Project area are at risk to suffer economically losing productive assets (houses, business, farm land) due to land acquisition.

Further, the fact that significantly larger burden is on women than on men in terms of housework allocation (thus not as much free time for women compared to men) and the traditional preference for males may create the situation where women tend to be excluded from receiving project's benefits or from having their voice heard at each stage of the project without proper measures for actively involving women.

The lack of off-farm employment opportunities is one of the most concerned issues in the Project Area. With the region's population heavily relying on agricultural activities to make their living, the employment opportunities are highly seasonal, and the lack of skills and low education attainment are further limiting the ability of the population to obtain off-farm jobs for income generation. The construction works that require specific construction knowledge and skills may not be appropriate for the general local population, and heavy physical works may not be suitable for women in terms of their capability. This would bring additional burden on women.

5.2.3. Impacts on Vulnerable Groups

Impacts on the vulnerable groups, who are also impacted by resettlement or displacement: No ethnic minority members or handicapped people were identified among the people who will be directly affected by resettlement or displacement in the Resettlement Plan.

Impacts on the vulnerable groups, who are not impacted by resettlement or displacement: There may be negative impact on those who are handicapped, as they typically have only small land holdings, if any, or work as hired agricultural worker; if they work as hired agricultural worker, some of them may lose their jobs if the employers' land is affected by the Project's resettlement.

Potential impacts on women and female headed household and the poor families

5.3. Other Project Risks

The other social impacts of the Project include spread of HIV/AIDS, human trafficking, traffic accidents, noise and dust pollution during the construction period. The project should take all these into consideration and prepare schedule to prevent or mitigate the anticipated negative impacts caused by the national highway construction.

In phase of the project construction, many contractors would participate for constructing of the project and their workers, construction supervisors would come to the sites and would live with or close with the project communities. It would be potential impacts to the project communities. This impact and mitigation plans are described in the project EIA and EMP.

6. HIV/AIDS and Other Sexually Transmitted Diseases, Drug Abuse, and Human Trafficking

Public information efforts concerning HIV-AIDS have been successful in creating awareness about the disease among those in the survey sample. Over 98 percent of those queried had heard about the disease, 70 percent having heard from more than one source. The top mediums of information included TV (84 percent of respondents), Radio (60 percent of respondents) and Newspapers (24 percent of respondents). Other mediums included nurses, posters, relative and neighbors.

Although a majority of people are aware of the disease, fewer people understand fully how the disease is spread. Of the respondents queried, 10 percent did not know how the disease was spread. Only 3 percent reported that HIV-AIDS is spread through a number of causes, including sex, blood contact or drug/needle injections. Close to 40 percent stated that the disease is spread through sex and drugs. Twenty per cent reported only one cause; either sexual contact, drug/needle injection, blood contact or respiration. When asked whether there was a vaccine for HIV-AIDS, 12 percent did not know while 3 percent said yes. Close to 84 percent knew that no vaccine for the disease existed at the time of survey. The following table shows the knowledge of HIV and AIDS transmission and availability of vaccines:

Villagers would benefit from improved an understanding of HIV-AIDS through further information campaigns as the improved roads will increase their exposure to HIV-AIDS risks as their ability to travel to HIV-AIDS high risk areas improves and visits from outsiders from high-risk areas become more frequent due to better access and increased market opportunities.

An increase in the transmission of HIV/AIDS and other sexually transmitted diseases, particularly via prostitution, are risks commonly linked with major construction projects. These are more significant when the projects involve the movement of a large number of construction workers and their temporary residence on the site.

In the case of this construction, it is anticipated that the workers for the construction will be from rural areas, and there will be large construction camps for workers. Associated risks include human trafficking and drug usage.

The HIV/AIDS and human trafficking risks mentioned above relate particularly to women and children. The completed national highway will increase the movement of people in the areas along the alignment, and some have suggested that this would increase the potential exposure of women and children to exploitation and trafficking.

7. Traffic Accidents

Injuries caused by traffic accidents are already a serious problem in Vietnam. Increased traffic volumes and speed and missing or wrongly located over- and underpasses may increase the risks for traffic accidents for local pedestrians and animals during the construction and operating phase of the project.

8. Dust and Noise Pollution

It is also anticipated that the construction phase, as well as operation, of the Proposed National highway will result in increased dust and noise pollution for the local people in phases of the project construction and operation. Especially, in Viet Nam most of drivers are with a bad habit that they like using horn most of the time and especially, the truct drivers using a load horns, even late at night and in the populated areas.

9. Potential Temporary Impacts

Outside labourer associated with construction activities may disrupt the local social order within the Project area, causing social tensions. When construction workers go into the Project areas, they stay there during the construction period, interacting with the local population. The movement of a group of construction workers can be followed by those who want to conduct business with them, possibly including commercial sex workers, which the local communities consider as "social evils", as most of the workers are likely to be men away from their family. Guidelines for construction activities should bear this in mind and include sufficient mitigation measures. Facilitating communication between villagers and workers should also help reduce potential social tensions.

10. Perceived Impact and Desired Mitigation Measures by Stakeholders and Community Participation

Resettlement: The affected people requested compensation of the partial or full land or house's loss in accordance with market price. They requested that the affected people be provided with assistance for finding new employments, job training for new jobs, suitable resettlement land/house to regain a stable life immediately. The affected people have made their living mainly by agricultural activities; they proposed that the resettlement site for the affected people should have agricultural land made available to them so that they can again make living by agricultural activities (i.e. they wish to have their land compensated with land, land-for-land compensation).

Present it as a theme, for example:

The means of compensation:

Which districts or, communes asked for land-for-land/ compensation, which's one asked for money compensation?

Other supports:

Which communes/ district/ percentage of people who asked for job opportunities/ training?

What are people concerns of resettlement and compensation process?? For example: do they concern about the duration of the project, the way of compensation, the procedure ..etc.

Poverty and Job Training: Even if there is not sufficient land to provide land-for-land compensation, the affected people still show willingness to support the Proposed Project in both focus group discussions with resettlement households. They are willing to participate in job trainings in order to take other occupations. While they prefer land-for-land compensation, they also feel that they may be able to have more stable income source if they are given appropriate skills training to take up a job for non land based activities.

Gender: The responses received in the field indicate that the people in the Project area does not see gender issue as a problem.

Concerns about the Project: The people in the Project Area expects that the Project will be implemented with a good management system, thus project workers be managed well to ensure that no conflict between the project workers and the residents in the Project Area takes place. They also hope that environmental issues related to the Proposed project, such as noise pollution, dust pollution and waste etc., will be well taken care of.

11. Perceived Overall Impact of Project

The representatives of people who reside in the areas along the proposed alignment are generally supportive for the project. They expect that the project will result in significant social benefits, such as the availability of efficient and convenient transport, accelerated regional economic development, and improvement in the quality of living.

Presently, economic relations and communications of the affected areas are largely limited because of the inconvenient traffic, so that the flows of materials, people and information are not smooth. The relations and communications between the affected areas and other areas is also restricted by the road condition. The construction of the project will improve the traffic condition thoroughly and will promote a series of procedures of industrial development. Make sure that resources can get out of the area and information can enter, and transform the predominance of potential resources to practical advantage to develop economy and improve people's life.

Social benefits:

The project can bring more job opportunities for local people during the project time, such as working along the project site. As a result, it can reduce the number of people to migrate to other cities or provinces to work.

Improving the social services, such as, better transportation system.

Promote the local economy: by attract tourists, or people to come and open their businesses.

Quality of life:

Improving the health and safety for people: reduce the number of road accidents, decrease the time for travelling, less pollution, etc.

Table 32: Potential adverse Impacts

	Potential Impacts
Resettlement	- Loss of means of living and social network.
Gender	- Increased risks of exposure to HIV/AIDS, other sexually transmitted diseases, and human trafficking. - Risk of women's voice/opinions not heard, thus not reflected in the project implementation
Potential Restriction Access	- Negative impact to communication community, disrupting their daily activities and social network during construction and operation phases.
Ethnic minorities	No Ethnic Minorities in the project areas
Handicapped	- Typically with small land holdings, if any, or working as hired agricultural workers, the risk of losing employment would be higher than non-handicapped.
HIV/AIDS and Other Sexually Transmitted Diseases, Drug Abuse, and Human Trafficking	- Spread of HIV/AIDS and other sexually transmitted diseases and drug use spread. - Human trafficking, especially impacting women and children.
Traffic Accidents	- Higher traffic speed and increased traffic potentially increases the risk of accidents as well as the severity of accidents.
Dust and Noise Pollution	- Increase of dust and noise pollution for the local people during construction phase.

12. Recommendations Mitigation Measures

Critical Risk and Mitigation Measures:

This chapter summarizes the potential adverse impacts during and after construction. Most of these adverse impacts will be covered by the RP and EMP. Although there were 3 adverse impacts identified that are not covered by the RP or EMP, the externalities will be mitigated through the expansion in economic growth that the road improvement program will entail. Nevertheless, this section also includes ideas and suggestions for additional mitigation of these potentially short term impacts.

Project Implementation:

The construction activities associated with project implementation pose a number of potential

critical risks to the social and economic well being of the populations within the project area. These potential negative impacts and recommended measures to mitigate such effects are discussed in brief below.

Potential negative impacts

12.1.Negative Socio-economic Impacts on Populations Needing to Resettle

The road widening activities associated with project implementation will require land acquisition that will potentially necessitate the relocation of some populations within the immediate vicinity of the project roads. The process of relocation will most likely cause immeasurable emotional stress on those needing to be resettled. Additionally, the relocation process may involve the loss of productive assets, as well as the disruption of productive activities, that could negatively impact the immediate and long run well being of the resettled populations. The Resettlement Plan (RP) will take into account these potential negative impacts and offer measures to minimize the ill effects of forced relocation.

12.2.Negative Impacts on Project Area Economic Activity

The general construction activities associated with project implementation will also potentially disrupt economic activity within the project area. Particularly, road construction will most likely impede the flow of outside resources into the project area, as well as income-generating exports. Road construction may also have indirect negative impacts on local economic activity. The RP should address these potential negative impacts to as great an extent as possible through its compensation initiatives. Additionally, project design should take into account these potential negative impacts and attempt to minimize the disruptive effects of construction activities. The construction schedule for individual roads should be made readily available to the respective project area populations significantly in advance of the commencement of construction activities in order to allow these populations sufficient time to plan ahead for potential disruptions.

12.3.Increased Noise and Contamination

There is a potential risk that construction activities will lead to excessive noise and contamination of the project area. Added pollution may result directly from road works, such as through increased dust, construction equipment emissions, and construction mishaps (e.g., oil spills, hazardous waste issues, etc.). The introduction of outside labor into the project area may also strain local water and waste removal systems, leading to project area contamination. The Environmental Management Plan (EMP) will address these potential negative impacts and provide corresponding mitigation measures.

12.4.Increased Exposure to Diseases Due to Potential Influx of Workers

Outside labor associated with construction activities may introduce Sexually Transmitted Diseases (STDs), as well as other types of diseases, into the project area. This would adversely

affect the health and general well being of project area populations.As a result, the EMP will take into account these potential negative impacts and provide corresponding mitigation measures.

12.5.Social disruptions/tensions from Potential Influx of Workers Involved in

12.5.1.Project Implementation

Outside labor associated with construction activities may also disrupt the local social order within the project area, causing social tensions. Guidelines for construction activities should bear this in mind and include sufficient mitigation measures. Particularly, construction camps should include adequate social and utility services. Facilitating communication between villagers and workers should also help reduce potential social tensions.

12.5.2.Post Project Completion

The successful completion of the project also includes a number of potential critical risks to the social and economic well being of the populations within and outside of the project area. These potential negative impacts and recommended measures to mitigate such effects are discussed in brief below.

12.5.3.Increased Incidence of Accidents

Improvement in conditions along the project roads will allow motorized vehicles to travel at faster speeds. As a result, there is a critical risk that the incidence of accidents along these roads will increase. Similar improvements on the Vietnamese national highway linking Hanoi and Hai Phong, coupled with a lack of pedestrian underpasses,

speed bumps or other traffic slowing features, resulted in high death rates. The EMP will address this risk and provide corresponding mitigation measures.

12.5.4.Increased Traffic-generated Pollution

Future air quality impacts are likely due to growth in the volume of traffic carried by the improved project roads. This would adversely affect the health and general well being of project area populations. As a result, the EMP will take into account these potential negative impacts and provide corresponding mitigation measures.

12.5.5.Increased Exposure to Diseases Due to Improved Connectivity

The transmission of diseases along previously undeveloped or less intensively traveled corridors have been identified in retrospect as a major unintended environmental consequence of road developments. In light of these possibilities some International Agencies is nowfinancing a program for the prevention of HIV/AIDS among mobile populations in the Greater Mekong Subregion and the East-West Corridor Project spanning Thailand, Lao People's Democratic Republic and Vietnam. The goals of these programs are to devise interventions to reduce disease transmission particularly sexually transmitted diseases (STDs) associated with road projects. The

EMP will take this into account and provide corresponding mitigation measures.

12.5.6. Development along Project Roads

Investment in the project roads will most likely lead to inward migration to the project area due to the increased economic opportunities resulting from the road improvements. The population influx may strain the capacity of the infrastructure and land available in the project area in the short term. This would adversely affect the health and general well being of the project area population. Government officials should monitor post- project developments and increase the supply of related infrastructure to meet these increased needs as required.

Investment in the roads connecting to the improved national highways likely will extend the economic opportunities resulting from the project to outlying areas, decreasing the incentive to migrate to the immediate project area. Especially, roads in agricultural areas increase value added of the production and facilitate the introduction of new techniques and technologies, thus improving rural household incomes and reducing poverty. Any negative impacts will thus be mitigated through the long-term impact of the improved road network.

12.5.7.Decrease in Land Availability

Road development will lead to a small decrease in productive capacity within the project area in the long run due to the acquisition of formerly productive agricultural and/or commercial land. The RP addresses the short to medium-term decrease in project area productive capacity through direct compensation payments and other measures.

Still, it is important to bear in mind that for any areas experiencing land acquisition, it is important to consider to what extent that the indirect productivity gains resulting from the project will compensate for any potential loss in long-run productive capacity. The RP shows that land acquisition for the project likely will be less than 25% of any landowner's holdings, thus negative indirecty impacts are expected to be minimal. The RP details the compensation measures required for the DPs.

12.5.8. Unsustainable Induced Development along Project Roads

Investment in the project roads will most likely lead to inward migration to the project area due to the increased economic opportunities resulting from the road improvements. This population influx may strain the capacity of the infrastructure and land available in the project area. This would adversely affect the health and general well being of the project area population. Investment in capacity building in the project area would be required in order to ensure that this induced development is sustainable.

Offsetting the above possible negative impacts, investment in the roads connecting to the improved national highways likely will extend the economic opportunities resulting from the project to outlying areas, decreasing the incentive to migrate to the immediate project area.

Stages of Proposed Mitigation Plan:

1. *Monitor Population Growth within Project Area (part of Monitoring and Evaluation)*
2. *Evaluate Sustainable Capacity of Infrastructure within Communities Experiencing Significantly Accelerated Population Growth Post-project Completion*
3. *Implement Necessary Capacity-building Investments*

12.5.9.Shift of Economic Factors to Project Area to the Detriment of Economic

12.5.9.1. Activity in Non-project Areas

The increased expected returns resulting from the road investment will most likely lead to a shift of population and investment towards the project area and away from other non-project areas. This shift will most likely be beneficial to the overall national economy in the long run and could result in net capital inflows from abroad.

While this shift of economic factors will likely result in a net gain for the economy of Vietnam, there may be some losers as a result. Particularly those that remain in any areas experiencing short-term outward migration and capital flight to the project area may experience adverse social and economic impacts as a result. Mitigation measures may be needed to dampen any potential economic and social shocks associated with this transition. Conversely, investment in the roads connecting to the improved national highways may extend the economic opportunities resulting from the project to outlying areas, decreasing the incentive to migrate to the immediate project area.

Stages of Proposed Mitigation Plan:

1. *Formulate Rural Road Rehabilitation Program to Complement VRAMP*
2. *Assess the Extent of Outward Migration to VRAMP Project Areas from Candidate Areas for the Rural Road Rehabilitation Program*
3. *Prioritize Rural Road Rehabilitation activities in Areas Experiencing Severe Negative Impacts from Outward Migration to VRAMP Project Areas*

12.9.5.2. Poverty Alleviation Measures

Government Strategy

Reducing rural poverty is one of the highest priorities of the Government and a broad policy framework for Government efforts have been provided by the Hunger Eradication and Poverty (HERP) program launched in 1992. In recent years there is recognition within the Government that poverty is concentrated in certain areas and this is reflected in a more targeted approach to poverty reduction. Two programs have been launched recently to provide targeted assistance to poor communes:

 The *National Target Program on Hunger Eradication and Poverty Reduction for the Period 1998-2000*, which is under the Ministry of Labor, Invalids and Social Affairs (MOLISA), but also involves other Ministries, and aims to target the poorest segments of the population in rural and urban areas; and

 The *Socio-Economic Development Program for Especially Difficult Mountainous and Remote Communes*, which is under the Committee for Ethnic Minorities and Mountainous Areas (CEMMA), and also calls for orchestrated efforts and targeted resource provision in disadvantaged communes.

Both programs identify 1,715 poorest communes (out of some 10,000 in total for the country) with a total population of 5.9 million as their primary target. Of them, 1,000 are selected as the first priority group. Activities supported under these programs include infrastructure development, improvement of social services, development of sedentary agriculture, and capacity building. At the CG meeting in Paris in December 1998, the Government requested assistance from all donors for these programs.

The Government has also been promoting decentralization through a series of laws, decrees and regulations. The major guiding principle has been to give greater power, autonomy and responsibility to districts and communes. The new Budget Law also attempts to bring greater transparency and stability into financing for local development. At provincial level there is also greater awareness of the need to involve local communities in planning and implementation of development activities. The February 1998 Politburo Directive on Grassroots Democracy proposes that people at the community level should participate more actively in planning and decision making by (a) being better informed about the law, (b) participating in local decisions making before final decisions are made, and, (c) supervising, controlling, and evaluating the operations and activities of their local authorities.

The following sections cover the general recommendations for complimentary measures that would expand the poverty alleviating impacts of the project. While some of these recommendations refer directly to project design, most involve separate actions that would require further investigation to fully assess their financial feasibility and practicality within the larger context of Vietnam's overarching development and poverty alleviation goals.

On 30 January 2011 a Prime Minster issued a decision on the poverty lines for 2011-2015, Decision no. 09/2011/QD-TTg and with Articles as below.

Article 1. To set norms on poor households and households in danger of falling into poverty for the 2011-2015 period as follows:

1. A rural poor household is a household with each member earning an average income of up to VND 400,000 per month (or VND 4,800,000 per year).

2. An urban poor household is a household with each member earning an average income of up to VND 500,000 per month (or VND 6,000,000 per year).

3. A rural household in danger of falling into poverty is a household with each member earning an average income of between VND 401,000 and VND 520,000 per month.

4. An urban household in danger of falling into poverty is a household with each member earning an average income of between VND 501,000 and VND 650,000 per month.

Article 2. The poverty lines specified in Article 1 of this Decision serve as a basis for realizing social security policies and other socio-economic policies.

Article 3. This Decision takes effect on 1st January, 2011.

Article 4. Ministers, heads of ministerial-level agencies, heads of government-attached agencies, and chairpersons of People's Committees of provinces and centrally run cities shall implement this Decision.

RESULTS

SURVEY, REVIEW POOR AND NEAR-POOR HOUSEHOLDS IN 2011

(Attached to Decision No. 375/QD-LDTBXH dated 28th March, 2012 of the Ministry of Labour - Invalids and Social Affairs)

No.	Province/City	No. of HHs	Poor HH		Near-poor HH	
			No.of HHs	*%*	*No.of HHs*	*%*
	Whole country	**21.938.260**	**2.580.885**	**11,76**	**1.530.295**	**6,98**
I	**North East mountain**	**2.417.909**	**507.911**	**21,01**	**231.726**	**9,58**
1	Ha Giang	155.213	54.914	35,38	20.752	13,37
2	Tuyen Quang	186.798	54.313	29,08	24.461	13,09
3	Cao Bang	117.401	38.718	32,98	7.558	6,44
4	Lang Son	180.931	44.896	24,81	22.029	12,18
5	Thai Nguyen	291.390	48.620	16,69	31.873	10,94
6	Bac Giang	412.204	63.455	15,39	32.655	7,92
7	Lao Cai	144.355	50.939	35,29	17.591	12,19
8	Yen Bai	185.940	60.481	32,53	17.591	9,46
9	Phu Tho	358.770	59.367	16,55	38.620	10,76
10	Quang Ninh	313.032	15.294	4,89	9.189	2,94
11	Bac Kan	71.875	16.914	23,53	9.407	13,09

No.	Province/City	No. of HHs	Poor HH		Near-poor HH	
			No.of HHs	*%*	*No.of HHs*	*%*
II	**North West mountain**	**618.203**	**204.136**	**33,02**	**74.661**	**12,08**
12	Son La	239.995	75.229	31,35	27.670	11,53
13	Dien Bien	105.541	47.786	45,28	8.189	7,76
14	Lai Chau	78.067	30.351	38,88	7.864	10,07
15	Hoa Binh	194.600	50.770	26,09	30.938	15,90
III	**Red river delta**	**5.091.919**	**330.891**	**6,50**	**226.935**	**4,46**
16	Bac Ninh	276.660	16.055	5,80	13.150	4,75
17	Vinh Phuc	260.927	22.681	8,69	13.984	5,36
18	Hanoi	1.598.332	50.149	3,14	26.755	1,67
19	Hai Phong	503.385	26.059	5,18	21.694	4,31
20	Nam Dinh	554.431	46.000	8,30	41.168	7,43
21	Ha Nam	240.701	25.702	10,68	18.161	7,55
22	Hai Duong	509.122	45.532	8,94	31.453	6,18
23	Hung Yen	316.353	26.639	8,42	17.117	5,41
24	Thai Binh	571.265	46.388	8,12	23.223	4,07
25	Ninh Binh	260.743	25.686	9,85	20.230	7,76
IV	**Old 4 area**	**2.609.556**	**476.994**	**18,28**	**359.651**	**13,78**
26	Thanh Hoa	895.816	182.439	20,37	115.131	12,85
27	Nghe An	734.599	138.002	18,79	117.286	15,97
28	Ha Tinh	353.016	61.554	17,44	57.234	16,21
29	Quang Binh	213.221	45.130	21,17	30.685	14,39
30	Quang Tri	154.671	25.376	16,41	21.814	14,10
31	Thua Thien - Hue	258.233	24.493	9,48	17.501	6,78
V	**Central coastal area**	**1.968.495**	**285.217**	**14,49**	**197.065**	**10,01**
32	Da Nang	227.150	6.766	2,98	13.029	5,74
33	Quang Nam	380.211	79.482	20,90	53.447	14,06
34	Quang Ngai	319.308	66.066	20,69	28.966	9,07
35	Binh Dinh	390.009	52.883	13,56	21.029	5,39

No.	Province/City	No. of HHs	Poor HH		Near-poor HH	
			No.of HHs	*%*	*No.of HHs*	*%*
36	Phu Yen	238.883	40.524	16,96	33.952	14,21
37	Khanh Hoa	268.841	20.006	7,44	32.913	12,24
38	Ninh Thuan	144.093	19.490	13,47	13.729	9,53
VI	**Central Highlands**	**1.181.128**	**219.892**	**18,62**	**69.290**	**5,87**
39	Gia Lai	288.141	68.420	23,75	17.038	2,91
40	Dak Lak	398.273	69.261	17,39	28.760	7,22
41	Dak Nong	115.789	26.070	22,52	-	-
42	Kon Tum	106.496	29.728	27,91	6.372	5,98
43	Lam Dong	272.429	26.413	9,70	17.120	6,28
VII	**South East**	**3.729.204**	**63.462**	**1,70**	**66.519**	**1,78**
44	TP.HCM	1.824.822	109	0,006	16.437	0,90
45	Binh Thuan	278.740	21.218	7,61	11.252	4,04
46	Tay Ninh	276.212	11.788	4,27	9.866	3,57
47	Binh Phuoc	228.070	15.740	6,90	9.979	4,38
48	Binh Duong	253.588	22	0,01		-
49	Dong Nai	642.772	7.941	1,24	13.924	2,17
50	Ba Ria-Vung Tau	225.000	6.644	2,95	5.061	2,25
VIII	**Mekong river delta**	**4.321.846**	**492.382**	**11,39**	**304.448**	**7,04**
51	Long An	366.875	21.142	5,76	17.866	4,87
52	Dong Thap	418.620	53.760	12,84	33.512	8,01
53	An Giang	526.503	41.281	7,84	32.045	6,09
54	Tien Giang	441.090	42.483	9,63	19.788	4,49
55	Ben Tre	361.591	45.661	12,63	21.993	6,08
56	Vinh Long	267.423	21.158	7,91	15.944	5,96
57	Tra Vinh	254.922	51.306	20,13	25.333	9,94
58	Hau Giang	191.735	37.203	19,40	21.752	11,34
59	Can Tho	295.215	19.530	6,62	15.921	5,39
60	Soc Trang	311.480	70.648	22,68	44.139	14,17
61	Kien Giang	401.937	29.066	7,23	24.221	6,03
62	Bac Lieu	194.284	29.714	15,29	17.718	9,12
63	Ca Mau	290.171	29.430	10,14	14.216	4,90

RESULTS

SURVEY, REVIEW POOR AND NEAR-POOR HOUSEHOLDS IN 2011 AT 62 POOR DISTRICTS OF RESOLUTION 30A/2008/NQ-CP

(Attached to Decision No. 375/QD-LDTBXH dated 28th March, 2012 of the Ministry of Labour - Invalids and Social Affairs)

Province	No.	District/ City, town	No.of HHs	Poor HH		Near-poor HH	
				No.of HHs	*%*	*No.of HHs*	*%*
Ha Giang							
	1	Meo Vac	13.917	7.923	56,93	1.276	9,17
	2	Đong Van	13.672	8.648	63,25	2.186	15,99
	3	Yen Minh	15.044	7.134	47,42	2.196	14,60
	4	Quan Ba	9.737	4.473	45,94	2.052	21,07
	5	Xin Man	11.774	6.494	55,16	1.874	15,92
	6	Hoang Su Phi	12.193	5.945	48,76	1.971	16,17
Cao Bang							
	1	Ha Quang	7.468	2.889	38,69	644	8,62
	2	Bao Lam	10.255	6.299	61,42	223	2,17
	3	Bao Lac	9.598	6.086	63,41	527	5,49
	4	Thanh Nong	4.876	2.969	60,89	142	2,91
	5	Ha Lang	5.595	2.512	44,90	561	10,03
Bac Kan							
	1	Pac Nam	6.072	2.759	45,44	656	10,80
	2	Ba Be	10.887	3.226	29,63	2.084	19,14
Lao Cai							
	1	Bac Ha	12.001	5.993	49,94	1.388	11,57
	2	Si Ma Cai	6.261	3.370	53,83	968	15,46
	3	Muong Khuong	11.382	6.320	55,53	2.124	18,66
Yen Bai							
	1	Tram Tau	4.995	3.861	77,30	359	7,19
	2	Mu Cang Chai	8.918	7.170	80,40	490	5,49

Province	No.	District/ City, town	No.of HHs	Poor HH		Near-poor HH	
				No.of HHs	*%*	*No.of HHs*	*%*
Bac Giang							
	1	Son Dong	16.983	7.779	45,80	2.629	15,48
Phu Tho							
	1	Tan Son	19.020	6.880	36,17	3.701	19,46
Dien Bien							
	1	Dien Bien Dong	10.917	6.374	58,39	912	8,35
	2	Muong Ang	8.865	5.463	61,62	1.144	12,90
	3	Muong Nhe	10.500	7.470	71,14	452	4,30
	4	Tua Chua	8.883	6.241	70,26	622	7,00
Lai Chau							
	1	Phong Tho	13.562	5.810	42,84	2.660	19,61
	2	Sin Ho	14.606	7.015	48,03	1.625	11,13
	3	Muong Te	10.025	5.693	56,79	521	5,20
	4	Tan Uyen	9.786	3.846	39,30	1.271	12,99
	5	Than Uyen	11.481	4.000	34,84	915	7,97
Son La							
	1	Muong La	18.058	9.903	54,84	1.803	9,98
	2	Quynh Nhai	12.879	5.221	40,54	1.496	11,62
	3	Phu Yen	24.912	6.993	28,07	6.744	27,07
	4	Bac Yen	11.514	4.602	39,97	1.091	9,48
	5	Sop Cop	8.652	4.338	50,14	481	5,56
Thanh Hoa							
	1	Nhu Xuan	14.930	6.742	45,16	2.769	18,55
	2	Thuong Xuan	20.740	8.103	39,07	4.043	19,49
	3	lang Chanh	10.886	5.775	53,05	2.114	19,42
	4	Ba Thuoc	25.124	9.851	39,21	4.437	17,66
	5	Quan Hoa	10.283	4.721	45,91	2.222	21,61

Province	No.	District/ City, town	No.of HHs	Poor HH		Near-poor HH	
				No.of HHs	*%*	*No.of HHs*	*%*
	6	Quan Son	8.109	3.721	45,89	1.348	16,62
	7	Muong Lat	7.238	4.095	56,58	1.180	16,30
Nghe An							
	1	Que Phong	14.339	7.245	50,53	984	6,86
	2	Ky Son	13.867	10.053	72,50	1.425	10,28
	3	Tuong Duong	16.165	10.542	65,21	1.100	6,80
Quang Binh							
	1	Minh Hoa	11.129	6.625	59,53	1.490	13,39
Quang Tri							
	1	ĐaKrong	8.156	3.359	41,18	1.076	13,19
Quang Nam							
	1	Tay Giang	3.660	2.363	64,56	215	5,87
	2	Phuoc Son	5.713	3.680	64,41	615	10,76
	3	Nam Tra My	5.827	4.688	80,45	140	2,40
Quang Ngai							
	1	Tra Bong	7.885	4.446	56,39	2.080	26,38
	2	Son Ha	19.185	10.895	56,79	2.830	14,75
	3	Sons Tay	4.889	2.966	60,67	483	9,88
	4	Minh Long	4.535	2.393	52,77	753	16,60
	5	Ba To	13.780	6.284	45,60	1.785	12,95
	6	Tay Tra	4.362	3.131	71,78	441	10,11
Binh Dinh							
	1	Van Canh	7.253	3.771	51,99	1.155	15,92
	2	Vinh Thanh	8.412	4.588	54,54	1.307	15,54
	3	An Lao	7.081	4.123	58,23	1.022	14,43
Ninh Thuan							
	1	Bac Ai	5.799	3.192	55,04	592	10,21
Kon Tum							
	1	Kon Plong	5.220	3.017	57,80	354	6,78
	2	Tu Mo Rong	4.832	3.137	64,92	429	8,88
Lam Dong							
	1	Dam Rong	9.056	3.096	34,19	1.068	11,79

Direct Project Implementation Poverty Alleviation Measures

There are a number of considerations that can be directly taken into account during project design that would enhance the poverty alleviating benefits of the proposed road investments. Recommended poverty alleviation measures, to be realized directly through project implementation, are discussed in brief below.

Prioritize Directly Generated Project Employment Opportunities for the Poor

Unemployment in the project area ranges between 30 and 50 percent. As a result, there is a large pool of labor within the project area that could be utilized for direct project construction and supporting activities. Of course, the degree to which this labor could be utilized would depend on the engineering requirements and design specifications of the recommended road rehabilitation measures. Prioritizing directly generated project employment opportunities for the poor would at least temporarily improve their well- being through the added income they would earn. Additionally, any savings and/or investment resulting from these added earnings would lead towards longer term gains for the poor.

Improve the Lot of Impoverished Displaced Persons (DPs)

Typically, resettlement plans (RPs) maintain the minimal goal of ensuring that the project does not inflict any economic damage on DPs. To the extent possible, the project RP will include measures aimed at improving the lot of impoverished DPs through direct payments

Economic Impact Enhancement

It is widely held in academic and professional circles that general economic growth is a strong means of alleviating poverty. To this end, there are a number of complimentary measures that can be taken to improve the overall economic benefits resulting from the proposed road investments. Recommended economic impact enhancement measures, to be realized during project implementation and after project completion, are discussed in brief below.

Improve Traffic Flow

Currently, there is a lot of congestion along the project roads due to the mix of traffic, which consists of primarily pedestrian and non-motorized local traffic as well as

motorized through traffic. Road widening activities included in the project design are aimed at alleviating some of this congestion. In addition to these measures, the Government of Vietnam may wish to pursue a public information campaign aimed at ensuring that local traffic remains on road shoulders in order to allow for the freer flow of through traffic on the central portions of the project roads. Improving traffic flow will lower travel times and corresponding transportation costs, resulting in increased economic benefits from the project.

Additionally, in some parts of Vietnam small poor farmers and poor retailers spread paddy and other grains on the paved roads to dry the crops. Having large areas of paved roads covered in drying crops is not an efficient method for crop drying nor does it promote efficient use of the national highway system. Small farmers and retailers need areas that are elevated to avoid inundations and floods where they can dry their crops safely without interfering with

the transport system. Efforts to provide such infrastructure, where needed, would also serve to improve traffic flow along the project roads.

Strengthen Institutions Responsible for Routine Maintenance and Emergency Repair of Project Roads

The Provincial Departments of Transportation (PDOTs) are primarily responsible for the routine maintenance and emergency repair of the project roads. All efforts should be made to ensure that these institutions are able to fulfill this mandate to maximize the long-run economic benefits resulting from the project road improvements. Institutional strengthening initiatives aimed at the PDOTs might include a review of their mission statements to ensure that they more actively promote improvements that benefit poor users of the roads under their jurisdiction, as well as a review of existing maintenance.

Promote Increased Economic Productivity within the Project Area Populations

Rice cultivation and other forms of agricultural production are the dominant forms of economic activity in the project area. Road improvements will primarily benefit these activities by lowering transportation costs, which in turn will ultimately lead to lower input costs and the increased profitability of exporting project area produce to non-local markets. It may be difficult for many of the farmers in the project area, particularly for the poor ones, to increase production above subsistence levels to the degree necessary to take advantage of the road improvements and increase their earnings by exporting surplus produce to outside markets. Investment in agriculture support services and infrastructure, as well as training in more productive cultivation techniques, would increase the ability of project area residents to take advantage of the

Poverty Impact Enhancement

Finally, there are a number of complimentary measures that can be taken to maximize the amount of project-related benefits that go to the poor. Recommended poverty impact enhancement measures, to be realized during project implementation and after project completion, are discussed in brief below.

Promote Reforms in the Transportation Services Sector to Ensure that Project Generated Benefits are Passed on to Poor End Users

The long distance passenger and freight transportation markets that function along the project roads are dominated by State-owned service providers. The fares that these service providers charge are typically below those that would be determined under perfect competition. In other words, the State subsidizes the use of transportation services. Efforts should be made to better target these subsidies towards poor transportation users.

State-owned transportation service providers will benefit significantly from the project- related road improvements through the resulting reductions in transportation costs. These providers should be made to pass on at least part of these transportation cost savings to end users by lowering fares, particularly those paid by the poor. In the long term, measures to increase the degree of competition within the transportation markets along the project roads may also serve to increase

the amount of project-generated transportation cost savings captured by the poor.

Expand Reach of Project Related Benefits into a Greater Number of Impoverished Areas

Developing national highways that will ultimately promote political stability, growth and trade is a necessary step in reaching Vietnam's development and poverty reduction goals. However, if feeder roads are not improved, economic development patterns will be geographically distorted—favoring activities generating benefits for those close to the project roads. This will be at the expense of those farmers served by feeder roads more distant from the project roads and people in the pockets of poverty found at the extreme ends of the feeder roads. Improving these feeder roads will increase connectivity within the national transportation network and ultimately expand the reach of project benefits to a greater number of impoverished areas.

Resettlement

The resettlement plan should address the compensation and livelihood impact of the Project to eliminate potential poverty and social impact. The local governing authorities and the PMU3 must ensure that any involuntary resettlement will be carried out in accordance with the agreed Resettlement Plan, World Bank Operational Policies (OP 4.12), and the Government's laws and regulations on land acquisition, assistance and resettlement..

Impact on household economy: To meet the World Bank Policy requirements, payment for all assets (including land, structures, crops, and other assets) must be based on the of replacement cost with the assets value at full market price. Displaced people's living should be restored to at least the same level as that of prior to the displacement/ resettlement. In the community meeting, the local authorities expressed their appreciation with regards to the World Bank's policy to restore livelihood of the affected people and to assist poor and vulnerable households.

Impacts on women: Resettlement Plan should include the Project's Gender Strategy, which ensures that women will receive benefit from the project. The gender strategy should includes several beneficial aspects, such as increasing women's participation in decision making and in livelihood training, and ensuring that compensation will be given to both men and women. The project supervision consultant will include specialists on social development to help monitor the management of gender-specific activities by the project Provincial People's Committee and to oversee implementation of the Resettlement Plan

Implement EMP

The PMU3, project Contractors and other stakeholders must follow the mitigation plan as proposed in EMP. As well as RP, the implementation of EMP need to be internally and externally monitored and evaluated. The quarterly reports on monitoring and evaluation need to be prepared and reviewed by the relevant Agencies of the World Bank and the GOV and disclosed at the offices of PC's of the Province to the Commune and accessible to anyone who are interested in the reports.

Gender

The life skills training should be provided to increasing the gender equality perception of both male and female in the project area. Besides that, the occupational retraining course design for both male and female to eliminate risk of lost occupation due to project construction.

To decrease the impact related to HIV/AIDS and Human Trafficking of woman, the HIV/AIDS awareness and prevention of Human Trafficking awareness program should pay particular attention to women.

Potential Restriction Access

In order to minimize the negative impacts on the people living and working near the roads, a measure to maintain the connection of the locations between one side of the roads and the other side of the roads need to be made

The optimum locations of crossing points should be determined during the design phase in close consultation with local communities and their representatives. Inadequate consultation with the local people in designing the underpass or overpass can create significant disruption in local peoples' livelihood system and social network. The Project should be formulated to minimize these potential risks.

During construction works, contractors should provide and maintain clearly marked and protected passageways. Local people should be informed of any interruptions for traffic and on safety issues related to the works.

Impacts on Vulnerable Groups

There are impacts to the vulnerable groups such as female headed households, poor families, disable person, families enjoy the social policies etc. The additional assistance to these groups are described as in the RP and need to be implemented in a timely manner and to be closely monitored and evaluated to make sure that these groups could improve their livelihoods after the project construction.

HIV/AIDS and Other Sexually Transmitted Diseases, Drug Abuse, and Human Trafficking

The project will need to address the needs for better dissemination of information on HIV/AIDS and other risks, such as drug abuse, and human trafficking. Under the Project, HIV/AIDS and Human Trafficking Prevention Program (HATPP) should ensure that communities in project area are not subject to increased risk of sexually transmitted diseases, other risks as drug and human trafficking, and improved communication need to be controlled.

The HIV/ADS program should include awareness campaigns at the construction sites and in the communities, developing peer educators and community monitoring combine with the prevention of human trafficking, awareness on safe migration, and community monitoring.

Traffic Accidents

The potential rise of traffic accidents due to speeding is one of the major concerns expressed by the local communities during the fieldwork. Appropriate traffic safety measures, such as road signs, enforcement of traffic safety laws/regulations, and awareness programs, will need to be implemented.

Dust and Noise Pollution

For both the construction and operation phases, the Environment Management Plan should include mitigation measures to address dust and noise pollution issues and minimize any impacts on local residents.

13. Implementation Arrangements

The PMU3 will be the owner of the project, the PMU3 would manage to implement the mitigation program, in cooperation with Provincial and District People Committees, Provincial Department of Labour, Invalid and Social Affairs, Provincial Steering Committee of HIV/AIDS, drug and prostitution, Vietnam Women's Unions, Vietnam Fatherland Fronts and Mass Organizations.

A team of Project Implementation consultants will be engaged in building capacity of the implementing agencies, Women's Union Mass Organization and facilitating the implementation of the program.

The structures for implementing for the RPs and EMP are decribed with details in RP and EMP of the project.

The proposed for implementing mitigation measures and schedule for main impacts are given in table 33 below.

Table 33: Implementation for Main Proposed Mitigation Program

No	Content	Location Recommendation
1	**Life Skills Training**	
1.1	Gender Equality	Can be combined with Resettlement activities. Priority will be given to poor female-headed households, especially for women who are unemployed or are housewives in the project districts
1.2	Road Safety awareness	Will be given to households living near the proposed national highway in the project districts
2		
2.1	Female	The data on agriculture indicated both men and women have difficulty in transferring from the agricultural sector to other sectors, and these courses should assist those that are negatively impacted by the project. The course should be undertaken in the Project provinces.
2.2	Male	
2.3	Handicapped	
3	**Awareness of HIV/AIDS, Trafficking**	The prevention of HIV/AIDS, Human Trafficking to be undertaken in the Project districts. Advocacy actions on HIV/AIDS and Trafficking Prevention to be organized through: Workshops targeting local resident communities in the project area, and targeted risk groups; Design of an HIV/AIDS and human trafficking information campaign to be implemented along the road before and during the construction period; Design and implementation of migration and human trafficking awareness campaign in the Communities in the Project districts.

Deatiled potential impacts and mitigation measures which assessed in EIA and EMP are shown as in Annex 5.

Table 34: Implementation Schedule

No	Content	Number of programs				Note
		2013	2014	2015	Total	
1	***Life Skills Training***					
1.1	Gender Equality	1	1		2	1 week per year
1.2	Road Safety awareness	1	1		2	
2	***Occupational Training Courses***					
2.1	Female	1	1	1	3	3-6 months per year
2.2	Male	1	1	1	3	
2.3	Handicapped	1	1	1	3	
3	***Awareness of HIV/AIDS, Trafficking***	1	1	1	3	1 week per year

14. Budgeting

Many mitigation activities are designed as in the RP and EMP such as restoration of income after land acquisition, assistance to the vulnerable groups, principles of fair compensation, mitigation of noise, vibration impacts by construction, safety issues etc. Table below roughly estimate about the cost for SIA (and will be revised and allocated by years with a revised SIA later)

Table 35: Estimated Budget for Proposed Mitigation Program (USD)

No	Content					Total
1	***Life Skills Training***					***50,000***
1.1	Gender Equality					20,000
1.2	Road Safety awareness					

No	Content					Total
						20,000
2	***Occupational Training Courses***					***135,000***
2.1	Female					100,000
2.2	Male					20,000
2.3	Handicapped					15,000
4	***Awareness of HIV/AIDS, Trafficking***					***35,000***
5	***Implementation cost***					***20,000***
Total (US$)						**240,000**

15. Monitoring and Evaluation

15.1. Introduction

Monitoring and evaluation studies are usually conducted to check whether the overall project development objectives are met and the intended benefits in infrastructure development, socio-economic and environmental aspects are realized in the post project situation.

Benefit monitoring and evaluation is normally carried through the following phases:

- The collection of benchmark information (also called baseline data) for each performance indicator identified to measure the benefits for the groups or sectors that will be impacted by a project. Benchmark data refers to conditions prior to an intervention, and is normally collected during the earliest phase of project implementation. Both current and target values should be established for each performance indicator.

- Collection and analysis of data related to performance indicator during the project life to ascertain whether the project is on the right track and any mid course correction in project scope or policies will be necessary to meet the targets.

- Evaluations carried out at project completion and in selected subsequent years to measure

the extent to which the intended benefits identified at the beginning of project implementation have been achieved.

A project performance management System (PPMS) will be established for the purpose of benefit monitoring and evaluation. The PPMS will be executed through a structured process of data collection ranging from direct engineering, environmental, transport sector data to household level sample socio-economic data, data analysis and appropriate evaluation regarding achievement of targets set for the performance indicators.

The PPMS will measure the project impacts in the areas of:

 Infrastructure improvements (project outputs) and overall improvement in the transport sector profile of the project impact area

 Socio-Economic benefits of the project impact area with specific focus on poverty alleviation and employment generation

 Environmental conditions.

The PPMS will also indirectly assess the level of institutional strengthening and policy reforms achieved during the course of the project.

In order to monitor and evaluate the anticipated improvements of social issues and the mitigation of potential adverse impacts of the VRAMP, this section only looks at the indicators covering socio-economic benefits and discusses several milestones based on these indicators. Emphasis is on monitoring whether:

 The social indicators will be improving over time, and

 The potential adverse impacts will be mitigated effectively.

It also seeks to anticipate and identify problems and risk areas where mitigation processes are not happening (or not happening well or fast enough), and to feed this information back into a system for improving VRAMP implementation and design in subsequent phases.

15.2. Monitoring and Evaluation of Social Impacts

The Socio-Economic Monitoring and Evaluation Program will address not only the socio-economic effects of the road rehabilitation component, but also the effects of the complementary poverty alleviation strategies.

The socio-economic development services provided through the Project will focus on two principal objectives:

- Employment generation (direct and indirect), and
- Poverty reduction

The first objective has been incorporated in to the project design. Poverty reduction strategies targeted to benefit the rural poor have been recommended to complement the road rehabilitation. The delivery, use, and effects of services provided through these strategies should be monitored and evaluated along with the rest of the services provided through the Project.

15.2.1. Employment Generation

The Project will generate employment opportunities for local labor during the implementation period and long-term employment for periodic maintenance. The objectives to be met and monitored are: a) provision of manual and non-manual employment for unemployed or underemployed men and women in the Project Area during project implementation and post-project periodic maintenance, b) the achievement of poverty reduction benefits, and c) the injection of cash into the local economy.

The Project will also generate employment opportunities for local populations through procurement of goods and services, such as procurement of services of local transport companies and procurement of local construction materials. The objectives to be met and monitored are: a) provision of employment for local private transport and construction material companies and service sector thereby supporting the local small business sector, b) achievement of poverty reduction benefits, and c) injection of cash into the local economy.

15.2.2. Poverty Reduction

The impact of poverty reduction should be measured through: a) poverty reduction in the Project Area, b) enhanced socio-economic benefits of the Road Rehabilitation Project, and c) economic recovery in the Project area.

The approach taken in this SA is the establishment of 2 types of baseline data:

1. The section headed Socio-economic Baseline Profile deals with the establishment of baseline data over the entire VRAMP project area using information and data from secondary resources. The baseline data is broken down into demographic and socio-economic information and an assessment of accessibility social infrastructure.

2. The section headed Socio-economic Baseline Data deals with household-level data which originates from a detailed household survey using Stratified Random Sampling along the Year 1 Project Roads.

The monitoring and evaluation will hence involve a 2-level assessment of changes in baseline

data over time.

15.2.3. Monitoring and Evaluation of Impacts on Socio-economic Baseline Profile

The monitoring and evaluation of the Year 1 Projects' impacts on the socio-economic baseline profile will be included in the Social Assessment report for the Years 2 and 3 programs, as well as in separate assessments in Years 3 and 5 after project begin. These assessments will entail an overview of the socio-economic baseline data of the overall project area broken down into the following areas:

- Demographic Organization
- Economic and Social Organization

The review of secondary information will have to use updated information wherever possible in order to assess the changes in project area data.

An underlying assumption of this assessment is that the road rehabilitation program will stimulate economic growth within the project area. This increase in economic growth will impact a set of indicators. In order to measure the changes in these indicators, Chapter of socioeconomic conditions provides a baseline survey of the existing conditions. The following table summarizes some of these indicators and provides benchmarks and expected developments as a result of this economic stimulus in the project area. The baseline data and expected milestones for the next survey include:

Table 36: Monitoring and Evaluation of Socio-economic Profile

Baseline Data	Anticipated Milestones	Underlying Reasons
1. Demographic Organization		
1.1. Population Growth Rate	Continuing stability of population growth rate around the project .	Economic growth will contribute in improving living standards and stabilize population growth rates.
1.2. Migration	A reduction of the project area's out-migration towards the national average.	Economic development of the project area and will reduce the outwards migration of the resident population towards neighboring provinces with higher living standards.

Baseline Data	Anticipated Milestones	Underlying Reasons
1.3. Gender Issues	A reduction in the project area's sex ratio towards the national average.	Improved access and linkage to larger cities (better education), health care facilities and markets (providing a greater diversity of food and nutrients) will hopefully reduce the relatively higher mortality rate for women.
2. Economic and Social Organization		
2.1. Welfare Indicators	Reduction in proportion of household expenditure on food and beverages in project area towards the national average.	Stimulation in economic growth will contribute in increasing disposable income and reducing the percentage of household income spent on food.
2.2. Income – Amount	Increase in monthly income per capita for all income quintiles towards the national averages.	Stimulation in economic growth will contribute in increasing monthly income per capita.
2.3. Income – Source	Reduction in proportion of income from agricultural employment in project area towards the national average.	An indicator for economic growth in the region is a shift of labor and resources away from agriculture towards other sectors of the economy, in particular towards the industrialized sector.
2.4. Poverty	Reduction in the incidence of poverty in the project area towards the national average.	Economic growth tends to facilitate the reduction in poverty.
2.5. Unemployment	Reduction in unemployment from the project area towards the national average	Economic growth tends to facilitate the reduction in unemployment which in turn stimulates economic growth.
3. Social Infrastructure		
3.1. Body Mass Index (BMI)	Increase in average BMIs for both men and women in the project area towards the national averages.	Economic growth will assist in improving living standards and allocate more disposable income towards a greater variety of food items. Better roads will also improve the access to larger and more diverse markets.

Baseline Data	Anticipated Milestones	Underlying Reasons
3.2. Z-scores (height index)	The z-scores for normal height are expected to increase for the project area towards the national average.	Economic growth will assist in improving living standards and allocate more disposable income towards a greater variety of food items. Better roads will also improve the access to larger and more diverse markets.
3.3. Stunting and Wasting	The percentages of stunting and wasting are expected to fall in the project area to the national averages.	Economic growth will assist in improving living standards and allocate more disposable income towards a greater variety of food items. Better roads will also improve the access to larger and more diverse markets.
3.4. Agricultural Productivity Rates (Rice)	The productivity rates for rice are expected to increase in the project areas to the national average.	Economic growth helps to facilitate the increase of investment into agricultural extension services and the adoption of HYVs which will increase the productivity rates.
3.5. Transport	The use of the road network within the project area is expected to increase towards the average of the population of Vietnam.	Improved roads will encourage more people to travel due to faster travel times and a decrease in road user fares and charges.

15.2.4. Monitoring and Evaluation of Impacts on Socio-economic Baseline Data

This SA includes a detailed household survey in communes along the Year 1 Project Roads. Household surveys will be made in communes along the Years 2 and 3 Project Roads at the appropriate time.

In Years 3 and 5 after project beginning, household surveys will have to be made in the same communes to assess, monitor and evaluate the degree of change of certain baseline indicators in these locations. All communes in which household surveys took place will be carefully registered and located on maps to allow the follow-up household surveys in Years 3 and 5 after project beginning to take pace in the same locations. The same or very similar questionnaires will be used to identify the same sets of data that will allow comparison of basic indicators over time.

The household survey will also include focus group discussions based on PRA principles that will allow for a 2-way flow of information and encourage the participation of as many stakeholders at different levels as possible.

An underlying assumption of this assessment is that the road rehabilitation program will stimulate economic growth within the project areas. This increase in economic growth will impact a set of indicators that were registered in the household survey. In order to measure the changes in these indicators, Chapter of Socioeconomic conditions provides a baseline survey of the existing conditions along communes. The following table summarizes these indicators and provides benchmarks and expected developments as a result of this economic stimulus in the project communes. The baseline data and expected milestones for the next survey include:

Table 37: Monitoring and Evaluation of Socio-economic Data

Baseline Data	Anticipated Milestones	Underlying Reasons
1. Number of people/household	The number of people in the households is expected to decrease by 5 percent each in Years 3 and 5.	Economic growth will facilitate the improvement in living standards and, if equally distributed, along the population. Less people will be crowded in the same households and may afford to live in separate units.
2. Education	An increase of 5 percent each in Years 3 and 5 for the survey population in the overall degree obtained.	Economic growth will facilitate an increase in allocation of income towards education.
3. Health - Immunization	An increase of 5 percent each in Years 3 and 5 in immunization of the survey population.	Economic growth will facilitate an increase in allocation of income towards heath.
4. Health – AIDS Awareness	An increase of 5 percent each in Years 3 and 5 in awareness of how AIDS is spread and how to protect oneself from the disease.	Economic growth will facilitate an increase in allocation of income towards heath and education. Local governments will have better logistics at their disposal to educate the public on AIDS. Particular measures will have to be taken to restrict the spread of AIDS during the construction stage and once the road is improved (see EMP on this issue).
5. Living Standards - Water	An increase of 5 percent each for Years 3 and 5 of the survey population using pump wells.	Economic growth will facilitate an increase in allocation of income towards improvement living standards.
6. Living Standards - Sanitation	An increase of 5 percent each in Years 3 and 5 of the survey population using sealed water latrines.	Economic growth will facilitate an increase in allocation of income towards improvement living standards.

Baseline Data	Anticipated Milestones	Underlying Reasons
7. Income - Source	A reduction of 5 percent each in Years 3 and 5 on incomes derived from agriculture.	An indicator for economic growth in the region is a shift of labor and resources away from agriculture towards other sectors of the economy, in particular towards the industrialized sector.
8. Income - Amount	An average increase of 5 percent each in Years 3 and 5 in incomes, irrespective of source.	An increase in economic growth helps to increase incomes.
9. Household Assets	An average increase of 5 percent in Years 3 and 5 in household assets.	An increase in economic growth helps to increase disposable incomes and will increase the expenditure on household assets and durable goods.

A team of social development specialists should be engaged to undertake the proposed implementation program of social interventions. It is possible to engage one team to carry out both mitigation program and the resettlement plan.

A team of specialists should have experience in implementing life skills training, HIV/AIDS awareness, and prevention of Human Trafficking Program, at the community level. A team leader will have to ensure efficient and effective implementation of the mitigation program. The monitoring and evaluation of the proposed implementation programs should be done continuously from the project commencement to until the end of at least one year of operation. An annual reports need to be prepared for the relevant Agencies.

Annex 1: The questionnaire for social and economic survey of affected assets

Vietnam Road Assets Management Program (VRAMP)

SOCIO-ECONOMIC SURVEY AND AFFECTED ASSET FORM

Form VF05

Household code……. Survey date: ____ /__ /2013

Village……Commune.....District…….Province……

A. HOUSEHOLDER INFORMATION

2. Full name of householder: ……; Age ……; Sex [ ] Male=1; Female =2;

1.1 Ethnicity: [ ]; 1.2 Main occupation [ ]; 1.3 Secondary occupation [ ];

1.4 Education and occupation [ ];

1.6 Main monthly income of the householder: ……..……VND;

1.7 Classification of household : [ ] (1=Poor; 2= Near-poor; 3= Rise above poverty)

1.8 Policy family to enjoy social benefits: [ ]

(1=Single women householder; 2= Disabled persons; 3=The lonely aged; 4= Entitled to social assistance; 5= Ethnic minorities)

1.9 The project affected area (a family may has land and property in different areas, if such, it needs to mark clearly all affected areas of the household)

1) Within scope of road [ ]
2) Within safety corridor [ ]
3) Within viaduct, bridge [ ]
4) Within the scope of intersection [ ]
5) Other (please specify) [ ] _____

B. SOCIO-ECONOMIC SURVEY IN AFFECTED AREA

3. Family members.

No.	Full name	Sex 1=Male 2=Female	Relation with the householder 1= Husband/Wife 2= Father/Mother 3=Son/daughter 4= Son-in-law/daughter-in-law 5=Nephew/niece 6=Other brother/sister	Age	Ethnicity 1=Kinh 2= Thai 3= Tay 4= Nung 5= Muong 6=Hoa 7= Other	Main occupation 1= Agriculture (farming) 2= Livestock 3= Sales 4= Catering service, 5= Workers in factory, workshop 6= State officials and state employees 7= Work for private companies 8= Work in transport field 9= Students, pupils 10= Housework 11= Hired worker 12=Other	Education 0= Illiterate 1= Primary school 2=Secondary school 3= High school ungraduation 4= High school 5=Vocational training 6= University and above university 7= Others	Notes

1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

4. Average annual income of household: ……. ……. VND

Main sources of income contributed to the household's annual income:

Agricultural production (crops, livestock) _____VND

Trade or business _____VND

Salary _____VND

From other sources (such as remittances, etc.) _____VND

5. Average monthly expenditure of household

Average living expenditure of household _____VND

Average healthcare of household _____VND

Education spending _____VND

Visit, tourism, relax _____VND

6. The loan of household

Loans	**Loan amount**	**Loan-use purpose** 1= Agricultural production 2= Business 3= Household expenditure 4= Building, repairing houses 5= Other (specify)
1) Loans from banks		
2) Loans from other institutions		
3) Loans from relatives, friends		

4) Others		
5)		

7. Please tell us the number of current assets and amenities your family is using?

Type of asset	Number	Type of asset	Number	Type of asset	Number	Type of asset	Number
1. Radio		4. bicycle		7. Refrigerator		10. Gas Cooker	
2. Tivi/Video		5. Electric fans		8. Pump		11.Hot water tank	
3. motorbike		6. Rice Cooker		9. Washing machine		12. Computer	

8. Water use: The daily main sources of water of household? (Marked x in the appropriate box)

Digging well	Village public wells
Tap water	Rain water
Rivers, streams, ponds, lakes	Buying water
Ravine water	Other (specify)

9. Main energy for household lighting?

1) Power grid
2) Pin and battery
3) Wood/charcoal
4) Generator
5) Oil lamp
6) Others

10. Main energy for household cooking?

1) Power grid
2) Generator
3) Gas/oil
4) Wood/coal
6) Biogas
7) Others
8) No answer

11. Common diseases in the community (name of disease)

1) Cold
2) Influenza
3) Respiratory disease
4) Malaria
5) Cholera
6) Dysentery
7) Hepatitis
8) Toxic infection
9) Others
10) No answer

12. Household's access to healthcare, education and culture services?

Healthcare, education and culture services	1=Yes	2=No	Less than 1km	1= 1 - 2 km	2= 2 - 5 km	3= More than 5 km
Healthcare						
1. Commune health station						
2. District hospital						
3. Clinic/nurse						
4. Pharmacy						
5. Traditional drug treatment						
Education						
6. Preschool						
7. Elementary school						
8. Secondary school						
9. High school						
10.Vocational school						
Cultural, religion						
11. Market						
12. Stadiums, sports						
13. Pagoda/temple/church						
14. Other amusement and entertainment parks						

13. Has the household economic condition changed in the recent 3 years?

1) No change [ ]; Reason: _____

2) Better [ ]; Reason: _____

3) Worse [ ]; Reason: _____

14. Do you support the road upgrading and expansion project?

1) Yes No

If yes, what's the support reason?

_____

_____

If not, what do you wonder and worry about?

_____

_____

If the project is implemented, what is positive side do you find?

_____

_____

According to you, how is development of the road meaningful to the local socio-economic development?

_____

_____

_____

15. How is the division of labor in you family?

No.	Work-item	Men	Women	Both
1	Main farming activities			
1.1	- Soil tuning			
1.2	- Cultivation			
1.3	- Sowing			
1.4	- Weeding			
1.5	- Pesticide spraying			
1.6	- Harvest			
2	Vegetable growing			
3	Livestock			
4	Small business			
5	Workers			
6	Labor migration (domestic)			

16. Community activities

Activity	Male	Female	Both
1. Attend community meetings			
2. Participate in decision making			
3. Join local organizations			
4. Others			

C. INVENTORY OF LOSS IN AFFECTED AREAS

17. Land use status of household (affected land is only located in areas that needs to acquire for the project)

Map	Type of soil		Total land area (m2)	Affected degree of each parcel of land		Current land use	Legal status of land	Work-item	Type of affect
	1= Urban residential land 2= Rural residential land 3= Paddy land 4= Garden 5= Aquaculture land 6= Business/non-agricultural land 7= Forest land 8=Other type of land			Total affected area (m2)	1= Partly affected 2 = Totally affected	1= Owned land 2= Rented land	1= With red book 2= No red book but legalable for red book 3= illegalable for red book 4= Rented land 5= Safety corridor	1= Pavement 2= Safety corridor 3 = Bridge 4 = Intersection 5= Other (specify)	1= Permanently 2= Temporary
	Type	**Plot?**							
	Total								

18. Houses affected by the project

Type of house	Total building floor (m2)	Using status		Affected level		Work item	Type of affect
1. Villa 2. Level 1 3. Level 2 4. Level 3 5. Level 4 6. Temporary house		1. With construction license 2. Without construction license 3. Built on agricultural land 4. Rented house 5. Built on Safety corridor	1. Living 2. Renting 3. Living and renting 4. Living and trading 5. Trading	Total affected floor (m2)	1= Partly affected 2 = Totally affected	1= Pavement 2= Safety corridor 3 = Bridge 4 = Intersection 5= Other (specify)	1= Permanently 2= Temporary

Note: A household may have many affected houses; it is necessary fill in the information of all affected house.

19. Business impact (in the project area)

1) Business impact [ ]
(1=No; 2= Yes, if yes, asked additional questions below)

a. Business location [ ] (1= In the same house; 2= Independent outside house)

b. Business form [ ]
(1=Company; 2=Store; 3=Household)

c. Business registration [ ] (1= Yes; 2=No)

d. Type of business:……..

e. Monthly income from business: _____VND (Just ask those who business is affected)

f. Impact locations in the project area: [ ] (1= Pavement; 2= Safety corridors; 3= Bridge; 4= Intersection; 5= Others)

20. Affected works and other structures and living facilities on land

(Statistics of affected **independent works outside houses** and living facilities are listed above)

Works/living facilities	**Type of works** (corresponding to auxiliary works)	**Unit**	**Quantity**	**Work items** 1= Pavement 2= Safety corridor 3 = Bridge 4 = Intersection 5= Other (specify)
1. Independent kitchen outside main	1. Temporary 2. Equivalent to house level 4	m^2		
2. Pigsty/beef/chicken coops	1. Temporary 2. Equivalent to house level 4	m^2		
3. Power meter		Unit		
4. Water meter		Unit		
5. Estimated water pipe length		m		
6. Wired telephone		Unit		
7. Fence	1. Brick 2. Wood or barbed	m^2		
8. Gate	1. Wall 2. Steel 3. Wood/Bamboo	m^2		
9. Toilet, bathroom (separate from house)	1. Brick, concrete 2. Bamboo/leaf	m^2		
10. Earth tomb a) At the cemetery b) Separate		Unit		
11. Built tomb (brick, cement) c) At the cemetery d) Separate		Unit		
12. Well	1. Drilled 2. Dug	m		
13. Water tank	Brick/concrete Stainless steel/Inox Plastics	m^3		
14. Yard (only cement or tiled)		m^2		
15. Fish pond (excavated quantity)		m^3		
16. Other works (name of works and affected area)				

21. Types of affected trees, crops

(Only make statistical of affected perennial/fruit)

Type of plants or agricultural products	**Specifications**	**Unit**	**Quantity**	**Work items** 1= Pavement 2= Safety corridor 3 = Bridge 4 = Intersection 5= Other (specify)
a) Fruit trees (main plant)		**Tree**		
1)				
2)				
3)				
4)				
b) Timber (main plant)		**Tree**		
1)				
2)				
3)				
c) Decoration plant (main plant)				
1)				
2)				
3)				
d) Crops main (plant)		**m^2**		
1) Rice				
2) Corn				
3) Potatoes				
4) Peanut				
5) Beans				
e) The area of seafood aquaculture		**m^2**		

D. CONSULTATION QUESTIONS

22. If your agricultural land or other productive land is affected (due to land acquisition), which compensation plan does your family select?

a) Receive land-for-land (if replacement land in the commune is available) with the same type and area/profitability [ ]

b) Receive cash [ ]

c) Not decide [ ]

23. For those who residential land is affected only:

If it is unable to rebuild house on the remaining residential land (the remaining area is less than 80m2 for urban land and 100m2 for rural land, which resettlement plan does your family select?

a) Moved to another land of the family [ ]

b) Move to another place where the family choose [ ]

c) Move to the project resettlement site [ ]

d) Move to resettlement site arranged by local authorities [ ]

e) Not decide [ ]

24. Does your family plan to use the land compensation money?

1) Rebuilt or repair houses [ ]

2) Buy a new land [ ]

3) Buy other asset [ ] ; Name of asset _____

4) Invest in small business [ ]

5) Save in a bank [ ]

6) Spend for children's education [ ]

7) Other intention [ ]; Description _____

25. Choose a livelihood rehabilitation form of household.

1) Agricultural activity [ ] 3) Self find job [ ]

2) Apprenticeship [ ] 4) No answer [ ]

Thank you for answering our questions.

Surveyor **Householder or family representative**

Annex 2: Results of SES from the project affected households

1. Section Trieu Duong – Hung Ha

Using the socio-economic survey questionnaire prepared for RP preparation, the total number of households surveyed was 202 households in Hung Ha District; accounts for about 34% of the total affected households. Details of survey is shown as in table 2.1. There are 86 of severely affected HHs by the project.

Table 2.1 : Sample of SES in each communes

District	Commune	Number of affected households	Number of severely affected households (SAH)	Number of socio-economic survey households	% socio-economic survey	Number of socio-economic survey SAH	% Number of socio-economic survey SAH	Number of socio-economic survey non-SAH	% Number of socio-economic survey non-SAH
1	2	3	4	5	6=5/3	7	8=7/4	9	10=9/5
Hung Ha	Tan Le	54	5	16	29.6%	2	40.0%	14	87.5%
	Hung Nhan town	119	25	36	30%	10	40.0%	26	72.2%
	Lien Hiep	189	46	61	32.3%	12	26.1%	49	80.3%
	Phuc Khanh	53	5	17	32.1%	2	40.0%	15	88.2%
	Thai Phuong	12	1	7	58.3%	1	100.0%	6	85.7%
	Hung Ha town	22	0	8	36.4%	0	0.0%	8	100.0%
	Hong Linh	30	0	9	30%	0	0.0%	9	100.0%
	Minh Khai	95	3	40	42.1%	3	100.0%	37	92.5%
	Tan Hoa	8	1	8	100%	1	100.0%	7	87.5%
Total		**582**	**86**	**202**	**34.7%**	**31**	**36.0%**	**171**	**84.7%**

Household Size

A majority of the affected HHs is with a family size of less than 3 persons, then follows by the size of from 3 to 4 persons and from 5 to 6 persons. There are only two households from a sample of survey with more than 6 persons. The detailed results are shown as in table 2.2.

Table 2. 2: Household size

District	Commune	< 3 members	3–4 members	5–6 members	> 6 members	Total
Hưng Hà	Tan Le	8	7	1	-	**16**
	Hung Nhan town	13	12	11	-	**36**
	Lien Hiep	23	29	8	1	**61**
	Phuc Khanh	6	3	7	1	**17**
	Thai Phuong	6	1	-	-	**7**

District	Commune	< 3 members	3–4 members	5–6 members	> 6 members	Total
	Hung Ha town	3	5	-	-	**8**
	Hong Linh	5	4	-	-	**9**
	Minh Khai	21	16	3	-	**40**
	Tan Hoa	3	5	-	-	**8**
Grand Total		**88**	**82**	**30**	**2**	**202**

Gender Distribution

With regard to the gender ratio, male rate (51.9%) is higher than female rate (48.1%) as average of the district and the rates are different from commune to communes. Some communes the rate of male is less and some communes the rate of male is higher than the rate of female. A detailed of surveyed results are described as in table 2.3 below.

Table 2. 3: Gender Distribution of HH Member in affected communes

District	Commune	No. of SES HH	Male		Female		Total	
			Person	%	Person	%	Person	%
Hung Ha	Tan Le	16	28	53.8%	24	46.2%	52	100%
	Hung Nhan town	36	67	48.6%	71	51.4%	138	100%
	Lien Hiep	61	113	51.1%	108	48.9%	221	100%
	Phuc Khanh	17	41	56.9%	31	43.1%	72	100%
	Thai Phuong	7	11	57.9%	8	42.1%	19	100%
	Hung Ha town	8	15	51.7%	14	48.3%	29	100%
	Hong Linh	9	19	70.4%	8	29.6%	27	100%
	Minh Khai	40	66	49.3%	68	50.7%	134	100%
	Tan Hoa	8	13	50.0%	13	50.0%	26	100%
Grand total		**202**	**373**	**51.9%**	**345**	**48.1%**	**718**	**100%**

Age distribution:

The age distribution of the affected HH surveyed is described in Table 2.4 below. In the aggregate, the table below show that the rate of people at the working age (from 15 to 60) is very high and the rate of the old people (over 60 year olds) is low. This shows very positive pictures of potential labour in the project area.

Table 2. 1: Age distribution of HH Member in affected communes

District	Commune	<15 years old	15–60 years old	>60 years old	Total
Hung Ha	Tan Le	3	40	9	**52**
	Hung Nhan town	22	94	22	**138**
	Lien Hiep	26	165	30	**221**

District	Commune	<15 years old	15–60 years old	>60 years old	Total
	Phuc Khanh	12	42	18	**72**
	Thai Phuong	0	15	4	**19**
	Hung Ha town	4	18	7	**29**
	Hong Linh	1	24	2	**27**
	Minh Khai	10	110	14	**134**
	Tan Hoa	5	18	3	**26**
Grand total		**83**	**526**	**109**	**718**

Education:

The surveyed results show that, 294/697 person surveyed have reached secondary level education, closely followed by those who have had high school education (109/697); with university (94/697), none of illiterate. These results show with a very positive status of education of the population in a project area.

Table 2. 2: Education Attainment of HH Member in affected communes

District	Commune	Illiterate	Primary	Secondary school	Not finished high school	High scho0ol	Vocational	University and above	Other	Total
Hung Ha	Tan Le	-	1	25	3	11	2	10	-	52
	Hung Nhan town	-	23	49	25	16	2	17	6	138
	Lien Hiep	-	27	88	25	33	17	25	6	221
	Phuc Khanh	-	12	17	13	10	4	12	4	72
	Thai Phuong	-	-	11	4	2	-	2	-	19
	Hung Ha town	-	3	7	-	13	1	5	-	29
	Hong Linh	-	1	9	7	5	3	2	-	27
	Minh Khai	-	8	66	14	16	9	18	3	134
	Tan Hoa	-	2	12	3	3	1	3	2	26
Grand total		**-**	**77**	**284**	**94**	**109**	**39**	**94**	**21**	**718**

Employment:

The surveyed results on the occupation of the affected households with the different activities/ business such as farming, husbandry, handicraft, running shops, restaurant, state employment, working for a private sector etc. are analysed and described as in table 2.6 below.

Table 2. 3: Occupational Distribution of HH Member in affected communes

Type of job	Locality																		Total	
	Tan Le		Hung Nhan town		Lien Hiep		Phuc Khanh		Thai Phuong		Hung Ha town		Hong Linh		Minh Khai		Tan Hoa			
	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%
Farming	10	4.0%	57	22.7%	79	31.5%	17	6.8%	11	4.4%	7	2.8%	15	6.0%	47	18.7%	8	3.2%	251	**100%**
Livestock	-	0.0%	-	0.0%	-	0.0%	1	100.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	**100%**
Selling goods	10	24.4%	3	7.3%	13	31.7%	3	7.3%	-	0.0%	1	2.4%	2	4.9%	6	14.6%	3	7.3%	41	**100%**
Restaurant/ eatery	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	100.0 %	-	0.0%	-	0.0%	-	0.0%	1	**100%**
Workers in factory	2	7.7%	4	15.4%	5	19.2%	3	11.5%	-	0.0%	2	7.7%	-	0.0%	9	34.6%	1	3.8%	26	**100%**
State employee	7	10.0%	14	20.0%	19	27.1%	12	17.1%	-	0.0%	8	11.4 %	1	1.4%	8	11.4%	1	1.4%	70	**100%**
Private employee	-	0.0%	2	20.0%	4	40.0%	1	10.0%	-	0.0%	-	0.0%	-	0.0%	2	20.0%	1	10.0%	10	**100%**
Work in transport field	1	50.0%	-	0.0%	-	0.0%	1	50.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	2	**100%**
Student/pupil	17	9.8%	32	18.4%	55	31.6%	13	7.5%	2	1.1%	7	4.0%	8	4.6%	33	19.0%	7	4.0%	174	**100%**
Housewife	5	31.3%	3	18.8%	2	12.5%	4	25.0%	-	0.0%	1	6.3%	-	0.0%	-	0.0%	1	6.3%	16	**100%**
Hire labor	-	0.0%	13	17.8%	25	34.2%	6	8.2%	6	8.2%	-	0.0%	1	1.4%	20	27.4%	2	2.7%	73	**100%**
Other	-	0.0%	4	12.5%	13	40.6%	7	21.9%	-	0.0%	2	6.3%	-	0.0%	6	18.8%	-	0.0%	32	**100%**
Grand total	**52**	**7.5%**	**132**	**18.9%**	**215**	**30.8%**	**68**	**9.8%**	**19**	**2.7%**	**29**	**4.2%**	**27**	**3.9 %**	**131**	**18.8%**	**24**	**3.4%**	**697**	**100%**

Social Policy Households:

Social policy households receive special cash allowances from the Government on the basis of having household members who are invalids, have heroic mothers, martyrs, and those who have contributed to the revolutions. The eligible HHs to social policy is listed and managed at the commune offices show that from the samples surveyed in the affected communes of Hung Ha district is with 82 households/ 202 households surveyed (40%). Of which, the Female Headed Households is 19 households, accounts of about 9.4 %.

Table 2. 4: Social Policy Households, Other Vulnerable Households and Single Female Headed Households (No. of Households)

District	Commune	Poor	Single Female Headed Household	Ethnic minorities	Lonely elder	Entitled to social assistance	Total
Hung Ha	Tan Le	-	1	1	-	3	**5**
	Hung Nhan town	2	4	-	1	4	**11**
	Lien Hiep	5	3	-	3	15	**26**
	Phuc Khanh	-	-	-	-	5	**5**
	Thai Phuong	1	2	-	-	2	**5**
	Hung Ha town	-	1	-	-	2	**3**
	Hong Linh	-	1	-	1	1	**3**
	Minh Khai	7	7	-	-	8	**22**
	Tan Hoa	2	-	-	-	-	**2**
Grand Total		**17**	**19**	**1**	**5**	**40**	**82**

Average Monthly Income

Table 2.8 shows that most of the interviewed families earn with income from VND 3,000,000 to VND 5,000,000 per month and only 2 few families have monthly income less than VND 1,000,000. There are 55 households from 202 surveyed households earning income with more than VND 5,000,000 per month.

Table 2. 5: Average Monthly Household Income of Affected Household (in million VND)

District	Commune	<VND 1 million	VND 1 million - < VND 3 million	VND 3 million – VND 5 million	> VND 5 million	Total
Hung Ha	Tan Le	-	3	9	4	16
	Hung Nhan town	-	9	20	7	36
	Lien Hiep	-	13	29	19	61
	Phuc Khanh	1	-	9	7	17
	Thai Phuong	-	4	3	-	7
	Hung Ha town	-	1	3	4	8

District	Commune	<VND 1 million	VND 1 million - < VND 3 million	VND 3 million – VND 5 million	> VND 5 million	Total
	Hong Linh	-	1	7	1	9
	Minh Khai	1	11	16	12	40
	Tan Hoa	-	2	5	1	8
Grand Total		**2**	**44**	**101**	**55**	**202**

Income - Expenditure Balance:

After comparing for gross income and gross expenditures, the picture on whether households have positive or negative income was derived. In the affected communes of Hung Ha district, this exercise revealed that 78.2% of total households end up with positive income or surplus after expenditures and 14.4% of the surveyed households are with incomes less than expenditures.

Table 2. 6: Income-Expenditure Balance of Affected Household

District	Commune	Income-Expenditure Balance							
		Income<Expense		Income=Expense		Income>Expense		Total	
		HH	%	HH	%	HH	%	HH	%
Hung Ha	Tan Le	3	18.8%	1	6.3%	12	75.0%	**16**	**100%**
	Hung Nhan town	4	11.1%	1	2.8%	31	86.1%	**36**	**100%**
	Lien Hiep	9	14.8%	5	8.2%	47	77.0%	**61**	**100%**
	Phuc Khanh	4	23.5%	1	5.9%	12	70.6%	**17**	**100%**
	Thai Phuong	2	28.6%	-	0.0%	5	71.4%	**7**	**100%**
	Hung Ha town	-	0.0%	1	12.5%	7	87.5%	**8**	**100%**
	Hong Linh	-	0.0%	-	0.0%	9	100.0%	**9**	**100%**
	Minh Khai	3	7.5%	6	15.0%	31	77.5%	**40**	**100%**
	Tan Hoa	4	50.0%	-	0.0%	4	50.0%	**8**	**100%**
Grand total		**29**	**14.4%**	**15**	**7.4%**	**158**	**78.2%**	**202**	**100%**

Credit /Access to Loan.

Table 2.10 shows that the rates of the households borrow loans from Banks (61.5%) and other institutions (30.8%) are high. The households said that they borrow money for farming and husbandry activities and for other businesses. Table 2.10, 2.11 described about the survey results on accessing loans and using loans from a sample of the affected households.

Table 2. 7: Access to Loan of Affected Female Headed Household

District	Commune	Loans from banks		Loans from other institutions		Loans from relatives, friends		Loans from other sources		Total	
		HH	%	HH	%	HH	%	HH	%	HH	%
Hung Ha	Tan Le	-	-	-	-	-	-	-	-	-	-
	Hung Nhan town	2	100%	-	-	-	-	-	-	2	100%
	Lien Hiep	2	66.7%	-	-	1	33.3%	-	-	3	100%
	Phuc Khanh	3	100%	-	-	-	-	-	-	3	100%
	Thai Phuong	-	-	-	-	-	-	-	-	-	-
	Hung Ha town	-	-	-	-	-	-	-	-	-	-
	Hong Linh	-	-	-	-	-	-	-	-	-	-
	Minh Khai	-	-	4	100%	-	-	-	-	4	100%
	Tan Hoa	1	100%	-	-	-	-	-	-	1	100%
Grand total		**8**	**61.5%**	**4**	**30.8%**	**1**	**7.7%**	-	-	**13**	**100%**

Purposes of using Loans

Table 2. 8: Purposes of using loans of Affected Female Headed Household

District	Commune	Agricultural production		Business		Household expenditure		Building houses		Other		Total	
		HH	%	HH	%	HH	%	HH	%	HH	%	HH	%
Hung Ha	Tan Le	-	-	-	-	-	-	-	-	-	-	-	-
	Hung Nhan town	**1**	**50%**	**1**	**50%**	-	-	-	-	-	-	**2**	**100%**
	Lien Hiep	-	-	-	-	**3**	**100%**	-	-	-	-	**3**	**100%**
	Phuc Khanh	-	-	-	-	-	-	-	-	-	-	-	-
	Thai Phuong	-	-	-	-	-	-	-	-	-	-	-	-
	Hung Ha town	-	-	-	-	-	-	-	-	-	-	-	-
	Hong Linh	-	-	-	-	-	-	-	-	-	-	-	-
	Minh Khai	-	-	-	-	**1**	**14.3%**	**3**	**42.9%**	**3**	**42.9%**	**7**	**100%**
	Tan Hoa	-	-	-	-	**1**	**100%**	-	-	-	-	**1**	**100%**
Grand total		**1**	**7.7%**	**1**	**7.7%**	**5**	**38.5%**	**3**	**23.1%**	**3**	**23.1%**	**13**	**100%**

Living facilities and Community Assets

Almost all of the households surveyed have motorbikes, television sets, refrigerator, furniture, and sanitation facilities such as septic toilet and running water, among others. Community physical infrastructures (village and commune link roads and community social services such as schools, healthcare centers, market etc.) are available and with locations that are not far from the affected households. The survey results on asset ownership, living amenities, cooking ways, community health etc. are shown in tables from 2.12 to 2.19 below.

Table 2. 9: Ownership of Living Facilities of Affected Households

District	Commune	Unit	No. of surveyed HHs	Tivi	Motor-bike	Bicycle	Electric fan	Cooker	Fridge	Pump	Washing machine	Gas stove	Hot water tank	Computer
Hưng Hà	Tan Le	HH	16	16	14	16	16	16	14	11	5	15	4	1
		%	100%	100%	88%	100%	100%	100%	88%	69%	31%	94%	25%	6%
	Hung Nhan town	HH	36	36	30	34	36	35	21	24	8	34	7	3
		%	100%	100%	83%	94%	100%	97%	58%	67%	22%	94%	19%	8%
	Lien Hiep	HH	61	61	53	60	61	61	34	53	5	53	12	4
		%	100%	100%	87%	98%	100%	100%	56%	87%	8%	87%	20%	7%
	Phuc Khanh	HH	17	17	14	15	17	17	13	14	-	16	-	4
		%	100%	100%	82%	88%	100%	100%	76%	82%	0%	94%	0%	24%
	Thai Phuong	HH	7	7	5	7	7	6	1	5	-	4	-	-
		%	100%	100%	71%	100%	100%	86%	14%	71%	0%	57%	0%	0%
	Hung Ha town	HH	8	8	8	8	8	8	8	5	4	8	1	1
		%	100%	100%	100%	100%	100%	100%	100%	63%	50%	100%	13%	13%
	Hong Linh	HH	9	9	8	9	9	8	3	8	1	9	1	-
		%	100%	100%	89%	100%	100%	89%	33%	89%	11%	100%	11%	0%
	Minh Khai	HH	40	38	36	38	40	38	17	31	3	31	5	2
		%	100%	95%	90%	95%	100%	95%	43%	78%	8%	78%	13%	5%
	Tan Hoa	HH	8	8	5	7	8	8	3	1	2	3	2	2
		%	100%	100%	63%	88%	100%	100%	38%	13%	25%	38%	25%	25%
Total		**HH**	**202**	**200**	**173**	**194**	**202**	**197**	**114**	**152**	**28**	**173**	**32**	**17**
		%	**100%**	**99%**	**86%**	**96%**	**100%**	**98%**	**56%**	**75%**	**14%**	**86%**	**16%**	**8%**

Table 2. 10: Water Source for Using of Affected Households

District	Commune	Unit	Water Source for Using								Total
			Well	Tap Water	River, spring, pond water	Mountain creek	Well shared with neighbours	Rain water	Buying from other	Drilled well	
Hung Ha	Tan Le	HH	-	-	-	-	-	-	-	16	**16**
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	**100%**
	Hung Nhan town	HH	4	13	-	-	-	1	9	9	**36**
		%	11.1%	36.1%	0.0%	0.0%	0.0%	2.8%	25.0%	25.0%	**100%**
	Lien Hiep	HH	1	-	-	-	-	-	-	60	**61**
		%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	98.4%	**100%**
	Phuc Khanh	HH	6	2	-	-	-	-	-	9	**17**
		%	35.3%	11.8%	0.0%	0.0%	0.0%	0.0%	0.0%	52.9%	**100%**
	Thai Phuong	HH	1	-	-	-	-	1	-	5	**7**
		%	14.3%	0.0%	0.0%	0.0%	0.0%	14.3%	0.0%	71.4%	**100%**
	Hung Ha town	HH	-	-	-	-	-	-	-	8	**8**
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	**100%**
	Hong Linh	HH	-	-	-	-	-	-	-	9	**9**
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	**100%**
	Minh Khai	HH	-	-	-	-	-	-	-	40	**40**
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	**100%**
	Tan Hoa	HH	4	2	-	-	-	-	-	2	**8**
		%	50.0%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	**100%**
Grand total		HH	**16**	**17**	**-**	**-**	**-**	**2**	**9**	**158**	**202**
		%	**7.9%**	**8.4%**	**0.0%**	**0.0%**	**0.0%**	**1.0%**	**4.5%**	**78.2%**	**100%**

Table 2. 11: Main Sources for Lighting of Affected Households

District	Commune	Unit	Main Sources for Lighting						Total
			Electricity	Battery	Wood/ Coal	Generator	Oil lamp	Other	
Hung Ha	Tan Le	HH	16	-	-	-	-	-	**16**
		%	100.0%	-	-	-	-	-	**100%**
	Hung Nhan town	HH	36	-	-	-	-	-	**36**
		%	100.0%	-	-	-	-	-	**100%**
	Lien Hiep	HH	61	-	-	-	-	-	**61**
		%	100.0%	-	-	-	-	-	**100%**
	Phuc Khanh	HH	17	-	-	-	-	-	**17**
		%	100.0%	-	-	-	-	-	**100%**
	Thai	HH	7	-	-	-	-	-	**7**

District	Commune	Unit	Main Sources for Lighting						Total
			Electricity	Battery	Wood/ Coal	Generator	Oil lamp	Other	
	Phuong	%	100.0%	-	-	-	-	-	**100%**
	Hung Ha town	HH	8	-	-	-	-	-	**8**
		%	100.0%	-	-	-	-	-	**100%**
	Hong Linh	HH	9	-	-	-	-	-	**9**
		%	100.0%	-	-	-	-	-	**100%**
	Minh Khai	HH	40	-	-	-	-	-	**40**
		%	100.0%	-	-	-	-	-	**100%**
	Tan Hoa	HH	8	-	-	-	-	-	**8**
		%	100.0%	-	-	-	-	-	**100%**
Grand total		**HH**	**202**	-	-	-	-	-	**202**
		%	**100.0%**	-	-	-	-	-	**100%**

Table 2. 12: Main Sources for Cooking of Affected Households

District	Commu-ne	Unit	Main Sources for Cooking							Total
			Electri city	Genera tor	Gas/Oil	Wood/ Coal	Biogas	Other	No response	
Hung Ha	Tan Le	HH	-	-	14	2	-	-	-	**16**
		%	0.0%	0.0%	87.5%	12.5%	0.0%	0.0%	0.0%	**100%**
	Hung Nhan town	HH	1	-	27	8	-	-	-	**36**
		%	2.8%	0.0%	75.0%	22.2%	0.0%	0.0%	0.0%	**100%**
	Lien Hiep	HH	-	-	32	25	-	4	-	**61**
		%	0.0%	0.0%	52.5%	41.0%	0.0%	6.6%	0.0%	**100%**
	Phuc Khanh	HH	1	-	11	5	-	-	-	**17**
		%	5.9%	0.0%	64.7%	29.4%	0.0%	0.0%	0.0%	**100%**
	Thai Phuong	HH	-	-	2	4	-	-	1	**7**
		%	0.0%	0.0%	28.6%	57.1%	0.0%	0.0%	14.3%	**100%**
	Hung Ha town	HH	-	-	8	-	-	-	-	**8**
		%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	**100%**
	Hong Linh	HH	-	-	5	4	-	-	-	**9**
		%	0.0%	0.0%	55.6%	44.4%	0.0%	0.0%	0.0%	**100%**
	Minh Khai	HH	1	-	23	16	-	-	-	**40**
		%	2.5%	0.0%	57.5%	40.0%	0.0%	0.0%	0.0%	**100%**
	Tan Hoa	HH	1	-	1	5	-	1	-	**8**
		%	12.5%	0.0%	12.5%	62.5%	0.0%	12.5%	0.0%	**100%**
Grand total		**HH**	**4**	**-**	**123**	**69**	**-**	**5**	**1**	**202**
		%	**2.0%**	**0.0%**	**60.9%**	**34.2%**	**0.0%**	**2.5%**	**0.5%**	**100%**

Table 2. 13: Common diseases in the community

District	Commune	Unit	Common diseases									Total
			Feel	Flu	Malaria	Cholera	Dysentery	Hepatitis	Infectious agent	Other	No response	
Hung Ha	Tan Le	HH	10	1	-	-	-	-	-	-	5	**16**
		%	62.5%	6.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	31.2%	**100%**
	Hung Nhan town	HH	22	7	-	-	-	-	-	1	6	**36**
		%	61.1%	19.4%	0.0%	0.0%	0.0%	0.0%	0.0%	2.8%	16.7%	**100%**
	Lien Hiep	HH	37	8	1	-	-	-	-	14	1	**61**
		%	60.7%	13.1%	1.6%	0.0%	0.0%	0.0%	0.0%	23.0%	1.6%	**100%**
	Phuc Khanh	HH	13	2	-	-	-	-	-	-	2	**17**
		%	76.5%	11.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.8%	**100%**
	Thai Phuong	HH	2	1	-	-	-	-	-	1	3	**7**
		%	28.6%	14.3%	0.0%	0.0%	0.0%	0.0%	0.0%	14.3%	42.9%	**100%**
	Hung Ha town	HH	4	2	-	-	-	-	-	-	2	**8**
		%	50.0%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	**100%**
	Hong Linh	HH	5	2	-	-	-	-	-	-	2	**9**
		%	55.6%	22.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	22.2%	**100%**
	Minh Khai	HH	25	3	1	-	-	-	-	-	11	**40**
		%	62.5%	7.5%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	27.5%	**100%**
	Tan Hoa	HH	6	2	-	-	-	-	-	-	-	**8**
		%	75.0%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**100%**
Grand total		HH	**124**	**28**	**2**	**-**	**-**	**-**	**-**	**16**	**32**	**202**
		%	**61.4%**	**13.9%**	**1.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**7.9%**	**15.8%**	**100%**

Table 2. 14: Access to health services

District	Commune	Unit	Commune health station				District hospital				Clinic/Nurse				Pharmacy				Traditional drug treatment			
			<1km	**1-2km**	**2-5km**	**>5km**	**<1km**	**1-2km**	**2-5km**	**>5km**	**<1km**	**1-2km**	**2-5km**	**>5km**	**<1km**	**1-2km**	**2-5km**	**>5km**	**<1km**	**1-2km**	**2-5km**	**>5km**
Hưng Ha	Tan Le	HH	7	-	-	-	-	5	-	-	-	2	-	-	-	-	-	-	-	-	-	-
		%	50.0%	0.0%	0.0%	0.0%	0.0%	35.7%	0.0%	0.0%	0.0%	14.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Hung Nhan town	HH	13	2	1	-	1	1	1	3	2	-	-	-	16	-	-	-	-	-	-	-
		%	32.5%	5.0%	2.5%	0.0%	2.5%	2.5%	2.5%	7.5%	5.0%	0.0%	0.0%	0.0%	40.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Lien Hiep	HH	34	22	1	-	-	2	3	44	-	-	-	-	2	3	1	-	-	-	-	-
		%	30.4%	19.6%	0.9%	0.0%	0.0%	1.8%	2.7%	39.3%	0.0%	0.0%	0.0%	0.0%	1.8%	2.7%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%
	Phuc Khanh	HH	2	-	1	1	1	-	1	1	1	-	2	1	10	-	-	-	1	-	1	1
		%	8.3%	0.0%	4.2%	4.2%	4.2%	0.0%	4.2%	4.2%	4.2%	0.0%	8.3%	4.2%	41.7%	0.0%	0.0%	0.0%	4.2%	0.0%	4.2%	4.2%
	Thai Phuong	HH	2	-	-	-	-	1	-	-	-	-	1	-	2	-	-	-	-	-	-	-
		%	33.3%	0.0%	0.0%	0.0%	0.0%	16.7%	0.0%	0.0%	0.0%	0.0%	16.7%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Hung Ha town	HH	2	-	-	-	1	3	-	-	1	-	-	-	4	1	-	-	-	-	-	-
		%	16.7%	0.0%	0.0%	0.0%	8.3%	25.0%	0.0%	0.0%	8.3%	0.0%	0.0%	0.0%	33.3%	8.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Hong Linh	HH	8	-	-	-	-	-	-	-	-	-	2	-	6	-	-	-	-	-	-	-
		%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.5%	0.0%	37.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Minh Khai	HH	18	3	-	-	1	10	8	1	-	-	1	-	2	3	-	-	-	-	-	-
		%	38.3%	6.4%	0.0%	0.0%	2.1%	21.3%	17.0%	2.1%	0.0%	0.0%	2.1%	0.0%	4.3%	6.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Tan Hoa	HH	1	2	1	-	-	-	3	-	-	-	-	-	4	4	-	-	-	-	-	-
		%	6.7%	13.3%	6.7%	0.0%	0.0%	0.0%	20.0%	0.0%	0.0%	0.0%	0.0%	0.0%	26.7%	26.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total		HH	**87**	**29**	**4**	**1**	**4**	**22**	**16**	**49**	**4**	**2**	**6**	**1**	**46**	**11**	**1**	**0**	**1**	**0**	**1**	**1**
		%	**30.4%**	**10.1%**	**1.4%**	**0.3%**	**1.4%**	**7.7%**	**5.6%**	**17.1%**	**1.4%**	**0.7%**	**2.1%**	**0.3%**	**16.1%**	**3.8%**	**0.3%**	**0.0%**	**0.3%**	**0.0%**	**0.3%**	**0.3%**

Table 2. 15: Access to education services

Commune	Unit	Preschool				Elementary school				Secondary school				High school				Vocational school			
		<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km
Tan Le	HH	-	-	-	-	1	-	-	-	-	2	1	-	1	1	2	-	-	-	5	-
	%	0.0%	0.0%	0.0%	0.0%	7.7%	0.0%	0.0%	0.0%	0.0%	15.4%	7.7%	0.0%	7.7%	7.7%	15.4%	0.0%	0.0%	0.0%	38.5%	0.0%
Hung Nhan town	HH	1	-	-	-	2	4	1	-	2	4	1	-	2	2	-	1	1	-	-	2
	%	4.3%	0.0%	0.0%	0.0%	8.7%	17.4%	4.3%	0.0%	8.7%	17.4%	4.3%	0.0%	8.7%	8.7%	0.0%	4.3%	4.3%	0.0%	0.0%	8.7%
Lien Hiep	HH	-	-	-	-	2	9	-	-	1	10	-	-	-	4	6	2	-	-	-	15
	%	0.0%	0.0%	0.0%	0.0%	4.1%	18.4%	0.0%	0.0%	2.0%	20.4%	0.0%	0.0%	0.0%	8.2%	12.2%	4.1%	0.0%	0.0%	0.0%	30.6%
Phuc Khanh	HH	-	-	-	-	4	1	-	-	1	-	-	-	-	-	-	-	-	-	-	1
	%	0.0%	0.0%	0.0%	0.0%	57.1%	14.3%	0.0%	0.0%	14.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	14.3%
Thai Phuong	HH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Hung Ha town	HH	-	-	-	-	2	1	-	-	-	1	-	-	-	-	-	-	-	-	-	0
	%	0.0%	0.0%	0.0%	0.0%	50.0%	25.0%	0.0%	0.0%	0.0%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Hong Linh	HH	-	-	-	-	1	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-
	%	0.0%	0.0%	0.0%	0.0%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	75.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Minh Khai	HH	1	-	-	-	2	1	-	-	-	6	-	-	-	4	1	-	-	-	-	-
	%	6.7%	0.0%	0.0%	0.0%	13.3%	6.7%	0.0%	0.0%	0.0%	40.0%	0.0%	0.0%	0.0%	26.7%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Tan Hoa	HH	-	-	-	-	-	-	-	-	-	1	1	-	-	-	2	1	-	-	-	-
	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%	20.0%	0.0%	0.0%	0.0%	40.0%	20.0%	0.0%	0.0%	0.0%	0.0%
Total	HH	**2**	**-**	**-**	**-**	**14**	**16**	**1**	**-**	**4**	**24**	**3**	**-**	**3**	**14**	**11**	**4**	**1**	**-**	**5**	**19**
	%	**1.7%**	**0.0%**	**0.0%**	**0.0%**	**11.6%**	**13.2%**	**0.8%**	**0.0%**	**3.3%**	**19.8%**	**2.5%**	**0.0%**	**2.5%**	**11.6%**	**9.1%**	**3.3%**	**0.8%**	**0.0%**	**4.1%**	**15.7%**

Table 2.19: Access to other services, culture works...

Commune	Unit	Market				Stadium				Sport area				Pagoda/Temple/Church				Entertainment park			
		<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km
Tan Le	HH	10	-	-	-	-	-	-	-	4	1	-	-	5	2	-	-	-	-	1	-
	%	43.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	17.4%	4.3%	0.0%	0.0%	21.7%	8.7%	0.0%	0.0%	0.0%	0.0%	4.3%	0.0%
Hung Nhan town	HH	22	2	-	-	-	-	-	-	3	2	-	-	17	1	-	3	-	-	-	3
	%	41.5%	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.7%	3.8%	0.0%	0.0%	32.1%	1.9%	0.0%	5.7%	0.0%	0.0%	0.0%	5.7%
Lien Hiep	HH	34	24	-	-	-	-	-	-	16	11	1	2	7	36	4	8	1	-	-	12
	%	21.8%	15.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.3%	7.1%	0.6%	1.3%	4.5%	23.1%	2.6%	5.1%	0.6%	0.0%	0.0%	7.7%
Phuc Khanh	HH	15	1	-	-	-	-	-	-	1	-	-	-	15	1	-	-	1	5	-	-
	%	38.5%	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	0.0%	0.0%	0.0%	38.5%	2.6%	0.0%	0.0%	2.6%	12.8%	0.0%	0.0%
Thai Phuong	HH	3	-	-	-	-	-	-	-	1	-	-	-	1	-	-	1	-	-	-	1
	%	42.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	14.3%	0.0%	0.0%	0.0%	14.3%	0.0%	0.0%	14.3%	0.0%	0.0%	0.0%	14.3%
Hung Ha town	HH	7	-	-	-	-	-	-	-	1	-	-	-	5	1	1	-	-	-	1	-
	%	43.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.3%	0.0%	0.0%	0.0%	31.3%	6.3%	6.3%	0.0%	0.0%	0.0%	6.3%	0.0%
Hong Linh	HH	8	-	-	-	-	-	-	-	4	-	-	-	2	1	1	-	-	-	1	-
	%	47.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	23.5%	0.0%	0.0%	0.0%	11.8%	5.9%	5.9%	0.0%	0.0%	0.0%	5.9%	0.0%
Minh Khai	HH	21	-	-	-	-	-	-	-	6	-	-	-	10	1	2	1	-	-	3	1
	%	46.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.3%	0.0%	0.0%	0.0%	22.2%	2.2%	4.4%	2.2%	0.0%	0.0%	6.7%	2.2%
Tan Hoa	HH	6	2	-	-	-	-	-	-	-	-	-	-	6	2	-	-	-	-	-	-
	%	37.5%	12.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	37.5%	12.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	HH	**126**	**29**	-	-	-	-	-	-	**36**	**14**	**1**	**2**	**68**	**45**	**8**	**13**	**2**	**5**	**6**	**17**
	%	**33.9%**	**7.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**9.7%**	**3.8%**	**0.3%**	**0.5%**	**18.3%**	**12.1%**	**2.2%**	**3.5%**	**0.5%**	**1.3%**	**1.6%**	**4.6%**

Living standard

Table 2.20 analysed about the trend of living standards of the affected households in the recent last three years. The results show that the majority of the households declared with no change (62.9%); about 32.2 % declared that they are better off and about 5.0% the households are worse off.

Table 2. 20: Household living standard changes (last 3 years)

District	Commune	No change		Better		Worse		Total	
		HH	%	HH	%	HH	%	HH	%
Hung Ha	Tan Le	8	50.0%	7	43.8%	1	6.3%	16	100%
	Hung Nhan town	20	55.6%	13	36.1%	3	8.3%	36	100%
	Lien Hiep	41	67.2%	18	29.5%	2	3.3%	61	100%
	Phuc Khanh	13	76.5%	4	23.5%	-	0.0%	17	100%
	Thai Phuong	6	85.7%	-	0.0%	1	14.3%	7	100%
	Hung Ha town	3	37.5%	5	62.5%	-	0.0%	8	100%
	Hong Linh	8	88.9%	1	11.1%	-	0.0%	9	100%
	Minh Khai	24	60.0%	13	32.5%	3	7.5%	40	100%
	Tan Hoa	4	50.0%	4	50.0%	-	0.0%	8	100%
Grand total		**127**	62.9%	**65**	32.2%	**10**	**5.0%**	**202**	100%

Table 2.21 shows the results of consultation for the feedback from the affected households to the project development. It shows with a very positive results that nearly 100 % of the survey households support for the project development. It means that with the project, local people see a lot of benefits to them.

Public consultation on the behaviour of people to the project

Table 2. 21: Support implementation of the project

District	Commune	Yes		No		Total	
		HH	%	HH	%	HH	%
Hung Ha	Tan Le	16	100%	-	-	16	100%
	Hung Nhan town	36	100%	-	-	36	100%
	Lien Hiep	61	100%	-	-	61	100%
	Phuc Khanh	17	100%	-	-	17	100%
	Thai Phuong	7	100%	-	-	7	100%
	Hung Ha town	8	100%	-	-	8	100%
	Hong Linh	9	100%	-	-	9	100%
	Minh Khai	39	97.5%	1	2.5%	40	100%
	Tan Hoa	8	100%	-	-	8	100%
Grand total		**201**	**99.5%**	**1**	**0.5%**	**202**	**100%**

Gender issues and Ethnic Minority

Table 2.21 shows the surveyed results analysed by the gender (male and female) by the different activities. It shows with the results that most of economic development activities are done by both men and women. However, with farming activities, women participate to the activities more than men.

Table 2.22 shows that, women participate the community meetings more than men, but the rate of men making decisions is much higher than women.

Table 2.22: Division of Labor

#	Division of labor	Unit	Tan Le		Hung Nhan town		Lien Hiep		Phuc Khanh		Thai Phuong		Hung Ha town		Hong Linh		Minh Khai		Tan Hoa	
			Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%
1	Land preparation	Male	-	0.0%	-	0.0%	4	66.7%	-	0.0%	-	0.0%	-	0.0%	1	16.7%	1	16.7%	-	0.0%
		Female	2	9.1%	1	4.5%	8	36.4%	-	0.0%	-	0.0%	1	4.5%	-	0.0%	11	50.0%	1	4.5%
		Both	7	5.1%	33	24.1%	43	31.4%	14	10.2%	6	4.4%	3	2.2%	7	5.1%	26	19.0%	5	3.6%
2	Cultivation	Male	-	0.0%	-	0.0%	4	66.7%	-	0.0%	-	0.0%	-	0.0%	1	16.7%	1	16.7%	-	0.0%
		Female	3	13.0%	1	4.3%	9	39.1%	-	0.0%	-	0.0%	1	4.3%	-	0.0%	11	47.8%	1	4.3%
		Both	6	4.4%	32	23.5%	42	30.9%	14	10.3%	6	4.4%	3	2.2%	8	5.9%	26	19.1%	5	3.7%
3	Sowing	Male	-	0.0%	-	0.0%	4	80.0%	-	0.0%	-	0.0%	-	0.0%	1	20.0%	-	0.0%	-	0.0%
		Female	3	13.0%	1	4.3%	9	39.1%	-	0.0%	-	0.0%	1	4.3%	-	0.0%	11	47.8%	1	4.3%
		Both	6	4.4%	33	24.1%	42	30.7%	14	10.2%	6	4.4%	3	2.2%	8	5.8%	26	19.0%	5	3.6%
4	Weeding	Male	-	0.0%	-	0.0%	3	75.0%	-	0.0%	-	0.0%	-	0.0%	1	25.0%	-	0.0%	-	0.0%
		Female	3	12.0%	3	12.0%	10	40.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	11	44.0%	1	4.0%
		Both	6	4.4%	31	23.0%	42	31.1%	14	10.4%	6	4.4%	3	2.2%	8	5.9%	26	19.3%	5	3.7%
5	Pesticide spraying	Male	2	20.0%	1	10.0%	6	60.0%	-	0.0%	-	0.0%	1	10.0%	1	10.0%	1	10.0%	-	0.0%
		Female	2	8.7%	1	4.3%	9	39.1%	-	0.0%	-	0.0%	-	0.0%	1	4.3%	11	47.8%	1	4.3%
		Both	5	3.8%	32	24.2%	40	30.3%	14	10.6%	6	4.5%	2	1.5%	7	5.3%	26	19.7%	5	3.8%
6	Harvest	Male	-	0.0%	-	0.0%	4	57.1%	-	0.0%	-	0.0%	-	0.0%	2	28.6%	1	14.3%	-	0.0%
		Female	2	10.5%	2	10.5%	6	31.6%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	10	52.6%	1	5.3%
		Both	7	5.1%	32	23.2%	45	32.6%	13	9.4%	6	4.3%	3	2.2%	7	5.1%	27	19.6%	5	3.6%
7	Vegetable growing	Male	-	0.0%	-	0.0%	3	75.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	25.0%	-	0.0%
		Female	3	14.3%	2	9.5%	14	66.7%	-	0.0%	1	4.8%	1	4.8%	-	0.0%	3	14.3%	-	0.0%
		Both	2	2.2%	26	29.2%	36	40.4%	11	12.4%	3	3.4%	2	2.2%	2	2.2%	6	6.7%	3	3.4%
8	Livestock	Male	-	0.0%	-	0.0%	3	100.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	-	0.0%	2	18.2%	5	45.5%	-	0.0%	-	0.0%	-	0.0%	1	9.1%	3	27.3%	-	0.0%

#	Division of labor	Unit	Tan Le		Hung Nhan town		Lien Hiep		Phuc Khanh		Thai Phuong		Hung Ha town		Hong Linh		Minh Khai		Tan Hoa	
			Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%
		Both	3	3.5%	18	20.9%	45	52.3%	7	8.1%	4	4.7%	3	3.5%	1	1.2%	6	7.0%	2	2.3%
9	Small business	Male	-	0.0%	-	0.0%	1	50.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	50.0%	-	0.0%
		Female	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	50.0%	-	0.0%	1	50.0%	-	0.0%
		Both	3	27.3%	1	9.1%	6	54.5%	1	9.1%	-	0.0%	-	0.0%	2	18.2%	1	9.1%	-	0.0%
10	Workers	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	-	0.0%	2	100.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Both	-	0.0%	1	100.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
11	Labor migration (domestic)	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Both	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%

Table 2.23: Participate in Community Activities

#	Activity	Unit	Tan Le		Hung Nhan town		Lien Hiep		Phuc Khanh		Thai Phuong		Hung Ha town		Hong Linh		Minh Khai		Tan Hoa	
			Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%
1	Attend community meetings	Male	3	5.3%	9	15.8 %	20	35.1 %	5	8.8%	1	1.8 %	1	1.8 %	1	1.8 %	18	31.6 %	2	3.5%
		Female	3	33.3 %	1	11.1 %	2	22.2 %	-	0.0%	-	0.0 %	-	0.0 %	-	0.0 %	5	55.6 %	1	11.1 %
		Both	10	9.1%	20	18.2 %	38	34.5 %	11	10.0 %	6	5.5 %	7	6.4 %	8	7.3 %	16	14.5 %	4	3.6%
2	Participate in decision making	Male	2	4.4%	4	8.9%	19	42.2 %	5	11.1 %	1	2.2 %	1	2.2 %	1	2.2 %	11	24.4 %	3	6.7%
		Female	3	20.0 %	6	40.0 %	2	13.3 %	-	0.0%	-	0.0 %	-	0.0 %	-	0.0 %	6	40.0 %	1	6.7%
		Both	6	5.8%	23	22.1 %	38	36.5 %	11	10.6 %	6	5.8 %	4	3.8 %	7	6.7 %	15	14.4 %	-	0.0%
3	Join local organizations	Male	1	2.4%	2	4.8%	19	45.2 %	5	11.9 %	1	2.4 %	-	0.0 %	1	2.4 %	11	26.2 %	3	7.1%
		Female	1	7.7%	4	30.8 %	2	15.4 %	-	0.0%	-	0.0 %	-	0.0 %	0	0.0 %	6	46.2 %	1	7.7%
		Both	10	9.2%	20	18.3 %	39	35.8 %	8	7.3%	6	5.5 %	7	6.4 %	8	7.3 %	17	15.6 %	4	3.7%
4	Others	Male	-	0.0%	-	0.0%	17	70.8 %	-	0.0%	-	0.0 %	-	0.0 %	-	0.0 %	4	16.7 %	3	12.5 %
		Female	-	0.0%	1	10.0 %	2	20.0 %	-	0.0%	-	0.0 %	-	0.0 %	-	0.0 %	6	60.0 %	1	10.0 %
		Both	4	7.8%	3	5.9%	38	74.5 %	-	0.0%	-	0.0 %	2	3.9 %	1	2.0 %	7	13.7 %	-	0.0%

Survey sample shows that there is only one Ethnic Minority in Tan Le commune, this family move from the Northern mountainous region to the plain area and living with Kinh people. There is nothing different from this family and others on the aspects of economic activities, language and culture. This household would be affected with about 35 m2 of non-residential land, accounts with a small rate from the total land the household holding.

Table 2. 24: Number of Affected Ethnic Minority Households by Commune

District	Commune	Total number of affected HH	Number of affected Ethnic Minority households	Number of persons
Hung Ha	Tan Le	54	**1**	**1**
	Hung Nhan town	119	-	
	Lien Hiep	189	-	
	Phuc Khanh	53	-	
	Thai Phuong	12	-	
	Hung Ha town	22	-	
	Hong Linh	30	-	
	Minh Khai	95	-	
	Tan Hoa	8	-	
Total		**582**	**1**	**1**

Table 2. 25: Project Impacts on Land and House of the Ethnic Minority

District	Commune	Affected residential land		Affected house		Affected agricultural land	
		No. of HHs	Area (m^2)	No. of HHs	Area (m^2)	No. of HHs	Area (m^2)
Hung Ha	Tan Le	1	35	-	-	-	-
	Hung Nhan town	-	-	-	-	-	-
	Lien Hiep	-	-	-	-	-	-
	Phuc Khanh	-	-	-	-	-	-
	Thai Phuong	-	-	-	-	-	-
	Hung Ha town	-	-	-	-	-	-
	Hong Linh	-	-	-	-	-	-
	Minh Khai	-	-	-	-	-	-
	Tan Hoa	-	-	-	-	-	-
Total		**1**	**35**	**-**	**-**	**-**	**-**

Table 2. 26: Sex-Disaggregated of the Affected Ethnic Minority Household

District	Commune	EM Household	Male		Female		Household members
			Person	%	Person	%	
Hung Ha	Tan Le	1	1	100%	-	0%	1
	Hung Nhan town	-	-	-	-	-	-
	Lien Hiep	-	-	-	-	-	-
	Phuc Khanh	-	-	-	-	-	-
	Thai Phuong	-	-	-	-	-	-
	Hung Ha town	-	-	-	-	-	-
	Hong Linh	-	-	-	-	-	-
	Minh Khai	-	-	-	-	-	-
	Tan Hoa	-	-	-	-	-	-
Grand Total		1	1	100%	-	-	1

Table 2.27 shows the results of survey on the age distribution of female with less than 15 years old; from 15 to 60 years old and above 60 years old. Majority of women are at the working age. Follows by the rate of over 60 years old and then with the age under 15 years olds

Table 2. 27: Age Distribution of Females from Affected Households

District	Commune	<15 years old	15–60 years old	>60 years old	Total
Hung Ha	Tan Le	1	18	5	**24**
	Hung Nhan town	12	46	13	**71**
	Lien Hiep	12	82	14	**108**
	Phuc Khanh	7	19	5	**31**
	Thai Phuong	-	6	2	**8**
	Hung Ha town	2	9	3	**14**
	Hong Linh	1	7	-	**8**
	Minh Khai	4	56	8	**68**
	Tan Hoa	3	8	2	**13**
Grand total		**42**	**251**	**52**	**345**

Table 2.28 gives the results of survey on income of female headed households. From 25 surveyed female headed households, there are 12 households (about 50%) with income from VND 3,000,000 to VND 5,000,000. About 25 % with income less than VND 3,000,000 and 25 % with income more than VND 5,000,000.

Table 2. 28: Monthly Incomes of Affected Households Headed by Women

District	Commune	Under VND 1,000,000	VND 1 million– VND 3 million	VND 3 million– VND 5 million	Over VND 5,000,000	Total
Hung Ha	Tan Le	-	-	1	-	1
	Hung Nhan town	-	2	3	2	7
	Lien Hiep	-	1	5	-	6
	Phuc Khanh	-	-	-	1	1
	Thai Phuong	-	-	-	-	-
	Hung Ha town	-	-	-	1	1
	Hong Linh	-	-	-	-	-
	Minh Khai	1	2	3	2	8
	Tan Hoa	-	1	-	-	1
Grand total		**1**	**6**	**12**	**6**	**25**

Table 2.29 shows the detailed results of survey on the employments of the project affected HHs, table 2.30 describes about the education levels. It shows that a majority of people are at a Secondary School level.

Table 2. 29: Occupational Distribution of Females in Affected Households

Type of job	Locality																			
	Tan Le		Hung Nhan town		Lien Hiep		Phuc Khanh		Thai Phuong		Hung Ha town		Hong Linh		Minh Khai		Tan Hoa		Total	
	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%
Farming	7	5.6%	16	12.9%	40	32.3%	6	4.8%	4	3.2%	4	3.2%	6	4.8%	35	28.2%	6	4.8%	124	**100%**
Livestock	-	0.0%	-	0.0%	-	0.0%	1	100.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	**100%**
Selling goods	5	19.2%	3	11.5%	7	26.9%	3	11.5%	-	0.0%	1	3.8%	2	7.7%	4	15.4%	1	3.8%	26	**100%**
Restaurant /eatery	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	100.0%	-	0.0%	-	0.0%	-	0.0%	1	**100%**
Workers in factory	-	0.0%	-	0.0%	1	33.3%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	2	66.7%	-	0.0%	3	**100%**
State employee	1	20.0%	-	0.0%	3	60.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	20.0%	-	0.0%	5	**100%**
Private employee	-	0.0%	1	25.0%	2	50.0%	1	25.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	4	**100%**
Work in transport field	-	0.0%	-	0.0%	-	0.0%	1	100.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	**100%**
Student/Pupil pupil	6	10.5%	10	17.5%	21	36.8%	4	7.0%	1	1.8%	2	3.5%	2	3.5%	11	19.3%	-	0.0%	57	**100%**
Housewife	4	20.0%	8	40.0%	2	10.0%	4	20.0%	-	0.0%	1	5.0%	-	0.0%	-	0.0%	1	5.0%	20	**100%**
Hire labor	-	0.0%	2	7.4%	10	37.0%	4	14.8%	1	3.7%	-	0.0%	-	0.0%	10	37.0%	-	0.0%	27	**100%**
Other	-	0.0%	-	0.0%	4	44.4%	-	0.0%	-	0.0%	2	22.2%	-	0.0%	3	33.3%	-	0.0%	9	**100%**
Grand total	**23**	**8.3%**	**40**	**14.4%**	**90**	**32.4%**	**24**	**8.6%**	**6**	**2.2%**	**11**	**4.0%**	**10**	**3.6%**	**66**	**23.7%**	**8**	**2.9%**	**278**	**100%**

Note: There are total of 345 women, including 278 women at the working age.

Table 2. 30: Education Attainment of Females in Affected Households

District	Commune	Illiterate	Primary	Secondary school	Not finished high school	High school	Vocational	University and above	Other	Total
Hung Ha	Tan Le	-	1	11	3	4	-	4	-	23
	Hung Nhan	-	10	21	11	7	1	4	-	54
	Lien Hiep	-	17	55	9	14	5	8	-	108
	Phuc Khanh	-	4	7	9	3	2	2	-	27
	Thai Phuong	-	-	6	1	1	-	-	-	8
	Hung Ha	-	1	5	-	6	1	1	-	14
	Hong Linh	-	1	4	3	2	-	-	-	10
	Minh Khai	-	8	37	10	4	4	5	-	68
	Tan Hoa	-	2	6	2	2	1	-	-	13
Total		**-**	**44**	**152**	**48**	**43**	**14**	**24**	**-**	**325**

Note: There are total of 345 women, of which 20 persons have not reached school age

2. Section Vo Hoi – Diem Dien

Using the socio-economic survey questionnaire prepared for RP preparation, the total number of households surveyed was 161 households in Thai Thuy and Dong Hung district; accounts for about 41% of the total affected households. Of which there are 72 severely affected households were surveyed, accounts about 50.3 % from the total number of the surveyed households. Details of survey are shown as in table 2.31.

Table 2. 31: Sample of SES in each communes

TT	Commune	Number of affected HHs	Severely affected households (SAH)	Number of survey HHs	% from total HHs	SAH with surveyed	% of SAH were surveyed	Non SAH with survey	% of non SAH were surveyed
1	2	3	4	5	6=5/3	7	8=7/4	9	10=9/5
I	**Thai Thuy**	**343**	**132**	**138**	**40%**	**61**	**46.2%**	**77**	**56%**
1.1	Diem Dien town	3	-	3	100%	-	-	3	100%
1.2	Thai Son	39	16	16	41%	7	43.8%	9	56.3%
1.3	Thai Thuy	12	5	9	75%	5	100%	4	44.4%
1.4	Thuy Lien	21	5	7	33.3%	2	40%	5	71.4%
1.5	Thai Giang	104	49	38	36.5%	18	36.7%	20	52.6%
1.6	Thai Duong	89	42	36	40.4%	20	47.6%	16	44.4%
1.7	Thuy Ha	75	15	29	39%	9	60.0%	20	69.0%
II	**Dong Hung**	**50**	**11**	**23**	46%	**11**	100.0%	**12**	52.2%
2.1	Dong Kinh	8	-	6	75%	-	-	6	100.0%
2.2	Dong Tan	42	11	17	40%	11	100.0%	6	35.3%
Total		**393**	**143**	**161**	**41.0%**	**72**	**50.3%**	**89**	**55.3%**

Household Size

A majority of the affected HHs is with a family size of less than 3 persons, then follows by the size of from 3-4 persons and from 5-6 persons. There is no household from a sample of survey with more than 6 persons. The detailed results are shown as in table 2.32.

Table 2. 32: Household size

#	District/ Commune	< 3 heads	3–4 heads	5–6 heads	> 6 heads	Total
I	**Thai Thuy**	**73**	**45**	**20**	**-**	**138**
1.1	Diem Dien town	1	1	1	**-**	**3**
1.2	Thai Son	8	6	2	**-**	**16**
1.3	Thai Thuy	5	2	2	**-**	**9**
1.4	Thuy Lien	6	1	-	**-**	**7**
1.5	Thai Giang	17	12	9	**-**	**38**
1.6	Thai Duong	21	12	3	**-**	**36**
1.7	Thuy Ha	15	11	3	**-**	**29**
II	**Dong Hung**	**11**	**11**	**1**	**-**	**23**
2.1	Dong Kinh	2	4	**-**	**-**	**6**
2.2	Dong Tan	9	7	1	**-**	**17**
Total		**84**	**56**	**21**	**-**	**161**

Gender Distribution

With regard to the gender ratio, male rate (53.7%) is higher than female rate (46.3%) as average of the district and the rates are different from commune to communes. Some communes the rate of male is less and some communes the rate of male is higher than the rate of female. A detailed of surveyed results are described as in table 2.33 below.

Table 2. 33: Gender Distribution of HH Member in affected communes

#	District/ Commune	Total with SES	Male		Female		Total	
			Number of head	%	Number of head	%	Number of head	%
I	**Thai Thuy**	**138**	**252**	**53.5%**	**219**	**46.5%**	**471**	**100%**
1.1	Diem Dien town	3	4	36.4%	7	63.6%	11	100%
1.2	Thai Son	16	30	55.6%	24	44.4%	54	100%
1.3	Thai Thuy	9	16	51.6%	15	48.4%	31	100%
1.4	Thuy Lien	7	14	66.7%	7	33.3%	21	100%
1.5	Thai Giang	38	73	52.5%	66	47.5%	139	100%
1.6	Thai Duong	36	60	51.7%	56	48.3%	116	100%
1.7	Thuy Ha	29	55	55.6%	44	44.4%	99	100%

#	District/ Commune	Total with SES	Male		Female		Total	
			Number of head	%	Number of head	%	Number of head	%
II	**Dong Hung**	**23**	**43**	**55.1%**	**35**	**44.9%**	**78**	**100%**
2.1	Dong Kinh	6	11	52.4%	10	47.6%	21	100%
2.2	Dong Tan	17	32	56.1%	25	43.9%	57	100%
Total		**161**	**295**	**53.7%**	**254**	**46.3%**	**549**	**100%**

Age distribution:

The age distribution of the affected HH surveyed is described in Table 2.34 below. In the aggregate, the table below show that the rate of people at the working age (from 15 to 60) is very high and the rate of the old people (over 60 year olds) is low. This shows very positive pictures of potential labour in the project area.

Table 2. 34: Age distribution of HH Member in affected communes

#	District/Commune	< 15 years old	From 15–60 years old	>60 years old	Total
I	**Thai Thuy**	**46**	**375**	**50**	**471**
1.1	Diem Dien town	4	5	2	**11**
1.2	Thai Son	2	48	4	**54**
1.3	Thai Thuy	3	22	6	**31**
1.4	Thuy Lien	1	19	1	**21**
1.5	Thai Giang	13	113	13	**139**
1.6	Thai Duong	12	87	17	**116**
1.7	Thuy Ha	11	81	7	**99**
II	**Dong Hung**	**8**	**68**	**2**	**78**
2.1	Dong Kinh	4	17	0	**21**
2.2	Dong Tan	4	51	2	**57**
Total		**54**	**443**	**52**	**549**

Education:

The surveyed results show that, 221/549 persons surveyed have reached secondary level education, closely followed by those who have had high school education (86/549); with university and above (60/549), none of illiterate. These results show with a very positive status of education of the population in a project area.

Table 2. 35: Education Attainment of HH Member in affected communes

#	District/ Commune	Illite rate	Prim ary Scho ol	Secon dary School	Not yet finished for high School	High Scho ol	Vocati onal traini ng	University and above	Others (under school age)	Total
I	**Thai Thuy**	**-**	**43**	**200**	**67**	**68**	**32**	**46**	**15**	**471**
1.1	Diem Dien town	-	1	4	-	4	-	1	1	11
1.2	Thai Son	-	7	22	11	5	4	5	-	54
1.3	Thai Thuy	-	1	11	6	7	2	4	-	31
1.4	Thuy Lien	-	2	11	2	3	3	-	-	21
1.5	Thai Giang	-	15	65	13	23	11	6	6	139
1.6	Thai Duong	-	9	45	18	18	5	15	6	116
1.7	Thuy Ha	-	8	42	17	8	7	15	2	99
II	**Dong Hung**	**-**	**6**	**21**	**16**	**18**	**1**	**14**	**2**	**78**
2.1	Dong Kinh	-	3	2	1	12	0	3	-	21
2.2	Dong Tan	-	3	19	15	6	1	11	2	57
Total		**-**	**49**	**221**	**83**	**86**	**33**	**60**	**17**	**549**

Employment:

The surveyed results on the occupation of the affected households with the different activities/ business such as farming, husbandry, handicraft, running shops, restaurant, state employment, working for a private sector etc. are analysed and described as in table 2.36 below.

Table 2. 36: Occupational Distribution of HH Member in affected communes

Job	Thai Thuy														Dong Hung				Total	
	Diem Dien town		Thai Son		Thai Thuy		Thai Lien		Thai Giang		Thai Duong		Thuy Ha		Dong Kinh		Dong Tan			
	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%
Agricultural activities	1	0.4%	31	13.3%	15	6.4%	11	4.7%	66	28.3%	52	22.3%	39	16.7%	-	0.0%	18	7.7%	233	100 %
Husbandry	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	25.0%	-	0.0%	-	0.0%	-	0.0%	3	75.0%	4	100 %
Shop	1	4.0%	-	0.0%	-	0.0%	2	8.0%	-	0.0%	2	8.0%	-	0.0%	9	36.0%	11	44.0%	25	100 %
Restaurant	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	0.0%	0	0%
Workers	-	0.0%	2	8.3%	1	4.2%	2	8.3%	10	41.7%	5	20.8%	3	12.5%	-	0.0%	1	4.2%	24	100 %
Governmental Staff	-	0.0%	1	4.5%	1	4.5%	-	0.0%	7	31.8%	4	18.2%	3	13.6%	4	18.2%	2	9.1%	22	100 %
Private Sector	-	0.0%	2	25.0%	-	0.0%	-	0.0%	1	12.5%	2	25.0%	-	0.0%	-	0.0%	3	37.5%	8	100 %
Transport Sector	-	0.0%	-	0.0%	3	42.9%	-	0.0%	-	0.0%	1	14.3%	2	28.6%	1	14.3%	-	0.0%	7	100 %
Student	5	4.3%	8	6.8%	8	6.8%	4	3.4%	18	15.4%	23	19.7%	33	28.2%	7	6.0%	11	9.4%	117	100 %
Housework	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	33.3%	2	66.7%	-	0.0%	-	0.0%	-	0.0%	3	100 %
Tenant	-	0.0%	10	15.2%	2	3.0%	2	3.0%	23	34.8%	9	13.6%	14	21.2%	-	0.0%	6	9.1%	66	100 %
Others	3	13.0 %	-	0.0%	1	4.3%	-	0.0%	6	26.1%	10	43.5%	3	13.0%	-	0.0%	-	0.0%	23	100 %
None	1	5.9%	-	0.0%	-	0.0%	-	0.0%	6	35.3%	6	35.3%	2	11.8%	-	0.0%	2	11.8%	17	100 %
Total	**11**	**2.0%**	**54**	**9.8%**	**31**	**5.6%**	**21**	**3.8%**	**139**	**25.3%**	**116**	**21.1%**	**99**	**18.0%**	**21**	**3.8%**	**57**	**10.4%**	**549**	100 %

Social Policy Households:

Social policy households receive special cash allowances from the Government on the basis of having household members who are invalids, have heroic mothers, martyrs, and those who have contributed to the revolutions. The eligible HHs to social policy is listed as in table 2.37 including the female headed households.

Table 2. 37: Social Policy Households, Other Vulnerable Households and Households Headed by Women (No. of Households)

#	District/ Commune	Poor	FHH	Disable person	Elderly	Enjoy the social policy	Total
I	**Thai Thuy**	**9**	**11**	**2**	**0**	**16**	**38**
1.1	Diem Dien town	-	1	-	-	0	**1**
1.2	Thai Son	2	2	-	-	3	**7**
1.3	Thai Thuy	2	1	1	-	2	**6**
1.4	Thuy Lien	-	-	-	-	-	**0**
1.5	Thai Giang	3	1	-	-	5	**9**
1.6	Thai Duong	2	4	1	-	4	**11**
1.7	Thuy Ha	-	2	0	-	2	**4**
II	**Dong Hung**	**0**	**1**	**0**	**0**	**1**	**2**
2.1	Dong Kinh	-	-	-	-	-	-
2.2	Dong Tan	-	1	-	-	1	**2**
Total		**9**	**12**	**2**	**0**	**17**	**40**

Average Monthly Income

Table 2.38 shows that most of the interviewed families earn with income from VND 3,000,000 to VND 5,000,000 per month and none have monthly income less that VND 1,000,000 per month. There are 48 households from 161 surveyed households earning income with more than VND 5,000,000 per month.

Table 2. 38: Average Monthly Household Income of Affected Household (in million VND)

#	District/ Commune	< VND 1 million	From VND 1 to 3 million	From VND 3 to 5 million	> VND 5 million	Total
I	**Thai Thuy**	-	**28**	**72**	**38**	**138**
1.1	Diem Dien town	-	1	2	-	3
1.2	Thai Son	-	6	5	5	16
1.3	Thai Thuy	-	3	3	3	9
1.4	Thuy Lien	-	-	3	4	7
1.5	Thai Giang	-	5	21	12	38
1.6	Thai Duong	-	9	18	9	36

#	District/ Commune	< VND 1 million	From VND 1 to 3 million	From VND 3 to 5 million	> VND 5 million	Total
1.7	Thuy Ha	-	4	20	5	29
II	**Dong Hung**	-	**3**	**10**	**10**	**23**
2.1	Dong Kinh	-	0	2	4	6
2.2	Dong Tan	-	3	8	6	17
Total		-	-	**82**	**48**	**161**

Income - Expenditure Balance:

After comparing for gross income and gross expenditures, the picture on whether households have positive or negative income was derived. In the affected communes of Thai Thuy and Dong Hung district, this exercise revealed that 87% of total households end up with positive income or surplus after expenditures and 8.1% of the surveyed households are with incomes less than expenditures.

Table 2. 39: Income-Expenditure Balance of Affected Household

#	District/ Commune	Balance of income (I) earning and expenditures (E)							
		(I)< (E)		(I) = (E)		(I) > (E)		Total	
		HH	%	HH	%	HH	%	HH	%
I	**Thai Thuy**	**13**		**6**		**119**		**138**	
1.1	Diem Dien town	-	0.0%	-	0.0%	3	100.0%	**3**	**100%**
1.2	Thai Son	2	12.5%	-	0.0%	14	87.5%	**16**	**100%**
1.3	Thai Thuy	1	11.1%	-	0.0%	8	88.9%	**9**	**100%**
1.4	Thuy Lien	-	0.0%	1	14.3%	6	85.7%	**7**	**100%**
1.5	Thai Giang	6	15.8%	2	5.3%	30	78.9%	**38**	**100%**
1.6	Thai Duong	2	5.6%	-	0.0%	34	94.4%	**36**	**100%**
1.7	Thuy Ha	2	6.9%	3	10.3%	24	82.8%	**29**	**100%**
II	**Dong Hung**	-	**0.0%**	**2**	**8.7%**	**21**	**91.3%**	**23**	
2.1	Dong Kinh	-	0.0%	1	16.7%	5	83.3%	**6**	**100%**
2.2	Dong Tan	-	0.0%	1	5.9%	16	94.1%	**17**	**100%**
Total		**13**	**8.1%**	**8**	**5.0%**	**140**	**87.0%**	**161**	**100%**

Credit /Access to Loan.

Table 2.40 shows that the rates of the households borrow loans from Banks is high (90.9%) and other institutions (9.1%) and followed by other sources. The households said that they borrow money for farming and husbandry activities and for other businesses. Table 2.40, 2.41 described about the survey results on accessing loans and using loans from a sample of the affected households.

Table 2. 40: Access to Loan of Affected Female Headed Household

#	District/ Commune	Loan from Banks		For other Institutions		From Relative or Friend		From other Sources		Total	
		HH	%	HH	%	HH	%	HH	%	HH	%
I	**Thai Thuy**	**10**	**90.9%**	**1**	9.1%	**-**	-	**-**	-	**11**	**100%**
1.1	Diem Dien town	-	-	-	-	-	-	-	-	-	-
1.2	Thai Son	3	100%	-	-	-	-	-	-	**3**	**100%**
1.3	Thai Thuy	1	100%	-	-	-	-	-	-	**1**	**100%**
1.4	Thuy Lien	-	-	-	-	-	-	-	-	-	-
1.5	Thai Giang	4	-	-	-	-	-	-	-	**4**	-
1.6	Thai Duong	1	-	1	-	-	-	-	-	**2**	-
1.7	Thuy Ha	1	-	-	-	-	-	-	-	**1**	-
II	**Dong Hung**	-	-	-	-	-	-	-	-	-	-
2.1	Dong Kinh	-	-	-	-	-	-	-	-	-	-
2.2	Dong Tan	-	-	-	-	-	-	-	-	-	-
Total		**10**	**90.9%**	**1**	**9.1%**	**-**	-	**-**	-	**11**	**100%**

Purposes of using Loans

Table 2. 41: Purposes of using loans of Affected Female Headed Household

#	District/ Commune	Agricultural Activities		Business		Family Expenditures		Housing		Others		Total	
		HH	%	HH	%	HH	%	HH	%	HH	%	HH	%
I	**Thai Thuy**	**1**	**9.1%**	**1**	**9.1%**	**6**	**54.5%**	**1**	**9.1%**	**2**	**18.2%**	**11**	**100%**
1.1	Diem Dien town	-	-	-	-	-	-	-	-	-	-	-	-
1.2	Thai Son	-	-	-	-	1	33.3%	1	33.3%	1	33.3%	**3**	**100%**
1.3	Thai Thuy	-	-	-	-	1	100%	-	-	-	-	**1**	**100%**
1.4	Thuy Lien	-	-	-	-	-	-	-	-	-	-	-	-
1.5	Thai Giang	1	25%	-	-	3	75%	-	-	-	-	**4**	**100%**
1.6	Thai Duong	-	-	-	-	1	50%	-	-	1	50%	**2**	**100%**
1.7	Thuy Ha	-	-	1	100%	-	-	-	-	-	-	**1**	**100%**
II	**Dong Hung**	-	-	-	-	-	-	-	-	-	-	-	-
2.1	Dong Kinh	-	-	-	-	-	-	-	-	-	-	-	-
2.2	Dong Tan	-	-	-	-	-	-	-	-	-	-	-	-
Total		**1**	**9%**	**1**	**9%**	**6**	**55%**	**1**	**9%**	**2**	**18%**	**11**	**100%**

Living facilities and Community Assets

Almost all of the households surveyed have motorbikes, television sets, refrigerator, furniture, and sanitation facilities such as septic toilet and running water, among others. Community physical infrastructures (village and commune link roads and community social services such as schools, healthcare centers, market etc.) are available and with locations that are not far from the affected households. The survey results on asset ownership, living amenities, cooking ways, community health etc. are shown in tables from 2.42 to 2.49 below.

Table 2. 42: Ownership of Living Facilities of Affected Households

#	District/ Commune	Unit	No. of surveyed HHs	Radio	Tivi	Motorbike	Bicycle	Fan	Cooker	Refrigerator	Pump	Washing machine	Gas Cook	Hot water tank	Computer
I	**Thai Thuy**	**HH**	**138**	**44**	**137**	**125**	**132**	**138**	**138**	**61**	**125**	**12**	**115**	**23**	**1**
		%	**100%**	**31.9%**	**99.3%**	**90.6%**	**95.7%**	**100%**	**100%**	**44.2%**	**90.6%**	**8.7%**	**83.3%**	**16.7%**	**0.7%**
1.1	Diem Dien town	HH	3	2	3	2	3	3	3	3	3	2	3	3	1
		%	100%	67%	100%	67%	100%	100%	100%	100%	100%	67%	100%	100%	33%
1.2	Thai Son	HH	16	9	16	14	15	16	16	3	16	-	15	2	-
		%	100%	56%	100%	88%	94%	100%	100%	19%	100%	0%	94%	13%	0%
1.3	Thai Thuy	HH	9	-	8	6	9	9	9	4	5	3	7	1	-
		%	100%	0%	89%	67%	100%	100%	100%	44%	56%	33%	78%	11%	0%
1.4	Thuy Lien	HH	7	6	7	7	7	7	7	6	7	-	5	2	-
		%	100%	86%	100%	100%	100%	100%	100%	86%	100%	0%	71%	29%	0%
1.5	Thai Giang	HH	38	10	38	34	37	38	38	16	38	2	31	8	-
		%	100%	26%	100%	89%	97%	100%	100%	42%	100%	5%	82%	21%	0%
1.6	Thai Duong	HH	36	14	36	34	32	36	36	21	29	3	32	4	-
		%	100%	39%	100%	94%	89%	100%	100%	58%	81%	8%	89%	11%	0%
1.7	Thuy Ha	HH	29	3	29	28	29	29	29	8	27	2	22	3	-
		%	100%	10%	100%	97%	100%	100%	100%	28%	93%	7%	76%	10%	0%
II	**Dong Hung**	**HH**	**23**	**3**	**23**	**22**	**23**	**23**	**23**	**21**	**22**	**6**	**23**	**8**	**4**
		%	**100%**	**13%**	**100%**	**96%**	**100%**	**100%**	**100%**	**91%**	**96%**	**26%**	**100%**	**35%**	**17%**
2.1	Dong Kinh	HH	6	2	6	6	6	6	6	6	6	4	6	5	4
		%	100%	33%	100%	100%	100%	100%	100%	100%	100%	67%	100%	83%	67%
2.2	Dong Tan	HH	17	1	17	16	17	17	17	15	16	2	17	3	0
		%	100%	6%	100%	94%	100%	100%	100%	88%	94%	12%	100%	18%	0%
Total		**HH**	**161**	**47**	**160**	**147**	**155**	**161**	**161**	**82**	**147**	**18**	**138**	**31**	**5**
		%	**100%**	**29%**	**99%**	**91%**	**96%**	**100%**	**100%**	**51%**	**91%**	**11%**	**86%**	**19%**	**3%**

Table 2. 43 Water Source for Using of Affected Households

#	District/ Commune	Unit	Water Resources								Total
			Well	Running water	River, lake	Creek	Village well	Rain water	Buying	Drilling well	
I	**Thai Thuy**	**HH**	**-**	**2**	**-**	**-**	**-**	**-**	**1**	**135**	**138**
		%	**0%**	**1.4%**	**0%**	**0%**	**0%**	**0%**	**1%**	**98%**	**100%**
1.1	Diem Dien town	HH	-	2	-	-	-	-	1	-	**3**
		%	0.0%	66.7%	0.0%	0.0%	0.0%	0.0%	33.3%	0.0%	100.0%
1.2	Thai Son	HH	-	-	-	-	-	-	-	16	**16**
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
1.3	Thai Thuy	HH	-	-	-	-	-	-	-	9	**9**
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
1.4	Thuy Lien	HH	-	-	-	-	-	-	-	7	**7**
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
1.5	Thai Giang	HH	-	-	-	-	-	-	-	38	**38**
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
1.6	Thai Duong	HH	-	-	-	-	-	-	-	36	**36**
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
1.7	Thuy Ha	HH	-	-	-	-	-	-	-	29	**29**
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
II	**Dong Hung**	**HH**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**23**	**23**
		%	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**100.0%**	**100.0%**
2.1	Dong Kinh	HH	-	-	-	-	-	-	-	6	**6**
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
2.2	Dong Tan	HH	-	-	-	-	-	-	-	17	**17**
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total		**HH**	**-**	**2**	**-**	**-**	**-**	**-**	**1**	**158**	**161**
		%	**0.0%**	**1.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.6%**	**98.1%**	**100.0%**

Table 2. 44: Main Sources for Lighting of Affected Households

#	District/ Commune	Unit	Lighting Resources						Total
			Grid	Battery	Wood/ Coal	Generator	Oil	Others	
I	**Thai Thuy**	**HH**	**138**	-	-	-	-	-	**138**
		%	**100%**	-	-	-	-	-	**100%**
1.1	Diem Dien town	HH	3	-	-	-	-	-	**3**
		%	100%	-	-	-	-	-	100%
1.2	Thai Son	HH	16	-	-	-	-	-	**16**
		%	100%	-	-	-	-	-	**100%**
1.3	Thai Thuy	HH	9	-	-	-	-	-	**9**

#	District/ Commune	Unit	Lighting Resources						Total
			Grid	Battery	Wood/ Coal	Generator	Oil	Others	
		%	100%	-	-	-	-	-	100%
1.4	Thuy Lien	HH	7	-	-	-	-	-	**7**
		%	100%	-	-	-	-	-	100%
1.5	Thai Giang	HH	38	-	-	-	-	-	**38**
		%	100%	-	-	-	-	-	100.0%
1.6	Thai Duong	HH	36	-	-	-	-	-	**36**
		%	100%	-	-	-	-	-	100%
1.7	Thuy Ha	HH	29	-	-	-	-	-	**29**
		%	100%	-	-	-	-	-	100%
II	**Dong Hung**	**HH**	**23**						**23**
		%	**100%**	**-**	**-**	**-**	**-**	**-**	**100%**
2.1	Dong Kinh	HH	6						**6**
		%	100%	-	-	-	-	-	100%
2.2	Dong Tan	HH	17						**17**
		%	100%	-	-	-	-	-	100%
Total		**HH**	**161**	**-**	**-**	**-**	**-**	**-**	**161**
		%	**100%**	**-**	**-**	**-**	**-**	**-**	**100%**

Table 2. 45: Main Sources for Cooking of Affected Households

#	District/ Commune	Unit	Cooking Resources							Total
			Grid	Generator	Gas/Oil	Wood/ Coal	Biogas	Others	No answers	
I	**Thai Thuy**	**HH**	**-**	**-**	**92**	**31**	**-**	**14**	**1**	**138**
		%	**0.0%**	**0.0%**	**66.7%**	**22.5%**	**0.0%**	**10.1%**	**0.7%**	**100.0%**
1.1	Diem Dien town	HH	-	-	**3**	-	-	-	-	**3**
		%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
1.2	Thai Son	HH	-	-	13	3	-	-	-	**16**
		%	0.0%	0.0%	81.3%	18.8%	0.0%	0.0%	0.0%	100.0%
1.3	Thai Thuy	HH	-	-	6	2	-	-	1	**9**
		%	0.0%	0.0%	66.7%	22.2%	0.0%	0.0%	11.1%	100.0%
1.4	Thuy Lien	HH	-	-	3	4	-	-	-	**7**
		%	0.0%	0.0%	42.9%	57.1%	0.0%	0.0%	0.0%	100.0%
1.5	Thai Giang	HH	-	-	18	12	-	8	-	**38**
		%	0.0%	0.0%	47.4%	31.6%	0.0%	21.1%	0.0%	100.0%
1.6	Thai Duong	HH	-	-	27	6	-	3	-	**36**
		%	0.0%	0.0%	75.0%	16.7%	0.0%	8.3%	0.0%	100.0%
1.7	Thuy Ha	HH	-	-	22	4	-	3	-	**29**
		%	0.0%	0.0%	75.9%	13.8%	0.0%	10.3%	0.0%	100.0%

#	District/ Commune	Unit	Cooking Resources							Total
			Grid	Generator	Gas/Oil	Wood/ Coal	Biogas	Others	No answers	
II	**Dong Hung**	**HH**	**-**	**-**	**23**	**-**	**-**	**-**	**-**	**23**
		%	**0%**	**0%**	**100%**	**0%**	**0%**	**0%**	**0%**	**100%**
2.1	Dong Kinh	HH	-	-	6	-	-	-	-	**6**
		%	0%	0%	100%	0%	0%	0%	0%	100%
2.2	Dong Tan	HH	-	-	17	-	-	-	-	**17**
		%	0%	0%	100%	0%	0%	0%	0%	100%
Total		**HH**	**-**	**-**	**115**	**31**	**-**	**14**	**1**	**161**
		%	**0.0%**	**0.0%**	**71.4%**	**19.3%**	**0.0%**	**8.7%**	**0.6%**	**100.0%**

Table 2. 46: Common diseases in the community

#	District/ Commune	Unit	Common diseases									Total
			Feel	Flu	Malaria	Cholera	Dysentery	Hepatitis	Infectious agent	Other	No response	
I	**Thai Thuy**	**HH**	**104**	**22**	**-**	**-**	**-**	**-**	**2**	**-**	**10**	**138**
		%	**83%**	**96%**	**0%**	**0%**	**0%**	**0%**	**100%**	**0%**	**100%**	**86%**
1.1	Diem Dien town	HH	1	2	-	-	-	-	-	-	-	**3**
		%	33.3%	66.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**100%**
1.2	Thai Son	HH	15	-	-	-	-	-	1	-	-	**16**
		%	93.8%	0.0%	0.0%	0.0%	0.0%	0.0%	6.3%	0.0%	0.0%	**100%**
1.3	Thai Thuy	HH	9	-	-	-	-	-	-	-	-	**9**
		%	100%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**100%**
1.4	Thuy Lien	HH	1	3	-	-	-	-	-	-	3	**7**
		%	14.3%	42.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	42.9%	**100%**
1.5	Thai Giang	HH	24	11	-	-	-	-	-	-	3	**38**
		%	63.2%	28.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.9%	**100%**
1.6	Thai Duong	HH	26	5	-	-	-	-	1	-	4	**36**
		%	72.2%	13.9%	0.0%	0.0%	0.0%	0.0%	2.8%	0.0%	11.1%	**100%**
1.7	Thuy Ha	HH	28	1	-	-	-	-	-	-	-	**29**
		%	96.6%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**100%**
II	**Dong Hung**	**HH**	**22**	**1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**23**
		%	**17.5%**	**4.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**14.3%**
2.1	Dong Kinh	HH	5	1	-	-	-	-	-	-	-	**6**
		%	22.7%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	26.1%
2.2	Dong Tan	HH	17	-	-	-	-	-	-	-	-	**17**
		%	77.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	73.9%
Total		**HH**	**126**	**23**	**-**	**-**	**-**	**-**	**2**	**-**	**10**	**161**
		%	**78.3%**	**14.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**1.2%**	**0.0%**	**6.2%**	**100%**

Table 2. 47: Access to health services

#	District/ Commune	Unit	Commune health station				District hospital				Clinic/Nurse				Pharmacy				Traditional drug treatment			
			<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km
I	**Thai Thuy**	**HH**	**19**	**77**	**26**	**2**	**1**	**3**	**4**	**24**	**1**	**0**	**0**	**0**	**34**	**27**	**16**	**0**	**0**	**0**	**0**	**0**
		%	**8.1%**	**32.9%**	**11.1%**	**0.9%**	**0.4%**	**1.3%**	**1.7%**	**10.3%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**14.5%**	**11.5%**	**6.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
1.1	Diem Dien town	HH	2	1	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	-	-
		%	33.3%	16.7%	0.0%	0.0%	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	16.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1.2	Thai Son	HH	-	-	16	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	-	-
		%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1.3	Thai Thuy	HH	3	4	-	-	-	-	-	-	-	-	-	-	6	-	-	-	-	-	-	-
		%	23.1%	30.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	46.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1.4	Thuy Lien	HH	-	2	5	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-
		%	0.0%	14.3%	35.7%	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1.5	Thai Giang	HH	10	27	1	-	-	1	1	12	-	-	-	-	10	9	-	-	-	-	-	-
		%	14.1%	38.0%	1.4%	0.0%	0.0%	1.4%	1.4%	16.9%	0.0%	0.0%	0.0%	0.0%	14.1%	12.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1.6	Thai Duong	HH	1	25	2	2	-	1	1	5	1	-	-	-	7	13	-	-	-	-	-	-
		%	1.7%	43.1%	3.4%	3.4%	0.0%	1.7%	1.7%	8.6%	1.7%	0.0%	0.0%	0.0%	12.1%	22.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

#	District/ Commune	Unit	Commune health station				District hospital				Clinic/Nurse				Pharmacy				Traditional drug treatment			
			<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km
1.7	Thuy Ha	HH	3	18	2	-	1	1	-	-	-	-	-	-	10	5	-	-	-	-	-	-
		%	7.5%	45.0 %	5.0%	0.0 %	2.5 %	2.5 %	0.0 %	0.0%	0.0 %	0.0 %	0.0%	0.0 %	25.0 %	12.5 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
II	**Dong Hung**	**HH**	**10**	**7**	**-**	**-**	**-**	**-**	**1**	**6**	**-**	**-**	**-**	**-**	**-**	**10**	**-**	**-**	**1**	**-**	**-**	**-**
		%	**28.6 %**	**20.0 %**	**0.0 %**	**0.0 %**	**0.0 %**	**0.0 %**	**2.9 %**	**17.1 %**	**0.0 %**	**0.0 %**	**0.0 %**	**0.0 %**	**0.0 %**	**28.6 %**	**0.0 %**	**0.0 %**	**2.9 %**	**0.0 %**	**0.0 %**	**0.0 %**
2.1	Dong Kinh	HH	3	3	-	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-
		%	25.0 %	25.0 %	0.0%	0.0 %	0.0 %	0.0 %	0.0 %	50.0 %	0.0 %	0.0 %	0.0%	0.0 %	0.0%	0.0%	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
2.2	Dong Tan	HH	7	4	-	-	-	-	1	-	-	-	-	-	-	10	-	-	1	-	-	-
		%	30.4 %	17.4 %	0.0%	0.0 %	0.0 %	0.0 %	4.3 %	0.0%	0.0 %	0.0 %	0.0%	0.0 %	0.0%	43.5 %	0.0 %	0.0 %	4.3 %	0.0 %	0.0 %	0.0 %
Total		**HH**	**29**	**84**	**26**	**2**	**1**	**3**	**5**	**30**	**1**	**-**	**-**	**-**	**34**	**37**	**16**	**-**	**1**	**-**	**-**	**-**
		%	**10.8 %**	**31.2 %**	**9.7 %**	**0.7 %**	**0.4 %**	**1.1 %**	**1.9 %**	**11.2 %**	**0.4 %**	**0.0 %**	**0.0 %**	**0.0 %**	**12.6 %**	**13.8 %**	**5.9 %**	**0.0 %**	**0.4 %**	**0.0 %**	**0.0 %**	**0.0 %**

Table 2. 48: Access to education services

#	District/ Commune	Unit	Preschool				Elementary school				Secondary school				High school				Vocational school			
			<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km
I	**Thai Thuy**	**HH**	**2**	**2**	**0**	**0**	**6**	**10**	**3**	**0**	**1**	**11**	**5**	**0**	**1**	**1**	**16**	**0**	**0**	**0**	**2**	**9**
		%	**2.9 %**	**2.9 %**	**0.0 %**	**0.0 %**	**8.7 %**	**14.5 %**	**4.3 %**	**0.0 %**	**1.4 %**	**15.9 %**	**7.2 %**	**0.0 %**	**1.4 %**	**1.4 %**	**23.2 %**	**0.0 %**	**0.0 %**	**0.0%**	**2.9 %**	**13.0 %**
1.1	Diem Dien town	HH	-	-	-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	-	1
		%	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0%	25.0 %	0.0 %	0.0 %	0.0%	25.0 %	0.0 %	0.0 %	0.0 %	25.0 %	0.0 %	0.0 %	0.0%	0.0 %	25.0 %
1.2	Thai Son	HH	-	-	-	-	-	-	-	-	-	-	2	-	-	-	2	-	-	-	-	-
		%	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0%	0.0 %	0.0 %	0.0 %	0.0%	50.0 %	0.0 %	0.0 %	0.0 %	50.0 %	0.0 %	0.0 %	0.0%	0.0 %	0.0 %
1.3	Thai Thuy	HH	-	-	-	-	1	-	-	-	-	2	-	-	-	-	1	-	-	-	-	2
		%	0.0 %	0.0 %	0.0 %	0.0 %	16.7 %	0.0%	0.0 %	0.0 %	0.0 %	33.3 %	0.0 %	0.0 %	0.0 %	0.0 %	16.7 %	0.0 %	0.0 %	0.0%	0.0 %	33.3 %
1.4	Thuy Lien	HH	-	-	-	-	-	-	1	-	-	-	-	-	-	-	2	-	-	-	-	1
		%	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0%	25.0 %	0.0 %	0.0 %	0.0%	0.0 %	0.0 %	0.0 %	0.0 %	50.0 %	0.0 %	0.0 %	0.0%	0.0 %	25.0 %
1.5	Thai Giang	HH	-	1	-	-	-	8	-	-	1	1	-	-	1	-	2	-	-	-	-	2
		%	0.0 %	6.3 %	0.0 %	0.0 %	0.0 %	50.0 %	0.0 %	0.0 %	6.3 %	6.3%	0.0 %	0.0 %	6.3 %	0.0 %	12.5 %	0.0 %	0.0 %	0.0%	0.0 %	12.5 %
1.6	Thai Duong	HH	1	1	-	-	4	1	1	-	-	2	-	-	-	-	3	-	-	-	2	1
		%	6.3 %	6.3 %	0.0 %	0.0 %	25.0 %	6.3%	6.3 %	0.0 %	0.0 %	12.5 %	0.0 %	0.0 %	0.0 %	0.0 %	18.8 %	0.0 %	0.0 %	0.0%	12.5 %	6.3 %
1.7	Thuy Ha	HH	1	-	-	-	1	1	-	-	-	6	2	-	-	1	5	-	-	-	-	2
		%	5.3 %	0.0 %	0.0 %	0.0 %	5.3 %	5.3%	0.0 %	0.0 %	0.0 %	31.6 %	10.5 %	0.0 %	0.0 %	5.3 %	26.3 %	0.0 %	0.0 %	0.0%	0.0 %	10.5 %

#	District/ Commune	Unit	Preschool				Elementary school				Secondary school				High school				Vocational school			
			<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km
II	**Dong Hung**	**HH**	**2**	**0**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**
		%	**17 %**	**0%**	**0%**	**0%**	**8%**	**25%**	**0%**	**0%**	**0%**	**33%**	**0%**	**0%**	**0%**	**8%**	**8%**	**0%**	**0%**	**0%**	**0%**	**0%**
2.1	Dong Kinh	HH	-	-	-	-	-	3	-	-	-	3	-	-	-	1	-	-	-	-	-	-
		%	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	42.9 %	0.0 %	0.0 %	0.0 %	42.9 %	0.0 %	0.0 %	0.0 %	14.3 %	0.0%	0.0 %	0.0 %	0.0%	0.0 %	0.0 %
2.2	Dong Tan	HH	2	-	-	-	1	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-
		%	40.0 %	0.0 %	0.0 %	0.0 %	20.0 %	0.0%	0.0 %	0.0 %	0.0 %	20.0 %	0.0 %	0.0 %	0.0 %	0.0 %	20.0 %	0.0 %	0.0 %	0.0%	0.0 %	0.0 %
Total		**HH**	**4**	**2**	-	-	**7**	**13**	**3**	-	**1**	**15**	**5**	-	**1**	**2**	**17**	-	-	-	**2**	**9**
		%	**4.9 %**	**2.5 %**	**0.0 %**	**0.0 %**	**8.6 %**	**16.0 %**	**3.7 %**	**0.0 %**	**1.2 %**	**18.5 %**	**6.2 %**	**0.0 %**	**1.2 %**	**2.5 %**	**21.0 %**	**0.0 %**	**0.0 %**	**0.0%**	**2.5 %**	**11.1 %**

Table 2. 49: Access to other services, culture works...

#	District/ Commune	Unit	Market				Stadium				Sport area				Pagoda/Temple/Church				Entertainment park			
			<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km
I	**Thai Thuy**	**HH**	**27**	**87**	**21**	**0**	**4**	**7**	**13**	**0**	**0**	**0**	**0**	**0**	**38**	**49**	**28**	**0**	**2**	**1**	**8**	**0**
		%	**9.5%**	**30.5%**	**7.4%**	**0.0%**	**1.4%**	**2.5%**	**4.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**13.3%**	**17.2%**	**9.8%**	**0.0%**	**0.7%**	**0.4%**	**2.8%**	**0.0%**
1.1	Diem Dien town	HH	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1.2	Thai Son	HH	1	-	15	-	-	-	2	-	-	-	-	-	1	-	10	-	-	-	-	-
		%	3.4%	0.0%	51.7%	0.0%	0.0%	0.0%	6.9%	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	0.0%	34.5%	0.0%	0.0%	0.0%	0.0%	0.0%
1.3	Thai Thuy	HH	7	2	-	-	-	-	-	-	-	-	-	-	8	-	-	-	1	-	-	-
		%	38.9%	11.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	44.4%	0.0%	0.0%	0.0%	5.6%	0.0%	0.0%	0.0%
1.4	Thuy Lien	HH	-	7	-	-	-	-	6	-	-	-	-	-	-	-	7	-	-	-	5	-
		%	0.0%	28.0%	0.0%	0.0%	0.0%	0.0%	24.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	28.0%	0.0%	0.0%	0.0%	20.0%	0.0%
1.5	Thai Giang	HH	10	28	-	-	3	6	3	-	-	-	-	-	9	21	6	-	-	1	1	-
		%	11.4%	31.8%	0.0%	0.0%	3.4%	6.8%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	10.2%	23.9%	6.8%	0.0%	0.0%	1.1%	1.1%	0.0%
1.6	Thai Duong	HH	3	28	5	-	-	1	2	-	-	-	-	-	9	15	4	-	1	-	2	-
		%	4.3%	40.0%	7.1%	0.0%	0.0%	1.4%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	12.9%	21.4%	5.7%	0.0%	1.4%	0.0%	2.9%	0.0%
1.7	Thuy Ha	HH	4	22	1	-	1	-	-	-	-	-	-	-	11	13	1	-	-	-	-	-
		%	7.5%	41.5%	1.9%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.8%	24.5%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%

#	District/ Commune	Unit	Market				Stadium				Sport area				Pagoda/Temple/Church				Entertainment park			
			<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km
II	**Dong Hung**	**HH**	**13**	**10**	-	-	**1**	**3**	-	-	-	-	-	-	**18**	**5**	-	-	-	**1**	**2**	-
		%	**24.5%**	**18.9%**	**0.0%**	**0.0%**	**1.9%**	**5.7%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**34.0%**	**9.4%**	**0.0%**	**0.0%**	**0.0%**	**1.9%**	**3.8%**	**0.0%**
2.1	Dong Kinh	HH	3	3	-	-	1	3	-	-	-	-	-	-	1	5	-	-	-	1	2	-
		%	15.8%	15.8%	0.0%	0.0%	5.3%	15.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.3%	26.3%	0.0%	0.0%	0.0%	5.3%	10.5%	0.0%
2.2	Dong Tan	HH	10	7	-	-	-	-	-	-	-	-	-	-	17	-	-	-	-	-	-	-
		%	29.4%	20.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total		**HH**	**40**	**97**	**21**	-	**5**	**10**	**13**	-	-	-	-	-	**56**	**54**	**28**	-	**2**	**2**	**10**	-
		%	**11.8%**	**28.7%**	**6.2%**	**0.0%**	**1.5%**	**3.0%**	**3.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**16.6%**	**16.0%**	**8.3%**	**0.0%**	**0.6%**	**0.6%**	**3.0%**	**0.0%**

Living standard

Table 2.50 analysed about the trend of living standards of the affected households in the recent last three years. The results show that the majority of the households declared with no change (57.76 %); about 30.43 % declared that they are better off and about 11.80 % the households are worse off.

Table 2. 50: Household living standard changes (last 3 years)

#	District/ Commune	No change		Better off		Worse off		Total	
		HH	%	HH	%	HH	%	HH	%
I	**Thai Thuy**	**87**		**49**		**2**		**138**	
1.1	Diem Dien town	2	66.7%	1	33.3%	-	0.0%	3	100%
1.2	Thai Son	14	87.5%	2	12.5%	-	0.0%	16	100%
1.3	Thai Thuy	5	55.6%	4	44.4%	-	0.0%	9	100%
1.4	Thuy Lien	2	28.6%	5	71.4%	-	0.0%	7	100%
1.5	Thai Giang	23	60.5%	15	39.5%	-	0.0%	38	100%
1.6	Thai Duong	23	63.9%	13	36.1%	-	0.0%	36	100%
1.7	Thuy Ha	18	62.1%	9	31.0%	2	6.9%	29	100%
II	**Dong Hung**	**6**	**26.1%**	**-**	**0.0%**	**17**	**73.9%**	**23**	**100%**
2.1	Dong Kinh	1	16.7%	-	0.0%	5	83.3%	6	100%
2.2	Dong Tan	5	29.4%	-	0.0%	12	70.6%	17	100%
Total		**93**	**57.76%**	**49**	**30.43%**	**19**	**11.80%**	**161**	**100%**

Table 2.51 shows the results of consultation for the feedback from the affected households to the project development. It shows with a very positive result that 100 % of the survey households support for the project development. It means that with the project, local people see a lot of benefits to them.

Public consultation on the behaviour of people to the project

Table 2. 51: Support implementation of the project

#	District/ Commune	Yes		No		Total	
		HH	%	HH	%	HH	%
I	**Thai Thuy**	**138**		**-**		**138**	
1.1	Diem Dien town	3	100%	-	-	3	100%
1.2	Thai Son	16	100%	-	-	16	100%
1.3	Thai Thuy	9	100%	-	-	9	100%
1.4	Thuy Lien	7	100%	-	-	7	100%

#	District/ Commune	Yes		No		Total	
		HH	%	HH	%	HH	%
1.5	Thai Giang	38	100%	-	-	38	100%
1.6	Thai Duong	36	100%	-	-	36	100%
1.7	Thuy Ha	29	100%	-	-	29	100%
II	**Dong Hung**	**23**	**100%**	**-**	**-**	**23**	**100%**
2.1	Dong Kinh	6	100%	-	-	6	100%
2.2	Dong Tan	17	100%	-	-	17	100%
Total		**161**	**100.0%**	**-**	**-**	**161**	**100%**

Gender issues and Ethnic Minority

Table 2.52 shows the surveyed results analysed by the gender (male and female) by the different activities. It shows with the results that most of economic development activities are done by both men and women. However, with farming activities, women participate to the activities more than men.

Table 2.53 shows that, women participate the community meetings more than men, but the rate of men making decisions is much higher than women.

Table 2. 52: Division of Labor

#	Item	Unit	Thai Thuy														Dong Hung			
			Diem Dien town		Thai Son		Thai Thuy		Thuy Lien		Thai Giang		Thai Duong		Thuy Ha		Dong Kinh		Dong Tan	
			Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%
1	Land preparation	Male	-	0.0%	1	50.0%	1	50.0%	-	0.0%	-	0.0%	-	0.0%	0	0.0%	-	0.0%	-	0.0%
		Female	1	5.6%	1	5.6%	1	5.6%	-	0.0%	4	22.2%	4	22.2%	4	22.2%	-	0.0%	4	22.2%
		Both	-	0.0%	14	11.2%	7	5.6%	7	5.6%	32	25.6%	30	24.0%	24	19.2%	-	0.0%	11	8.8%
2	Cultivation	Male	-	0.0%	1	50.0%	1	50.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	1	5.6%	1	5.6%	1	5.6%	-	0.0%	4	22.2%	4	22.2%	4	22.2%	-	0.0%	4	22.2%
		Both	-	0.0%	14	11.2%	7	5.6%	7	5.6%	32	25.6%	30	24.0%	24	19.2%	-	0.0%	11	8.8%
3	Sowing	Male	-	0.0%	1	50.0%	1	50.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	-	0.0%	1	5.6%	1	5.6%	-	0.0%	4	22.2%	4	22.2%	4	22.2%	-	0.0%	4	22.2%
		Both	1	0.8%	14	11.2%	7	5.6%	7	5.6%	32	25.6%	30	24.0%	24	19.2%	-	0.0%	11	8.8%
4	Weeding	Male	-	0.0%	1	50.0%	1	50.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	-	0.0%	1	5.6%	1	5.6%	-	0.0%	4	22.2%	4	22.2%	4	22.2%	-	0.0%	4	22.2%
		Both	1	0.8%	14	11.2%	7	5.6%	7	5.6%	32	25.6%	30	24.0%	24	19.2%	-	0.0%	11	8.8%
5	Pesticide spraying	Male	-	0.0%	1	50.0%	1	50.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	-	0.0%	1	5.9%	1	5.9%	-	0.0%	4	23.5%	3	17.6%	4	23.5%	-	0.0%	4	23.5%
		Both	1	0.8%	14	11.1%	7	5.6%	7	5.6%	32	25.4%	31	24.6%	24	19.0%	-	0.0%	11	8.7%
6	Harvesting	Male	-	0.0%	1	50.0%	1	50.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	-	0.0%	-	0.0%	1	8.3%	-	0.0%	4	33.3%	3	25.0%	4	33.3%	-	0.0%	-	0.0%
		Both	1	0.9%	15	12.9%	7	6.0%	7	6.0%	32	27.6%	31	26.7%	24	20.7%	-	0.0%	-	0.0%
7	Vegetable growing	Male	-	0.0%	-	0.0%	1	100.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	-	0.0%	-	0.0%	1	12.5%	-	0.0%	4	50.0%	3	37.5%	-	0.0%	-	0.0%	-	0.0%
		Both	1	1.3%	2	2.5%	7	8.8%	7	8.8%	33	41.3%	31	38.8%	-	0.0%	-	0.0%	-	0.0%

#	Item	Unit	Thai Thuy														Dong Hung			
			Diem Dien town		Thai Son		Thai Thuy		Thuy Lien		Thai Giang		Thai Duong		Thuy Ha		Dong Kinh		Dong Tan	
			Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%
8	Livestock	Male	-	0.0%	-	0.0%	1	100.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	-	0.0%	-	0.0%	1	14.3%	-	0.0%	3	42.9%	3	42.9%	-	0.0%	-	0.0%	-	0.0%
		Both	1	1.3%	-	0.0%	7	8.9%	7	8.9%	34	43.0%	31	39.2%	-	0.0%	-	0.0%	-	0.0%
9	Small business	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	100.0%	-	0.0%	-	0.0%	-	0.0%
		Female	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	100.0%
		Both	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	7	100.0%
10	Workers	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	100.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Both	-	0.0%	-	0.0%	-	0.0%	-	0.0%	2	100.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
11	Labor migration (domestic)	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Both	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%

Table 2. 53: Participate in Community Activities

#	Activity	Unit	Thai Thuy														Dong Hung			
			Diem Dien town		Thai Son		Thai Thuy		Thuy Lien		Thai Giang		Thai Duong		Thuy Ha		Dong Kinh		Dong Tan	
			Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%
1	Attend community meetings	Male	1	2.9%	1	2.9%	5	14.7%	5	14.7%	8	23.5%	8	23.5%	4	11.8%	1	2.9%	2	5.9%
		Female	1	8.3%	-	0.0%	2	16.7%	1	8.3%	2	16.7%	3	25.0%	2	16.7%	-	0.0%	2	16.7%
		Both	1	0.9%	15	13.5%	1	0.9%	1	0.9%	28	25.2%	25	22.5%	23	20.7%	5	4.5%	13	11.7%
2	Participate in decision making	Male	-	0.0%	1	3.8%	5	19.2%	2	7.7%	4	15.4%	7	26.9%	4	15.4%	1	3.8%	2	7.7%
		Female	1	9.1%	-	0.0%	2	18.2%	-	0.0%	2	18.2%	3	27.3%	2	18.2%	-	0.0%	2	18.2%
		Both	2	1.6%	15	12.3%	2	1.6%	5	4.1%	33	27.0%	26	21.3%	23	18.9%	5	4.1%	13	10.7%
3	Join local organizations	Male	-	0.0%	1	5.3%	5	26.3%	1	5.3%	3	15.8%	2	10.5%	4	21.1%	1	5.3%	2	10.5%
		Female	1	9.1%	-	0.0%	2	18.2%	-	0.0%	2	18.2%	3	27.3%	2	18.2%	-	0.0%	2	18.2%
		Both	2	1.6%	15	11.7%	2	1.6%	6	4.7%	33	25.8%	31	24.2%	23	18.0%	5	3.9%	13	10.2%
4	Others	Male	-	0.0%	1	5.9%	4	23.5%	-	0.0%	3	17.6%	2	11.8%	4	23.5%	1	5.9%	2	11.8%
		Female	1	10.0%	-	0.0%	2	20.0%	-	0.0%	2	20.0%	2	20.0%	2	20.0%	-	0.0%	2	20.0%
		Both	2	1.6%	14	10.9%	2	1.6%	7	5.5%	33	25.8%	31	24.2%	23	18.0%	5	3.9%	13	10.2%

No ethnic minorities in the project areas.

Table 2.54 shows the results of survey on the age distribution of female with less than 15 years old; from 15 to 60 years old and above 60 years old. Majority of women are at the working age. Follows by the rate of over 60 years old and the rate of age under 15 years olds.

Table 2. 54: Age Distribution of Females from Affected Households

#	District/ Commune	<15 years old	15–60 years old	>60 years old	Total
I	**Thai Thuy**	**21**	**175**	**23**	**219**
1.1	Diem Dien town	2	4	1	**7**
1.2	Thai Son	1	22	1	**24**
1.3	Thai Thuy	1	10	4	**15**
1.4	Thuy Lien	-	7	-	**7**
1.5	Thai Giang	7	52	7	**66**
1.6	Thai Duong	7	42	7	**56**
1.7	Thuy Ha	3	38	3	**44**
II	**Dong Hung**	**2**	**33**	**-**	**35**
2.1	Dong Kinh	1	9	-	**10**
2.2	Dong Tan	1	24	-	**25**
Total		**23**	**208**	**23**	**254**

Table 2.55 gives the results of survey on income of female headed households. From 32 surveyed female headed households, there are 21 households with income from VND 3,000,000 to VND 5,000,000. There are 6 HHs with income less than VND 3,000,000 per month and 5 HHs with income more than VND 5,000,000 per month.

Table 2. 55: Monthly Incomes of Affected Households Headed by Women

#	District/ Commune	Under VND 1,000,000	VND 1 million– VND 3 million	VND 3 million– VND 5 million	Over VND 5,000,000	Total
I	**Thai Thuy**	**-**	**5**	**18**	**4**	**27**
1.1	Diem Dien town	-	-	1	-	1
1.2	Thai Son	-	1	2	-	3
1.3	Thai Thuy	-	1	1	1	3
1.4	Thuy Lien	-	-	-	-	-
1.5	Thai Giang	-	1	6	3	10
1.6	Thai Duong	-	2	6	-	8
1.7	Thuy Ha	-	-	2	-	2
II	**Dong Hung**	**-**	**1**	**3**	**1**	**5**

#	District/ Commune	Under VND 1,000,000	VND 1 million– VND 3 million	VND 3 million– VND 5 million	Over VND 5,000,000	Total
2.1	Dong Kinh	-	-	-	1	1
2.2	Dong Tan	-	1	3	-	4
Total		**-**	**-**	**21**	**5**	**32**

Table 2.56 shows the detailed results of survey on the employments of the project affected HHs, table 2.57 describes about the education levels. It shows that a majority of people are at a Secondary School level.

Table 2. 56: Occupational Distribution of Females in Affected Households

Job	Thai Thuy														Dong Hung				Total	
	Diem Dien town		Thai Son		Thai Thuy		Thuy Lien		Thai Giang		Thai Duong		Thuy Ha		Dong Kinh		Dong Tan			
	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%
Agricultural activities	1	0.7 %	18	13.4 %	10	7.5%	6	4.5%	34	25.4 %	31	23.1 %	27	20.1 %	1	0.7%	6	4.5%	134	**100%**
Husbandry	-	0.0 %	-	0.0%	-	0.0%	-	0.0%	1	33.3 %	-	0.0%	-	0.0%	1	33.3 %	1	33.3 %	3	**100%**
Shop	1	10.0 %	-	0.0%	-	0.0%	1	10.0 %	-	0.0%	1	10.0 %	-	0.0%	2	20.0 %	5	50.0 %	10	**100%**
Restaurant	-	0.0 %	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	**100%**
Workers	-	0.0 %	2	15.4 %	-	0.0%	-	0.0%	5	38.5 %	1	7.7%	1	7.7%	1	7.7%	3	23.1 %	13	**100%**
Governmental Staff	-	0.0 %	-	0.0%	1	10.0 %	-	0.0%	5	50.0 %	-	0.0%	2	20.0 %	-	0.0%	2	20.0 %	10	**100%**
Private Sector	-	0.0 %	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	50.0 %	-	0.0%	-	0.0%	1	50.0 %	2	**100%**
Transport Sector	-	0.0 %	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	**100%**
Student	4	8.7 %	2	4.3%	4	8.7%	-	0.0%	8	17.4 %	12	26.1 %	11	23.9 %	2	4.3%	3	6.5%	46	**100%**
Housework	-	0.0 %	-	0.0%	-	0.0%	-	0.0%	1	33.3 %	2	66.7 %	-	0.0%	-	0.0%	-	0.0%	3	**100%**
Tenant	-	0.0 %	2	14.3 %	-	0.0%	-	0.0%	7	50.0 %	1	7.1%	1	7.1%	-	0.0%	3	21.4 %	14	**100%**
Others	1	9.1 %	-	0.0%	-	0.0%	-	0.0%	3	27.3 %	4	36.4 %	1	9.1%	2	18.2 %	0	0.0%	11	**100%**
Under Working age	-	0.0 %	-	0.0%	-	0.0%	-	0.0%	2	25.0 %	3	37.5 %	1	12.5 %	1	12.5 %	1	12.5 %	8	**100%**
Total	**7**	**2.8 %**	**24**	**9.4 %**	**15**	**5.9 %**	**7**	**2.8 %**	**66**	**26.0 %**	**56**	**22.0 %**	**44**	**17.3 %**	**10**	3.9%	**25**	9.8%	**254**	**100%**

Table 2. 57: Education Attainment of Females in Affected Households

#	District/ Commune	Illiterate	Primary	Secondary school	Not finished high school	High school	Vocational	University and above	Under School age	Total
I	**Thai Thuy**	**-**	**24**	**113**	**24**	**25**	**9**	**18**	**6**	**219**
1.1	Diem Dien town	-	-	4	-	2	-	1	-	7
1.2	Thai Son	-	**4**	**10**	**6**	**3**	-	**1**	-	**24**
1.3	Thai Thuy	-	-	8	4	1	-	2	-	15
1.4	Thuy Lien	-	1	5	1	-	-	-	-	7
1.5	Thai Giang	-	10	34	1	11	5	3	2	66
1.6	Thai Duong	-	7	29	4	7	2	4	3	56
1.7	Thuy Ha	-	2	23	8	1	2	7	1	44
II	**Dong Hung**	**-**	**2**	**7**	**9**	**10**	**-**	**7**	**-**	**35**
2.1	Dong Kinh	-	**1**	-	**1**	**7**	-	**1**	-	**10**
2.2	Dong Tan	-	**1**	**7**	**8**	**3**	-	**6**	-	**25**
Total		**-**	**26**	**120**	**33**	**35**	**9**	**25**	**6**	**254**

3. Section Quan Goi – Yen Lenh

Using the socio-economic survey questionnaire prepared for RP preparation, the total number of households surveyed was 278 households; accounts for about 37.1% of the total affected households. Details of survey are shown as in table 2.58. There are 237 of severely affected HHs by the project.

Table 2. 58: Sample of SES in each communes

#	District/ Commune	Number of affected households	Number of severely affected households (SAH)	Number of socio-economic survey households	% socio-economic survey	Number of socio-economic survey SAH	% Number of socio-economic survey SAH	Number of socio-economic survey non-SAH	% Number of socio-economic survey non-SAH
1	2	3	4	5	6=5/3	7	8=7/4	9	10=9/5
I	**My Hao**	**10**	**-**	**10**	**100%**	**-**	**0.0%**	**10**	**100%**
1.1	Minh Duc	10	-	10	100%	-	-	10	100%
II	**Binh Giang**	**208**	**107**	**79**	**38%**	**47**	**43.9%**	**32**	**40.5%**
2.1	Hung Thinh	27	19	16	59%	10	53%	6	37.5%
2.2	Vinh Tuy	63	17	25	39.7%	9	53%	16	64.0%
2.3	Vinh Hong	12	8	6	50.0%	5	62.5%	1	16.7%
2.4	Trang Liet	33	30	15	45.5%	12	40.0%	3	20.0%
2.5	Thuc Khang	73	33	17	23%	11	33.3%	6	35.3%
III	**An Thi**	**451**	**71**	**160**	**35%**	**38**	**53.5%**	**122**	**76%**
3.1	Phu Ung	43	6	**19**	44%	6	100.0%	13	68.4%

#	District/ Commune	Number of affected households	Number of severely affected households (SAH)	Number of socio-economic survey households	% socio-economic survey	Number of socio-economic survey SAH	% Number of socio-economic survey SAH	Number of socio-economic survey non-SAH	% Number of socio-economic survey non-SAH
3.2	Bai Say	184	1	57	31%	1	100.0%	56	98.2%
3.3	Tan Phuc	26	-	10	38%	-	0.0%	10	100.0%
3.4	Quang Vinh	78	34	28	36%	11	32.4%	17	60.7%
3.5	An Thi town	34	22	13	38%	12	54.5%	1	7.7%
3.6	Quang Lang	86	8	33	38%	8	100.0%	25	75.8%
IV	**Kim Dong**	**80**	**59**	**29**	**36%**	**19**	**32.2%**	**10**	**34%**
4.1	Nghia Dan	80	59	29	36%	19	32.2%	10	34.5%
Total		**749**	**237**	**278**	**37.1%**	**104**	**43.9%**	**174**	**63%**

Household Size

A majority of the affected HHs is with a family size of less than 3 persons, and then follows by the size of from 3 to 4 persons and from 5 to 6 persons. There is no household from a sample of survey with more than 6 persons. The detailed results are shown as in table 2.59

Table 2. 59: Household size

#	District/ Commune	< 3 heads	3–4 heads	5–6 heads	> 6 heads	Total
I	**My Hao**	**7**	**3**	**-**	**-**	**10**
1.1	Minh Duc	7	3	-	-	**10**
II	**Binh Giang**	**53**	**15**	**11**	**-**	**79**
2.1	Hung Thinh	7	4	5	-	**16**
2.2	Vinh Tuy	19	6	-	-	**25**
2.3	Vinh Hong	5	-	1	-	**6**
2.4	Trang Liet	8	3	4	-	**15**
2.5	Thuc Khang	14	2	1	-	**17**
III	**An Thi**	**74**	**66**	**20**	**-**	**160**
3.1	Phu Ung	11	7	1	-	**19**
3.2	Bai Say	17	26	14	-	**57**
3.3	Tan Phuc	3	7	-	-	**10**
3.4	Quang Vinh	17	8	3	-	**28**
3.5	An Thi town	10	3	-	-	**13**
3.6	Quang Lang	16	15	2	-	**33**
IV	**Kim Dong**	**16**	**10**	**3**	**-**	**29**
4.1	Nghia Dan	16	10	3	-	**29**
Total		**150**	**94**	**34**	**-**	**278**

Gender Distribution

With regard to the gender ratio, male rate (52.5%) is higher than female rate (47.5%) as average of the district and the rates are different from commune to communes. Some communes the rate of male is less and some communes the rate of male is higher than the rate of female. A detailed of surveyed results are described as in table 2.60 below.

Table 2. 60: Gender Distribution of HH Member in affected communes

#	District/ Commune	No. of SES HH	Male		Female	
			Person	%	Person	%
I	**My Hao**	**10**	**12**	**48.0%**	**13**	**52.0%**
1.1	Minh Duc	10	12	48.0%	13	52.0%
II	**Binh Giang**	**79**	**123**	**50.4%**	**121**	**49.6%**
2.1	Hung Thinh	16	29	50.9%	28	49.1%
2.2	Vinh Tuy	25	40	54.1%	34	45.9%
2.3	Vinh Hong	6	8	44.4%	10	55.6%
2.4	Trang Liet	15	24	49.0%	25	51.0%
2.5	Thuc Khang	17	22	47.8%	24	52.2%
III	**An Thi**	**160**	**292**	**52.4%**	**265**	**47.6%**
3.1	Phu Ung	19	33	54.1%	28	45.9%
3.2	Bai Say	57	118	53.9%	101	46.1%
3.3	Tan Phuc	10	14	38.9%	22	61.1%
3.4	Quang Vinh	28	49	53.3%	43	46.7%
3.5	An Thi town	13	20	55.6%	16	44.4%
3.6	Quang Lang	33	58	51.3%	55	48.7%
IV	**Kim Dong**	**29**	**56**	**59.6%**	**38**	**40.4%**
4.1	Nghia Dan	29	56	59.6%	38	40.4%
Total		**278**	**483**	**52.5%**	**437**	**47.5%**

Age distribution:

The age distribution of the affected HH surveyed is described in Table 2.61 below. In the aggregate, the table below show that the rate of people at the working age (from 15 to 60) is very high and the rate of the old people (over 60 year olds) is low. This shows very positive pictures of potential labour in the project area.

Table 2. 61: Age distribution of HH Member in affected communes

#	District/ Commune	<15 years old	15–60 years old	>60 years old	Total
I	**My Hao**	**4**	**19**	**2**	**25**
1.1	Minh Duc	4	19	2	**25**
II	**Binh Giang**	**9**	**195**	**40**	**244**
2.1	Hung Thinh	3	46	8	**57**
2.2	Vinh Tuy	3	62	9	**74**
2.3	Vinh Hong	2	16	-	**18**
2.4	Trang Liet	1	39	9	**49**
2.5	Thuc Khang	-	32	14	**46**
III	**An Thi**	**67**	**430**	**60**	**557**
3.1	Phu Ung	1	51	9	**61**
3.2	Bai Say	43	164	12	**219**
3.3	Tan Phuc	7	24	5	**36**
3.4	Quang Vinh	3	75	14	**92**
3.5	An Thi town	1	29	6	**36**
3.6	Quang Lang	12	87	14	**113**
IV	**Kim Dong**	**11**	**66**	**17**	**94**
4.1	Nghia Dan	11	66	17	**94**
Total		**91**	**710**	**119**	**920**

Education:

The surveyed results show that, 452/920 person surveyed have reached secondary level education, closely followed by those who have had high school education (164/920); with university (46/920), none of illiterate. These results show with a very positive status of education of the population in a project area.

Table 2. 62: Education Attainment of HH Member in affected communes

#	District/ Commune	Illiterate	Primary	Secondary school	Not finished high school	High school	Vocational	University and above	Other (under school age)	Total
I	**My Hao**	**-**	**2**	**16**	**1**	**6**	**-**	**-**	**-**	**25**
1.1	Minh Duc	-	2	16	1	6	-	-	-	**25**
II	**Binh Giang**	**-**	**15**	**124**	**21**	**55**	**13**	**13**	**3**	**244**
2.1	Hung Thinh	-	2	27	8	13	3	3	1	**57**
2.2	Vinh Tuy	-	8	29	10	16	8	2	1	**74**

#	District/ Commune	Illiterate	Primary	Secondary school	Not finished high school	High school	Vocational	University and above	Other (under school age)	Total
2.3	Vinh Hong	-	1	10	1	3	-	2	1	**18**
2.4	Trang Liet	-	-	29	-	15	1	4	-	**49**
2.5	Thuc Khang	-	4	29	2	8	1	2	-	**46**
III	**An Thi**	**-**	**56**	**258**	**64**	**93**	**28**	**32**	**26**	**557**
3.1	Phu Ung	-	6	37	3	8	4	3	-	**61**
3.2	Bai Say	-	31	92	35	25	9	11	16	**219**
3.3	Tan Phuc	-	2	10	1	17	1	2	3	**36**
3.4	Quang Vinh	-	7	45	7	17	7	6	3	**92**
3.5	An Thi town	-	-	23	1	7	-	5	-	**36**
3.6	Quang Lang	-	10	51	17	19	7	5	4	**113**
IV	**Kim Dong**	**-**	**10**	**54**	**12**	**10**	**4**	**1**	**3**	**94**
4.1	Nghia Dan	-	10	54	12	10	4	1	3	**94**
Total		**-**	**83**	**452**	**98**	**164**	**45**	**46**	**32**	**920**

Employment:

The surveyed results on the occupation of the affected households with the different activities/ business such as farming, husbandry, handicraft, running shops, restaurant, state employment, working for a private sector etc. are analysed and described as in table 2.63 below.

Table 2. 63 Occupational Distribution of HH Member in affected communes

Job	My Hao district		Binh Giang district									
	Minh Duc		Hung Thinh		Vinh Tuy		Vinh Hong		Trang Liet		Thuc Khang	
	P	%	P	%	P	%	P	%	P	%	P	%
Farming	12	2.5%	28	5.8%	37	7.7%	9	1.9%	26	5.4%	26	5.4%
Livestock	-	0.0%	1	11.1%	-	0.0%	-	0.0%	-	0.0%	1	11.1%
Selling goods	4	5.8%	-	0.0%	-	0.0%	-	0.0%	2	2.9%	2	2.9%
Restaurant/ eatery	-	0%	2	0%	-	0%	-	0%	-	0%	-	0%
Workers in factory	1	1.8%	1	1.8%	5	8.9%	3	5.4%	5	8.9%	-	0.0%
State employee	1	2.3%	-	0.0%	3	7.0%	1	2.3%	1	2.3%	1	2.3%
Private employee	-	0.0%	2	10.0%	1	5.0%	-	0.0%	-	0.0%	-	0.0%
Work in transport field	-	0.0%	1	10.0%	1	10.0%	-	0.0%	-	0.0%	-	0.0%
Student/Pupil	6	2.9%	10	4.9%	12	5.9%	4	2.0%	8	3.9%	3	1.5%
Housewife	-	0.0%	1	6.3%	-	0.0%	-	0.0%	-	0.0%	1	6.3%
Hire labor	1	0.9%	-	0.0%	12	10.7%	-	0.0%	2	1.8%	2	1.8%
Other	-	0.0%	9	12.9%	3	4.3%	-	0.0%	5	7.1%	9	12.9%
Under working age	-	0.0%	2	6.5%	-	0.0%	1	3.2%	-	0.0%	1	3.2%
Total	**25**	**2.2%**	**57**	**5.1%**	**74**	**6.6%**	**18**	**1.6%**	**49**	**4.4%**	**46**	**4.1%**

Job	An Thi district											
	Phu Ung		Bai Say		Tan Phuc		Quang Vinh		An Thi town		Quang Lang	
	P	%	P	%	P	%	P	%	P	%	P	%
Farming	23	4.8%	82	17.0%	6	1.2%	42	8.7%	23	4.8%	38	7.9%
Livestock	-	0.0%	2	22.2%	-	0.0%	1	11.1%	-	0.0%	1	11.1%
Selling goods	1	1.4%	15	21.7%	6	8.7%	-	0.0%	-	0.0%	5	7.2%
Restaurant/ eatery	-	0.0%	-	0.0%	-	0.0%	-	0%	-	0.0%	1	0.0%
Workers in factory	6	10.7%	6	10.7%	3	5.4%	3	5.4%	3	5.4%	7	12.5%
State employee	4	9.3%	6	14.0%	3	7.0%	4	9.3%	5	11.6%	4	9.3%
Private employee	-	0.0%	5	25.0%	-	0.0%	3	15.0%	-	0.0%	3	15.0%
Work in transport field	-	0.0%	3	30.0%	1	10.0%	1	10.0%	-	0.0%	2	20.0%
Student/Pupil	9	4.4%	55	27.0%	7	3.4%	11	5.4%	5	2.5%	19	9.3%
Housewife	4	25.0%	-	0.0%	2	12.5%	1	6.3%	-	0.0%	3	18.8%
Hire labor	13	11.6%	13	11.6%	1	0.9%	22	19.6%	-	0.0%	21	18.8%
Other	1	1.4%	16	22.9%	5	7.1%	2	2.9%	-	0.0%	8	11.4%
Under working age	-	0.0%	16	51.6%	2	6.5%	2	6.5%	-	0.0%	1	3.2%
Total	**61**	5.4%	**219**	19.4%	**36**	3.2%	**92**	**8.2%**	**36**	**3.2%**	**113**	**10.0%**

Job	Kim Dong district		Total	
	Nghia Dan			
	P	%	Person	%
Farming	58	12.0%	410	100%
Livestock	1	11.1%	7	100%
Selling goods	1	1.4%	36	100%
Restaurant/ eatery	0	0.0%	3	100%
Workers in factory	3	5.4%	46	100%
State employee	0	0.0%	33	100%
Private employee	2	10.0%	16	100%
Work in transport field	0	0.0%	9	100%
Student/Pupil	13	6.4%	162	100%
Housewife	0	0.0%	12	100%
Hire labor	13	11.6%	100	100%
Other	1	1.4%	59	100%
Under working age	2	6.5%	27	100%
Total	**94**	8.3%	**920**	100%

Social Policy Households:

Social policy households receive special cash allowances from the Government on the basis of having household members who are invalids, have heroic mothers, martyrs, and those who have contributed to the revolutions. The eligible HHs to social policy is with 60 households. Of which, the Single Female Headed Households is 8 households, accounts of about 13.3%.

Table 2.64: Social Policy Households, Other Vulnerable Households and Single Female Headed Households (No. of Households)

#	District/ Commune	Poor	Single Female Headed Household	Ethnic minorities	Lonely elder	Entitled to social assistance	Total
I	**My Hao**	**-**	**1**	**-**	**-**	**-**	**1**
1.1	Minh Duc	-	1	-	-	-	**1**
II	**Binh Giang**	**3**	**4**	**-**	**1**	**11**	**19**
2.1	Hung Thinh	-	1	-	-	3	**4**
2.2	Vinh Tuy	2	-	-	1	7	**10**
2.3	Vinh Hong	-	-	-	-	-	**-**
2.4	Trang Liet	1	3	-	-	1	**5**
2.5	Thuc Khang	-	-	-	-	-	**-**
III	**An Thi**	**12**	**2**	**1**	**1**	**20**	**36**
3.1	Phu Ung	1	1	-	-	-	**2**
3.2	Bai Say	4	-	-	-	5	**9**
3.3	Tan Phuc	1	-	-	1	3	**5**
3.4	Quang Vinh	3	1	-	-	3	**7**
3.5	An Thi town	1	-	-	-	3	**4**
3.6	Quang Lang	2	-	1	-	6	**9**
IV	**Kim Dong**	**1**	**1**	**-**	**-**	**2**	**4**
4.1	Nghia Dan	1	1	-	-	2	**4**
Total		**16**	**8**	**1**	**2**	**33**	**60**

Average Monthly Income

Table 2.65 shows that most of the interviewed families earn with income from VND 3,000,000 to VND 5,000,000 per month and no family have monthly income less than VND 1,000,000. There are 81 households from 278 surveyed households earning income with more than VND 5,000,000 per month.

Table 2. 65: Average Monthly Household Income of Affected Household (in million VND)

#	District/ Commune	<VND 1 million	VND 1 million - < VND 3 million	VND 3 million – VND 5 million	> VND 5 million	Total
I	**My Hao**	**-**	**1**	**6**	**3**	**10**
1.1	Minh Duc	-	1	6	3	**10**
II	**Binh Giang**	**-**	**16**	**45**	**18**	**79**

#	District/ Commune	<VND 1 million	VND 1 million - < VND 3 million	VND 3 million – VND 5 million	> VND 5 million	Total
2.1	Hung Thinh	-	3	7	6	**16**
2.2	Vinh Tuy	-	5	13	7	**25**
2.3	Vinh Hong	-	-	5	1	**6**
2.4	Trang Liet	-	4	8	3	**15**
2.5	Thuc Khang	-	4	12	1	**17**
III	**An Thi**	**-**	**16**	**93**	**51**	**160**
3.1	Phu Ung	-	-	13	6	**19**
3.2	Bai Say	-	6	33	18	**57**
3.3	Tan Phuc	-	1	2	7	**10**
3.4	Quang Vinh	-	4	14	10	**28**
3.5	An Thi town	-	2	11	-	**13**
3.6	Quang Lang	-	3	20	10	**33**
IV	**Kim Dong**	**-**	**10**	**10**	**9**	**29**
4.1	Nghia Dan	-	10	10	9	**29**
Total		**-**	**43**	**154**	**81**	**278**

Income - Expenditure Balance:

After comparing for gross income and gross expenditures, the picture on whether households have positive or negative income was derived. In the affected communes, this exercise revealed that 87% of total households end up with positive income or surplus after expenditures and 8.3% of the surveyed households are with incomes less than expenditures.

Table 2. 66: Income-Expenditure Balance of Affected Household

#	District/ Commune	Income<Expense		Income=Expense		Income>Expense		Total	
		HH	%	HH	%	HH	%	HH	%
I	**My Hao**	**-**	**0.0%**	**-**	**0.0%**	**10**	**100.0%**	**10**	**100%**
1.1	Minh Duc	-	0.0%	-	0.0%	10	100.0%	10	100%
II	**Binh Giang**	**5**	**6.3%**	**2**	**2.5%**	**72**	**91.1%**	**79**	**100%**
2.1	Hung Thinh	3	18.8%	-	0.0%	13	81.3%	16	100%
2.2	Vinh Tuy	1	4.0%	2	8.0%	22	88.0%	25	100%
2.3	Vinh Hong	-	0.0%	-	0.0%	6	100.0%	6	100%
2.4	Trang Liet	1	6.7%	-	0.0%	14	93.3%	15	100%
2.5	Thuc Khang	-	0.0%	-	0.0%	17	100.0%	17	100%
III	**An Thi**	**14**	**8.8%**	**8**	**5.0%**	**138**	**86.3%**	**160**	**100%**
3.1	Phu Ung	1	5.3%	-	0.0%	18	94.7%	19	100%
3.2	Bai Say	10	17.5%	5	8.8%	42	73.7%	57	100%
3.3	Tan Phuc	2	20.0%	-	0.0%	8	80.0%	10	100%
3.4	Quang Vinh	1	3.6%	3	10.7%	24	85.7%	28	100%

#	District/ Commune	Income<Expense		Income=Expense		Income>Expense		Total	
		HH	%	HH	%	HH	%	HH	%
3.5	An Thi town	-	0.0%	-	0.0%	13	100.0%	13	100%
3.6	Quang Lang	-	0.0%	-	0.0%	33	100.0%	33	100%
IV	**Kim Dong**	**4**	**13.8%**	**3**	**10.3%**	**22**	**75.9%**	**29**	**100%**
4.1	Nghia Dan	4	13.8%	3	10.3%	22	75.9%	29	100%
Total		**23**	**8.3%**	**13**	**4.7%**	**242**	**87%**	**278**	**100%**

Credit /Access to Loan

Table 2.67 shows that households only borrow loans from Banks 83.3% and other institutions 16.7% the households said that they borrow money for farming and husbandry activities and for other businesses. Table 2.67, 2.68 described about the survey results on accessing loans and using loans from a sample of the affected households.

Table 2. 67 Access to Loan of Affected Female Headed Household

#	District/ Commune	Loans from banks		Loans from other institutions		Loans from relatives, friends		Loans from other sources		Total	
		HH	%	HH	%	HH	%	HH	%	HH	%
I	**My Hao**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0.0%**	**0**	**-**
1.1	Minh Duc	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
II	**Binh Giang**	**3**	**75.0%**	**1**	**25.0%**	**-**	**0.0%**	**-**	**0.0%**	**4**	**100%**
2.1	Hung Thinh	1	100.0%	-	0.0%	-	0.0%	-	0.0%	1	100%
2.2	Vinh Tuy	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
2.3	Vinh Hong	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
2.4	Trang Liet	-	0.0%	1	100.0%	-	0.0%	-	0.0%	1	100%
2.5	Thuc Khang	2	100.0%	-	0.0%	-	0.0%	-	0.0%	2	100%
III	**An Thi**	**7**	**87.5%**	**1**	**12.5%**	**-**	**0.0%**	**-**	**0.0%**	**8**	**100%**
3.1	Phu Ung	3	75.0%	1	25.0%	-	0.0%	-	0.0%	4	100%
3.2	Bai Say	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
3.3	Tan Phuc	1	100.0%	-	0.0%	-	0.0%	-	0.0%	1	100%
3.4	Quang Vinh	2	100.0%	-	0.0%	-	0.0%	-	0.0%	2	100%
3.5	An Thi town	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
3.6	Quang Lang	1	100.0%	-	0.0%	-	0.0%	-	0.0%	1	100%
IV	**Kim Dong**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0%**
4.1	Nghia Dan	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
Total		**10**	**83.3%**	**2**	**16.7%**	**-**	**0.0%**	**-**	**0.0%**	**12**	**100%**

Purposes of using Loans

Table 2. 68: Purposes of using loans of Affected Female Headed Household

#	District/ Commune	Agricultural production		Business		Household expenditure		Building houses		Other		Total	
		HH	%	HH	%	HH	%	HH	%	HH	%	HH	%
I	**My Hao**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0.0%**	**0**	**0%**
1.1	Minh Duc	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
II	**Binh Giang**	**2**	**50.0%**	**-**	**0.0%**	**1**	**25.0%**	**1**	**25.0%**	**-**	**0.0%**	**4**	**100%**
2.1	Hung Thinh	1	100.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	100%
2.2	Vinh Tuy	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
2.3	Vinh Hong	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
2.4	Trang Liet	-	0.0%	-	0.0%	1	100.0 %	-	0.0%	-	0.0%	1	100%
2.5	Thuc Khang	1	50.0%	-	0.0%	-	0.0%	1	50.0%	-	0.0%	2	100%
III	**An Thi**	**2**	**25.0%**	**-**	**0.0%**	**4**	**50.0%**	**1**	**12.5%**	**1**	**12.5%**	**8**	**100%**
3.1	Phu Ung	2	50.0%	-	0.0%	1	25.0%	1	25.0%	-	0.0%	4	100%
3.2	Bai Say	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
3.3	Tan Phuc	-	0.0%	-	0.0%	1	100.0 %	-	0.0%	-	0.0%	1	100%
3.4	Quang Vinh	-	0.0%	-	0.0%	2	100.0 %	-	0.0%	-	0.0%	2	100%
3.5	An Thi town	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
3.6	Quang Lang	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	100.0 %	1	100%
IV	**Kim Dong**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0%**
4.1	Nghia Dan	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
Total		**4**	**33.3%**	**-**	**-**	**5**	**41.7%**	**2**	**16.7%**	**1**	**8.3%**	**12**	**100%**

Living facilities and Community Assets

Almost all of the households surveyed have motorbikes, television sets, refrigerator, furniture, and sanitation facilities such as septic toilet and running water, among others. Community physical infrastructures (village and commune link roads and community social services such as schools, healthcare centers, market etc.) are available and with locations that are not far from the affected households. The survey results on asset ownership, living amenities, cooking ways, community health etc. are shown in tables from 2.69 to 2.76 below.

Table 2. 69: Ownership of Living Facilities of Affected Households

#	District/ Commune	Unit	No.of surveyed HHs	Radio	Tivi	Motor-bike	Bicycle	Electric fan	Cooker	Fridge	Pump	Washing machine	Gas stove	Hot water tank	Comp uter
I	**My Hao**	**HH**	**10**	**2**	**10**	**9**	**10**	**10**	**10**	**8**	**8**	**-**	**10**	**1**	**-**
		%	**100%**	**20%**	**100%**	**90%**	**100%**	**100%**	**100%**	**80%**	**80%**	**0%**	**100%**	**10%**	**0%**
1.1	Minh Duc	HH	10	2	10	9	10	10	10	8	8	-	10	1	-
		%	100%	20%	100%	90%	100%	100%	100%	80%	80%	0%	100%	10%	0%
II	**Binh Giang**	**Hộ**	**79**	**34**	**78**	**69**	**76**	**78**	**78**	**44**	**74**	**10**	**73**	**20**	**6**
		%	**100%**	**43%**	**99%**	**87%**	**96%**	**99%**	**99%**	**56%**	**94%**	**13%**	**92%**	**25%**	**8%**
2.1	Hung Thinh	HH	16	2	15	15	14	15	15	10	12	4	14	4	4
		%	100%	13%	94%	94%	88%	94%	94%	63%	75%	25%	88%	25%	25%
2.2	Vinh Tuy	HH	25	20	25	21	25	25	25	16	25	4	25	14	1
		%	100%	80%	100%	84%	100%	100%	100%	64%	100%	16%	100%	56%	4%
2.3	Vinh Hong	HH	6	-	6	6	6	6	6	5	6	-	6	-	-
		%	100%	0%	100%	100%	100%	100%	100%	83%	100%	0%	100%	0%	0%
2.4	Trang Liet	HH	15	2	15	12	14	15	15	7	15	2	12	2	1
		%	100%	13%	100%	80%	93%	100%	100%	47%	100%	13%	80%	13%	7%
2.5	Thuc Khang	HH	17	10	17	15	17	17	17	6	16	-	16	-	-
		%	100%	59%	100%	88%	100%	100%	100%	35%	94%	0%	94%	0%	0%
III	**An Thi**	**HH**	**160**	**47**	**158**	**147**	**152**	**160**	**160**	**107**	**158**	**20**	**154**	**26**	**13**
		%	**100%**	**29%**	**99%**	**92%**	**95%**	**100%**	**100%**	**67%**	**99%**	**13%**	**96%**	**16%**	**8%**
3.1	Phu Ung	HH	19	6	19	19	19	19	19	12	19	-	19	1	-
		%	100%	32%	100%	100%	100%	100%	100%	63%	100%	0%	100%	5%	0%
3.2	Bai Say	HH	57	20	57	53	50	57	57	37	57	12	55	15	10
		%	100%	35%	100%	93%	88%	100%	100%	65%	100%	21%	96%	26%	18%
3.3	Tan Phuc	HH	10	4	10	9	10	10	10	9	10	6	10	5	2
		%	100%	40%	100%	90%	100%	100%	100%	90%	100%	60%	100%	50%	20%
3.4	Quang Vinh	HH	28	13	27	24	27	28	28	19	26	2	25	5	1
		%	100%	46%	96%	86%	96%	100%	100%	68%	93%	7%	89%	18%	4%

#	District/ Commune	Unit	No.of surveyed HHs	Radio	Tivi	Motor-bike	Bicycle	Electric fan	Cooker	Fridge	Pump	Washing machine	Gas stove	Hot water tank	Comp uter
3.5	An Thi Town	HH	13	-	12	11	13	13	13	10	13	-	13	-	-
		%	100%	0%	92%	85%	100%	100%	100%	77%	100%	0%	100%	0%	0%
3.6	Quang Lang	HH	33	4	33	31	33	33	33	20	33	-	32	-	-
		%	100%	12%	100%	94%	100%	100%	100%	61%	100%	0%	97%	0%	0%
IV	**Kim Dong**	**HH**	**29**	**10**	**27**	**27**	**29**	**30**	**29**	**12**	**25**	**4**	**27**	**8**	**-**
		%	**100%**	**34%**	**93%**	**93%**	**100%**	**103%**	**100%**	**41%**	**86%**	**14%**	**93%**	**28%**	**0%**
4.1	Nghia Dan	HH	29	10	27	27	29	30	29	12	25	4	27	8	-
		%	100%	34%	93%	93%	100%	103%	100%	41%	86%	14%	93%	28%	0%
Total		**HH**	**278**	**93**	**273**	**252**	**267**	**278**	**277**	**171**	**265**	**34**	**264**	**55**	**19**
		%	**100%**	**33%**	**98%**	**91%**	**96%**	**100%**	**100%**	**62%**	**95%**	**12%**	**95%**	**20%**	**7%**

Table 2. 70: Water Source for Using of Affected Households

#	District/ Commune	Unit	Well	Tap Water	River, spring, pond water	Mountain creek	Well shared with neighbours	Rain water	Buying from other	Drilled well	Total
I	**My Hao**	**HH**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**10**	**10**
		%	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**100%**	**100%**
1.1	Minh Duc	HH	-	-	-	-	-	-	-	10	10
		%	0%	0%	0%	0%	0%	0%	0%	100%	100%
II	**Binh Giang**	**HH**	**1**	**-**	**-**	**-**	**-**	**-**	**-**	**78**	**79**
		%	**1.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**98.7%**	**100%**
2.1	Hung Thinh	HH	1	-	-	-	-	-	-	15	16
		%	6.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	93.8%	100%
2.2	Vinh Tuy	HH	-	-	-	-	-	-	-	25	25
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%	100%
2.3	Vinh Hong	HH	-	-	-	-	-	-	-	6	6
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0 %	100%
2.4	Trang Liet	HH	-	-	-	-	-	-	-	15	15
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%	100%
2.5	Thuc Khang	HH	-	-	-	-	-	-	-	17	17
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%	100%
III	**An Thi**	**HH**	**2**	**-**	**-**	**-**	**-**	**-**	**-**	**158**	**160**
		%	**1.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**98.8%**	**100%**
3.1	Phu Ung	HH	-	-	-	-	-	-	-	19	19
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0 %	100%
3.2	Bai Say	HH	2	-	-	-	-	-	-	55	57
		%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	96.5%	100%
3.3	Tan Phuc	HH	-	-	-	-	-	-	-	10	10
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%	100%
3.4	Quang Vinh	HH	-	-	-	-	-	-	-	28	28
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%	100%
3.5	An Thi town	HH	-	-	-	-	-	-	-	13	13
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%	100%
3.6	Quang Lang	HH	-	-	-	-	-	-	-	33	33
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%	100%
IV	**Kim Dong**	**HH**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**29**	**29**
		%	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**100%**	**100%**
4.1	Nghia Dan	HH	-	-	-	-	-	-	-	29	29
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0 %	100%
Total		**HH**	**3**	**-**	**-**	**-**	**-**	**-**	**-**	**275**	**278**
		%	**1.1%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**98.9%**	**100%**

Table 2. 71: Main Sources for Lighting of Affected Households

#	District/ Commune	Unit	Electricity	Battery	Wood/ Coal	Generator	Oil lamp	Other	Total
I	**My Hao**	**HH**	**10**	**-**	**-**	**-**	**-**	**-**	**10**
		%	**100.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**100.0%**
1.1	Minh Duc	HH	10	-	-	-	-	-	10
		%	100%	0%	0%	0%	0%	0%	100%
II	**Binh Giang**	**HH**	**79**	**-**	**-**	**-**	**-**	**-**	**79**
		%	**100.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**100%**
2.1	Hung Thinh	HH	16	-	-	-	-	-	16
		%	100%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
2.2	Vinh Tuy	HH	25	-	-	-	-	-	25
		%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
2.3	Vinh Hong	HH	6	-	-	-	-	-	6
		%	100%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
2.4	Trang Liet	HH	15	-	-	-	-	-	15
		%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
2.5	Thuc Khang	HH	17	-	-	-	-	-	17
		%	100%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
III	**An Thi**	**HH**	**158**	**-**	**2**	**-**	**-**	**-**	**160**
		%	**98.8%**	**0.0%**	**1.3%**	**0.0%**	**0.0%**	**0.0%**	**100%**
3.1	Phu Ung	HH	19	-	-	-	-	-	19
		%	100%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
3.2	Bai Say	HH	55	-	2	-	-	-	57
		%	96.5%	0.0%	3.5%	0.0%	0.0%	0.0%	100%
3.3	Tan Phuc	HH	10	-	-	-	-	-	10
		%	100%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
3.4	Quang Vinh	HH	28	-	-	-	-	-	28
		%	100%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
3.5	An Thi town	HH	13	-	-	-	-	-	13
		%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
3.6	Quang Lang	HH	33	-	-	-	-	-	33
		%	100%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
IV	**Kim Dong**	**HH**	**29**	**-**	**-**	**-**	**-**	**-**	**29**
		%	**100%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**100%**
4.1	Nghia Dan	HH	29	-	-	-	-	-	29
		%	100%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total		**HH**	**276**	**-**	**2**	**-**	**-**	**-**	**278**
		%	**99.3%**	**0%**	**0.7%**	**0%**	**0%**	**0%**	**100%**

Table 2. 72: Main Sources for Cooking of Affected Households

#	District/ Commune	Unit	Grid	Generator	Gas/Oil	Wood/ Coal	Biogas	No answer	Total
I	**My Hao**	**HH**	**-**	**-**	**6**	**4**	**-**	**-**	**10**
		%	**0.0%**	**0.0%**	**60.0%**	**40.0%**	**0.0%**	**0.0%**	**100%**
1.1	Minh Duc	HH	-	-	6	4	-	-	10
		%	0%	0%	60%	40%	0%	0%	100%
II	**Binh Giang**	**HH**	**-**	**-**	**61**	**17**	**1**	**-**	**79**
		%	**0.0%**	**0.0%**	**77.2%**	**21.5%**	**1.3%**	**0.0%**	**100%**
2.1	Hung Thinh	HH	-	-	13	3	-	-	16
		%	0.0%	0.0%	81.3%	18.8%	0.0%	0.0%	100%
2.2	Vinh Tuy	HH	-	-	18	6	1	-	25
		%	0.0%	0.0%	72.0%	24.0%	4.0%	0.0%	100%
2.3	Vinh Hong	HH	-	-	4	2	-	-	6
		%	0.0%	0.0%	66.7%	33.3%	0.0%	0.0%	100%
2.4	Trang Liet	HH	-	-	9	6	-	-	15
		%	0.0%	0.0%	60.0%	40.0%	0.0%	0.0%	100%
2.5	Thuc Khang	HH	-	-	17	-	-	-	17
		%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100%
III	**An Thi**	**HH**	**-**	**1**	**130**	**19**	**10**	**-**	**160**
		%	**0.0%**	**0.6%**	**81.3%**	**11.9%**	**6.3%**	**0.0%**	**100%**
3.1	Phu Ung	HH	-	-	19	-	-	-	19
		%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100%
3.2	Bai Say	HH	-	1	44	5	7	-	57
		%	0.0%	1.8%	77.2%	8.8%	12.3%	0.0%	100%
3.3	Tan Phuc	HH	-	-	9	1	-	-	10
		%	0.0%	0.0%	90.0%	10.0%	0.0%	0.0%	100%
3.4	Quang Vinh	HH	-	-	17	9	2	-	28
		%	0.0%	0.0%	60.7%	32.1%	7.1%	0.0%	100%
3.5	An Thi town	HH	-	-	9	4	-	-	13
		%	0.0%	0.0%	69.2%	30.8%	0.0%	0.0%	100%
3.6	Quang Lang	HH	-	-	32	-	1	-	33
		%	0.0%	0.0%	97.0%	0.0%	3.0%	0.0%	100%
IV	**Kim Dong**	**HH**	**1**	**-**	**17**	**7**	**4**	**-**	**29**
		%	**3.4%**	**0.0%**	**58.6%**	**24.1%**	**13.8%**	**0.0%**	**100%**
4.1	Nghia Dan	HH	1	-	17	7	4	-	29
		%	3.4%	0.0%	58.6%	24.1%	13.8%	0.0%	100%
Total		**HH**	**1**	**1**	**214**	**47**	**15**	**-**	**278**
		%	**0.4%**	**0.4%**	**77%**	**16.8%**	**5.4%**	**0.0%**	**100%**

Table 2. 73: Common diseases in the community

#	District/ Commune	Unit	Feel	Flu	Malaria	Cholera	Dysentery	Hepatitis	Infectious agent	No answer	Total
I	**My Hao**	**HH**	**10**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**10**
		%	**100%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**100%**
1.1	Minh Duc	HH	10	-	-	-	-	-	-	-	10
		%	100%	0%	0%	0%	0%	0%	0%	0%	100%
II	**Binh Giang**	**HH**	**60**	**11**	**-**	**-**	**-**	**-**	**1**	**7**	**79**
		%	**75.9%**	**13.9%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**1.3%**	**8.9%**	**100%**
2.1	Hung Thinh	HH	10	-	-	-	-	-	-	6	16
		%	62.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	37.5%	100%
2.2	Vinh Tuy	HH	19	6	-	-	-	-	-	-	25
		%	76.0%	24.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
2.3	Vinh Hong	HH	6	-	-	-	-	-	-	-	6
		%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
2.4	Trang Liet	HH	13	2	-	-	-	-	-	-	15
		%	86.7%	13.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
2.5	Thuc Khang	HH	12	3	-	-	-	-	1	1	17
		%	70.6%	17.6%	0.0%	0.0%	0.0%	0.0%	5.9%	5.9%	100%
III	**An Thi**	**HH**	**109**	**30**	**-**	**-**	**-**	**-**	**13**	**8**	**160**
		%	**68.1%**	**18.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**8.1%**	**5.0%**	**100%**
3.1	Phu Ung	HH	15	2	-	-	-	-	2	-	19
		%	78.9%	10.5%	0.0%	0.0%	0.0%	0.0%	10.5%	0.0%	100%
3.2	Bai Say	HH	21	21	-	-	-	-	9	6	57
		%	36.8%	36.8%	0.0%	0.0%	0.0%	0.0%	15.8%	10.5%	100%
3.3	Tan Phuc	HH	6	2	-	-	-	-	2	-	10
		%	60.0%	20.0%	0.0%	0.0%	0.0%	0.0%	20.0%	0.0%	100%
3.4	Quang Vinh	HH	22	5	-	-	-	-	-	1	28
		%	78.6%	17.9%	0.0%	0.0%	0.0%	0.0%	0.0%	3.6%	100%

#	District/ Commune	Unit	Feel	Flu	Malaria	Cholera	Dysentery	Hepatitis	Infectious agent	No answer	Total
3.5	An Thi town	HH	13	-	-	-	-	-	-	-	13
		%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
3.6	Quang Lang	HH	32	-	-	-	-	-	-	1	33
		%	97.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	100%
IV	**Kim Dong**	**HH**	**27**	**-**	**-**	**-**	**-**	**-**	**-**	**2**	**29**
		%	**93.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**6.9%**	**100%**
4.1	Nghia Dan	HH	27	-	-	-	-	-	-	2	29
		%	93.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.9%	100%
Total		**HH**	**206**	**41**	**-**	**-**	**-**	**-**	**14**	**17**	**278**
		%	**74.1%**	**14.7%**	**0%**	**0%**	**0%**	**0%**	**5.1%**	**6.1%**	**100%**

Table 2. 74: Access to health services

#	District/ Commune	Unit	Commune health station				District hospital				Clinic/Nurse				Pharmacy				Traditional drug treatment			
			<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km
I	**My Hao**	**HH**	**10**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		%	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0 %
1.1	Minh Duc	HH	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		%	100%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0 %
II	**Binh Giang**	**HH**	**49**	**13**	-	-	**2**	**1**	**8**	**19**	-	-	**1**	**0**	**31**	-	-	**1**	-	-	**1**	-
		%	**38.9 %**	**10.3 %**	**0.0%**	**0.0 %**	**1.6 %**	**0.8 %**	**6.3 %**	**15.1 %**	**0.0 %**	**0.0%**	**0.8%**	**0.0 %**	**24.6 %**	**0.0%**	**0.0 %**	**0.8 %**	**0.0 %**	**0.0%**	**0.8 %**	**0.0 %**
2.1	Hung Thinh	HH	6	1	-	-	-	-	1	-	-	-	1	-	11	-	-	-	-	-	1	-
		%	28.6%	4.8%	0.0%	0.0%	0.0%	0.0%	4.8%	0.0%	0.0%	0.0%	4.8%	0.0%	52.4 %	0.0%	0.0%	0.0%	0.0%	0.0%	4.8%	0.0 %
2.2	Vinh Tuy	HH	14	11	-	-	-	-	3	19	-	-	-	-	-	-	-	1	-	-	-	-
		%	29.2%	22.9 %	0.0%	0.0%	0.0%	0.0%	6.3%	39.6 %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0 %
2.3	Vinh Hong	HH	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		%	100.0 %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0 %
2.4	Trang Liet	HH	13	-	-	-	2	-	2	-	-	-	-	-	8	-	-	-	-	-	-	-
		%	52.0%	0.0%	0.0%	0.0%	8.0%	0.0%	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	32.0 %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0 %
2.5	Thuc Khang	HH	10	1	-	-	-	1	2	-	-	-	-	-	12	-	-	-	-	-	-	-
		%	38.5%	3.8%	0.0%	0.0%	0.0%	3.8%	7.7%	0.0%	0.0%	0.0%	0.0%	0.0%	46.2 %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0 %
III	**An Thi**	**HH**	**85**	**62**	**1**	-	**1**	**4**	**15**	**54**	**2**	**4**	-	**1**	**53**	**4**	**1**	-	**2**	**1**	-	-
		%	**58.2 %**	**42.5 %**	**0.7 %**	**0.0 %**	**0.7 %**	**2.7 %**	**10.3 %**	**37.0 %**	**1.4 %**	**2.7 %**	**0.0 %**	**0.7 %**	**36.3 %**	**2.7 %**	**0.7 %**	**0.0 %**	**1.4 %**	**0.7%**	**0.0 %**	**0.0 %**
3.1	Phu Ung	HH	14	4	-	-	-	-	-	-	-	-	-	-	13	1	-	-	-	-	-	-
		%	43.8%	12.5 %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	40.6 %	3.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0 %

#	District/ Commune	Unit	Commune health station				District hospital				Clinic/Nurse				Pharmacy				Traditional drug treatment			
			<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km
3.2	Bai Say	HH	27	30	-	-	-	-	7	42	-	-	-	-	5	1	1	-	1	-	-	-
		%	23.7%	26.3%	0.0%	0.0%	0.0%	0.0%	6.1%	36.8%	0.0%	0.0%	0.0%	0.0%	4.4%	0.9%	0.9%	0.0%	0.9%	0.0%	0.0%	0.0%
3.3	Tan Phuc	HH	4	5	1	-	-	-	4	6	-	-	-	-	-	-	-	-	-	-	-	-
		%	20.0%	25.0%	5.0%	0.0%	0.0%	0.0%	20.0%	30.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
3.4	Quang Vinh	HH	11	16	-	-	-	2	-	6	2	4	-	1	10	2	-	-	-	1	-	-
		%	20.0%	29.1%	0.0%	0.0%	0.0%	3.6%	0.0%	10.9%	3.6%	7.3%	0.0%	1.8%	18.2%	3.6%	0.0%	0.0%	0.0%	1.8%	0.0%	0.0%
3.5	An Thi town	HH	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
3.6	Quang Lang	HH	16	7	-	-	1	2	4	-	-	-	-	-	25	-	-	-	1	-	-	-
		%	28.6%	12.5%	0.0%	0.0%	1.8%	3.6%	7.1%	0.0%	0.0%	0.0%	0.0%	0.0%	44.6%	0.0%	0.0%	0.0%	1.8%	0.0%	0.0%	0.0%
IV	**Kim Dong**	**HH**	**6**	**19**	**-**	**-**	**-**	**4**	**1**	**3**	**-**	**-**	**1**	**1**	**12**	**7**	**-**	**-**	**-**	**-**	**-**	**-**
		%	**11.1%**	**35.2%**	**0.0%**	**0.0%**	**0.0%**	**7.4%**	**1.9%**	**5.6%**	**0.0%**	**0.0%**	**1.9%**	**1.9%**	**22.2%**	**13.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
4.1	Nghia Dan	HH	6	19	-	-	-	4	1	3	-	-	1	1	12	7	-	-	-	-	-	-
		%	11.1%	35.2%	0.0%	0.0%	0.0%	7.4%	1.9%	5.6%	0.0%	0.0%	1.9%	1.9%	22.2%	13.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total		**HH**	**50**	**150**	**94**	**1**	**-**	**3**	**9**	**24**	**76**	**2**	**4**	**2**	**2**	**96**	**11**	**1**	**1**	**2**	**1**	**1**
		%	**31.3%**	**19.6%**	**0.2%**	**0.0%**	**0.6%**	**1.9%**	**5.0%**	**15.8%**	**0.4%**	**0.8%**	**0.4%**	**0.4%**	**20.0%**	**2.3%**	**0.2%**	**0.2%**	**0.4%**	**0.2%**	**0.2%**	**0.0%**

Table 2. 75: Access to education services

#	District/ Commune	Unit	Preschool				Elementary school				Secondary school				High school				Vocational school			
			<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km
I	**My Hao**	**HH**	**2**	**-**	**-**	**-**	**1**	**2**	**-**	**-**	**1**	**2**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
		%	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**2.4%**	**4.8%**	**0.0%**	**0.0%**	**2.4%**	**4.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
1.1	Minh Duc	HH	-	-	-	-	1	2	-	-	-	1	2	-	-	-	-	-	-	-	-	-
		%	0.0%	0.0%	0.0%	0.0%	16.7%	33.3%	0.0%	0.0%	16.7%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
II	**Binh Giang**	**HH**	**1**	**-**	**-**	**-**	**3**	**-**	**-**	**-**	**2**	**2**	**-**	**-**	**-**	**3**	**4**	**-**	**-**	**-**	**-**	**3**
		%	**5.6%**	**0.0%**	**0.0%**	**0.0%**	**16.7%**	**0.0%**	**0.0%**	**0.0%**	**11.1%**	**11.1%**	**0.0%**	**0.0%**	**0.0%**	**16.7%**	**22.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**16.7%**
2.1	Hung Thinh	HH	-	-	-	-	1	-	-	-	-	1	-	-	8	1	-	-	-	-	-	-
		%	0.0%	0.0%	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	33.3%	0.0%	0.0%	44.4%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2.2	Vinh Tuy	HH	-	-	-	-	2	-	-	-	2	1	-	-	-	1	7	-	-	-	-	2
		%	0.0%	0.0%	0.0%	0.0%	20.0%	0.0%	0.0%	0.0%	20.2%	10.0%	0.0%	0.0%	0.0%	10.0%	28.0%	0.0%	0.0%	0.0%	0.0%	20.0%
2.3	Vinh Hong	HH	1	-	-	-	-	6	-	-	-	-	-	-	9	-	6	-	-	-	-	1
		%	33.3%	0.0%	0.0%	0.0%	0.0%	6.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.2%	0.0%	6.8%	0.0%	0.0%	0.0%	0.0%	33.3%
2.4	Trang Liet	HH	-	-	-	-	-	1	-	-	-	-	-	-	9	1	4	-	-	-	-	-
		%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.9%	50%	5.7%	0.0%	0.0%	0.0%	0.0%	0.0%
2.5	Thuc Khang	HH	-	-	-	-	-	-	-	-	-	-	-	-	11	-	1	-	-	-	-	-
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.8%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%
III	**An Thi**	**HH**	**3**	**4**	**-**	**-**	**7**	**18**	**-**	**-**	**-**	**-**	**-**	**-**	**1**	**5**	**18**	**-**	**-**	**1**	**1**	**14**
		%	**5.0%**	**6.7%**	**0.0%**	**0.0%**	**11.7%**	**30.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**1.7%**	**8.3%**	**30.0%**	**0.0%**	**0.0%**	**1.7%**	**1.7%**	**23.3%**
3.1	Phu Ung	HH	-	-	-	-	1	-	-	-	-	-	-	-	1	-	2	-	-	-	1	1
		%	0.0	0.0%	0.0%	0.0%	25	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.3%	0.0%	50.5%	0.0%	0.0%	0.0%	10.5%	25.0%

#	District/ Commune	Unit	Preschool				Elementary school				Secondary school				High school				Vocational school			
			<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km
			%				%															
3.2	Bai Say	HH	2	4	-	-	-	16	-	-	-	-	-	-	17	3	9	-	-	-	-	8
		%	3.6%	7.1%	0.0%	0.0%	0.0%	28.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	5.4%	16.1%	0.0%	0.0%	0.0%	0.0%	14.3%
3.3	Tan Phuc	HH	-	-	-	-	-	2	-	-	-	-	-	-	-	2	1	-	-	-	-	2
		%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	12.5%	0.0%	0.0%	0.0%	0.0%	25.0%
3.4	Quang Vinh	HH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	1	1	2
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	0.0%	0.0%	12.5%	12.5%	25%
3.5	An Thi town	HH	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	1
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	0.0%	25.0%	0.0%	0.0%	0.0%	0.0%	25%
3.6	Quang Lang	HH	1	-	-	-	6	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-
		%	7.7%	0.0%	0.0%	0.0%	46.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	23.1%	0.0%	0.0%	0.0%	0.0%	0.0%
IV	**Kim Dong**	**HH**	**1**	**-**	**-**	**-**	**1**	**4**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**2**	**1**	**-**	**-**	**-**	**1**
		%	**100.0%**	**0.0%**	**0.0%**	**0.0%**	**10.0%**	**40.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**20.0%**	**10.0%**	**0.0%**	**0.0%**	**0.0%**	**10.0%**
4.1	Nghia Dan	HH	-	-	-	-	1	4	-	-	-	1	-	-	-	-	2	1	-	-	-	1
		%	0.0%	0.0%	0.0%	0.0%	10.0%	40.0%	0.0%	0.0%	0.0%	10.0%	0.0%	0.0%	0.0%	0.0%	20.0%	10.0%	0.0%	0.0%	0.0%	10.0%
Total		**HH**	**50**	**4**	**4**	**-**	**-**	**12**	**24**	**-**	**-**	**5**	**22**	**2**	**-**	**1**	**8**	**24**	**1**	**0**	**1**	**1**
		%	**3.1%**	**3.1%**	**0.0%**	**0.0%**	**9.4%**	**18.9%**	**0.0%**	**0.0%**	**3.9%**	**17.3%**	**1.6%**	**0.0%**	**0.8%**	**6.3%**	**18.9%**	**0.8%**	**0.0%**	**0.8%**	**0.8%**	**14.2%**

Table 2. 76: Access to other services, culture works...

#	District/ Commune	Unit	Market				Stadium				Sport area				Pagoda/Temple/Church				Entertainment park			
			<1 km	1-2km	2-5km	>5 km	<1 km	1-2km	2-5km	>5 km	<1 km	1-2km	2-5km	>5 km	<1 km	1-2km	2-5km	>5km	<1 km	1-2km	2-5km	>5 km
I	**My Hao**	**HH**	**9**	**1**	-	-	**1**	**2**	-	-	-	-	-	-	**7**	**3**	-	-	-	**1**	-	-
		%	**2.4%**	**0.0 %**	**0.0 %**	**0.0 %**	**0.3 %**	**0.0 %**	**0.0 %**	**0.0 %**	**0.0 %**	**0.0%**	**0.0%**	**0.0 %**	**1.8 %**	**0.8 %**	**0.0 %**	**0.0 %**	**0.0 %**	**0.3 %**	**0.0 %**	**0.0 %**
1.1	Minh Duc	HH	9	1	-	-	1	2	-	-	-	-	-	-	7	3	-	-	-	1	-	-
		%	35.7 %	4.2 %	0.0%	0.0 %	4.2 %	8.3 %	0.0 %	0.0 %	0.0 %	0.0%	0.0%	0.0 %	29.2 %	12.5 %	0.0 %	0.0 %	0.0 %	4.2 %	0.0 %	0.0 %
II	**Binh Giang**	**HH**	**73**	**5**	**1**	-	**8**	**11**	**5**	-	-	-	-	-	**46**	**5**	**18**	-	**2**	**3**	**1**	**1**
		%	**40.8 %**	**2.8 %**	**0.6 %**	**0.0 %**	**4.5 %**	**6.1 %**	**2.8 %**	**0.0 %**	**0.0 %**	**0.0%**	**0.0 %**	**0.0 %**	**25.7 %**	**2.8 %**	**10.1 %**	**0.0 %**	**1.1 %**	**1.7 %**	**0.6 %**	**0.6 %**
2.1	Hung Thinh	HH	16	-	-	-	1	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-
		%	55.2 %	0.0 %	0.0%	0.0 %	3.4 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0%	0.0%	0.0 %	41.4 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
2.2	Vinh Tuy	HH	19	5	1	-	-	11	5	-	-	-	-	-	1	5	18	-	-	1	1	1
		%	27.9 %	7.4 %	1.5%	0.0 %	0.0 %	16.2 %	7.4 %	0.0 %	0.0 %	0.0%	0.0%	0.0 %	1.5 %	7.4 %	26.5 %	0.0 %	0.0 %	1.5 %	1.5 %	1.5 %
2.3	Vinh Hong	HH	6	-	-	-	3	-	-	-	-	-	-	-	6	-	-	-	1	1	-	-
		%	35.3 %	0.0 %	0.0%	0.0 %	17.6 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0%	0.0%	0.0 %	35.3 %	0.0 %	0.0 %	0.0 %	5.9 %	5.9 %	0.0 %	0.0 %
2.4	Trang Liet	HH	15	-	-	-	3	-	-	-	-	-	-	-	11	-	-	-	1	1	-	-
		%	48.4 %	0.0 %	0.0%	0.0 %	9.7 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0%	0.0%	0.0 %	35.5 %	0.0 %	0.0 %	0.0 %	3.2 %	3.2 %	0.0 %	0.0 %
2.5	Thuc Khang	HH	17	-	-	-	1	-	-	-	-	-	-	-	16	13	1	-	-	-	-	-
		%	50 %	0.0 %	0.0%	0.0 %	2.9 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0%	0.0%	0.0 %	47.1 %	24.5 %	1.9 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
III	**An Thi**	**HH**	**107**	**53**	-	-	**16**	**13**	**1**	-	-	-	-	-	**81**	**42**	**29**	**4**	**1**	**5**	**15**	**6**
		%	**54.6 %**	**27%**	**0.0 %**	**0.0 %**	**8.2 %**	**6.6 %**	**0.5 %**	**0.0 %**	**0.0 %**	**0.0%**	**0.0%**	**0.0 %**	**41.3 %**	**21.4 %**	**14.8 %**	**2.0 %**	**0.5 %**	**2.6 %**	**7.7 %**	**3.1 %**

#	District/ Commune	Unit	Market				Stadium				Sport area				Pagoda/Temple/Church				Entertainment park			
			<1 km	1-2km	2-5km	>5 km	<1 km	1-2km	2-5km	>5 km	<1 km	1-2km	2-5km	>5 km	<1 km	1-2km	2-5km	>5km	<1 km	1-2km	2-5km	>5 km
3.1	Phu Ung	HH	13	6	-	-	-	1	-	-	-	-	-	-	16	2	-	-	-	-	-	-
		%	34.2 %	15.8 %	0.0%	0.0 %	0.0 %	2.6 %	0.0 %	0.0 %	0.0 %	0.0%	0.0%	0.0 %	42.1 %	5.3 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
3.2	Bai Say	HH	32	25	-	-	12	8	1	-	-	-	-	-	4	24	25	4	1	5	11	6
		%	20.3 %	15.8 %	0.0%	0.0 %	7.6 %	5.1 %	0.6 %	0.0 %	0.0 %	0.0%	0.0%	0.0 %	2.5 %	15.2 %	15.8 %	2.5 %	0.6 %	3.2 %	7%	3.8 %
3.3	Tan Phuc	HH	6	4	-	-	1	2	-	-	-	-	-	-	2	7	1	-	-	-	4	-
		%	22.2 %	14.8 %	0.0%	0.0 %	3.7 %	7.4 %	0.0 %	0.0 %	0.0 %	0.0%	0.0%	0.0 %	7.4 %	25.9 %	3.7 %	0.0 %	0.0 %	0.0 %	14.8 %	0.0 %
3.4	Quang Vinh	HH	8	10	-	-	1	2	-	-	-	-	-	-	15	9	3	-	-	-	-	-
		%	31 %	17.2 %	0.0%	0.0 %	1.7 %	3.4 %	0.0 %	0.0 %	0.0 %	0.0%	0.0%	0.0 %	25.9 %	15.5 %	52%	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
3.5	An Thi town	HH	13	-	-	-	-	-	-	-	-	-	-	-	13	-	-	-	-	-	-	-
		%	50.0 %	0.0 %	0.0%	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0%	0.0%	0.0 %	50.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
3.6	Quang Lang	HH	25	8	-	-	2	-	-	-	-	-	-	-	31	-	-	-	-	-	-	-
		%	37.9 %	12.1 %	0.0%	0.0 %	3.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0%	0.0%	0.0 %	47 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
IV	**Kim Dong**	**HH**	**26**	**4**	**-**	**-**	**7**	**-**	**3**	**-**	**-**	**-**	**-**	**-**	**16**	**1**	**5**	**-**	**3**	**-**	**-**	**-**
		%	**40 %**	**6.2 %**	**0.0 %**	**0.0 %**	**10.8 %**	**0.0 %**	**4.6 %**	**0.0 %**	**0.0 %**	**0.0%**	**0.0%**	**0.0 %**	**24.6 %**	**1.5 %**	**7.7 %**	**0.0 %**	**4.6 %**	**0.0 %**	**0.0 %**	**0.0 %**
4.1	Nghia Dan	HH	26	4	-	-	7	-	3	-	-	-	-	-	16	1	5	-	3	-	-	-
		%	40 %	6.2 %	0.0%	0.0 %	10.8 %	0.0 %	4.6 %	0.0 %	0.0 %	0.0%	0.0%	0.0 %	24.6 %	1.5 %	7.7 %	0.0 %	4.6 %	0.0 %	0.0 %	0.0 %
Total		**HH**	**215**	**63**	**1**	**-**	**32**	**26**	**9**	**-**	**-**	**-**	**-**	**-**	**150**	**51**	**52**	**4**	**3**	**9**	**19**	**7**
		%	**33.5 %**	**9.8 %**	**0.2 %**	**0.0 %**	**5.0 %**	**4.1 %**	**1.4 %**	**0.0 %**	**0.0 %**	**0.0%**	**0.0%**	**0.0 %**	**23.4 %**	**8.0 %**	**8.1 %**	**0.6 %**	**0.5 %**	**1.4 %**	**3.0 %**	**1.1 %**

Living standard

Table 2.77 analysed about the trend of living standards of the affected households in the recent last three years. The results show that the majority of the households declared with no change (47.8%) or better (50%) and about 2.2% the households are worse off.

Table 2. 77: Household living standard changes (last 3 years)

#	District/ Commune	No change		Better		Worse		Total	
		HH	%	HH	%	HH	%	HH	%
I	**My Hao**	**5**	**50.0%**	**5**	**50.0%**	**-**	**0.0%**	**10**	**100%**
1.1	Minh Duc	5	50.0%	5	50.0%	-	0.0%	10	100%
II	**Binh Giang**	**42**	**53.2%**	**36**	**45.6%**	**1**	**1.3%**	**79**	**100%**
2.1	Hung Thinh	8	50.0%	7	43.8%	1	6.3%	16	100%
2.2	Vinh Tuy	9	36.0%	16	64.0%	-	0.0%	25	100%
2.3	Vinh Hong	4	66.7%	2	33.3%	-	0.0%	6	100%
2.4	Trang Liet	8	53.3%	7	46.7%	-	0.0%	15	100%
2.5	Thuc Khang	13	76.5%	4	23.5%	-	0.0%	17	100%
III	**An Thi**	**67**	**41.9%**	**88**	**55.0%**	**5**	**3.1%**	**160**	**100%**
3.1	Phu Ung	5	26.3%	14	73.7%	-	0.0%	19	100%
3.2	Bai Say	29	50.9%	23	40.4%	5	8.8%	57	100%
3.3	Tan Phuc	3	30.0%	7	70.0%	-	0.0%	10	100%
3.4	Quang Vinh	11	39.3%	17	60.7%	-	0.0%	28	100%
3.5	An Thi town	8	61.5%	5	38.5%	-	0.0%	13	100%
3.6	Quang Lang	11	33.3%	22	66.7%	-	0.0%	33	100%
IV	**Kim Dong**	**19**	**65.5%**	**10**	**34.5%**	**-**	**0.0%**	**29**	**100%**
4.1	Nghia Dan	19	65.5%	10	34.5%	-	0.0%	29	100%
Total		**133**	**47.8%**	**139**	**50%**	**6**	**2.2%**	**278**	**100%**

Table 2.78 shows the results of consultation for the feedback from the affected households to the project development. It shows with very positive results that nearly 100% of the survey households support for the project development. It means that with the project, local people see a lot of benefits to them.

Public consultation on the behaviour of people to the project

Table 2. 78: Support implementation of the project

#	District/ Commune	Yes		No		Total	
		HH	%	HH	%	HH	%
I	**My Hao**	**10**	**100%**	**-**	**0.0%**	**10**	**100%**
1.1	Minh Duc	10	100%	-	**0.0%**	10	100%
II	**Binh Giang**	**79**	**100%**	**-**	**0.0%**	**79**	**100%**

#	District/ Commune	Yes		No		Total	
		HH	%	HH	%	HH	%
2.1	Hung Thinh	16	100%	-	0.0%	16	100%
2.2	Vinh Tuy	25	100%	-	0.0%	25	100%
2.3	Vinh Hong	6	100%	-	0.0%	6	100%
2.4	Trang Liet	15	100%	-	0.0%	15	100%
2.5	Thuc Khang	17	100%	-	0.0%	17	100%
III	**An Thi**	**158**	**98.8%**	**2**	**1.3%**	**160**	**100%**
3.1	Phu Ung	19	100%	-	0.0%	19	100%
3.2	Bai Say	55	96.5%	2	3.5%	57	100%
3.3	Tan Phuc	10	100%	-	0.0%	10	100%
3.4	Quang Vinh	28	100%	-	0.0%	28	100%
3.5	An Thi town	13	100%	-	0.0%	13	100%
3.6	Quang Lang	33	100%	-	0.0%	33	100%
IV	**Kim Dong**	**29**	**100%**	**-**	**0.0%**	**29**	**100%**
4.1	Nghia Dan	29	100%	-	0.0%	29	100%
Total		**276**	**99.3%**	**2**	**0.7%**	**278**	**100%**

Gender issues and Ethnic Minority

Table 2.79 shows the surveyed results analysed by the gender (male and female) by the different activities. It shows with the results that most of economic development activities are done by both men and women. However, with farming activities, women participate to the activities more than men.

Table 2.80 shows that, women participate the community meetings more than men, but the rate of men making decisions is much higher than women.

Table 2. 79: Division of Labor

#	Division of labor	Unit	My Hao		Binh Giang									
			Minh Duc		Hung Thinh		Vinh Tuy		Vinh Hong		Trang Liet		Thuc Khang	
			P	%	P	%	P	%	P	%	P	%	P	%
1	Land preparation	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	2	6.7%	-	0.0%	-	0.0%	1	3.3%	3	9.7%	1	2.7%
		Both	6	2.5%	15	6.4%	25	10.6%	4	1.7%	11	4.7%	16	7.0%
2	Cultivation	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	2	6.5%	-	0.0%	-	0.0%	1	3.2%	3	9.7%	1	3.4%
		Both	6	2.5%	15	6.4%	25	10.6%	4	1.7%	11	4.7%	16	6.9%
3	Sowing	Male	-	0.0%	-	0.0%	0	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	2	6.5%	-	0.0%	0	0.0%	1	3.2%	3	8.1%	1	3.7%
		Both	6	2.6%	15	6.4%	25	10.6%	4	1.7%	11	4.8%	16	6.7%
4	Weeding	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	2	5.4%	-	0.0%	-	0.0%	1	2.7%	3	10.3%	1	2.6%
		Both	6	2.2%	15	6.4%	25	10.9%	4	1.7%	11	4.6%	16	5.7%
5	Pesticide spraying	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	2	6.9%	-	0.0%	-	0.0%	1	3.4%	3	10.0%	1	3.2%
		Both	6	2.6%	15	6.4%	25	10.8%	4	1.7%	11	6.4%	16	5.7%
6	Harvest	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	2	7.4%	-	0.0%	-	0.0%	1	3.3%	3	13.6%	1	3.4%
		Both	6	2.5%	15	6.4%	25	10.5%	4	1.7%	11	6.2%	16	5.6%
7	Vegetable growing	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	2	6.7%	-	0.0%	-	0.0%	1	3.3%	3	10%	-	0.0%
		Both	6	3.5%	15	6.4%	25	14.6%	4	2.3%	11	6.4%	-	0.0%
8	Livestock	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	2	9.1%	-	0.0%	-	0.0%	1	4.5%	3	13.6%	-	0.0%
		Both	6	3.4%	15	6.4%	25	14%	4	2.2%	11	6.2%	-	0.0%
9	Small business	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Both	3	17.6%	-	0.0%	-	0.0%	-	0.0%	1	5.9%	1	5.9%
10	Workers	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Both	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
11	Labor migration (domestic)	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Both	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%

#	Division of labor	Unit	An Thi district											
			Phu Ung		Bai Say		Tan Phuc		Quang Vinh		An Thi town		Quang Lang	
			P	%	P	%	P	%	P	%	P	%	P	%
1	Land preparation	Male	-	0.0%	1	100.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	2	6.7%	10	33.3%	3	10%	3	10%	1	3.3%	1	3.3%
		Both	16	6.8%	43	18.2%	6	2.5%	25	10.6%	12	5.1%	30	12.7%
2	Cultivation	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	2	6.5%	10	32.3%	3	9.7%	4	12.9%	1	3.2%	1	3.2%
		Both	16	6.8%	44	18.6%	6	2.5%	24	10.2%	12	5.1%	30	12.7%
3	Sowing	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	2	6.5%	10	32.3%	2	6.5%	4	12.9%	1	3.2%	1	3.2%
		Both	16	6.8%	44	18.7%	6	2.6%	24	10.2%	12	5.1%	30	12.7%
4	Weeding	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	2	5.4%	15	40.5%	3	8.1%	4	10.8%	1	3.2%	1	3.4%
		Both	16	7.0%	39	17.0%	6	2.6%	24	10.4%	12	5.1%	30	12.9%
5	Pesticide spraying	Male	-	0.0%	4	80.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	2	6.9%	10	34.5%	2	6.9%	3	10.3%	1	3.2%	1	3.7%
		Both	16	6.9%	40	14.2%	6	2.6%	25	10.8%	12	5.1%	30	12.6%
6	Harvest	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	2	7.4%	9	33.3%	1	3.7%	3	11.3%	1	3.7%	1	3.4%
		Both	16	6.9%	45	18.8%	7	2.9%	25	10.5%	12	5%	30	10.4%
7	Vegetable growing	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	-	0.0%	14	46.7%	3	10%	3	10%	1	3.3%	-	0.0%
		Both	-	0.0%	40	23.4%	6	3.5%	25	14.6%	12	6.7%	-	0.0%
8	Livestock	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	-	0.0%	8	36.4%	1	4.5%	3	13.6%	1	4.5%	-	0.0%
		Both	-	0.0%	46	25.8%	7	3.9%	25	14%	12	6.7%	-	0.0%
9	Small business	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	1	20%	-	0.0%	1	20%	-	0.0%	-	0.0%	-	0.0%
		Both	-	0.0%	9	52.9%	3	17.6%	-	0.0%	-	0.0%	-	0.0%
10	Workers	Male	1	100.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Both	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
11	Labor migration (domestic)	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Female	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
		Both	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%

#	Division of labor	Unit	Kim Dong	
			Nghia Dan	
			P	%
1	Land preparation	Male	-	0.0%
		Female	3	10%
		Both	27	11.4%
2	Cultivation	Male	0	0.0%
		Female	3	9.7%
		Both	27	11.4%
3	Sowing	Male	-	0.0%
		Female	4	12.9%
		Both	26	11.1%
4	Weeding	Male	-	0.0%
		Female	4	10.8%
		Both	26	11.3%
5	Pesticide spraying	Male	1	20.0%
		Female	3	10.3%
		Both	26	11.2%
6	Harvest	Male	-	0.0%
		Female	3	11.1%
		Both	27	11.3%
7	Vegetable growing	Male	-	0.0%
		Female	3	10%
		Both	27	15.8%
8	Livestock	Male	-	0.0%
		Female	3	13.6%
		Both	27	15.2%
9	Small business	Male	-	0.0%
		Female	-	0.0%
		Both	-	0.0%
10	Workers	Male	-	0.0%
		Female	-	0.0%
		Both	-	0.0%
11	Labor migration (domestic)	Male	-	0.0%
		Female	-	0.0%
		Both	-	0.0%

Table 2.80: Participate in Community Activities

#	Activity	Unit	My Hao		Binh Giang									
			Minh Duc		Hung Thinh		Vinh Tuy		Vinh Hong		Trang Liet		Thuc Khang	
			P	%	P	%	P	%	P	%	P	%	P	%
1	Attend community meetings	Male	3	4.2%	1	1.4%	6	8.5%	1	1.4%	2	2.8%	3	4.2%
		Female	1	7.1%	1	7.1%	1	7.1%	1	7.1%	2	14.3%	1	7.1%
		Both	6	3.1%	14	7.2%	18	9.2%	4	2.1%	11	5.6%	14	7.2%
2	Participate in decision making	Male	3	4.5%	1	1.5%	6	9.1%	1	1.5%	2	3%	3	4.5%
		Female	1	7.1%	1	7.1%	1	7.1%	1	7.1%	2	14.3%	1	7.1%
		Both	6	3.0%	14	7.0%	18	9.0%	4	2.0%	11	5.5%	14	7.0%
3	Join local organizations	Male	3	4.5%	1	1.5%	6	9.0%	1	1.5%	2	3.0%	3	4.5%
		Female	1	7.1%	1	7.1%	1	7.1%	1	7.1%	2	14.3%	1	7.1%
		Both	6	3.0%	14	7.0%	18	9.0%	4	2.0%	11	5.5%	14	7.0%
4	Others	Male	3	4.5%	1	1.5%	6	9.1%	1	1.5%	2	3.0%	3	4.5%
		Female	1	7.7%	1	7.7%	1	7.7%	1	7.7%	2	15.4%	1	7.7%
		Both	6	3.0%	14	7.1%	18	9.1%	4	2.0%	10	5.1%	13	6.6%

#	Activity	Unit	An Thi district											
			Phu Ung		Bai Say		Tan Phuc		Quang Vinh		An Thi town		Quang Lang	
			P	%	P	%	P	%	P	%	P	%	P	%
1	Attend community meetings	Male	8	11.3 %	4	5.6%	-	0.0%	14	19.7%	2	2.8%	16	22.5%
		Female	-	0.0%	2	14.3%	1	7.1%	-	0.0%	1	7.1%	1	7.1%
		Both	11	5.6%	51	26.2%	9	4.6%	14	7.2%	10	5.0%	16	8.2%
2	Participate in decision making	Male	8	12.1 %	3	4.5%	-	0.0%	12	18.2%	2	3.0%	16	24.2%
		Female	-	0.0%	2	14.3%	1	7.1%	-	0.0%	1	7.1%	1	7.1%
		Both	11	5.5%	52	26.0%	9	4.5%	16	8%	10	5.0%	16	8.0%
3	Join local organizations	Male	8	11.9 %	4	6%	-	0.0%	12	17.9%	2	3.0%	16	23.9%
		Female	-	0.0%	2	14.3%	1	7.1%	-	0.0%	1	7.1%	1	7.1%
		Both	11	5.5%	51	25.6%	9	4.5%	16	8.0%	10	5.0%	16	8.0%
4	Others	Male	8	12.1 %	3	4.5%	-	0.0%	12	18.2%	2	3.0%	16	24.2%
		Female	-	0.0%	2	15.4%	1	7.7%	-	0.0%	1	7.7%	1	7.7%
		Both	11	5.6%	52	26.4%	9	4.6%	16	8.1%	10	5.1%	16	8.1%

#	Activity	Unit	Kim Dong	
			Nghia Dan	
			P	%
1	Attend community meetings	Male	11	15.5%
		Female	2	14.3%
		Both	17	8.7%
2	Participate in decision making	Male	9	13.6%
		Female	2	14.3%
		Both	19	9.5%
3	Join local organizations	Male	9	13.4%
		Female	2	14.3%
		Both	19	9.5%
4	Others	Male	9	13.6%
		Female	1	7.7%
		Both	18	9.1%

There are no ethnic household in project area.

Table 2.81 shows the results of survey on the age distribution of female with less than 15 years old; from 15 to 60 years old and above 60 years old. Majority of women are at the working age. Follows by the rate of over 60 years old and then with the age under 15 years olds

Table 2.81: Age Distribution of Females from Affected Households

#	District/ Commune	<15 years old	15–60 years old	>60 years old	Total
I	**My Hao**	**2**	**10**	**1**	**13**
1.1	Minh Duc	2	10	1	**13**
II	**Binh Giang**	**4**	**93**	**24**	**121**
2.1	Hung Thinh	1	21	6	**28**
2.2	Vinh Tuy	2	28	4	**34**
2.3	Vinh Hong	1	9	-	**10**
2.4	Trang Liet	-	20	5	**25**
2.5	Thuc Khang	-	15	9	**24**
III	**An Thi**	**36**	**199**	**30**	**265**
3.1	Phu Ung	1	21	6	**28**
3.2	Bai Say	22	74	5	**101**
3.3	Tan Phuc	5	15	2	**22**
3.4	Quang Vinh	1	33	9	**43**
3.5	An Thi town	1	13	2	**16**
3.6	Quang Lang	6	43	6	**55**
IV	**Kim Dong**	**4**	**28**	**6**	**38**
4.1	Nghia Dan	4	28	6	**38**
Total		**46**	**330**	**61**	**437**

Table 2.82 gives the results of survey on income of female headed households. From 54 surveyed female headed households, there are 32 households (about 59.3%) with income from VND 3,000,000 to VND 5,000,000. About 15.3% with income less than VND 3,000,000 and 25.9% with income more than VND 5,000,000.

Table 2. 82: Monthly Incomes of Affected Households Headed by Women

#	District/ Commune	Under VND 1,000,000	VND 1 million– VND 3 million	VND 3 million– VND 5 million	Over VND 5,000,000	Total
I	**My Hao**	**-**	**1**	**2**	**-**	**3**
1.1	Minh Duc	-	1	2	-	**3**
II	**Binh Giang**	**-**	**5**	**12**	**4**	**21**
2.1	Hung Thinh	-	1	1	2	**4**
2.2	Vinh Tuy	-	2	3	2	**7**
2.3	Vinh Hong	-	-	2	-	**2**

#	District/ Commune	Under VND 1,000,000	VND 1 million– VND 3 million	VND 3 million– VND 5 million	Over VND 5,000,000	Total
2.4	Trang Liet	-	1	3	-	**4**
2.5	Thuc Khang	-	1	3	-	**4**
III	**An Thi**	**-**	**2**	**18**	**10**	**30**
3.1	Phu Ung	-	-	4	3	**7**
3.2	Bai Say	-	-	3	-	**3**
3.3	Tan Phuc	-	1	-	-	**1**
3.4	Quang Vinh	-	1	4	5	**10**
3.5	An Thi town	-	-	3	-	**3**
3.6	Quang Lang	-	-	4	2	**6**
IV	**Kim Dong**	**-**	**-**	**-**	**-**	**-**
4.1	Nghia Dan	-	-	-	-	-
Total		**-**	**8**	**32**	**14**	**54**

Table 2.83 shows the detailed results of survey on the employments of the project affected HHs, table 2.84 describes about the education levels. It shows that a majority of people are at a Secondary School level.

Table 2. 83: Occupational Distribution of Females in Affected Households

Job	My Hao		Binh Giang									
	Minh Duc		Hung Thinh		Vinh Tuy		Vinh Hong		Trang Liet		Thuc Khang	
	P	%	P	%	P	%	P	%	P	%	P	%
Farming	12	2.9%	28	6.8%	37	9%	9	2.2%	26	6.3%	26	6.3%
Livestock	-	0.0%	1	14.3%	-	0.0%	-	0.0%	-	0.0%	1	14.3%
Selling goods	4	11.1%	-	0.0%	-	0.0%	-	0.0%	2	5.6%	2	5.6%
Restaurant/eatery	-	0%	2	66.7%	-	0%	-	0%	-	0%	-	0%
Workers in factory	1	2.2%	1	2.2%	5	10.9%	3	6.5%	5	10.9%	-	0.0%
State employee	1	3.0%	-	0.0%	3	9.1%	1	3.0%	1	3.0%	3	13%
Private employee	-	0.0%	2	12.5%	1	6.3%	-	0.0%	-	0.0%	-	0.0%
Work in transport field	-	0.0%	1	11.1%	1	11.%	-	0.0%	-	0.0%	-	0.0%
Student/Pupil	6	3.7%	10	6.2%	12	7.4%	4	2.5%	8	4.9%	3	1.9%
Housewife	0	0.0%	1	8.3%	-	0.0%	-	0.0%	-	0.0%	1	8.3%
Hire labor	1	1.0%	-	0.0%	12	12.0%	-	0.0%	2	2.2%	2	2.0%
Other	-	0.0%	9	15.3%	3	5.1%	-	0.0%	5	8.5%	9	15.3%
Under working age	-	0.0%	2	7.4%	0	0.0%	-	0.0%	-	0.0%	1	3.7%
Total	**25**	**2.7%**	**74**	**8.0%**	**74**	**8%**	**18**	**2.0%**	**49**	**5.3%**	**46**	**5%**

Job	An Thi district											
	Phu Ung		Bai Say		Tan Phuc		Quang Vinh		An Thi town		Quang Lang	
	P	%	P	%	P	%	P	%	P	%	P	%
Farming	23	5.6%	82	20.0%	6	1.5%	42	10.2%	23	5.6%	38	9.3%
Livestock	-	0.0%	2	28.6%	-	0.0%	1	14.3%	-	0.0%	1	14.3%
Selling goods	1	2.8%	15	41.7%	6	16.7%	-	0.0%	-	0.0%	5	13.9%
Restaurant/eatery	-	0.0%	-	0.0%	-	0.0%	-	0%	-	0.0%	1	33.3%
Workers in factory	6	13%	6	13%	3	6.5%	3	6.5%	3	6.5%	7	15.2%
State employee	4	12.1%	6	18.2%	3	9.1%	4	12.1%	5	15.2%	4	12.1%
Private employee	-	0.0%	5	31.3%	-	0.0%	3	18.8%	-	0.0%	3	18.8%
Work in transport field	-	0.0%	3	33.3%	1	11.1%	1	11.1%	-	0.0%	2	22.2%
Student/Pupil	9	5.6%	55	34%	7	4.3%	11	6.8%	5	3.1%	19	11.7%
Housewife	4	13.0%	0	00%	2	16.7%	1	8.3%	-	0.0%	3	18.8%
Hire labor	1	1.7%	13	13.0%	1	1.0%	22	22%	-	0.0%	21	21.1%
Other	-	0.0%	16	27.1%	5	8.5%	2	3.4%	-	0.0%	8	13.6%
Under working age	-	0.0%	16	59.3%	2	7.4%	2	7.4%	-	0.0%	1	3.7%
Total	**61**	6.6%	**101**	19.1%	**36**	3.9%	**43**	**8.1%**	**36**	**12.3%**	**113**	**12.3%**

Job	Kim Dong Nghia Dan		Total	
Farming	58	14.4%	410	100%
Livestock	1	14.3%	7	100%
Selling goods	1	2.8%	36	100%
Restaurant/eatery	-	0.0%	3	100%
Workers in factory	3	6.5%	46	100%
State employee	-	0.0%	33	100%
Private employee	2	12.5%	16	100%
Work in transport field	-	0.0%	9	100%
Student/Pupil	13	8%	162	100%
Housewife	-	0.0%	12	100%
Hire labor	13	13.3%	100	100%
Other	1	1.7%	59	100%
Under working age	2	7.4%	27	100%
Total	**94**	10.2%	**920**	100%

Table 2. 84: Education Attainment of Females in Affected Households

#	District/ Commune	Illite rate	Prim ary	Secondary school	Not finished high school	High school	Vocat ional	University and above	Other (under school age)	Total
I	**My Hao**	**-**	**1**	**7**	**1**	**4**	**-**	**-**	**-**	**13**
1.1	Minh Duc	-	1	7	1	4	-	-	-	**13**
II	**Binh Giang**	**-**	**7**	**75**	**10**	**21**	**5**	**2**	**1**	**121**
2.1	Hung Thinh	-	1	18	3	4	1	1	-	**28**
2.2	Vinh Tuy	-	3	17	4	7	2	-	1	**34**
2.3	Vinh Hong	-	1	6	2	1	-	-	-	**10**
2.4	Trang Liet	-	-	17	-	6	1	1	-	**25**
2.5	Thuc Khang	-	2	17	1	3	1	-	-	**24**
III	**An Thi**	**-**	**36**	**137**	**29**	**34**	**11**	**10**	**8**	**265**
3.1	Phu Ung	-	2	23	1	1	1	-	-	**28**
3.2	Bai Say	-	25	39	17	9	4	3	4	**101**
3.3	Tan Phuc	-	2	11	-	7	1	-	1	**22**
3.4	Quang Vinh	-	3	24	3	7	2	2	2	**43**
3.5	An Thi town	-	-	13	1	2	-	-	-	**16**
3.6	Quang Lang	-	4	27	7	8	3	5	1	**55**
IV	**Kim Dong**	**-**	**4**	**21**	**5**	**5**	**1**	**1**	**1**	**38**
4.1	Nghia Dan	-	4	21	5	5	1	1	1	**38**
Total		**-**	**48**	**240**	**45**	**64**	**17**	**13**	**10**	**437**

4. Section 4 bridges of NH 38B

Using the socio-economic survey questionnaire prepared for RP preparation, the total number of households surveyed was 79 households; accounts for about 35% of the total affected households. Details of survey are shown as in table 111. There are 58 of severely affected HHs by the project.

Table 2. 85: Sample of SES in each communes

#	District/ Commune	Number of affected households	Number of severely affected households (SAH)	Number of socio-economic survey households	% socio-economic survey	Number of socio-economic survey SAH	% Number of socio-economic survey SAH	Number of socio-economic survey non-SAH	% Number of socio-economic survey non-SAH
1	2	3	4	5	6=5/3	7	8=7/4	9	10=9/5
I	**Gia Loc**	**20**	**5**	**10**	**50%**	**5**	**100.0%**	**5**	**50%**
1	Doan Thuong	13	-	4	31%	-	0.0%	4	100.0%
2	Dong Quang	7	5	6	86%	5	100.0%	1	16.7%
II	**Thanh Mien**	**140**	**53**	**40**	**29%**	**23**	**43.4%**	**17**	**43%**

#	District/ Commune	Number of affected households	Number of severely affected households (SAH)	Number of socio-economic survey households	% socio-economic survey	Number of socio-economic survey SAH	% Number of socio-economic survey SAH	Number of socio-economic survey non-SAH	% Number of socio-economic survey non-SAH
1	Thanh Mien town	41	19	15	37%	10	52.6%	5	33.3%
2	Tu Cuong	61	34	13	21%	13	38.2%	-	0.0%
3	Cao Thang	38	-	12	32%	-	0.0%	12	100.0%
III	**Phu Cu**	**63**	**0**	**29**	**46%**	**0**	**0.0%**	**29**	**100%**
1	Quang Hung	39	-	17	44%	-	0.0%	17	100.0%
2	Doan Dao	24	-	12	50%	-	0.0%	12	100.0%
Total		**223**	**58**	**79**	**35%**	**28**	**48.3%**	**51**	**65%**

Household Size

A majority of the affected HHs is with a family size of from 3 to 4 persons, and then follows by the size of less than 3 persons and from 5 to 6 persons. There is no household from a sample of survey with more than 6 persons. The detailed results are shown as in table 2.86.

Table 2. 86: Household size

#	District/ Commune	< 3 heads	3–4 heads	5–6 heads	> 6 heads	Total
I	**Gia Loc**	**3**	**7**	**-**	**-**	**10**
1.1	Doan Thuong	1	3	-	-	**4**
1.2	Dong Quang	2	4	-	-	**6**
II	**Thanh Mien**	**12**	**24**	**4**	**-**	**40**
2.1	Thanh Mien town	2	11	2	-	**15**
2.2	Tu Cuong	8	4	1	-	**13**
2.3	Cao Thang	2	9	1	-	**12**
III	**Phu Cu**	**8**	**16**	**5**	**-**	**29**
3.1	Quang Hung	4	8	5	-	**17**
3.2	Doan Dao	4	8	-	-	**12**
Total		**23**	**47**	**9**	**-**	**79**

Gender Distribution

With regard to the gender ratio, male rate (55.3%) is higher than female rate (44.7%) as average and the rates are different from commune to communes. Some communes the rate of male is less

and some communes the rate of male is higher than the rate of female. A detailed of surveyed results are described as in table 2..87 below.

Table 2. 87: Gender Distribution of HH Member in affected communes

#	District/ Commune	No. of SES HH	Male		Female		Total	
			Person	%	Person	%	Person	%
I	**Gia Loc**	**10**	**12**	**41.4%**	**17**	**58.6%**	**29**	**100%**
1.1	Doan Thuong	4	5	38.5%	8	61.5%	13	100%
1.2	Dong Quang	6	7	43.8%	9	56.3%	16	100%
II	**Thanh Mien**	**40**	**75**	**58.6%**	**53**	**41.4%**	**128**	**100%**
2.1	Thanh Mien town	15	32	57.1%	24	42.9%	56	100%
2.2	Tu Cuong	13	21	61.8%	13	38.2%	34	100%
2.3	Cao Thang	12	22	57.9%	16	42.1%	38	100%
III	**Phu Cu**	**29**	**58**	**55.2%**	**47**	**44.8%**	**105**	**100%**
3.1	Quang Hung	17	36	55.4%	29	44.6%	65	100%
3.2	Doan Dao	12	22	55.0%	18	45.0%	40	100%
Total		**79**	**145**	**55.3%**	**117**	**44.7%**	**262**	**100%**

Age distribution:

The age distribution of the affected HH surveyed is described in Table 2.88 below. In the aggregate, the table below show that the rate of people at the working age (from 15 to 60) is very high and the rate of the old people (over 60 year olds) is low. This shows very positive pictures of potential labour in the project area.

Table 2. 88: Age distribution of HH Member in affected communes

#	District/ Commune	<15 years old	15–60 years old	>60 years old	Total
I	**Gia Loc**	**3**	**24**	**2**	**29**
1.1	Doan Thuong	2	9	2	**13**
1.2	Dong Quang	1	15	-	**16**
II	**Thanh Mien**	**8**	**103**	**17**	**128**
2.1	Thanh Mien town	6	43	7	**56**
2.2	Tu Cuong	1	24	9	**34**
2.3	Cao Thang	1	36	1	**38**
III	**Phu Cu**	**12**	**81**	**12**	**105**
3.1	Quang Hung	7	48	10	**65**
3.2	Doan Dao	5	33	2	**40**
Total		**23**	**208**	**31**	**262**

Education:

The surveyed results show that, 125/262 person surveyed have reached secondary level education, closely followed by those who have had high school education (46/262); with university (25/262), none of illiterate. These results show with a very positive status of education of the population in a project area.

Table 2. 89: Education Attainment of HH Member in affected communes

#	District/ Commune	Illite rate	Primar y	Secon dary school	Not finished high school	High scho ol	Vocati onal	Universi ty and above	Other (under school age)	Total
I	**Gia Loc**	**-**	**3**	**16**	**-**	**5**	**-**	**4**	**1**	**29**
1.1	Doan Thuong	-	-	7	-	2	-	3	1	**13**
1.2	Dong Quang	-	3	9	-	3	-	1	-	**16**
II	**Thanh Mien**	**-**	**12**	**67**	**10**	**21**	**5**	**10**	**3**	**128**
2.1	Thanh Mien town		10	23	6	11	1	4	1	**56**
2.2	Tu Cuong	-	1	22	4	4	1	2	-	**34**
2.3	Cao Thang	-	1	22	-	6	3	4	2	**38**
VI I	**Phu Cu**	**-**	**4**	**42**	**17**	**20**	**8**	**11**	**3**	**105**
7.1	Quang Hung	-	2	21	13	11	7	9	2	**65**
7.2	Doan Dao	-	2	21	4	9	1	2	1	**40**
Total		**-**	**19**	**125**	**27**	**46**	**13**	**25**	**7**	**262**

Employment:

The surveyed results on the occupation of the affected households with the different activities/ business such as farming, husbandry, handicraft, running shops, restaurant, state employment, working for a private sector etc. are analysed and described as in table 2.90 below.

Table 2. 90: Occupational Distribution of HH Member in affected communes

Job	Gia Loc district				Thanh Mien district						Phu Cu district				Total	
	Doan Thuong		Dong Quang		Thanh Mien town		Tu Cuong		Cao Thang		Quang Hung		Doan Dao			
	Per	%	Per	%	Per	%	Per	%	Per	%	Per	%	Per	%	Per	%
Farming	3	3.4%	6	6.8%	16	18.2%	19	21.6%	14	15.9%	13	14.8%	17	19.3%	88	100%
Livestock	-	0.0%	-	0.0%	-	0.0%	2	100.0%	-	0.0%	-	0.0%	-	0.0%	2	100%
Selling goods	3	9.1%	4	12.1%	-	0.0%	2	6.1%	5	15.2%	19	57.6%	-	0.0%	33	100%
Restaurant/ eatery	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	100.0%	-	0.0%	1	100%
Workers in factory	-	0.0%	-	0.0%	7	41.2%	-	0.0%	2	11.8%	6	35.3%	2	11.8%	17	100%
State employee	1	9.1%	2	18.2%	1	9.1%	-	0.0%	-	0.0%	4	36.4%	3	27.3%	11	100%
Private employee	-	0.0%	1	25.0%	-	0.0%	2	50.0%	1	25.0%	-	0.0%	-	0.0%	4	100%
Work in transport field	-	0.0%	-	0.0%	1	50.0%	-	0.0%	1	50.0%	-	0.0%	-	0.0%	2	100%
Student/Pupil	4	7.1%	1	1.8%	14	25.0%	4	7.1%	7	12.5%	14	25.0%	12	21.4%	56	100%
Housewife	-	0.0%	-	0.0%	2	33.3%	1	16.7%	2	33.3%	1	16.7%	-	0.0%	6	100%
Hire labor	-	0.0%	2	9.5%	9	42.9%	2	9.5%	4	19.0%	-	0.0%	4	19.0%	21	100%
Other	1	6.3%	-	0.0%	5	31.3%	2	12.5%	1	6.3%	6	37.5%	1	6.3%	16	100%
Under working age	1	20.0%	-	0.0%	1	20.0%	-	0.0%	1	20.0%	1	20.0%	1	20.0%	5	100%
Total	**13**	**5.0%**	**16**	**6.1%**	**56**	**21.4%**	**34**	**13.0%**	**38**	**14.5%**	**65**	**24.8%**	**40**	**15.3%**	**262**	**100%**

Social Policy Households:

Social policy households receive special cash allowances from the Government on the basis of having household members who are invalids, have heroic mothers, martyrs, and those who have contributed to the revolutions. The eligible HHs to social policy is 18 households. Of which, the Female Headed Households is 2 households, accounts of about 11.1 %.

Table 2. 91 Social Policy Households, Other Vulnerable Households and Single Female Headed Households (No. of Households)

#	District/ Commune	Poor	Single Female Headed Household	Ethnic minorities	Lonely elder	Entitled to social assistance	Total
I	**Gia Loc**	-	-	-	-	-	-
1.1	Doan Thuong	-	-	-	-	-	-
1.2	Dong Quang	-	-	-	-	-	-
II	**Thanh Mien**	**1**	-	-	-	**3**	**4**
2.1	Thanh Mien town	1	-	-	-	-	**1**
2.2	Tu Cuong	-	-	-	-	2	**2**
2.3	Cao Thang	-	-	-	-	1	**1**
VII	**Phu Cu**	**1**	**2**	-	-	**11**	**14**
7.1	Quang Hung	1	2	-	-	8	**11**
7.2	Doan Dao	-	-	-	-	3	**3**
Total		**2**	**2**	-	-	**14**	**18**

Average Monthly Income

Table 2.92 shows that most of the interviewed families earn with income from VND 3,000,000 to VND 5,000,000 per month and only one household have monthly income less than VND 1,000,000. There are 22 households from 79 surveyed households earning income with more than VND 5,000,000 per month.

Table 2. 92: Average Monthly Household Income of Affected Household (in million VND)

#	District/ Commune	<VND 1 million	VND 1 million - < VND 3 million	VND 3 million – VND 5 million	> VND 5 million	Total
I	**Gia Loc**	-	**1**	**2**	**7**	**10**
1.1	Doan Thuong	-	-	1	3	**4**
1.2	Dong Quang	-	1	1	4	**6**
II	**Thanh Mien**	**1**	**2**	**31**	**6**	**40**
2.1	Thanh Mien town	1	1	11	2	**15**
2.2	Tu Cuong	-	1	11	1	**13**
2.3	Cao Thang	-	-	9	3	**12**
III	**Phu Cu**	-	**4**	**16**	**9**	**29**
3.1	Quang Hung	-	3	5	9	**17**
3.2	Doan Dao	-	1	11	-	**12**

#	District/ Commune	<VND 1 million	VND 1 million - < VND 3 million	VND 3 million – VND 5 million	> VND 5 million	Total
Total		**1**	**7**	**49**	**22**	**79**

Income - Expenditure Balance:

After comparing for gross income and gross expenditures, the picture on whether households have positive or negative income was derived. In the affected communes, this exercise revealed that 96.2% of total households end up with positive income or surplus after expenditures and 2.5% of the surveyed households are with incomes less than expenditures.

Table 2. 93: Income-Expenditure Balance of Affected Household

#	District/ Commune	Income<Expense		Income=Expense		Income>Expense		Total	
		HH	%	HH	%	HH	%	HH	%
I	**Gia Loc**	**1**	**10.0%**	**-**	**0.0%**	**9**	**90.0%**	**10**	**100%**
1.1	Doan Thuong	0	0.0%	0	0.0%	4	100.0%	4	100%
1.2	Dong Quang	1	16.7%	0	0.0%	5	83.3%	6	100%
II	**Thanh Mien**	**-**	**0.0%**	**-**	**0.0%**	**40**	**100.0%**	**40**	**100%**
2.1	Thanh Mien town	-	0.0%	-	0.0%	15	100.0%	15	100%
2.2	Tu Cuong	0	0.0%	0	0.0%	13	100.0%	13	100%
2.3	Cao Thang	0	0.0%	0	0.0%	12	100.0%	12	100%
III	**Phu Cu**	**1**	**3.4%**	**1**	**3.4%**	**27**	**93.1%**	**29**	**100%**
3.1	Quang Hung	1	5.9%	1	5.9%	15	88.2%	17	100%
3.2	Doan Dao	0	0.0%	0	0.0%	12	100.0%	12	100%
Total		**2**	**2.5%**	**1**	**1.3%**	**76**	**96.2%**	**79**	**100%**

Credit /Access to Loan

Table 2.94 shows that households only borrow loans from Banks (50%) and other institutions (50%). The households said that they borrow money for farming and husbandry activities and for other businesses. Table 2.94, 2.95 described about the survey results on accessing loans and using loans from a sample of the affected households.

Table 2. 94: Access to Loan of Affected Female Headed Household

#	District/ Commune	Loans from banks		Loans from other institutions		Loans from relatives, friends		Loans from other sources		Total	
		HH	%	HH	%	HH	%	HH	%	HH	%
I	**Gia Loc**	**-**	**0.0%**	**1**	**100.0%**	**-**	**0.0%**	**-**	**0.0%**	**1**	**100%**
1.1	Doan Thuong	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
1.2	Dong Quang	-	0.0%	1	100.0%	-	0.0%	-	0.0%	1	100%

#	District/ Commune	Loans from banks		Loans from other institutions		Loans from relatives, friends		Loans from other sources		Total	
		HH	%	HH	%	HH	%	HH	%	HH	%
II	**Thanh Mien**	**1**	**0.0%**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0.0%**	**1**	**0%**
2.1	Thanh Mien town	1	0.0%	-	0.0%	-	0.0%	-	0.0%	1	0%
2.2	Tu Cuong	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
2.3	Cao Thang	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
III	**Phu Cu**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0%**
3.1	Quang Hung	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
3.2	Doan Dao	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
Total		**1**	**50.0%**	**1**	**50.0%**	**-**	**0.0%**	**-**	**0.0%**	**2**	**100%**

Purposes of using Loans

Table 2. 95: Purposes of using loans of Affected Female Headed Household

#	District/ Commune	Agricultural production		Business		Household expenditure		Building houses		Other		Total	
		HH	%	HH	%	HH	%	HH	%	HH	%	HH	%
I	**Gia Loc**	**-**	**0.0%**	**1**	**100%**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0.0%**	**1**	**100%**
1.1	Doan Thuong	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
1.2	Dong Quang	-	0.0%	1	100%	-	0.0%	-	0.0%	-	0.0%	1	100%
II	**Thanh Mien**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0.0%**	**1**	**0.0%**	**1**	**0%**
2.1	Thanh Mien town	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	100%	1	100%
2.2	Tu Cuong	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
2.3	Cao Thang	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
III	**Phu Cu**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0%**
3.1	Quang Hung	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
3.2	Doan Dao	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
Tổng		**-**	**0.0%**	**1**	**50%**	**-**	**0.0%**	**-**	**0.0%**	**1**	**50%**	**2**	**100%**

Living facilities and Community Assets

Almost all of the households surveyed have motorbikes, television sets, refrigerator, furniture, and sanitation facilities such as septic toilet and running water, among others. Community physical infrastructures (village and commune link roads and community social services such as schools, healthcare centers, market etc.) are available and with locations that are not far from the affected households. The survey results on asset ownership, living amenities, cooking ways, community health etc. are shown in tables from 2.96 to 2.103 below.

Table 2. 96: Ownership of Living Facilities of Affected Households

#	District/Commune	Unit	No. of survey HHs	Radio	Tivi	Motor-bike	Bicycle	Electric fan	Cooker	Fridge	Pump	Washing machine	Gas Stove	Hot water tank	Computer
I	**Gia Loc**	**HH**	**10**	**1**	**10**	**10**	**9**	**10**	**10**	**10**	**10**	**6**	**10**	**5**	**3**
		%	**100%**	**10%**	**100%**	**100%**	**90%**	**100%**	**100%**	**100%**	**100%**	**60%**	**100%**	**50%**	**30%**
1.1	Doan Thuong	HH	4	-	4	4	3	4	4	4	4	3	4	2	2
		%	100%	0%	100%	100%	75%	100%	100%	100%	100%	75%	100%	50%	50%
1.2	Dong Quang	HH	6	1	6	6	6	6	6	6	6	3	6	3	1
		%	100%	17%	100%	100%	100%	100%	100%	100%	100%	50%	100%	50%	17%
II	**Thanh Mien**	**HH**	**40**	**11**	**40**	**38**	**39**	**40**	**39**	**28**	**36**	**6**	**39**	**2**	**1**
		%	**100%**	**28%**	**100%**	**95%**	**98%**	**100%**	**98%**	**70%**	**90%**	**15%**	**98%**	**5%**	**3%**
2.1	Thanh Mien town	HH	15	4	15	13	15	15	14	8	13	-	14	1	-
		%	100%	27%	100%	87%	100%	100%	93%	53%	87%	0%	93%	7%	0%
2.2	Tu Cuong	HH	13	1	13	13	13	13	13	12	11	4	13	-	-
		%	100%	8%	100%	100%	100%	100%	100%	92%	85%	31%	100%	0%	0%
2.3	Cao Thang	HH	12	6	12	12	11	12	12	8	12	2	12	1	1
		%	100%	50%	100%	100%	92%	100%	100%	67%	100%	17%	100%	8%	8%
III	**Phu Cu**	**HH**	**29**	**4**	**29**	**27**	**29**	**29**	**28**	**22**	**28**	**6**	**27**	**4**	**3**
		%	**100%**	**14%**	**100%**	**93%**	**100%**	**100%**	**97%**	**76%**	**97%**	**21%**	**93%**	**14%**	**10%**
3.1	Quang Hung	HH	17	4	17	15	17	17	16	11	16	5	15	4	3
		%	100%	24%	100%	88%	100%	100%	94%	65%	94%	29%	88%	24%	18%
3.2	Doan Dao	HH	12	-	12	12	12	12	12	11	12	1	12	-	-
		%	100%	0%	100%	100%	100%	100%	100%	92%	100%	8%	100%	0%	0%
Total		**HH**	**79**	**16**	**79**	**75**	**77**	**79**	**77**	**60**	**74**	**18**	**76**	**11**	**7**
		%	**100%**	**20%**	**100%**	**95%**	**97%**	**100%**	**97%**	**76%**	**94%**	**23%**	**96%**	**14%**	**9%**

Table 2. 97: Water Source for Using of Affected Households

#	District/ Commune	Unit	Well	Tap Water	River, spring, pond water	Mountain creek	Well shared with neighbours	Rain water	Buying from other	Drilled well	Total
I	**Gia Loc**	**HH**	**1**	**-**	**-**	**-**	**-**	**-**	**-**	**9**	**10**
		%	**10.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**90.0%**	**100.0%**
1.1	Doan Thuong	HH	1	-	-	-	-	-	-	3	4
		%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	75.0%	100%
1.2	Dong Quang	HH	0	0	0	0	0	0	0	6	6
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100%
II	**Thanh Mien**	**HH**	**-**	**15**	**-**	**-**	**-**	**-**	**-**	**25**	**40**
		%	**0.0%**	**37.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**62.5%**	**100.0%**
2.1	Thanh Mien town	HH	-	15	-	-	-	-	-	-	15
		%	0%	100%	0%	0%	0%	0%	0%	0%	100%
2.2	Tu Cuong	HH	-	-	-	-	-	-	-	13	13
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100%
2.3	Cao Thang	HH	-	-	-	-	-	-	-	12	12
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100%
III	**Phu Cu**	**HH**	**2**	**-**	**-**	**-**	**-**	**-**	**-**	**27**	**29**
		%	**6.9%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**93.1%**	**100.0%**
3.1	Quang Hung	HH	2	-	-	-	-	-	-	15	17
		%	11.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	88.2%	100%
3.2	Doan Dao	HH	-	-	-	-	-	-	-	12	12
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100%
Total		**HH**	**3**	**15**	**-**	**-**	**-**	**-**	**-**	**61**	**79**
		%	**4%**	**19%**	**0%**	**0%**	**0%**	**0%**	**0%**	**77%**	**100.0%**

Table 2. 98: Main Sources for Lighting of Affected Households

#	District/ Commune	Unit	Electricity	Battery	Wood/ Coal	Generator	Oil lamp	Other	Total
I	**Gia Loc**	**HH**	**10**	**-**	**-**	**-**	**-**	**-**	**10**
		%	**100.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**100.0%**
1.1	Doan Thuong	HH	4	-	-	-	-	-	4
		%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
1.2	Dong Quang	HH	6	-	-	-	-	-	6
		%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
II	**Thanh Mien**	**HH**	**40**	**-**	**-**	**-**	**-**	**-**	**40**
		%	**100.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**100.0%**
2.1	Thanh Mien town	HH	15	-	-	-	-	-	15
		%	100%	0%	0%	0%	0%	0%	100%
2.2	Tu Cuong	HH	13	-	-	-	-	-	13
		%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
2.3	Cao Thang	HH	12	-	-	-	-	-	12
		%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
III	**Phu Cu**	**HH**	**29**	**-**	**-**	**-**	**-**	**-**	**29**
		%	**100.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**100.0%**
3.1	Quang Hung	HH	17	-	-	-	-	-	17
		%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
3.2	Doan Dao	HH	12	-	-	-	-	-	12
		%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total		**HH**	**79**	**-**	**-**	**-**	**-**	**-**	**79**
		%	**100%**	**0%**	**0%**	**0%**	**0%**	**0%**	**100.0%**

Table 2. 99: Main Sources for Cooking of Affected Households

#	District/ Commune	Unit	Grid	Generator	Gas/Oil	Wood/ Coal	Biogas	Other	Total
I	**Gia Loc**	**HH**	**-**	**-**	**9**	**-**	**1**	**-**	**10**
		%	**0.0%**	**0.0%**	**90.0%**	**0.0%**	**10.0%**	**0.0%**	**100.0%**
1.1	Doan Thuong	HH	-	-	3	-	1	-	4
		%	0.0%	0.0%	75.0%	0.0%	25.0%	0.0%	100%
1.2	Dong Quang	HH	-	-	6	-	-	-	6
		%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100%
II	**Thanh Mien**	**HH**	**-**	**1**	**37**	**2**	**-**	**-**	**40**
		%	**0.0%**	**2.5%**	**92.5%**	**5.0%**	**0.0%**	**0.0%**	**100.0%**
2.1	Thanh Mien town	HH	-	-	15	-	-	-	15
		%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100%
2.2	Tu Cuong	HH	-	-	13	-	-	-	13
		%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100%
2.3	Cao Thang	HH	-	1	9	2	-	-	12
		%	0.0%	8.3%	75.0%	16.7%	0.0%	0.0%	100%
III	**Phu Cu**	**HH**	**-**	**-**	**27**	**2**	**-**	**-**	**29**
		%	**0.0%**	**0.0%**	**93.1%**	**6.9%**	**0.0%**	**0.0%**	**100.0%**
3.1	Quang Hung	HH	-	-	15	2	-	-	17
		%	0.0%	0.0%	88.2%	11.8%	0.0%	0.0%	100%
3.2	Doan Dao	HH	-	-	12	-	-	-	12
		%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100%
Total		**HH**	**-**	**1**	**73**	**4**	**1**	**-**	**79**
		%	**0.0%**	**1.3%**	**92.4%**	**5.1%**	**1.3%**	**0.0%**	**100.0%**

Table 2. 100: Common diseases in the community

#	District/ Commune	Unit	Feel	Flu	Malaria	Cholera	Dysentery	Hepatitis	Infectious agent	No answer	Total
I	**Gia Loc**	**HH**	**6**	**2**	**-**	**-**	**-**	**-**	**2**	**-**	**10**
		%	**60.0%**	**20.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**20.0%**	**0.0%**	**100.0%**
1.1	Doan Thuong	HH	4	-	-	-	-	-	-	-	4
		%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
1.2	Dong Quang	HH	2	2	-	-	-	-	2	-	6
		%	33.3%	33.3%	0.0%	0.0%	0.0%	0.0%	33.3%	0.0%	100%
II	**Thanh Mien**	**HH**	**34**	**6**	**-**	**-**	**-**	**-**	**-**	**-**	**40**
		%	**85.0%**	**15.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**100.0%**
2.1	Thanh Mien town	HH	13	2	-	-	-	-	-	-	15
		%	86.7%	13.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
2.2	Tu Cuong	HH	13	-	-	-	-	-	-	-	13
		%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
2.3	Cao Thang	HH	8	4	-	-	-	-	-	-	12
		%	66.7%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
III	**Phu Cu**	**HH**	**19**	**7**	**-**	**-**	**-**	**-**	**1**	**2**	**29**
		%	**65.5%**	**24.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**3.4%**	**6.9%**	**100.0%**
3.1	Quang Hung	HH	8	6	-	-	-	-	1	2	17
		%	47.1%	35.3%	0.0%	0.0%	0.0%	0.0%	5.9%	11.8%	100%
3.2	Doan Dao	HH	11	1	-	-	-	-	-	-	12
		%	91.7%	8.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total		**HH**	**59**	**15**	**-**	**-**	**-**	**-**	**3**	**2**	**79**
		%	**75%**	**19%**	**0%**	**0%**	**0%**	**0%**	**4%**	**3%**	**100.0%**

Table 2. 101: Access to health services

#	District/ Commune	Unit	Commune health station				District hospital				Clinic/Nurse				Pharmacy				Traditional drug treatment			
			<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km
I	**Gia Loc**	**HH**	**4**	**2**	**-**	**-**	**-**	**-**	**-**	**5**	**-**	**-**	**-**	**-**	**4**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
		%	**26.7%**	**13.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**33.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**26.7%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
1.1	Doan Thuong	HH	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1.2	Dong Quang	HH	4	2	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-
		%	36.4%	18.2%	0.0%	0.0%	0.0%	0.0%	0.0%	45.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
II	**Thanh Mien**	**HH**	**14**	**11**	**1**	**-**	**-**	**5**	**-**	**-**	**-**	**-**	**-**	**-**	**17**	**5**	**-**	**-**	**-**	**-**	**-**	**-**
		%	**26.4%**	**20.8%**	**1.9%**	**0.0%**	**0.0%**	**9.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**32.1%**	**9.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
2.1	Thanh Mien town	HH	2	-	-	-	-	5	-	-	-	-	-	-	10	2	-	-	-	-	-	-
		%	10.5%	0.0%	0.0%	0.0%	0.0%	26.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	52.6%	10.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2.2	Tu Cuong	HH	5	7	1	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-
		%	33.3%	46.7%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.7%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2.3	Cao Thang	HH	7	4	-	-	-	-	-	-	-	-	-	-	6	2	-	-	-	-	-	-
		%	36.8%	21.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	31.6%	10.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
III	**Phu Cu**	**HH**	**25**	**1**	**-**	**-**	**2**	**-**	**3**	**-**	**1**	**-**	**-**	**-**	**14**	**-**	**1**	**-**	**1**	**1**	**-**	**-**
		%	**51.0%**	**2.0%**	**0.0%**	**0.0%**	**4.1%**	**0.0%**	**6.1%**	**0.0%**	**2.0%**	**0.0%**	**0.0%**	**0.0%**	**28.6%**	**0.0%**	**2.0%**	**0.0%**	**2.0%**	**2.0%**	**0.0%**	**0.0%**
3.1	Quang Hung	HH	14	-	-	-	2	-	3	-	1	-	-	-	14	-	1	-	1	1	-	-
		%	37.8%	0.0%	0.0%	0.0%	5.4%	0.0%	8.1%	0.0%	2.7%	0.0%	0.0%	0.0%	37.8%	0.0%	2.7%	0.0%	2.7%	2.7%	0.0%	0.0%
3.2	Doan Dao	HH	11	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		%	91.7%	8.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total		**HH**	**43**	**14**	**1**	**-**	**2**	**5**	**3**	**5**	**1**	**-**	**-**	**-**	**35**	**5**	**1**	**-**	**1**	**1**	**-**	**-**
		%	**36.8%**	**12.0%**	**0.9%**	**0.0%**	**1.7%**	**4.3%**	**2.6%**	**4.3%**	**0.9%**	**0.0%**	**0.0%**	**0.0%**	**29.9%**	**4.3%**	**0.9%**	**0.0%**	**0.9%**	**0.9%**	**0.0%**	**0.0%**

Table 2. 102: Access to education services

#	District/ Commune	Unit	Preschool				Elementary school				Secondary school				High school				Vocational school			
			<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km
I	**Gia Loc**	**HH**	**-**	**-**	**-**	**-**	**-**	**1**	**-**	**-**	**-**	**1**	**-**	**-**	**-**	**-**	**-**	**1**	**-**	**-**	**-**	**-**
		%	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**33.3%**	**0.0%**	**0.0%**	**0.0%**	**33.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**33.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
1.1	Doan Thuong	HH	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-
		%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%
1.2	Dong Quang	HH	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
II	**Thanh Mien**	**HH**	**1**	**-**	**-**	**-**	**4**	**1**	**-**	**-**	**1**	**7**	**-**	**-**	**-**	**2**	**7**	**1**	**-**	**-**	**-**	**4**
		%	**3.6%**	**0.0%**	**0.0%**	**0.0%**	**14.3%**	**3.6%**	**0.0%**	**0.0%**	**3.6%**	**25.0%**	**0.0%**	**0.0%**	**0.0%**	**7.1%**	**25.0%**	**3.6%**	**0.0%**	**0.0%**	**0.0%**	**14.3%**
2.1	Thanh Mien town	HH	-	-	-	-	3	-	-	-	-	4	-	-	-	-	5	-	-	-	-	-
		%	0.0%	0.0%	0.0%	0.0%	25.0%	0.0%	0.0%	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	41.7%	0.0%	0.0%	0.0%	0.0%	0.0%
2.2	Tu Cuong	HH	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	1
		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	33.3%
2.3	Cao Thang	HH	1	-	-	-	1	1	-	-	1	2	-	-	-	2	1	1	-	-	-	3
		%	7.7%	0.0%	0.0%	0.0%	7.7%	7.7%	0.0%	0.0%	7.7%	15.4%	0.0%	0.0%	0.0%	15.4%	7.7%	7.7%	0.0%	0.0%	0.0%	23.1%
III	**Phu Cu**	**HH**	**-**	**-**	**-**	**-**	**-**	**3**	**1**	**-**	**-**	**3**	**2**	**-**	**-**	**1**	**7**	**-**	**-**	**1**	**1**	**1**
		%	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**15.0%**	**5.0%**	**0.0%**	**0.0%**	**15.0%**	**10.0%**	**0.0%**	**0.0%**	**5.0%**	**35.0%**	**0.0%**	**0.0%**	**5.0%**	**5.0%**	**5.0%**
3.1	Quang Hung	HH	-	-	-	-	-	1	1	-	-	1	2	-	-	1	3	-	-	1	1	-
		%	0.0%	0.0%	0.0%	0.0%	0.0%	9.1%	9.1%	0.0%	0.0%	9.1%	18.2%	0.0%	0.0%	9.1%	27.3%	0.0%	0.0%	9.1%	9.1%	0.0%
3.2	Doan Dao	HH	-	-	-	-	-	2	-	-	-	2	-	-	-	-	4	-	-	-	-	1
		%	0.0%	0.0%	0.0%	0.0%	0.0%	22.2%	0.0%	0.0%	0.0%	22.2%	0.0%	0.0%	0.0%	0.0%	44.4%	0.0%	0.0%	0.0%	0.0%	11.1%
Total		**HH**	**1**	**-**	**-**	**-**	**4**	**5**	**1**	**-**	**1**	**11**	**2**	**-**	**-**	**3**	**14**	**2**	**-**	**1**	**1**	**5**
		%	**2.0%**	**0.0%**	**0.0%**	**0.0%**	**7.8%**	**9.8%**	**2.0%**	**0.0%**	**2.0%**	**21.6%**	**3.9%**	**0.0%**	**0.0%**	**5.9%**	**27.5%**	**3.9%**	**0.0%**	**2.0%**	**2.0%**	**9.8%**

Table 2. 103: Access to other services, culture works...

#	District/ Commune	Unit	Market				Stadium				Sport area				Pagoda/Temple/Church				Entertainment park			
			<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km	<1km	1-2km	2-5km	>5km
I	**Gia Loc**	**HH**	**8**	**2**	**-**	**-**	**1**	**3**	**1**	**-**	**-**	**-**	**-**	**-**	**4**	**1**	**5**	**-**	**-**	**-**	**4**	**-**
		%	**27.6%**	**6.9%**	**0.0%**	**0.0%**	**3.4%**	**10.3%**	**3.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**13.8%**	**3.4%**	**17.2%**	**0.0%**	**0.0%**	**0.0%**	**13.8%**	**0.0%**
1.1	Doan Thuong	HH	4	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-
		%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1.2	Dong Quang	HH	4	2	-	-	1	3	1	-	-	-	-	-	-	1	5	-	-	-	4	-
		%	19.0%	9.5%	0.0%	0.0%	4.8%	14.3%	4.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.8%	23.8%	0.0%	0.0%	0.0%	19.0%	0.0%
II	**Thanh Mien**	**HH**	**27**	**13**	**-**	**-**	**2**	**9**	**-**	**-**	**-**	**-**	**-**	**-**	**16**	**13**	**3**	**-**	**-**	**1**	**3**	**1**
		%	**30.7%**	**14.8%**	**0.0%**	**0.0%**	**2.3%**	**10.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**18.2%**	**14.8%**	**3.4%**	**0.0%**	**0.0%**	**1.1%**	**3.4%**	**1.1%**
2.1	Thanh Mien town	HH	14	1	-	-	-	-	-	-	-	-	-	-	6	2	-	-	-	-	1	-
		%	58.3%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	8.3%	0.0%	0.0%	0.0%	0.0%	4.2%	0.0%
2.2	Tu Cuong	HH	7	6	-	-	1	-	-	-	-	-	-	-	9	3	-	-	-	-	-	-
		%	26.9%	23.1%	0.0%	0.0%	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	34.6%	11.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2.3	Cao Thang	HH	6	6	-	-	1	9	-	-	-	-	-	-	1	8	3	-	-	1	2	1
		%	15.8%	15.8%	0.0%	0.0%	2.6%	23.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	21.1%	7.9%	0.0%	0.0%	2.6%	5.3%	2.6%
III	**Phu Cu**	**HH**	**28**	**1**	**-**	**-**	**8**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**20**	**1**	**-**	**-**	**-**	**-**	**1**	**-**
		%	**47.5%**	**1.7%**	**0.0%**	**0.0%**	**13.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**33.9%**	**1.7%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**1.7%**	**0.0%**
3.1	Quang Hung	HH	17	-	-	-	8	-	-	-	-	-	-	-	9	-	-	-	-	-	1	-
		%	48.6%	0.0%	0.0%	0.0%	22.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.7%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%
3.2	Doan Dao	HH	11	1	-	-	-	-	-	-	-	-	-	-	11	1	-	-	-	-	-	-
		%	45.8%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	45.8%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total		**Hộ**	**63**	**16**	**-**	**-**	**11**	**12**	**1**	**-**	**-**	**-**	**-**	**-**	**40**	**15**	**8**	**-**	**-**	**1**	**8**	**1**
		%	**35.8%**	**9.1%**	**0.0%**	**0.0%**	**6.3%**	**6.8%**	**0.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**22.7%**	**8.5%**	**4.5%**	**0.0%**	**0.0%**	**0.6%**	**4.5%**	**0.6%**

Living standard

Table 2.104 analysed about the trend of living standards of the affected households in the recent last three years. The results show that the majority of the households declared with no change (54.4%) or better (44.3%) and about 1.3% the households are worse off.

Table 2. 104: Household living standard changes (last 3 years)

#	District/ Commune	No change		Better		Worse		Total	
		HH	%	HH	%	HH	%	HH	%
I	**Gia Loc**	**2**	**20.0%**	**8**	**80.0%**	**-**	**0.0%**	**10**	**100%**
1.1	Doan Thuong	-	0.0%	4	100.0%	-	0.0%	4	100%
1.2	Dong Quang	2	33.3%	4	66.7%	-	0.0%	6	100%
II	**Thanh Mien**	**20**	**50.0%**	**19**	**47.5%**	**1**	**2.5%**	**40**	**53%**
2.1	Thanh Mien town	9	60.0%	5	33.3%	1	6.7%	15	100%
2.2	Tu Cuong	5	38.5%	8	61.5%	-	0.0%	13	100%
2.3	Cao Thang	6	50.0%	6	50.0%	-	0.0%	12	100%
III	**Phu Cu**	**21**	**72.4%**	**8**	**27.6%**	**-**	**0.0%**	**29**	**100%**
3.1	Quang Hung	12	70.6%	5	29.4%	-	0.0%	17	100%
3.2	Doan Dao	9	75.0%	3	25.0%	-	0.0%	12	100%
Total		**43**	**54.4%**	**35**	**44.3%**	**1**	**1.3%**	**79**	**100%**

Table 2.105 shows the results of consultation for the feedback from the affected households to the project development. It shows with very positive results that nearly 100 % of the survey households support for the project development. It means that with the project, local people see a lot of benefits to them.

Public consultation on the behaviour of people to the project

Table 2. 105: Support implementation of the project

#	District/ Commune	Yes		No		Total	
		HH	%	HH	%	HH	%
I	**Gia Loc**	**9**	**90.0%**	**1**	**10.0%**	**10**	**100%**
1.1	Doan Thuong	3	75.0%	1	25.0%	4	100%
1.2	Dong Quang	6	100.0%	-	0.0%	6	100%
II	**Thanh Mien**	**40**	**100.0%**	**-**	**0.0%**	**40**	**100%**
2.1	Thanh Mien town	15	100.0%	-	0.0%	15	100%
2.2	Tu Cuong	13	100.0%	-	0.0%	13	100%
2.3	Cao Thang	12	100.0%	-	0.0%	12	100%
III	**Phu Cu**	**29**	**100.0%**	**-**	**0.0%**	**29**	**100%**
3.1	Quang Hung	17	100.0%	-	0.0%	17	100%
3.2	Doan Dao	12	100.0%	-	0.0%	12	100%
Total		**78**	**98.7%**	**1**	**1.3%**	**79**	**100%**

Gender issues and Ethnic Minority

Table 2.106 shows the surveyed results analysed by the gender (male and female) by the different activities. It shows with the results that most of economic development activities are done by both men and women.

Table 2.107 shows that, men participate the community activities more than women, and the rate of men making decisions is also much higher than women.

Table 2. 106: Division of Labor

#	Division of labor	Unit	Gia Loc				Thanh Mien						Phu Cu			
			Doan Thuong		Dong Quang		Thanh Mien		Tu Cuong		Cao Thang		Quang Hung		Doan Dao	
			Per	%	Per	%	Per	%	Per	%	Per	%	Per	%	Per	%
1	Land preparation	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
		Female	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	2	100%
		Both	2	3.2%	6	9.5%	14	22.2%	12	19.0%	9	14.3%	11	17.5%	9	14%
2	Cultivation	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
		Female	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	2	100%
		Both	2	3.2%	6	9.5%	14	22.2%	12	19.0%	9	14.3%	11	17.5%	9	14%
3	Sowing	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
		Female	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	2	100%
		Both	2	3.2%	6	9.5%	14	22.2%	12	19.0%	9	14.3%	11	17.5%	9	14%
4	Weeding	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
		Female	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	2	100%
		Both	2	3.2%	6	9.5%	14	22.2%	12	19.0%	9	14.3%	11	17.5%	9	14%
5	Pesticide spraying	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
		Female	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	2	100%
		Both	2	3.2%	6	9.5%	14	22.2%	12	19.0%	9	14.3%	11	17.5%	9	14%
6	Harvest	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	0	0.0%	-	0.0%	-	0%
		Female	-	0.0%	-	0.0%	-	0.0%	-	0.0%	0	0.0%	-	0.0%	2	100%
		Both	2	3.2%	6	9.5%	14	22.2%	12	19.0%	9	14.3%	11	17.5%	9	14%
7	Vegetable growing	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
		Female	1	33.3%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	2	67%
		Both	2	3.9%	6	11.8%	14	27.5%	-	0.0%	9	17.6%	11	21.6%	9	18%
8	Livestock	Male	-	0.0%	-	0.0%	0	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
		Female	-	0.0%	-	0.0%	0	0.0%	-	0.0%	-	0.0%	-	0.0%	2	100%
		Both	2	4.5%	6	13.6%	7	15.9%	-	0.0%	9	20.5%	11	25.0%	9	20%

#	Division of labor	Unit	Gia Loc				Thanh Mien						Phu Cu			
			Doan Thuong		Dong Quang		Thanh Mien		Tu Cuong		Cao Thang		Quang Hung		Doan Dao	
			Per	%	Per	%	Per	%	Per	%	Per	%	Per	%	Per	%
9	Small business	Male	1	50.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	50.0%	-	0%
		Female	-	0.0%	1	100.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
		Both	1	6.7%	2	13.3%	-	0.0%	-	0.0%	4	26.7%	8	53.3%	-	0%
10	Workers	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
		Female	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	100.0%	-	0%
		Both	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
11	Labor migration (domestic)	Male	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
		Female	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	100.0%	-	0%
		Both	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	100.0%	-	0%

Table 2. 107: Participate in Community Activities

#	Activity	Unit	Gia Loc				Thanh Mien						Phu Cu			
			Doan Thuong		Dong Quang		Thanh Mien		Tu Cuong		Cao Thang		Quang Hung		Doan Dao	
			Ng	%	Ng	%	Ng	%	Ng	%	Ng	%	Ng	%	Ng	%
1	Attend community meetings	Male	2	11.8%	1	5.9%	1	5.9%	8	47.1%	3	17.6%	1	5.9%	1	6%
		Female	-	0.0%	-	0.0%	1	100.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
		Both	2	3.3%	5	8.2%	13	21.3%	5	8.2%	9	14.8%	16	26.2%	11	18%
2	Participate in decision making	Male	2	11.8%	1	5.9%	1	5.9%	8	47.1%	3	17.6%	1	5.9%	1	6%
		Female	-	0.0%	-	0.0%	1	100.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
		Both	2	3.3%	5	8.2%	13	21.3%	5	8.2%	9	14.8%	16	26.2%	11	18%
3	Join local organizations	Male	2	12.5%	1	6.3%	1	6.3%	8	50.0%	3	18.8%	-	0.0%	1	6%
		Female	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
		Both	2	3.4%	5	8.5%	11	18.6%	5	8.5%	9	15.3%	16	27.1%	11	19%
4	Others	Male	2	12.5%	1	6.3%	1	6.3%	8	50.0%	3	18.8%	-	0.0%	1	6%
		Female	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
		Both	2	3.4%	5	8.5%	11	18.6%	5	8.5%	9	15.3%	16	27.1%	11	19%

There are no ethnic household in project area.

Table 2.108 shows the results of survey on the age distribution of female with less than 15 years old; from 15 to 60 years old and above 60 years old. Majority of women are at the working age. Follows by the rate of over 60 years old and then with the age under 15 years olds

Table 2.108: Age Distribution of Females from Affected Households

#	District/ Commune	<15 years old	15–60 years old	>60 years old	Total
I	**Gia Loc**	**2**	**12**	**3**	**17**
1.1	Doan Thuong	1	5	2	**8**
1.2	Dong Quang	1	7	1	**9**
II	**Thanh Mien**	**1**	**46**	**6**	**53**
2.1	Thanh Mien town	1	19	4	**24**
2.2	Tu Cuong	-	11	2	**13**
2.3	Cao Thang	-	16	-	**16**
III	**Phu Cu**	**4**	**37**	**6**	**47**
3.1	Quang Hung	2	23	4	**29**
3.2	Doan Dao	2	14	2	**18**
Total		**7**	**95**	**15**	**117**

Table 2.109 gives the results of survey on income of female headed households. From 8 surveyed female headed households, there are 5 households (about 62.5%) with income from VND 3,000,000 to VND 5,000,000. There are 2 households with income less than VND 3,000,000 and only one household with income more than VND 5,000,000.

Table 2. 109: Monthly Incomes of Affected Households Headed by Women

#	District/ Commune	< 1 million VND	1 million VND – <3 million VND	3 million VND – 5 million VND	>5 million VND	Total
I	**Gia Loc**	**-**	**1**	**1**	**-**	**2**
1.1	Doan Thuong	-	-	-	-	-
1.2	Dong Quang	-	1	1	-	**2**
II	**Thanh Mien**	**1**	**-**	**2**	**-**	**3**
2.1	Thanh Mien town	1	-	2	-	**3**
2.2	Tu Cuong	-	-	-	-	-
2.3	Cao Thang	-	-	-	-	-

III	**Phu Cu**	**-**	**-**	**2**	**1**	**3**
3.1	Quang Hung	-	-	-	1	**1**
3.2	Doan Dao	-	-	2	-	**2**
Total		**1**	**1**	**5**	**1**	**8**

Table 2.110shows the detailed results of survey on the employments of the project affected HHs, table 2.111 describes about the education levels of the women headed households. It shows that a majority of people are at a Secondary School level.

Table 2. 110 Occupational Distribution of Females in Affected Households

Job	Gia Loc				Thanh Mien						Phu Cu				Total	
	Doan Thuong		Dong Quang		Thanh Mien		Tu Cuong		Cao Thang		Quang Hung		Doan Dao			
	Ng	%	Ng	%	Ng	%	Ng	%	Ng	%	Ng	%	Ng	%	Người	%
Farming	4	8.2%	3	6.1%	11	22.4%	8	16.3%	6	12.2%	8	16.3%	9	18.4%	49	100%
Livestock	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
Selling goods	2	11.1%	2	11.1%	-	0.0%	2	11.1%	3	16.7%	9	50.0%	-	0.0%	18	100%
Restaurant/eatery	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	100.0%	-	0.0%	1	100%
Workers in factory	-	0.0%	-	0.0%	4	44.4%	-	0.0%	-	0.0%	3	33.3%	2	22.2%	9	100%
State employee	-	0.0%	-	0.0%	1	50.0%	-	0.0%	-	0.0%	1	50.0%	-	0.0%	2	100%
Private employee	-	0.0%	1	50.0%	-	0.0%	1	50.0%	-	0.0%	0	0.0%	-	0.0%	2	100%
Work in transport field	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	0	0.0%	-	0.0%	-	0%
Student/Pupil	2	9.1%	1	4.5%	3	13.6%	1	4.5%	4	18.2%	6	27.3%	5	22.7%	22	100%
Housewife	0	0.0%	-	0.0%	2	33.3%	1	16.7%	2	33.3%	1	16.7%	-	0.0%	6	100%
Hire labor	-	0.0%	2	28.6%	2	28.6%	-	0.0%	1	14.3%	-	0.0%	2	28.6%	7	100%
Other	-	0.0%	-	0.0%	1	100.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	100%
Under working age	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
Total	**8**	**6.8%**	**9**	**7.7%**	**24**	**20.5%**	**13**	**11.1%**	**16**	**13.7%**	**29**	**24.8%**	**18**	**15.4%**	**117**	**100%**

Table 2. 111: Education Attainment of Females in Affected Households

#	District/ Commune	Illite rate	Prim ary	Secon dary school	Not finished high school	High school	Vocati onal	Univers ity and above	Other (under school age)	Total
I	**Gia Loc**	**-**	**1**	**11**	**-**	**3**	**-**	**2**	**-**	**17**
1.1	Doan Thuong	-	-	6	-	1	-	1	-	**8**
1.2	Dong Quang	-	1	5	-	2	-	1	-	**9**
II	**Thanh Mien**	**-**	**6**	**32**	**3**	**7**	**1**	**3**	**1**	**53**
2.1	Thanh Mien town	-	4	14	2	2	-	2	-	**24**
2.2	Tu Cuong	-	1	9	1	2	-	-	-	**13**
2.3	Cao Thang	-	1	9	-	3	1	1	1	**16**
III	**Phu Cu**	**-**	**2**	**20**	**9**	**11**	**2**	**2**	**1**	**47**
3.1	Quang Hung	-	1	12	5	6	2	2	1	**29**
3.2	Doan Dao	-	1	8	4	5	-	-	-	**18**
Total		**-**	**9**	**63**	**12**	**21**	**3**	**7**	**2**	**117**

Annex 3: Project Information Booklet (PIB)

VIET NAM ROAD ASSET MANAGEMENT PROGRAM (VRAMP)

PROJECT INFORMATION BOOKLET (PIB)

PROJECT OVERVIEW

Viet Nam Road Asset Management Program (VRAMP) has subprojects in 3 provinces of Hung Yen, Hai Duong and Thai Binh, in scope of 10 districts/cities, towns, 33 wards/communes. The initial investment cost is estimated at $ 121.6 million, of which the World Bank loan of $ 71.6 million, the Government's counterpart funds of $ 50 million. Ministry of Transport is the Executive Agency (EA) of the project.

The objectives of the project: Establish a financial basis, sustainable institutional arrangements in order to manage and upgrade the road system, develop for the economy in the North and Central regions of Viet Nam. The project will have two main outputs:

The project will finance for maintaining the national roads no. 2, no.5, no.6, no. 18 and no.48; upgrading for the national roads no. 38, no.39, no 39-1 and four bridges with the length of about 25 m of the road no. 38 B

(i) Maintenance roads with diversified contract forms to establish a mechanism for managing of the maintenance of the Vietnam road system effectively and stable.

(ii) Upgrade and renovate the important national roads in the north region, including the national road No.38, No.39, No. 39-1 and 9 bridges with length more than 25 meters on the national roads (2 bridges on national road No.38, 4 bridges on national road No. 38B, two bridges on national road No.39 and 1 bridge on national road No.39-2). Improve for the institutional arrangements of the road management agencies in Vietnam.

QUESTION 1: How will the VRAMP affect the local population?

Answer:

Positive impacts: The population in the project areas will benefit variously, including more extensive access to irrigation system and water supply for farming production, reducing risk of crop failure due to lack of water and more available water for irrigation.

Adverse impacts: It needs to acquire some land for the construction of the main canal and other components. Every attempt will be made during the design process to minimize adverse impacts of such land acquisition on households and communities.

Where land acquisition is necessary, those affected HHs will be fully compensated for their affected land, houses, structures, crops and/or trees and be provided assistances for the restoration of their living standards. Details are included in a Resettlement Plan which will be available at your commune office.

QUESTION 2: What is the main objective of resettlement plan?

Answer: The main objective of the Resettlement Plan is to improve or at least to restore the pre-project living standards and earning capacities of all PAHs.

QUESTION 3: What will happen if my land is affected by the project?

Answer:

(i) You will be offered Land-for-land of similar attributes and with secure tenure OR cash compensation at replacement cost which is equivalent to current market price.

(ii) No compensation for rent land, but full replacement cost for investment on land to land user.

QUESTION 4: Do we need legal papers of land for being entitled to the compensation?

Answer: No, lack of formal legal rights of land does not prevent any APs from receiving compensation, allowances and rehabilitation assistance. Land owners with land use right certificates (LURCs) or in the process of acquiring LURC will be fully compensated for affected land and other assets on land. Land users who have no formal legal rights nor recognized claims to such land will be compensated for assets on land only.

QUESTION 5: Are affected houses and structures compensated?

Answer:Yes. All affected houses and other structures as well as other fixed assets such as well, breeding facilities, fences, etc. are compensated at replacement cost without depreciation nor deduction for salvageable materials for the affected portion. This will ensure that the APs are able to reconstruct houses/structures with better quality or at least with equivalent quality of the pre-project houses/structures.

QUESTION 6: What about affected crops and trees?

Answer:

i) Affected crops, trees on permanently acquired land will be compensated with market value of the crops at the time of compensation.

(ii) Compensation for crops, trees on temporary affected land:

- Annual crops will be based on the average production in the past 3 years for the temporary acquisition duration.

- Compensation for trees equivalent to current market value given the type, age and productive value (future production) at the time of compensation.

QUESTION 7: Besides the compensation, are there any assistances provided by the project?

Answer: In addition to compensation for loss of land and other assets according to the project entitlements, the Project will provide rehabilitation assistance to eligible APs to improve

or at least to restore the pre-project living standards of all PAHs. Types of assistance for eligible APs include:

- Severely affected households: Households who lose more than 10% of their total productive landholdings will receive an rehabilitation package consisting of (i) a transition subsistence allowance equivalent (ii) income restoration assistance such as agricultural extension assistance to intensify use of remaining land, access to existing credit programs or project-related employment.

- Relocated households: Households who must relocate to new places will receive (i) transport assistance, (ii) a transition subsistence allowance, (iii) house rent assistance based on market price. The assistance rates are given in details in project entitlements.

- Business owners who lose income in the transition period: Households with small, unregistered businesses will be provided cash assistance equal to the provincial minimum salary for 3 months. Owners of registered businesses will be provided cash assistance equivalent to 30% of after tax income in one year based on average income in the last 3 consecutive years as certified by the tax department of the province.

- Employees and hired labors who lose their jobs will be provided cash compensation for monthly salary/wages for lost period in case of temporarily affected; or cash compensation equivalent to the provincial minimum wage for six months or cash compensation for remaining contract period whichever is higher in case of permanently affected.

Assistance for career change: For registered or non-registered businesses on their affected residential land, APs at labor age will be provided free training courses at local vocational training centre which are suitable for local conditions and capacities of APs.

QUESTION 8: Are all of local people entitled to lodgement of complaints about compensation?

Answer: No. Entitled APs are those who will lose land or property based on the detailed measurement survey (DMS) that will be conducted following completion of the final designs for the project. Affected communes and local competent agencies will be informed of the cut-off date of the project.

QUESTION 9: If there are any disagreements or problems about land acquisition, compensation or other general disputes during project implementation, are APs entitled to lodgment of their complaints?

Answer: Yes, APs are entitled to lodgment of their complaints as grievance redress procedures of the project.

Every complaint, query of APs about land acquisition, compensation, resettlement and implementation will be resolved according to project policies and in time. APs do not have to pay any fees for the complaint resolution.

QUESTION 10: How will APs be consulted and disseminated information about the project?

Answer:Public consultation meetings are organized at the commune to ensure that APs are provided fully information about the project. APs will be disseminated information about the project components, impacts, their entitlements, grievance redress mechanism, rights of participation and consultation about resettlement activities. APs will participate in the RP preparation and implementation and will be consulted about following issues: (a) participation in the RP preparation as their interests; (b) consultation about vocational training which is suitable for their capacities, (c) participation in other activities of the project if they are qualified.

QUESTION 11: As a resident in the project area, how can I help?

Answer: We would like you to participate in all consultation meetings and other activities involving to the project in order to ensure that you are fully informed and consulted. Your participation during the detailed measurement survey (DMS) and the implementation will help us determine measures to mitigate impacts, to detect outstanding issues and potential problems and then to identify immediate resolution of these problems.

QUESTION 12: How will you know if the objectives of this project are met?

Answer: PMU3 will carry out internal monitoring on all project activities. In addition, PMU3 will engage an independent monitoring agency to conduct external monitoring on resettlement activities during the project implementation. The independent monitoring agency will submit a report to PMU3 and WB on resettlement implementation progress every 6 months. A post-resettlement impact evaluation will be studied to assess whether adverse impacts have been mitigated adequately and the pre-project living standards of APs have been restored or not.

For further information and suggestions, please contact the Province Compensation, Assistance and Resettlement Management Board, District Compensation, Assistance and Resettlement Boards or Commune People's Committee where you are living.

Annex 4: Results of consultation

1. Results of consultation for section Trieu Duong - Hung Ha

The meetings, venue, time and person met, participated is described as in table below:

Table 4. 1: Meetings with Other Stakeholders

#	Commune	Number of affected HH	Meeting Date	Venue	No. of participants	With participation of		No. of households with the questionnaires		
						Male	Female	IOL	SES	%
1	**Hung Ha**	**582**			**347**	**192**	**155**	**367**	**204**	
1.1	Tan Le	56	A: 28/01	CPC meeting hall	24	16	8	26	17	30%
1.2	Hung Nhan town	121	M: 27/01	CPC meeting hall	45	22	23	48	36	30%
1.3	Tan Hoa	8	M: 30/01	CPC meeting hall	8	7	1	8	8	100%
1.4	Lien Hiep	186	M: 29/01	CPC meeting hall	102	58	44	115	63	34%
1.5	Phuc Khanh	52	A: 27/01	Commune Temple	45	24	21	45	17	33%
1.6	Thai Phuong	12	M: 30/01	Commune Temple	12	8	4	12	6	50%
1.7	Hung Ha town	22	A: 29/01	CPC meeting hall	14	6	8	16	8	36%
1.8	Minh Khai	95	A: 30/01	CPC meeting hall	74	31	43	74	40	42%
1.9	Hong Linh	30	A:30/01	CPC meeting hall	23	20	3	23	9	30%
2	**Dong Hung**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0%**
2.1	Minh Tan									
Total		**582**	**-**	**-**	**347**	**192**	**155**	**367**	**204**	

Table 4. 2: Consultation on income restoration measures

#	Name	Address	Position	Interviewed date
1	Nguyen Van Hoa	Provincial People's Council	Chairman	27/02/2013
2	Bui Thi Nga	Farmer Association	Deputy Chairman	27/02/2013
3	Khuc Thi Duyen	Provincial Women Union	Chairwoman	27/02/2013
4	Truong Thi Hong Hanh	Provincial Women Union	Deputy Chairwoman	27/02/2013
5	Mai Cong Tuan	Vocational Training College 19-BQP	Deputy Head of consulting Department	27/02/2013
6	Nguyen Thi Thuy	Women Union of Hung Ha District	Official	28/02/2013
7	Vu Quang Huy	Farmer Association of Hung Ha	Standing Member	28/02/2013
8	Pham Ba Thuat	Vocational Training Center of Hung Ha district	Official	28/02/2013
9	Luong Thi Tiep	Enterprise no.10 (Stock Company)	Head of Department	28/02/2013

Table 4. 3: Meetings for a rapid survey in the substitution values

#	Name	Address	Title	Meeting date
I	**At the Provincial level**			
1	Mai Thi Toan	Financial Department	Head of Public Assets and Price Department	27/02/2013
2	Nguyen Van Thuy	Construction Department	Head of Economic Department	27/02/2013
II	**Hung Ha District level**			
1	Bui Duy Hạnh	DPC	Vice Chairman	17/01/2013
2	Bui Xuan Phong	DPC	Head Office	17/01/2013
3	Pham Thanh Nhon	Department of Natural Resources and Environment	Head of Department	17/01/2013
4	Pham Vinh Quang	Department of Natural Resources and Environment	Official	17/01/2013
5	Hoang Dinh Chinh	Department of Industry and Trade	Head Department	17/01/2013

#	Name	Address	Title	Meeting date
6	Nguyen Van Vinh	Department of Planning and Finance	Head Department	20/1/2013
7	Vu Huu Ai	Department of Planning and Finance	Deputy Head Department	21/1/2013
8	Nguyen Thi Platform	Department of Planning and Finance	Accountant	23/1/2013
9	Hoang Van Thu	Agricultural Department	Deputy Head of Department	26/1/2013
10	The Local	Shop of Construction Materials	Shop Owner	29/01/2013
11	Hanh force	Shop of Construction Materials	Shop Owner	29/01/2013
III	**At the Commune level**			
1	Tran Cong Ly	Tan Le Commune	Vice Chairman	28/01/2013
2	Tran Ba Hoi	Tan Le Commune	Land Manager	28/01/2013
3	Nguyen Van Cot	Tan Le Commune	Bui Xa Village Leader	28/01/2013
4	Hoang Thi Chai	Tan Le Commune	Chieu Thanh Village Leader	28/01/2013
5	Tran Khac Lap	Tan Le Commune	Local Citizen	28/01/2013
6	Tran Ngoc Dai	Tan Le Commune	Local Citizen	28/01/2013
7	Tran Khac Dien	Tan Le Commune	Local Citizen	28/01/2013
8	Do Van Huyen	TT Hưng Nhân	Deputy Chairman of Commune	27/01/2013
9	Nguyen Chi Cong	Hung Nhan Town	Land Manager	27/01/2013
10	Nguyen Van Dinh	Hung Nhan Town	Dau Village Leader	27/01/2013
11	Thai Xuan Phong	Hung Nhan Town	Van Nam Village Leader	27/01/2013
12	Tran Thi Hue	Hung Nhan Town	Local Citizen	27/01/2013
13	To Duc Hung	Hung Nhan Town	Local Citizen	27/01/2013

#	Name	Address	Title	Meeting date
14	Pham Van Dung	Hung Nhan Town	Local Citizen	27/01/2013
15	Nguyen Huu Tuyen	Tan Hoa Commune	Chairman of Commune	30/01/2013
16	Dao Quang Nghia	Tan Hoa Commune	Land Manager	30/01/2013
17	Nguyen Van Luan	Tan Hoa Commune	Luong Village Leader	30/01/2013
18	Truong Van Hieu	Tan Hoa Commune	Local Citizen	30/01/2013
19	Le Minh Phong	Tan Hoa Commune	Local Citizen	30/01/2013
20	Nguyen Thi Chung	Tan Hoa Commune	Local Citizen	30/01/2013
21	Dao Trong Giap	Lien Hiep Commune	Chairman of Commune	29/01/2013
22	Tran Van Tot	Lien Hiep Commune	Nai Village Leader	29/01/2013
23	Dao Van physique	Lien Hiep Commune	Nai Village Leader	29/01/2013
24	Dong Quang Binh	Lien Hiep Commune	Bai Village Leader	29/01/2013
25	Nguyen Van Hoa	Lien Hiep Commune	Local Citizen	29/01/2013
26	Nguyen Xuan Hung	Lien Hiep Commune	Local Citizen	29/01/2013
27	Nguyen Xuan Hai	Lien Hiep Commune	Local Citizen	29/01/2013
28	Bui Trong Do	Phuc Khanh Commune	Chairman	27/01/2013
29	Nguyen Van Tho	Phuc Khanh Commune	Land Manager	27/01/2013
30	Tran Dinh Tot	Phuc Khanh Commune	Khanh My Village Leader	27/01/2013
31	ancestors Valley	Phuc Khanh Commune	Huong Xa Village Leader	27/01/2013
32	Nguyen Van Cho	Phuc Khanh Commune	Local Citizen	27/01/2013
33	Tran Duy Ngan	Phuc Khanh Commune	Local Citizen	27/01/2013
34	Nguyen Van Chinh	Phuc Khanh Commune	Local Citizen	27/01/2013
35	Nguyen Van Chung	Thai Phuong Commune	Chairman of Commune	30/01/2013

#	Name	Address	Title	Meeting date
36	Tran Van Sang	Thai Phuong Commune	Land Manager	30/01/2013
37	Duy Nguyen Bich	Thai Phuong Commune	Nhan Xa Village Leader	30/01/2013
38	Hoang Van Tuong	Thai Phuong Commune	Local Citizen	30/01/2013
39	Tran Van Dien	Thai Phuong Commune	Local Citizen	30/01/2013
40	Tran Huu Thuoc	Thai Phuong Commune	Local Citizen	30/01/2013
41	Nguyen Huu Huan	Hung Ha Town	Chairman of Commune	29/01/2013
42	Ngo Quoc Department	Hung Ha Town	Land Manager	29/01/2013
43	Nguyen Manh Hung	Hung Ha Town	Nhan Cau 1 Village Leader	29/01/2013
44	Nghiem Dinh Khoi	Hung Ha Town	Dong Tu 1 Village Leader	29/01/2013
45	Nguyen Duy Hung	Hung Ha Town	Dong Tu 2 Village Leader	29/01/2013
46	Nguyen Huu Tien	Hung Ha Town	Thi Doc Village Leader	29/01/2013
47	Nguyen Minh Duc	Minh Khai Commune	Chairman of Commune	30/01/2013
48	Hoang Ngoc Son	Minh Khai Commune	Land Manager	30/01/2013
49	Nguyen Huu Man	Minh Khai Commune	Dong Lac Village Leader	30/01/2013
50	Vu Trung Kien	Minh Khai Commune	Thanh Cach Village Leader	30/01/2013
51	Tran Van Quan	Minh Khai Commune	Local Citizen	30/01/2013
52	Tran Van Hai	Minh Khai Commune	Local Citizen	30/01/2013
53	Tran Cong Thanh	Minh Khai Commune	Local Citizen	30/01/2013
54	Nguyen Duc Luy	Hong Linh Commune	Chairman of Commune	30/01/2013
55	Nguyen Ngoc An	Hong Linh Commune	Land Manager	30/01/2013
56	Pham Va Thap	Hong Linh Commune	Vu Dong Village Leader	30/01/2013
57	Nguyen Dinh Chieu	Hong Linh Commune	Dong Han Land Manager	30/01/2013
58	Nguyen Viet Ba	Hong Linh Commune	Village Leader	30/01/2013
59	Pham Van Bo	Hong Linh Commune	Local Citizen	30/01/2013
60	Nguyen Van Canh	Hong Linh Commune	Local Citizen	30/01/2013

Table 4.4: Consultation with stakeholders for income restoration plan

Consultation agency	The information and content for income rehabilitation consultation
Provincial level	
1. Provincial Farmers Association 2. Provincial Women Union 3. Vocational college No. 19 - Ministry of Defense	✓ Consulting on orienting and training jobs at site for farmers should be organized with such appropriate jobs as bamboo and rattan weaving like in Dong Phong commune - Dong Hung district and embroidery, etc. ✓ Training knowledge for animal husbandry to support farms and families. Support husbandry based on garden-pond-pigsty model. ✓ Study support forms in order that people will not leave farm or in Diaspora for working as housewives, workers without taking care of children. ✓ Support buying agricultural insurance (rice) for farmers. Currently, the State supports for poor households 100% insurance premium (10,000VND/perch/1crop) and 90% insurance premiums for near-poor households. ✓ Support buying health insurance for households whose land is acquired by percentage or support any form of social insurance to be paid by lump sum or pension regime. ✓ In Thai Binh province, there are many quality vocational centers, in which the prestigious center is Vocational School No.19 - Department of Defense. The school annual admission is organized by the following industries: ***Intermediate training*** The training period is 18-months for students who graduated high schools and 36 months for students who graduated secondary schools. ***Primary training*** o Welding: 3 and 6 months o Industrial electricity: 3 and 6 months o Civil electricity: 3 and 6 months o Refrigerating machine and air conditioner techniques: 3 and 6 months o Office Computer Science: 3 months o Excavator driving, bulldozer driving: 6 months o Fashion tailoring: 3 months o Car-driving, class B2: 3 months o Car-driving, class C: 5 months.
Hung Ha district	
1. Farmers Association 2. Women Union 3. Vocational training center 4. VESTON Hung Ha Factory –Garment 10 Joint Stock Company.	✓ Households in Hung Ha town and Hung Nhan town are not significantly affected, so they can do small business. ✓ The project can combine with the Provincial Agricultural Extension Center and Thai Binh Agricultural Vocational School in Quynh Phu district in training and transferring science and technology in the veterinary livestock and farming. ✓ Support loans and help connect the product input and output for farmers, like the Association in Tan Le commune, which

	support mat weaving. ✓ The production facilities must ensure the minimum income of 50,000 to 70,000 VND/person/day. If the income is lower they will quit. ✓ Thai Phuong commune has weaving and towel tailoring jobs, which attract a large number of employees in the commune and neighboring communes annually. Textile workers can buy machine to do at home. The investment for one machine ranges from 15-20 million VND. The income per person per machine is 3-4 million VND/month. One worker can run two machines and their income ranges from 6-7 million VND/month. ✓ Lien Hiep commune can expand secondary job for households like weaving, fabric processing like in Thai Phuong because this job does not require high technique, the working age can be 50-60 years old and it is not sexist. ✓ The Vocational Center of Hung Ha district primarily trains for rural labor under Project 1956 of the Government. The main occupations are: (i) Civil Electricity (ii) Tailoring, (iii) Embroidery, and (iv) Information Technology. The training courses take 1-3 months and require high school graduation. The employed rate after graduation reaches about 90% primarily in companies, factories and self-employment facilities in the district. ✓ In the district there is Dong Tu industrial park and Garment Factory No.10, which attract many rural workers in the district every year.

Table 4.5: Summary of the feedback from the participants in communes

#	District/commune	Feedback from people	Focus group discussions
1	Tan Le commune, Hung Ha district	Households agreed and support the project and look forward the construction complete as soon as possible because it was heard that the project was planned long ago and half-some previously. This road has been deteriorated for long and narrow, which does not meet the traffic and economic development. People have been waiting for the road to be renovated and upgraded for long time. People suggest that adequate compensation on the basis of agreement between the Employer and people should be implemented. The construction should be quick and on schedule as experiences from some construction works which prolong to cause difficulty for traffic and daily living of people and to create urgent	The road should be completed quickly, on time and have good drainage to accommodate drainage for residents. Now the road elevation is definitely higher than people' floors, if there is not good drainage, people will become difficult. During the construction of the road, people can not engage in small trade in market as they have to stay at home to look after, repair houses and clean up messy. This makes their income reduce. If the road occupies land of which household, reasonable compensation must be paid for them quickly. If land is lost, compensation by land must be paid; land along road must be compensated with other land along road to let people maintain their trading and they will refuse the

#	District/commune	Feedback from people	Focus group discussions
		matter in the community. Households noted that the design and construction must be minded the irrigation and drainage system to ensure the irrigation and drainage in the region. Basically our remaining land is enough for resettlement in place as it is larger than100m2. When the project acquires land, the project should support us incentive loans for sleeping mat production because the commune has the traditional production of sleeping mat.	compensation if their land along road is compensated by land in small alleys or in villages. Many houses along the road, including houses of some women in the consultation group have been deteriorated, dilapidated long, so they want to repair home but have to wait for the project to complete, so they want the project complete quickly for them to repair house.
2	Hung Nhan town, Hung Ha district	Households are excited when Highway 39 Upgrading And Expanding Project goes through. The financial capacity of the Employer should be reviewed, that is, if they have enough money to do, otherwise they would do in moderation and this will affect people's lives. Dust, pollution, loss of land and income making people which are difficult become more difficult. The compensation should be equivalent to the land acquisition area. We worry about how to stabilize our life when the project builds road though our homes. We also do not know what to do to maintain the life. It is recommended that the project should provide vocational training for our children and preferential loans for small-scale traders and livestock families.	If the remaining area of land, after the land acquisition, is smaller than 100m2, the State should arrange resettlement. Create stable jobs for women for earning for living like training for trading, support for concessional loans for small-business and increase of income. If land is acquired, the State should pay other land, if house is lost, new house should be compensated and this should be directly discussed with us to know which time is the best for us.
3	Tan Hoa commune, Hung Ha district	There is no focus group discussion because few households participated. The consultation is organized via questionnaire.	
4	Lien Hiep commune, Hung Ha district	People highly support the project and recommend that if their entitlement is settled equitably, they will be willing to support. Households requested that the project is implemented properly in accordance with the content in the meeting. People have to be compensated at fair prices. Some proposed the compensation at the market prices and the Employer must meet households to get agreement on prices. During the project construction progress, competent and responsible staff should be present at site to solve	People are highly consent and support the project construction. Although the compensation rates are equal to all but there should be priority policy for female headed households or poor households, or women raising children alone. For women in this situation, no men help dismantling houses, moving furniture, installing electricity, water… when the project deploy, they have to hire someone to do so costs increase. Most people are too old to go to school for new jobs and even when

#	District/commune	Feedback from people	Focus group discussions
		project problems, avoiding people have to ask each other the project information and lead to mistransmision of information, which will cause urgent matter in the community or when they ask the commune leaders, they cannot answer. When the construction is implemented, the drainage must be ensured. If the land area remains 100m2 or more, people will resettle in place and the project should mind the cases of multi-generations living together. Some people proposed that before the project commencement, official documents should be issued but not oral speaking and must be consistent from beginning to ending. The sanitation when the project starts should be ensured. Building road for long time will be difficult for drainage, so culverts should be build, otherwise people's rice will be flooded. When building road through residential areas, the project should calculate the reasonable distance for culverts. If a long section of road has one culvert, water will be stucked and undrained. During the construction stage, the traffic keeps going on, it more or less affects the movement of people and children going to school across the road, so traffic safety must be concerned with clear sign-boards and instruction boards to avoid traffic accidents, which have happened in many areas.	they learned, no company hires them at their age. They do not have secondary jobs. This is a difficult age in employment of rural women when there is the change of livelihoods. Especially for elderly households, they have more anxiety and difficulty. For some households, Long Hung Commercial District Project in 2012 took half of their land but so far they have not received the compensation money except the payment for a quantity of rice in 6 months. So they are so confused and worried about how to live. If they loss field, they have to change to animal livestock but they have no land for livestock as housing and structures take all space. If loss of land, children after graduation of school will have no land for farming, so there should be policy for vocational training support for children of poor women. We are at the age of not very old and not young, so changing jobs is difficult for us, so we hope the women's union or the mass organizations support to create jobs for us, for example, bamboo weaving, wool knitting, cooking ... which are in accordance with our age and qualifications. Women in this group have high consensus about the monetary compensation for people to take care of their living.
5	Phuc Khanh	The road has many potholes and if the State build road, it is very good. We fully support and accept the site clearance under the provisions of the State. We've been waiting for the project for 7 to 8 years but it has not started. I want to repair, upgrade house but dare not for fear that the road will acquire repaired houses and cause waste of money and labor force of the State and our family. The compensation for people should be in justice between villages and compensation prices should be fair and have the most reasonable policy to help people stabilize their lives.	All women in the discussion meeting agreed to support the project. Women's biggest concern is the stable normal life as before the project implementation. How to stabilize our life, work, and fast income. When the road is building, our movement will be difficult and dirt will affect our living activities. New road will be higher than old road, so house floor will be lower than road elevation, we request for additional support to elevate house floor and take care of rain water drainage to avoid flooding in our houses.

#	District/commune	Feedback from people	Focus group discussions
		The road is heightened up, so our houses will become low, we had to raise floor to prevent water from overflowing into houses, so the state would have to support us some of this funding. Building road will facilitate our people travelling more easily and avoid accidents due to potholes and bad roads. But it can increase traffic accidents because on beautiful road, traffic participants, which are almost young people, can not control speed, which leads to accidents. When building road, the project should mind the drainage system.	As a trader family, we want to keep living along road to continue our trading because we do not have other jobs. Women are concerned about that can trader families be compensated more? Which trading policy is they supported? They desire that the project continue support them in trading and preferential capital.
6	Thai Phuong commune	People are very supportive and looking forward to this project for so long. It is our request that the project deploys early and especially the compensation should be equal and satisfactory to people, avoiding withheld information and when people ask questions, they will be paid higher price. Study must be careful to avoid questions or complaints. Before the project deploys, information should be provided for people early and the project should be complete fast. People in the affected area are mainly lost field land. When field is lost, people will lack of food and have no job. So the project is requested to support people alternative jobs. Compensation for farmland is heard no avail because when people have money in hand, they will buy a motor and their few acres of field are run out of. A number of opinions are to support preferential capital for investment for embroidery machine because people have this handicraft in the commune.	The project must adequately compensate to develop non-agricultural jobs for our children in the future as field is narrow and run out of. When the project deploys, it will cause traffic congestion, complex in the village and community and it needs a good coordination with village leaders and people. In the village, there is the tower tailoring and embroidery but at our age, no one hire us. When the project deploys, it should be quickly, complete section by section, not spread out field land as people have to plow in remaining land, not to affect people's crops. If there are loans, we can turn into breeding for few pigs or chickens or buffaloes or cows. If no breeding, we can buy some textile machines because Thai Phuong commune has weaving craft in Ke village and Meo village. When meeting with people, or women, please ask them specific circumstances rather than taking general deployment. Women often worry for the life and concern about very specific issues which are side by side with their daily life such as barrels of rice, vegetables, food for family, so we look forward to the support where there are changes in life, especially affection to our income.
7	Hung Ha town, Hung Ha district	We look forward the project to early implement and when the project should	The project should be quickly and timely to let people stabilize their life

#	District/commune	Feedback from people	Focus group discussions
		announce for people to know, especially affected households to help them arrange their lives. The compensation plans or resettlement plans should be notified as soon as possible so that people know and prepare for their lives. The majority of households living along road are trading. When the construction starts, it should be fast so as not to affect the business, income and people's lives. Some households have to arrange resettlement and are to be allocated in the resettlement site of the town, we agreed. Our proposal is to be allocated in the Urban Commercial Center (Nhan Cau 3) and plan plot type 80 - 100m2. Road 39 through this section is in serious degradation with no drainage, so in rainy season, there is no way for water drainage, the project should pay attention to a drainage system.	soon. There is no current drainage in residential areas. All water gets out of the road. New road should have a drainage system for local population. Our families have a shop. If land is lost, we will lose shops. The remaining area is too narrow to keep the shop. During the construction, we can not run the business; it will affect our work, partners, relationships and loss of income. Fair compensation will help people arrange their work. Concessional loans should be provided by the project for people to convert business locations. Building road will certainly increase accidents. Hope that the project will be fast to minimize difficulties of our daily life.
8	Minh Khai commune, Hung Ha district	People support the project but the adequate compensation must be provided in the agreement between the Employer and people. It should create jobs and vocational training policies or non-agricultural economic development for locals.	Firstly, we loss field, the remaining part of field has not enough rice for our family to eat. All women joining in this consultation do farming and earn the income from farming 2 crops per year. We do not have secondary jobs. Minh Khai commune has no secondary jobs. The Government developed artisanal weaving but it did not be long and undeveloped. All women joining in this consultation propose the monetary compensation. Women expect the project will adequately and fast compensate for people not to take time and make women travel a lot. Support women to borrow loans to turn into animal livestock or other occupations. Support for lending should be real advantageous with lower interest rates. Because the actual experiences in rural areas show that there are lending policies but high interest rates, interest accumulates interest. If there are concessional loans, we must pass the process of commenting and revolving loan, so if we want to borrow loans, it is hard to our turn. Children have to feed old women

#	District/commune	Feedback from people	Focus group discussions
			when they loss of field. So the project is requested to introduce jobs for their children. For example, their daughters or daughter-in-law can cook for construction workers for HW 39 or their children are employed as workers of the project if the project recruits workers on site.
9	Hong Linh commune, Hung Ha district	Today is the first meeting we can hear about the project. People totally agree if the implementation is in accordance with the said content in this meeting and the information about the project should be public and transparent. Road section 39 passes through 6 small culverts, we propose that when building new road, the project builds 6 larger culverts to carry water. It is a suggest that the Employer should deploys the project on time and fast, complete section by section, avoiding each contractor managing a section of road, leading to seamless and incontinuous. Some sections are complete; some are not, causing difficulty for people's traffic, especially roadside households.	We do hope the project keeps the schedule Classify land to compensate inadequately. In addition to compensation, support for disadvantaged families, poor women, the elderly should be made. The project should consider specific circumstances to resolve thoroughly but not generic. Women in these difficult circumstances are at a high age, not too old, but not young so their ability to learn new job is difficult. We can only do houseworks, cooking or childcare. We have not many opportunities for good and stable jobs. We hope that if the project has jobs, it will give it for women. The compensation in cash or by land is ok provided that it is convenient for people.

Table 4.5: Preferences of the households to the income restoration activities

District	Commune	Affected households	HH gave answers	Agricultural activities		Vocational Training		Self-employment		No answers given	
				HH	%	HH	%	HH	%	HH	%
Hung Ha	Tan Le	54	5	2	40.0%	1	20.0%	1	20.0%	1	20.0%
	Hung Nhan	119	25	4	16.0%	3	12.0%	17	68.0%	1	4.0%
	Lien Hiep	189	46	19	41.3%	6	13.0%	10	21.7%	11	23.9%
	Phuc Khanh	53	-	-	-	-	-	-	-	-	-
	Thai Phuong	12	1	-	-	-	-	1	100%	-	-
	Hung Ha	22	-	-	-	-	-	-	-	-	-
	Hong Linh	30	-	-	-	-	-	-	-	-	-
	Minh Khai	95	3	2	66.7%	-	-	-	-	1	33.3%
	Tan Hoa	8	-	-	-	-	-	-	-	-	-
Total		**582**	**80**	**27**	**33.7%**	**10**	**12.5%**	**29**	**36.3%**	**14**	**17.5%**

Figure 5: Some photos about public consultation and participation

2. Results of consultation for section Vo Hoi – Diem Dien

The meetings, venue, time and person met, participated is described as in table below:

Table 4. 6: Meetings with Other Stakeholders

11	Commune	Number of affected HH	Meeting Date	Venue	No. of participants	With participation of		No. of households with the questionnaires		
						Male	Female	IOL	SES	%
1	**Dong Hung**	**52**			**29**	**21**	**08**	**29**	**24**	
1.1	Dong Kinh	8	A: 13/3	CPC meeting hall	8	6	2	8	6	75%
1.2	Dong Tan	44	A: 13/3	CPC meeting hall	21	15	6	21	18	41%
2	**Thai Thuy**	**411**			**297**	**148**	**149**	**312**	**159**	
2.1	Thai Giang	104	A: 9/03	CPC meeting hall	92	48	44	104	39	38%
2.2	Thai Son	42	M: 6/03	Commune Temple	34	14	20	39	15	36%
2.3	Thai Duong	87	A: 8/03	Commune Temple	51	35	16	57	37	43%
2.4	Thai Thuy	26	A: 07/03	CPC meeting hall	12	4	8	12	9	35%
2.5	Thuy Lien	71	M: 07/03	CPC meeting hall	21	16	5	21	21	30%
2.6	Thuy Ha	78	M: 07/03	CPC meeting hall	84	28	56	76	35	45%
2.7	Diem Dien Town	3	A: 07/03	CPC meeting hall	3	3	0	3	3	100%
Total		**463**	**-**	**-**	**326**	**169**	**157**	**341**	**183**	

Table 4. 7: Consultation on income restoration measures

#	Name	Address	Position	Interviewed date
1	Nguyen Van Hoa	Provincial Farmer Association	Chairman	27/02/2013
2	Bui Thi Nga	Provincial Farmer Association	Vice Chairman	27/02/2013
3	Khuc Thi Duyen	Provincial Women Union	Chairwoman	27/02/2013
4	Truong Thi Hong Hanh	Provincial Women Union	Vice Chairwoman	27/02/2013
5	Mai Cong Tuan	Vocational Training College 19-BQP	Deputy Head of consulting Department	27/02/2013

#	Name	Address	Position	Interviewed date
6	Nguyen Thi Dien	Women Union of Thai Thuy District	Chairwoman	07/03/2013
7	Nguyen Thi Phuong Hien	Women Union of Thai Thuy District	Deputy Chairwoman	07/03/2013
8	Nguyen Thi Van Khanh	Women Union of Thai Thuy District	Deputy Chairwoman	07/03/2013
9	Nguyen Van Hung	Farmer Association of Thai Thuy District	Chairman	07/03/2013
10	Nguyen Thi Tho	Farmer Association of Thai Thuy District	Vice Chairman	07/03/2013
11	Pham Anh Tuan	Vocational Training Center of Thai Thuy district	Director	07/03/2013
12	Dao Khuong Duy	Farmer Association of Dong Hung District	Chairman	08/03/2013
13	Nguyen Thi Tam	Women Union of Dong Hung District	Chairwoman	08/03/2013
14	Mai Ba Linh	Vocational Training Center of Dong Hung district	Vice Director	08/03/2013

Table 4. 8: Meetings for a rapid survey in the substitution values

#	Name	Address	Title	Meeting date
I	**At the Provincial level**			
1	Mai Thi Toan	Financial Department	Head of Public Assets and Price Department	27/02/2013
2	Nguyen Van Thi	Construction Department	Head of Economic Department	27/02/2013
II	**Dong Hung district**			
1	Pham Cong Trang	District PC	Chairman	22/01/2013
2	Vu Van Tri	District PC	Head Office	22/01/2013
3	Nguyen Minh Bau	District PC	Deputy Head Office	22/01/2013
4	Nguyen The Vinh	Department of Industry and Trade	Head of Department	08/03/2013
5	Le Thai Son	Department of Industry and Trade	Deputy Head of Department	08/03/2013
6	Nguyen Van Chuc	Department of Agriculture	Head of Department	08/03/2013
7	Nguyen Hong Long	Department of Agriculture	Deputy Head of Department	08/03/2013
8	Le Thi Rinh	Department of Finance and Planning	Head of Department	08/03/2013
9	Vu Viet Manh	Department of Natural Resources and Environment	Head of Department	22/01/2013

#	Name	Address	Title	Meeting date
10	Vu Viet Thu	Department of Natural Resources and Environment	Official	22/01/2013
III	**Thai Thuy district**			
1	Pham Dinh Duc	District PC	Vice Chairman	23/01/2013
2	Le Huu Loi	Department of Natural Resources and Environment	Head of Department	23/01/2013
3	Pham Trung Kien	Department of Natural Resources and Environment	Deputy Head Department	23/01/2013
4	Mai Duc Trung	Department of Industry and Trade	Official	17/01/2013
5	Nguyen Thi My Le	Department of Finance and Planning	Official	07/03/2013
6	Nguyen Thanh Dong	Department of Agriculture	Deputy Head Department	07/03/2013
IV	**At the Commune level**			
1	Pham Van Thang	Dong Kinh Commune	Chairman	13/03/2013
2	Tran Thanh Tung	Dong Kinh Commune	Land Manager	13/03/2013
3	Pham Van Tan	Dong Kinh Commune	Kinh Nau Village Leader	13/03/2013
4	Bui Cong Ly	Dong Kinh Commune	Local Citizen	13/03/2013
5	Pham Thi Hoa	Dong Kinh Commune	Local Citizen	13/03/2013
6	Bui Cong Thanh	Dong Kinh Commune	Local Citizen	13/03/2013
7	Quach Tien Công	Dong Tan Commune	Chairman	13/03/2013
8	Quach Tat Cuong	Dong Tan Commune	Land Manager	13/03/2013
9	Lai Khac An	Dong Tan Commune	Dong Thuong Liet Village Leader	13/03/2013
10	Ngo Van Phuong	Dong Tan Commune	Local Citizen	13/03/2013
11	Pham Van Hoa	Dong Tan Commune	Local Citizen	13/03/2013
12	Nguyen Van Vinh	Dong Tan Commune	Local Citizen	13/03/2013
13	Cua hang VLXD Nga Tinh	Dong Tan Commune	Business	13/03/2013
14	Le Xuan Hinh	Thai Giang Commune	Chairman	09/03/2013
15	Nguyen Ngoc Tan	Thai Giang Commune	Land Manager	09/03/2013
16	Pham Thi May	Thai Giang Commune	Tien Phong Village Leader	09/03/2013
17	Nguyen Ha Phuong	Thai Giang Commune	Local Citizen	09/03/2013
18	Bui Thi Tinh	Thai Giang Commune	Local Citizen	09/03/2013
19	Bui Thanh Hoa	Thai Giang Commune	Local Citizen	09/03/2013
20	Ngo Van Dang	Thai Son Commune	Vice chairman	06/03/2013

#	Name	Address	Title	Meeting date
21	Do Ba Dangd	Thai Son Commune	Land Manager	06/03/2013
22	Tran Cong Lenhf	Thai Son Commune	Viet Cuong Village Leader	06/03/2013
23	Nguyen Thi Phanf	Thai Son Commune	Local Citizen	06/03/2013
24	Nguyen Nhu Tho	Thai Son Commune	Local Citizen	06/03/2013
25	Nguyen Huu Dung	Thai Son Commune	Local Citizen	06/03/2013
26	Nguyen Van Luong	Thai Duong Commune	Vice chairman	08/03/2013
27	Dao Van Du	Thai Duong Commune	Land Manager	08/03/2013
28	Dao Van Huynh	Thai Duong Commune	Dong Tinh Village Leader	08/03/2013
29	Nguyen Nhu Khanh	Thai Duong Commune	Local Citizen	08/03/2013
30	Dinh Van Phuoc	Thai Duong Commune	Local Citizen	08/03/2013
31	Dao Van Line	Thai Duong Commune	Local Citizen	08/03/2013
32	Tran Ngoc Hung	Thai Thuy Commune	Chairman	07/03/2013
33	Hoang Ngoc Duong	Thai Thuy Commune	Land Manager	07/03/2013
34	Nguyen Thi Nhung	Thai Thuy Commune	Bac Dong Village Leader	07/03/2013
35	Pham Ngu Xuan	Thai Thuy Commune	Local Citizen	07/03/2013
36	Hoang Thi Ngo	Thai Thuy Commune	Local Citizen	07/03/2013
37	Tran Van Nam	Thai Thuy Commune	Local Citizen	07/03/2013
38	Trinh Thanh Oai	Thuy Lien Commune	Vice chairman	07/03/2013
39	Bui Thi Phuong	Thuy Lien Commune	Land Manager	07/03/2013
40	Pham Van Hon	Thuy Lien Commune	Tra Linh Village Leader	07/03/2013
41	Nguyen Van Thuy	Thuy Lien Commune	Local Citizen	07/03/2013
42	Dao Van Loc	Thuy Lien Commune	Local Citizen	07/03/2013
43	Dao Van Phuc	Thuy Lien Commune	Local Citizen	07/03/2013
44	Le Duy Change	Thuy Ha Commune	Chairman	07/03/2013
45	Nguyen Van Tuan	Thuy Ha Commune	Land Manager	07/03/2013
46	Tran Quoc Quan	Thuy Ha Commune	Nghia Chi Village Leader	07/03/2013
47	Dao Van H\a	Thuy Ha Commune	Local Citizen	07/03/2013
48	Giang Van Dong	Thuy Ha Commune	Local Citizen	07/03/2013
49	Giang Van Chien	Thuy Ha Commune	Local Citizen	07/03/2013

Table 4.9: Consultation with stakeholders for income restoration plan

Consultant agency	Consultation and information contents
Provincial level	
1. Provincial Farmers Association 2. Provincial Women Union 3. Vocational college No. 19 - Ministry of Defense	✓ Consulting on orienting and training jobs at site for farmers should be organized with such appropriate jobs as bamboo and rattan weaving like in Dong Phong commune - Dong Hung district and embroidery, etc. ✓ Training knowledge for animal husbandry to support farms and families. Support husbandry based on garden-pond-pigsty model. ✓ Study support forms in order that people will not leave farm or in Diaspora for working as housewives, workers without taking care of children. ✓ Support buying agricultural insurance (rice) for farmers. Currently, the State supports for poor households 100% insurance premium (10,000VND/perch/1crop) and 90% insurance premiums for near-poor households. ✓ Support buying health insurance for households whose land is acquired by percentage or support any form of social insurance to be paid by lump sum or pension regime. ✓ In Thai Binh province, there are many quality vocational centers, in which the prestigious center is Vocational School No.19 - Department of Defense. The school annual admission is organized by the following industries: ***Intermediate training*** The training period is 18-months for students who graduated high schools and 36 months for students who graduated secondary schools. ***Primary training*** o Welding: 3 and 6 months o Industrial electricity: 3 and 6 months o Civil electricity: 3 and 6 months o Refrigerating machine and air conditioner techniques: 3 and 6 months o Office Computer Science: 3 months o Excavator driving, bulldozer driving: 6 months o Fashion tailoring: 3 months o Car-driving, class B2: 3 months o Car-driving, class C: 5 months.
Thai Thuy district	

1. The Farmers' Union 2. The District Women's Union 3. The Vocational training center of Thai Thuy district	✓ It needs to consult with local agencies to learn all kinds of jobs as well as the development trend of each type of job, then organizes consultation and orientation for the types of jobs that may be suitable for project affected people to choose and participate in training courses; develop these jobs in order that households after being acquired land can recover soon. The possibly suitable jobs for training are: ship building, seafood processing, mechanics, rattan – bamboo weaving, yarn crocheting, and industrial sewing. ✓ For households affected by the project, whose family members are between 18 - 35 years old, the above job training should be provided for them in order that after the training courses they can work in local industrial zones or in production facilities in the locality and in the surrounding to create income and stabilize their lives. ✓ For households affected by the project, whose members are 36 - 50 years old, rattan – bamboo weaving, thread hand-made should be trained for them in order that they can work at home or participate in local production unions for income. ✓ Train knowledge about animal feeding to assist affected households to extend their animal feeding scale at homes or in farms. ✓ Train knowledge on food processing such as jellyfish, shrimp-sauce processing,... so that people can work at home ✓ Support initial capitals or interest-free loans or low-interest loans to develop family farming scale, create small shops (selling vegetables, confectionery and food, household goods, ...) or expand stores or light-food restaurant ... ✓ Support the association with production facilities which purchase products from rattan and bamboo, embroider, salted foods... to help produce and export products and provide income for people. ✓ The Training Center in Thai Thuy district is mainly responsible for rural worker job training under Government Scheme 1956. The New Rural Program trains only the primary short-term level in 3 months. The main training jobs include: o Construction engineering o Industrial sewing, fashion apparel o Civil electricity o Mechanical processing o Small scale industry o Sea economics and aquaculture The Center admits students 16 years old or older who are healthy enough to learn. The Center trains upon students' request for places and times. Students follow Scheme 1956 are free of tuition and practice and are advised and introduced jobs after training. After the end of a program, students will be qualified for

	certification of the training course and the Center introduces them to contact with businessmen. The percentage of employment after the end of a course is about 70%.
Dong Hung district	
1. The Department of Industry and Trade 4. The Farmers' Union 5. The District Women's Union 2. The Vocational training center of Dong Hung district	✓ The Upgrading and Expanding Project of HW39 will form a commercial path between areas in the province and create a momentum for the local economic development in Dong Hung district in particular and Thai Binh province as well as the neighboring provinces in general. ✓ Currently some occupations in the district that attract the labor force are: export apparel, bamboo, rattan, cartons, wooden handicrafts, mechanical processing, rush mats, so if the project-affected households loss their jobs due to the acquisition of land, the Project Owner should organize such income restoration programs as training some of these jobs for them and provide them with low interest loans to invest in production and trading etc. ✓ Currently, there are 02 industrial parks in the district (Dong La and Gia Le) and handicraft production facilities for various types of industries are operating in Dong Hung district, which attract a lot of local labor force. So, if affected households lose their jobs due to the loss of productive land, the project should support them with training suitable local jobs in order that members of affected households can participate in industrial facilities in the area to improve income and stabilize their lives. The types of industries in the area to be trained are: seafood processing, aquaculture, industrial sewing, livestock-poultry feeding, box embroider, bamboo and rattan weaving... ✓ In addition, in the district there are a number of trade villages as: chopstick making village (Mai Linh commune); hat making village (Dong Vinh, Dong Giang); sedge mat weaving village (Dong Giang); Banh Cay cake village.... therefore to help family members affected by the land acquisition of the project to recover soon, the project should support training trade village industries to help them have stable jobs. ✓ Support initial capital or interest-free loans or low-interest loans for the initial capital investment of equipment and supplies which are necessary for people's jobs. At the same time, invest and enlarger the scale of livestock and small trading ... to generate income for stable their lives. ✓ Support to link with production facilities which purchase products from rattan and bamboo, embroidering, yarn crocheting, box crocheting, salted shrimp sauce.... to help export products and provide income for people. ✓ The Training Center of Dong Hung district trains rural

	workers under Government Scheme 1956 and prioritizes households under the New Rural Program, which specially focuses on training what farmers need with the following main training courses: o Repair of agricultural machines o Veterinary livestock o Gardening and plants o Bamboo & rattan weaving o Box crocheting The Center trains under the criteria approved by the Department of Labor. After training, the Center will support students to find jobs. For example, in the sewing industry, 100% students get jobs after finishing a course, their average wage and income is about 3million VND/person/month, which depends on their skills.

Table 4.10: Summary of the feedback from the participants in communes

No.	District/commune	People's feedback	Focus group discussions
1	Dong Phong commune, Dong Hung district		
2	Dong Tan commune, Dong Hung district	- Which documents and texts are referred to land compensation rates? - Currently is the project road alignment approved? Can the current alignment be adjusted? - Currently the project is unpublished, can we build houses at this time and will we be compensated later? - Look forward to the fair compensation in order that the compensation money can buy back land same as the lost one or can rebuild with an area equal to the acquired area. - It needs supports for job changing training for farmers who lose production land or training for husbandry techniques and veterinary medicine, planting techniques so that people will have income. - The area of land acquisition for the project is not many, so people still have land for cultivation and they are looking forward low interest capital from the project to expand their scale of	- Borrow low-interest loans for children going to school. - Look forward loans to expand agricultural production (livestock expansion, trading expansion). - Train appropriate jobs in order that affected people can join industrial establishments.

No.	District/commune	People's feedback	Focus group discussions
		production or acquisition of new land to continue their farming.	
3	Dong Kinh commune, Dong Hung district		
4	Thai Giang commune, Thai Thuy district	- When the project implements, impacts on the operation of the regional irrigation should be minimized to avoid affecting production activities of people. - Compensation prices for land, crops, and structures… should be built in order that when people lose their land and homes, they can use compensation money to buy same land and property as before. - Are houses to be built recently compensated? - Look forward to the project's training support and establishment of production groups as well as support to create links with other product consumers to maintain stable income for the producer groups.	- Women want the project support initial capital as well as livestock techniques for them to create income. - Train a number of industries: industrial sewing, electronics, mechanics in association with industrial facilities to help students get jobs in these facilities after their course. - Look for funding to improve the remaining land for higher productivity growth to compensate for the lost area. - Look forward to loans for production expansion as well as small business and trading.
5	Thai Son commune, Thai Thuy district	- We agree and suggest that the project implements early because impacts of the road construction are very small compared to the agricultural land area we have. If the road is built, it will be very good for traffic and socio-economic development of our commune; there are opportunities for trading and business. The farther the road comes, the richer people are. - There are no traditional or sideline industries in the commune, the main livelihood are agriculture. Finishing the crops, our children work as building workers in Hanoi and surrounding provinces. - When the road is built, it will affect field canals, ditches, field shores. If the construction causes filling ditches and pathways, the project has to rebuild for us. - When performing the compensation and site clearance, the project is	- The road to be built is open and easy access, more secure. We are very supportive of the project. - The land was pond previously, which was filled for growing crops and is being harvested. We are growing bananas and feeding fish. If the project compensates money, we will spend for foods in a few days; the project's support of secondary occupations is the best. - Please support for the household poultry farming about 50 chickens per household. - The project's fair compensation is requested and supports to create jobs for local people. It can set up a garment factory here because the labor force under 45 years old is many. - The project is recommended to deploy quick to avoid people

No.	District/commune	People's feedback	Focus group discussions
		requested to measure again because the local authorities reallocated land. We do not have the land use right certificates. - The impact level is less, which does not affect our lives. If possible, request the project to support us capital for breeding chicken, duck, swan... because there is no fertilized soil for growing.	suffering, prolonging and delays as many other projects. - The project information should be notified via the village chiefs or women's unions, which is the best.
6	Thai Duong commune, Thai Thuy district	- Uniformly support the project implementation. - Require adequate compensation in order that affected people can purchase and repair property and land which are acquired. - Want the project provides local job training in order that people who lose productive land can engage and re-establish new jobs to create stable income. - Requests of some participants in the consultation: Before the project starts, temporary roads should be built to avoid traffic congestion as well as improve traffic safety when the construction takes place on this road. - After construction, the project has to repair irrigation works, canals to ensure the smooth irrigation network as it used to be to supply water for agriculture activities. - At the same time the project will facilitate smooth travel for people in the area. It also contributes to the momentum for the local economic development on a come up.	- Women propose some ideas for income rehabilitation for affected households: + Affected families who members are 18-35 years old should be trained with a number of industries (export rattan, sewing, electronics; agricultural engineering, etc.) so that they have jobs and work in a number of industrial establishments in the area to generate income and stable life. + Households whose members are 35-60 years old require initial capital support or low-interest loans for livestock and poultry. - Women want the project's initial capital support as well as farming techniques in order that after losing land, they can ensure income and stabilize their lives.
7	Thai Thuy commune, Thai Thuy district		
8	Thuy Lien commune, Thai Thuy district	When households were compensated? By Tra Linh Bridge Construction Project. A section, which is not compensated, is the entire of road ROW and public land under the management of the CPC.	
9	Thuy Ha commune, Thai Thuy district	- Some participants to the consultation want to know about the project construction progress and the compensation, support and resettlement	- Women propose for vocational training, arts and crafts, bamboo and rattan weaving. - Women worry about how to

No.	District/commune	People's feedback	Focus group discussions
		policies. - Some households are currently trading along the road, they want to know about the progress, construction time and how the project calculates the support for business households during the construction stage. If the project is longer than the initial planning period, how will it support more for business establishments? - People support the project but require the project's support solutions so that people can resume their livelihoods. - The project should be completed as quickly as possible. When the project is put into operation, it will facilitate trade in Thai Thuy province in particular and neighbouring provinces in general. At the same time it contributes to the local economy growth.	replace income due to loss of productive land. Women want the project's initial capital support as well as technical farming support after losing their land, so that they can ensure income and stabilize their lives. - Women want project's loan support for their children's going to school when their families lose productive land and income. - Look forward to the project's establishment of rattan production groups and project's links with other facilities which purchase products made by this group in order to create their stable income.
10	Diem Dien commune, Thai Thuy district		

Table 4.11: Preferences of the households to the income restoration activities

#	District/ Commune	Affected households	HH gave answers	Agricultural activities		Vocational Training		Self-employment		No answers given	
				HH	%	HH	%	HH	%	HH	%
I	**Thai Thuy**	**343**	**132**	**93**	**70.5%**	**3**	**2.3%**	**25**	**18.9%**	**11**	**8.3%**
1.1	Diem Dien town	3	-	-	0.0%	-	0.0%	-	0.0%	-	0.0%
1.2	Thai Son	39	16	12	75.0%	-	0.0%	-	0.0%	4	25.0%
1.3	Thai Thuy	12	5	3	60.0%	-	0.0%	2	40.0%	-	0.0%
1.4	Thuy Lien	21	5	3	60.0%	-	0.0%	2	40.0%	-	0.0%
1.5	Thai Giang	104	49	34	69.4%	1	2.0%	12	24.5%	2	4.1%
1.6	Thai Duong	89	42	31	73.8%	2	4.8%	5	11.9%	4	9.5%
1.7	Thuy Ha	75	15	10	66.7%	-	0.0%	4	26.7%	1	6.7%
II	**Dong Hung**	**50**	**11**	**9**	**81.8%**	**1**	**9.1%**	**0**	**0.0%**	**1**	**9.1%**
2.1	Dong Kinh	8	-	-	0.0%	-	0.0%	-	0.0%	-	0.0%
2.2	Dong Tan	42	11	9	81.8%	1	9.1%	-	0.0%	1	9.1%
Total		**393**	**143**	**102**	**71.3%**	**4**	**2.8%**	**25**	**17.5%**	**12**	**8.4%**

Figure 6: Some photos about public consultation and participation

3. Results of consultation for a Section Quan Goi–Yen Lenh and 4 bridges on NH38B

The meetings, venue, time and person met, participated is described as in table below:

Table 4. 12: Meetings with Other Stakeholders

No.	Commune	No. of affected HH	Meeting Date	Venue	No. of participants	With participation of		No. of households with the questionnaires		
						Male	Female	IOL	SES	%
I	**NH 38**									
1	**Hung Yen**	**10**			**10**	**3**	**7**	**10**	**10**	
1.1	**My Hao**	**10**			**10**	**3**	**7**	**10**	**10**	
1.1.1	Minh Duc	10	M:19/03	Commune Temple	10	3	7	10	10	100 %
2	**Hai Duong**	**208**			**131**	**82**	**49**	**140**	**84**	
2.1	**Binh Giang**	**208**			**131**	**82**	**49**	**140**	**84**	
2.1.1	Hung Thinh	27	M: 19/03	Commune Temple	16	8	8	21	16	59%
2.1.2	Vinh Tuy	63	M: 16/03	CPC meeting hall	30	17	13	48	25	40%
2.2.3	Vinh Hong	12	M: 20/03	CPC meeting hall	11	7	4	10	6	50%
2.1.4	Trang Liet	33	M: 20/03	CPC meeting hall	28	19	9	19	15	45%
2.1.5	Thuc Khang	73	M: 19/03	CPC meeting hall	46	31	15	42	22	30%
3	**Hung Yen**	**531**			**313**	**188**	**125**	**305**	**190**	
3.1	**An Thi**	**451**			**268**	**156**	**112**	**266**	**160**	
3.1.1	Phu ung	43	M: 15/03	CPC meeting hall	46	24	22	35	19	44%
3.1.2	Bai Say	184	A: 26/01	CPC meeting hall	77	53	24	78	57	31%
3.1.3	Tan Phuc	26	M: 26/01	CPC meeting hall	25	17	8	15	10	38%
3.1.4	Quang Vinh	78	M: 16/03	CPC meeting hall	49	26	23	52	28	36%
3.1.5	An Thi Town	34	M: 19/03	CPC meeting hall	25	18	7	31	13	38%
3.1.6	Quang Lang	86	M: 15/03	CPC meeting hall	46	18	28	55	33	38%
3.2	**Kim Đong**	**80**			**45**	**32**	**13**	**39**	**30**	
3.2.1	Nghia Dan	80	M: 10/03	CPC meeting hall	45	32	13	39	29	36%
3.2.2	Toan Thang									
II	**NH 38B**									
1	**Hai Duong**	**160**			**85**	**57**	**28**	**89**	**50**	
1.1	**Gia Loc**	**20**			**17**	**10**	**7**	**19**	**10**	
1.1.1	Doan Thuong	13	A: 31/01	CPC meeting hall	10	5	5	11	4	31%
1.1.2	Dong Quang	7	M: 01/02	CPC meeting hall	7	5	2	8	6	86%

No.	Commune	No. of affected HH	Meeting Date	Venue	No. of participants	With participation of		No. of households with the questionnaires		
						Male	Female	IOL	SES	%
2.1	**Thanh Mien**	**140**			**68**	**47**	**21**	**70**	**40**	
2.1.1	Thanh Mien Town	41	A: 02/04	CPC meeting hall	35	21	14	35	15	37%
2.1.2	Tu Cuong	61	M: 17/03	CPC meeting hall	12	10	2	12	13	21%
2.1.3	Cao Thang	38	A: 16/03	CPC meeting hall	21	16	5	23	12	32%
2	**Hung Yen**	**63**			**59**	**38**	**21**	**61**	**29**	
2.1	**Phu Cu**	**63**			**59**	**38**	**21**	**61**	**29**	
2.1.1	Quang Hung	39	A: 19/03	CPC meeting hall	39	26	13	39	17	44%
2.1.2	Doan Dao	24	A: 19/03	CPC meeting hall	20	12	8	22	12	50%

Table 4. 13: Consultation on income restoration measures

#	Name	Address	Position	Interviewed date
I	**Provincial level**			
1	Le Thi Bich Ha	Women Union in Hung Yen Province	Deputy Chairwoman	14/03/2013
2	Nguyen Thanh Huyen	Women Union in Hung Yen Province	Head of Department	14/03/2013
3	Nguyen Huu Tuyen	Farmer Association in Hung Yen Province	Chairman	14/03/2013
4	Le Van Nguyen	Farmer Association in Hung Yen Province	Deputy Chairman	14/03/2013
5	Nguyen Tuan Viet	Farmer Association in Hung Yen Province	Head of Office	14/03/2013
6	Bui Chi Thanh	Hung Yen Vocational School	Vice principal	14/03/2013
7	Le Thiet Hung	Farmer Association in Hai Duong Province	Head of Office	13/03/2013
II	**District level**			
8	Pham Thai Son	Management of Industrial Parks Board in Hung Yen Province	Head of Department	15/03/2013

#	Name	Address	Position	Interviewed date
9	Nguyen Dinh Cuong	Management of Industrial Parks Board in Hung Yen Province	Head of Department	15/03/2013
10	Dao Thi Hoat	Women Union in An Thi district	Chairwoman	14/03/2013
11	Nguyen Thi Lang	Farmer Association in An Thi district	Chairman	14/03/2013
12	Pham Thi Mo	Women Union in Binh Giang district	Chairwoman	18/03/2013
13	Le Xuan Hoan	Farmer Association in Binh Giang district	Chairman	18/03/2013

Table 4.14: Meetings for a rapid survey in the substitution values

#	Name	Address	Title	Meeting date
I	**Hung Yen Province**			
1	Nguyen Dinh Nghi	Provincial Department of Natural Resources and Environment	Vice Director	31/01/2013
2	Pham Truong Tam	Provincial Department Construction	Deputy Head of Department	31/01/2013
II	**Hai Duong Province**			
1	Mai Hoang Khuong	PPC	Head Office	11/01/2013
2	Pham Sy Thao	PPC	Deputy Head Office	11/01/2013
III	**An Thi district**			
1	Tran Duy Dan	DPC	Chairman	11/01/2013
2	Duong Tuan Doan	DPC	Head Office	11/01/2013
3	Nguyen Huu Chinh	Department of Natural Resources and Environment	Head of Department	11/01/2013
4	Nguyen Duc Khiem	Department of Natural Resources and Environment	Official	11/01/2013
IV	**Binh Giang district**			
1	Vu Quang Dang	DPC	Deputy Chairman	13/03/2013
2	Pham Van Nam	Department of Natural Resources and Environment	Head of Department	13/03/2013

#	Name	Address	Title	Meeting date
3	Pham Viet Trung	Department of Natural Resources and Environment	Deputy Head of Department	13/03/2013
V	**At commune level**			
1	Nguyen Van Huynh	Minh Duc commune	Deputy Chairman of Commune	20/03/2013
2	Vu Hong Duc	Minh Duc commune	Land Manager	20/03/2013
3	Vu Dang Phong	Minh Duc commune	Thinh Van Village leader	20/03/2013
4	Chu Thi Duong	Minh Duc commune	Local Citizen	20/03/2013
5	Tran Trung Duc	Minh Duc commune	Local Citizen	20/03/2013
6	Duong Duc Luan	Minh Duc commune	Local Citizen	20/03/2013
7	Pham Ngoc Suu	Hung Thinh commune	Chairman of Commune	19/03/2013
8	Pham Dinh Minh	Hung Thinh commune	Land Manager	19/03/2013
9	Le Dinh Soai	Hung Thinh commune	Ngoc Mai village leader	19/03/2013
10	Ngo Son Tung	Hung Thinh commune	Local Citizen	19/03/2013
11	Trinh Dinh Hien	Hung Thinh commune	Local Citizen	19/03/2013
12	Nguyen Van The	Hung Thinh commune	Local Citizen	19/03/2013
13	Vu Xuan Hien	Vinh Tuy commune	Chairman of Commune	16/03/2013
14	Vu Duy Mung	Vinh Tuy commune	Land Manager	16/03/2013
15	Vu Van Chien	Vinh Tuy commune	Vinh Lai village leader	16/03/2013
16	Vu Van Toi	Vinh Tuy commune	Local Citizen	16/03/2013
17	Vu Van Hiep	Vinh Tuy commune	Local Citizen	16/03/2013
18	Tran Van San	Vinh Tuy commune	Local Citizen	16/03/2013
19	Vu Van Tuan	Vinh Hong commune	Chairman of Commune	20/03/2013
20	Nguyen Van Dich	Vinh Hong commune	Land Manager	20/03/2013
21	Pham Van Lam	Vinh Hong commune	Me Khe village leader	20/03/2013
22	Co Thoa	Vinh Hong commune	Local Citizen	20/03/2013
23	Vu Dinh Moi	Vinh Hong commune	Local Citizen	20/03/2013
24	Bui Manh Cuong	Vinh Hong commune	Local Citizen	20/03/2013
25	Quach Van Hung	Trang Liet commune	Deputy Chairman of Commune	20/03/2013
26	Pham Manh Kim	Trang Liet commune	Land Manager	20/03/2013
27	Chu Van Tan	Trang Liet commune	Thuong area leader	20/03/2013
28	Nguyen Van Tien	Trang Liet commune	Local Citizen	20/03/2013
29	Phan Van Huu	Trang Liet commune	Local Citizen	20/03/2013
30	Nguyen Thi Van	Trang Liet commune	Local Citizen	20/03/2013
31	Bui Van Cuong	Thuc Khang commune	Chairman of Commune	19/03/2013
32	Vu Xuan Thai	Thuc Khang commune	Land Manager	19/03/2013

#	Name	Address	Title	Meeting date
33	Nguyen Van Hanh	Thuc Khang commune	Tranh Ngoai village leader	19/03/2013
34	Nguyen Van Tuan	Thuc Khang commune	Local Citizen	19/03/2013
35	Pham Van Thuong	Thuc Khang commune	Local Citizen	19/03/2013
36	Hoang Quoc Bao	Thuc Khang commune	Local Citizen	19/03/2013
37	Tran Cong Trang	Phu Ung commune	Deputy Chairman of Commune	15/03/2013
38	Ngo Minh Tan	Phu Ung commune	Land Manager	15/03/2013
39	Vu Ngoc Hoa	Phu Ung commune	Phu Ung village leader	15/03/2013
40	Pham Van Kien	Phu Ung commune	Local Citizen	15/03/2013
41	Nguyen Xuan Quyet	Phu Ung commune	Local Citizen	15/03/2013
42	Ly Ngoc Minh	Phu Ung commune	Local Citizen	15/03/2013
43	Nhu Duc Van	Bai Say commune	Chairman of Commune	26/01/2013
44	Nhu Van Huy	Bai Say commune	Land Manager	26/01/2013
45	Nguyen Van Co	Bai Say commune	Boi Khe village leader	26/01/2013
46	Pham Van Hung	Bai Say commune	Trai Giao village leader	26/01/2013
47	Pham Van Kin	Bai Say commune	Local Citizen	26/01/2013
48	Pham Van Tranh	Bai Say commune	Local Citizen	26/01/2013
49	Pham Duc Hoa	Bai Say commune	Local Citizen	26/01/2013
50	Bui Dinh Quynh	Tan Phuc commune	Chairman of Commune	26/01/2013
51	Le Xuan Chi	Tan Phuc commune	Land Manager	26/01/2013
52	Dang Dinh Thach	Tan Phuc commune	Ngoc Nhue village leader	26/01/2013
53	Vu Van Can	Tan Phuc commune	Phuc Xa village leader	26/01/2013
54	Do Van Quynh	Tan Phuc commune	Local Citizen	26/01/2013
55	Dang Dinh Hai	Tan Phuc commune	Local Citizen	26/01/2013
56	Ngo Minh Vuong	Tan Phuc commune	Local Citizen	26/01/2013
57	Nguyen Quang Tuan	Quang Vinh commune	Deputy Chairman of Commune	16/03/2013
58	Dang Van Dang	Quang Vinh commune	Land Manager	16/03/2013
59	Vu Trong Thien	Quang Vinh commune	Do Thuong village leader	16/03/2013
60	Hung Nguyen Mau	Quang Vinh commune	Local Citizen	16/03/2013
61	Nguyen Thi Mai	Quang Vinh commune	Local Citizen	16/03/2013
62	Dang Thi Quyen	Quang Vinh commune	Local Citizen	16/03/2013
63	Vu Huy Thai	An Thi town	Chairman of Commune	19/03/2013
64	Hoang Van Thuy	An Thi town	Land Manager	19/03/2013
65	Le Thi Tuoi	An Thi town	Hoang Ca 1 village leader	19/03/2013

#	Name	Address	Title	Meeting date
66	Hoang Van Trung	An Thi town	Local Citizen	19/03/2013
67	Hoang Van Hai	An Thi town	Local Citizen	19/03/2013
68	Hoang Xuan Truong	An Thi town	Local Citizen	19/03/2013
69	Manh Ha construction material shop	An Thi town	Business	19/03/2013
70	Giao Mien construction material shop	An Thi town	Business	19/03/2013
71	Hoc Vui construction material shop	An Thi town	Business	19/03/2013
72	Nguyen Van Dung	Quang Lang commune	Chairman of Commune	15/03/2013
73	Ta Van Thap	Quang Lang commune	Land Manager	15/03/2013
74	Tran Xuan Mai	Quang Lang commune	Luu Xa village leader	15/03/2013
75	Nguyen Thi Thuong	Quang Lang commune	Local Citizen	15/03/2013
76	Nguyen Thi Binh	Quang Lang commune	Local Citizen	15/03/2013
77	Tran Thi Van	Quang Lang commune	Local Citizen	15/03/2013
78	Dao Trung Lap	Nghia Dan commune	Chairman of Commune	10/03/2013
79	Hoang Van khoan	Nghia Dan commune	Land Manager	10/03/2013
80	Nguyen Van Quan	Nghia Dan commune	Truc Cau village leader	10/03/2013
81	Nguyen An Tuat	Nghia Dan commune	Local Citizen	10/03/2013
82	Hoang Van Tuan	Nghia Dan commune	Local Citizen	10/03/2013
83	Khuc Truong son	Nghia Dan commune	Local Citizen	10/03/2013
84	Nguyen Ngoc Hoang	Toan Thang commune	Chairman of Commune	12/03/2013
85	Nguyen Van Kha	Toan Thang commune	Land Manager	12/03/2013
87	Quyen Doi construction material shop	Toan Thang commune	Business	12/03/2013
88	Nguyen Duc Quang	Toan Thang commune	Local Citizen	12/03/2013
89	Nguyen Van Hoi	Toan Thang commune	Local Citizen	12/03/2013
90	Nguyen Van Bich	Toan Thang commune	Local Citizen	12/03/2013
91	Vu Ngoc Son	Doan Thuong commune	Chairman of Commune	31/03/2013
92	Vu Ngoc Quy	Doan Thuong commune	Land Manager	31/03/2013
93	Vu Hong Xung	Doan Thuong commune	Thung Do village leader	31/03/2013
94	Nguyen Anh Tuan	Doan Thuong commune	Local Citizen	31/03/2013
95	Nguyen Ngoc Quy	Doan Thuong commune	Local Citizen	31/03/2013
96	Vu Thi Van	Doan Thuong commune	Local Citizen	31/03/2013
97	La Van Chien	Dong Quang commune	Chairman of Commune	01/02/2013
98	Nguyen Van Tu	Dong Quang commune	Land Manager	01/02/2013

#	Name	Address	Title	Meeting date
99	Nguyen Anh Sung	Dong Quang commune	An Thu village leader	01/02/2013
100	Vu Thi Dong	Dong Quang commune	Local Citizen	01/02/2013
101	Le Van Giang	Dong Quang commune	Local Citizen	01/02/2013
102	Vu Van Khuyen	Dong Quang commune	Local Citizen	01/02/2013
103	Do Quy Cam	Thanh Mien town	Chairman of Commune	02/04/2013
104	Nguyen Ngoc Chien	Thanh Mien town	Land Manager	02/04/2013
105	Vu Van Tiem	Thanh Mien town	Phuong Hoang village leader	02/04/2013
106	Ngo Xuan Vinh	Thanh Mien town	Local Citizen	02/04/2013
107	Ngo Quang Ngan	Thanh Mien town	Local Citizen	02/04/2013
108	Hoang Thi Luyen	Thanh Mien town	Local Citizen	02/04/2013
109	Vu Van Dang	Tu Cuong commune	Chairman of Commune	17/03/2013
110	Pham Thi Que	Tu Cuong commune	Land Manager	17/03/2013
111	Bui Dang Hue	Tu Cuong commune	An Nghiep village leader	17/03/2013
112	Ngo Van Chanh	Tu Cuong commune	Local Citizen	17/03/2013
113	Vu Duc Nhanh	Tu Cuong commune	Local Citizen	17/03/2013
114	Ngo Trung Kieu	Tu Cuong commune	Local Citizen	17/03/2013
115	Truong Minh Man	Cao Thang commune	Chairman of Commune	16/03/2013
116	Vu Quang Lung	Cao Thang commune	Land Manager	16/03/2013
117	Pham Van Lieu	Cao Thang commune	Bang Do village leader	16/03/2013
118	Hung Truong Tuyen	Cao Thang commune	Local Citizen	16/03/2013
119	Luu Van Tham	Cao Thang commune	Local Citizen	16/03/2013
120	Nguyen Huu Chieu	Cao Thang commune	Local Citizen	16/03/2013
121	Vu Manh Tuyen	Quang Hung commune	Chairman of Commune	19/03/2013
122	Le Hong Son	Quang Hung commune	Land Manager	19/03/2013
123	Vu Tien Thanh	Quang Hung commune	Quang Xa village	19/03/2013
124	Luu Van Luan	Quang Hung commune	Local Citizen	19/03/2013
125	Nguyen Van Nam	Quang Hung commune	Local Citizen	19/03/2013
126	Nguyen Van An	Quang Hung commune	Local Citizen	19/03/2013
127	Hung Vuong Dinh	Doan Dao commune	Chairman of Commune	19/03/2013
128	Vu Duc Manh	Doan Dao commune	Land Manager	19/03/2013
129	Ta Quang Lanh	Doan Dao commune	Doan Dao village	19/03/2013
130	Nguyen Van Cuong	Doan Dao commune	Local Citizen	19/03/2013
131	Nguyen Thi Lien	Doan Dao commune	Local Citizen	19/03/2013
132	Nguyen Thi At	Doan Dao commune	Local Citizen	19/03/2013

Table 4.16: Consultation with stakeholders for income restoration plan

(Section Quan Goi – Yen Lenh and 4 bridges of NH 38B)

Consultation agency	Consultation content and information
Provincial level	
Hai Duong Provincial Farmers' Union	✓ The Union has not organized any income restoration programs for households affected by the projects in the province. However, during 2008 - 2015, the Union has collaborated with a number of departments to build a project: "Support farmers to invest in agricultural mechanization" with the main contents: investment in tractors, harvesters, plucking rice machine, cultivators and trucks. This project is funded by the State budget with the maximum preferential interest of 75% of the purchase price. So if the Upgrading and Expansion Highway 38 Project organizes economic rehabilitation program for affected households, it can coordinate with the Farmers' Union of Hai Duong province to integrate the project the Union is implementing to support households affected by the project. ✓ It needs to consult with local agencies to capture all kinds of jobs as well as the development trend of each type of job, then consult and orient suitable jobs for people affected by the project to opt and participate in the training to stabilize their life after the land acquisition. The jobs in the area suitable for the training are livestock and veterinary; seafood processing – aquaculture; agricultural mechanics; industrial garment. ✓ For the poor, the project should support them loans to buy fertilizer for agricultural production. ✓ For households affected by the project, whose members are between 18-35 years old, the following jobs should be trained for them: electronic assembly, industrial garment, mechanics engineering, wood machining; the learning period should be about 3 months; after the course they can work in industrial zones or in production facilities in the area to generate income and stabilize their lives. ✓ For households affected by the project, whose members are 36 - 50 years old, training veterinary and animal husbandry and cultivation knowledge should be supported for them to expand their animal breeding scale as well as their farms with high yield crops (tomatoes, corns, potatoes, etc.). ✓ Support initial capital via interest-free loans or low-interest loans to implement family farming scale and expand the production scale (such as industrial garment, mechanic engineering, wood machining); small businesses in the market...
1. Hung Yen Farmers' Union 2. Hung Yen Women's Union 3. The Center for Vocational	✓ The Women's Union and the Farmers' Union have not implemented any income restoration programs for project affected households in the province. In recent years the Unions have collaborated with other agencies and industries to develop a support program for poor farmers and policy-families on vocational training

Consultation agency	Consultation content and information
Training and Employment Support under the Farmers' Union 4. Hung Yen Management Board for Industrial Zones	under Decision 1956 of the Prime Minister. ✓ The Farmers' Union and the Women' Union in Hung Yen province in collaboration with agencies and unions have trained a number of industries: bamboo & rattan, mushroom, earthworms, veterinary husbandry techniques; a training course takes 03 months then trainees are certified. ✓ In An Thi district, there are mainly 02 rice crops; enterprises in the area are few; so we look for the Upgrading and Expanding Highway 38 Project to support affected households with high productivity rice cultivation techniques and capital support for fertilizer and insecticide to prevent diseases. In An Thi district, there is a hat-making village and a silver carving village in Phu Ung commune; the rattan and bamboo weaving has been recently introduced in the district and has not developed. Former Phu Minh Company in Pho Noi town cooperated with local authorities to training rattan and bamboo weaving for people in the area; Anh Hong Co. Ltd. is buying thread-weaving products in the district. So when the Upgrading and Expanding Highway 38 Project organizes job training, it should direct affected people to study some of the above occupations (rattan and bamboo weaving, thread-weaving), help to create an production association and link with procurement units to consume products. ✓ Currently in the province, 02 industrial zones: Pho Noi A, Pho Noi B and some industrial production lines have attracted many workers in the province as well as neighboring provinces. Some jobs that attract large number workers are industrial garment and electronic assembly, Kinh Do candy, ... ✓ In the past year, the Women's Union in Hung Yen province corporate with the departments and unions to implement program to support female members who are healthy to work but do not belong to poverty households (poor) by providing cattle and pig breeders. Currently this model works very effectively. The Provincial Women's Union encourages the Upgrading and Expanding Highway 38 Project, when implementing the program, it should model the breeder support to people to develop breeding herds, generating income for their families and early stabling their lives. ✓ It is expected that in the coming time, the Women's Union in Hung Yen province will coordinate with Hung Yen Vocational School to train and establish producer group: flowers; mushrooms; safe vegetables; worm farming; livestock and poultry; freshwater fish for the households involved. According to the initial cost estimates, the funding for the livestock model (cattle, freshwater fish, and worm farming) is about 15 million VND; poultry and mushroom farming is more than 40 million VND. If this group works well, the model will be replicated for the entire Hung Yen province. So if the Upgrading and

Consultation agency	Consultation content and information
	Expanding Highway 38 Project deploys the income rehabilitation program, it should introduce affected people the floriculture, mushroom cultivation, and safe vegetable cultivation so that they can participate, create income and stabilize their lives. ✓ The Center for Vocational Training and Employment is under the Farmers' Union trains the following jobs: + Techniques for safe vegetable cultivation + Techniques for veterinary and livestock (cattle and poultry) + Techniques for aquaculture + Techniques for handicrafts A training course takes about 3 months; the training fund is supported by the Provincial Farmers' Union under Decision 1956. In addition, the Center is associated with a number of vocational schools to train agriculture mechanics, civil engineering, industrial garment ...
District level	
Binh Giang district, Hai Duong province	
1. Department of Economic Infrastructure 2. Farmers' Association 3. Women's Union	- There are 2 resettlement sites in district to serve resettlement for Ha Noi - Hai Phong Expressway Construction Project: (i) Resettlement site at Co Bi commune has 100 plots that occupied and (ii) Resettlement site at Nhan Quyen commune has 30 plots that occupied. If the Upgrading and Expanding Project of NH 38 would require land acquisition due to needs of resettlement, there is available land in commune to arrange resettlement for affected households. - Ocean Investment Joint Stock Company has also invested in building a new commercial residential area in Hung Thinh commune, and is currently conducting leveling. If the Upgrading and Expanding Project of NH38 has needs of resettlement for affected households, the new commercial residential area can meet the need for households in resettlement. This area measure 13.7ha, of which residential land accounts for 35% and the remaining area is under investment for business, service establishments and investors are being called on. Investment rate for the resettlement plots close to the center: 12 million VND/1m2 with infrastructure. - In addition, there is the new residential area with the area of 13 ha in Trang Liet commune which has been approved by PPC, and Toan Gia Thanh Join Venture is the client for this new residential area. This residential area is planned with 44% of residential land, including the villas. - There are 4 industrial parks in Binh Giang district, which attract about 10,000 labors. Industrial parks including: + Hung Thinh Industrial park at Hung Thinh commune has area of 50ha, currently this industrial park has been filled with type of industries such as: Mechanical of agricultural machinery engines (majority); mechanical processing; electric motor; Manufacturing of household furniture. Labors in this industrial park are account for 50% total of labors in industrial parks in the district. + Trang Liet – Thuc Khang Mechanical Engineering village located in Trang Liet commune and Thuc Khang commune with an area of 27 hectares. Type of activities: mechanical processing accounts for about

Consultation agency	Consultation content and information
	50%, the rest of the garment industry and other types. + Tan Hong – Vinh Hong Industrial park has area of 37ha, this industrial park has multidisciplinary: industrial sewing; mechanical processing; electronics manufacture and assembly… - In the district there are 7 trade villages: 1. There are 2 villages on silver carving (Chau Khe – Luong Ngoc) at Thuc Khang commune. Numbers of households in the village which do silver carving account for 50-60% of total households in 02 villages, operation efficiency of this village is quite high. 2. Trang Liet Mechanical village at Trang Liet commune provides agricultural machinery engines, operation efficiency is very high. 3. Phuong Do carpentry village located in Hung Thinh commune, specializing in household furniture and wooden furniture. Population of the village which does in this trade accounts for 60% of total households in the village. Operation efficiency is quite high. 4. Cay ceramic village located in Long Xuyen commune, specializing in producing ceramics. 5. Vac village which in making comb is less active. 6. Dinh Nhu carpentry village at Dinh Nhu village, Binh Xuyen commune. In the district, Encourage Agriculture Center in collaboration with provincial departments has annual opened Breeding technique training course, cultivation, growing rice with high yield and training a non-agricultural job (garment, electronics assembly...) for poor people as 1956 fund by Prime Minister approved. - So far the Farmers' Association has not been implemented income restoration measures for households affected by the project implemented in the province. - Annually, Farmers' Association organizes 12 training courses, breeding technical training, cultivation, aquaculture (one course per month), garment, crocheted wool to export, handicrafts. The training period is 2-3 months, after the end of a program, students will be qualified for certification of the training course. - Currently Farmers' Association has implemented freshwater fish farming model, majority at Hong Khe commune, with initial invested capital is 500 million VND, initially efficiency as expected. - Livestock model is also implemented in the district. - District Farmers' Association has implemented the project on supporting loans to farmers investing machinery for agricultural production, funding from the state budget is 20 billion VND. The machines are: plow machine, rice plucking machine, harvester, sowing machine. - Some of secondary jobs are currently in the district: + Silver carving + Interior decoration (wooden furniture) + Bamboo & Rattan - Currently garment training course in the district achieved high efficiency and most of students get jobs after finishing a course, their average wage and income is about 2,5-3million VND/person/month. - These secondary jobs are thriving in the area: Silver carving and wooden furniture. Therefore, when the Upgrading and Expanding NH38 Project organizes an income rehabilitation program for affected households, it should guide them some jobs which are available in the district as well as train them techniques.

Consultation agency	Consultation content and information
An Thi district, Hung Yen province	
1. Department of Industry and Trade 1. Farmers' Union 2. District Women's Union 3. An Thi district vocational training center	The Farmers' Union and the Women's Union in An Thi district in collaboration with To Hieu University to train some sectors: veterinary and husbandry techniques; high yield rice techniques; garment industry; mechanical engineering; electronic assembly… A training period takes 03 months. Then trainees will receive certificates. Most students can find jobs through the introduction of the Unions. The District Women's Union is currently modeling growing vegetables and mushrooms. Expected in the second quarter of 2013, they will launch 02 models. In the district, a number of households joined training on pig feeding and mushrooms techniques and then deploy the model with high efficiency. Yet the mushrooms model does not thrive because people worry about no where for their stable product consumption, so they have not invested in this model. In Tien Phong commune the vegetable model is deploying (corvettes) but at a small scale because they have not associated with consumption units to sold large quantity, people here do not dare to thrive. The district now has some Korean garment companies, attracting 1,500 - 2,000 workers; private garment facilities employ about 200 workers. So when the Upgrading and Expanding HW38 Project organizes an income rehabilitation program for affected households, it should guide them some jobs which are available in the district as well as train them techniques to model the animal feeding and cultivation which have been developed in the district; train women 18 -35 years old the industrial garment when they demand and want to work for garment companies in the area. At the same time, the project associates with the product purchasers to help households sell products and develop the model sustainably. When the Upgrading and Expanding HW38 Project organizes an income rehabilitation program for affected households, the Farmers' Union encourages the project to provide technical assistance for raising pig and chicken (for eggs) and support loans to implement the model. At the same time, the project associates with the procurement units that purchase clean eggs (supermarkets).

The households who are affected with more than 10% of their agricultural land and the household who is fully affected on the house would be eligible to the income restoration activities. The activities for income restoration will be designed in an implementation phase of RP based on the DMS results and the results of further consultation with stakeholders of income restoration.

Table 4.17: Summary of the feedback from the participants in communes

No.	District/commune	People's feedback	Focus group discussion
I	**Highway 38, Quan Goi-Yen Lech bridge section**		
1	Minh Duc commune, My Hao district, Hung Yen province	Less affected households, only meet with commune leaders and consult households via questionnaires.	
2	Hung Thinh commune, Binh Giang district, Hai Duong province	- Agree with the project implementation. However, the project area is the highest yield rice production area in the commune. If the land acquisition occurs, it will affect the agricultural households, thus the project is requested to arrange appropriate compensation and support to limit disadvantages for people. - After the project organizes the land acquisition, farmers will loss their land and loss their jobs, so we expect the project to support us the job training to create new jobs for local people. There are a lot of industrial establishments in the commune currently (31 companies and businesses which primarily major in mechanical - agriculture activities and traditional carpentry), therefore, we look forward to the project' job training support to create new jobs and stabilize people's lives. - When we loss land, the project should consult with the local leaders and farmers in order that we have stable food security. - When the project acquires land, if the remaining area after the land acquisition is too small (less than 200m2), the project should acquire all land because it is too small to do farming. - Support loans for families to develop the carpentry with less than 100 million VND. - Highly support the project implementation. It is requested to be quickly for locals to have smooth traffic on road and to promote the local economic development.	- Support the project to be developed early in order that there are pretty smooth local road early and convenient for people. - When the project implements the land acquisition, single, windowed female householders, who are nursing children at school age, will get more difficulties, so we expect a fair compensation and more support fund from the project so that we can find jobs, hire new land or invest in remaining land for high yield farming. - We look for the project's support on vocational training for children 18-35 years old, who are in households affected by the project (vocational training for agricultural engineering, machining and traditional carpentry). - For women 35-55 years old the project should have technical training and financial support in livestock and poultry for them. - We look for the project's support on the vocational training for affected families; support initial loans for the traditional carpentry tooling and equipment to create a stable source of income and soon stabilize the lives.
3	Vinh Tuy commune, Binh Giang district, Hai Duong province	- People attending the meeting support the project implementation but request that the project must be transparent, fair; all information about the project (resettlement, compensation,	- We desire the project's loans for business expansion and production, the expected loan should be less than 100 million VND.

No.	District/commune	People's feedback	Focus group discussion
		construction) must be disseminated to each household to understand. - Some participants to the consultations would like to know about the project construction progress, requests the project to roll the works, completing works section by section, to limit impacts on the movement and activities of people in the construction process. - The project mostly passes agricultural areas, so when being progress, it is requested to plan temporary roads to serve people's travel as well as when the project cuts infield canals, it must build alternative canals to not interrupt the water supply to the agricultural activities and not affect the production activities of people. - People support the project but request the project to have adequate support solutions so that people can restore their livelihoods after the land acquisition. - For affected households, which have people more than 60 years old, the project should support them cash funding to help them self-employ because they can not participate in vocational training to change to new jobs at their age. - The project should be as quickly as possible as when the project construction works completed and put into operation, they will facilitate the trading between the regions in Hai Duong province in particular and in the neighboring provinces in general. At the same time this project promotes the local economy to go up.	- Women want to be supported with initial loans as well as technical farming support so that after losing land they can ensure income and stabilize their lives. - Women are looking for project's loans for their children to go to school when their families loss productive land and loss income. - We look for the project's support for the establishment of a number of rattan production groups or livestock areas (farms) and links with other companies which purchase products made by these groups to create them stable income.
4	Vinh Hong commune, Binh Giang district, Hai Duong province	- According to the planning, Binh Giang district will become Binh Giang town by 2020. The project passes through Vinh Hong commune, which will contribute to the introduction, a premise that promote the planning quickly become a reality. Therefore local people are very excited and agreed that the project should be quickly. - The compensation for households affected by the project land acquisition should comply with the provisions of the state and publicize to avoid questions of	- Agree with the project implementation and desire the project's fair compensation. - Hope that the project will train the industrial garment for our children 18-35 years old in households affected by the project. Now the garment industry in the area is pretty developed and attracting employees, especially female workers. - Women look for the project's

No.	District/commune	People's feedback	Focus group discussion
		affected households during the implementation of the land acquisition. - When the project carries out the land acquisition, if the remaining area after the land acquisition is too small (less than 200m2), it should be acquired all because the remaining area is too small to keep the production efficiency. - The project's land acquisition will lose job opportunities; it should support the training on mechanics, apparel, to create new jobs and stabilize people's lives. - Currently there is Phuc Dien industrial zone which is planned in more than 200ha in the commune. After the project deployment, there will be a large amount of labor, so the project should consider some types of jobs in the industrial zone to drive as well as train appropriately us to work in this industrial zone.	initial loans as well as livestock and veterinary technical support after their land is lost to help them ensure income and stabilize their lives. - Women look for the project's initial loans for their children going to school when their families loss of productive land, loss income. - We look for the project's support to establish a livestock production group (livestock farm). The expected money is less than 150 million VND.
5	Trang Liet commune, Binh Giang district, Hai Duong province	- The local highly support the project implementation to create a road for the community, more convenient and less traffic accidents in the section passing the commune. This road also contributes to the promotion of the socio-economic development in the area. - We want to know the detail planning of the road passing our commune to know exactly how much our land is affected, which help us secure in the production, working. Now we do not know how much we will be affected and we are very worried. - Require the adequate compensation to affected people in order that they can purchase and repair property and land which is acquired. - People' expectation when the project is implemented is minimizing impact of land acquisition since the acquired land now is largely belonged to old households. If we loss land, we get difficult to make alternative income. On the other hand, because we are old, we could not be working in enterprises, so we look for the project's support so that we can create jobs by ourselves (weaving, livestock, planting trees, small business, etc.).	- Support the project implementation quickly to help people have an extensive road for smooth travel. - We look for the project's appropriate compensation. Older women should be supported with livestock technical training as well as raising loans to raise livestock (cattle and poultry) to make income. - We look for the project's initial loan in order that the households can create rattan and bamboo frames of cargoes to shoulder and sell on streets or small kiosks to sell cargoes at the market (fruit, vegetables etc.). - Hope that the project loans us with low-interest and the payback period is about 2 - 3 years for affected households to expand the wooden furniture production. The loan should 100 million VND or more.
6	Thuc Khang	- Local leaders and people all support	- The woman group highly

No.	District/commune	People's feedback	Focus group discussion
	commune, Binh Giang district, Hai Duong province	the project implementation. The project formation will bring advantages for people like: smooth travel, freight trading between the areas, improving local transport system, and promoting further local economic development. - When deploying the site clearance, the project is requested to be transparent and to compensate satisfactorily with fair prices to limit civil claims in the process of site clearance. - We look for the project's loan support to expand the business scale (traditional carpentry, silver carving), if I am borrowed, I need from 100 million VND or more. - The project goes through fields, the remaining area is small and inefficient for production, so it is requested to be acquired all remaining land. - When the project construction starts, drainage system should be built along the road to drain water. Undrained rainwater will flood houses along the road. For road sections that cut through infield canals, the project is requested to build alternative canals to limit impact to the operations of local irrigation.	agreed to the project implementation. The construction of this road will facilitate the movement of people in the region in particular and the community in general. - We look for the projects' loans to expand production scale, doing business (gold- silver carving) - the loan should be 100 million VND and the payback period is about 03 years later). - The area where the project goes through is mostly agricultural land. If the Government seizes land, people lose jobs, so the project should support for raising livestock (pigs, cattle, chickens, ducks, etc.) cultivation (watermelon, tomato, maize, potato, etc.), and support seedlings and loans, techniques to help people have jobs. The support should be 100 million VND or more. - Hope that the project will support techniques for high yield maize cultivation and seedlings because now we do not know where to buy?
7	Phu Ung commune, An Thi district, Hung Yen province	- People in Phu Ung commune highly support the Upgrading and Expanding of Highway 38 passing our commune. The project formation will contribute to improve the local transportation and facilitate smooth travel for the people as well as promote the local social and economic development. - According to the project preliminary design, we found that the formation of the project road will cut through the industrial zone (the industrial zone has been approved by the government) and change the master planning of Phu Ung commune in particular and An Thi district in general, so the project is requested to consider the alignment to limit the disruption of the master planning of the commune. - Before the project implementation, the project owner should build temporary	- Agree with the project implementation. However, when the project performs the compensation, it must be adequate to avoid damages to property of people. - For female households older than 40 years old, they desire the project's technical support for livestock farming to help them both increase production and ensure houseworks. - The group of women 18 - 35 years old would like to have some vocational training to find jobs, such training as: industrial garment, mechanical processing, bamboo and rattan weaving. - The affected women group desires the project loans to

No.	District/commune	People's feedback	Focus group discussion
		road to serve the travel as well as the production of the local population, and the project must build replacement canals to ensure the water supply for agricultural production activities without interruption. - Request the project to research, develop such a compensation plan that the compensation prices to affected people are adequately and fairly. - The project acquires land for construction; if the remaining land after the acquisition is small and economically ineffective, so can the project acquire all remaining area? - When the project acquires land, local people lose their jobs, so it is requested to provide training supports (silver carving, garment, mechanics, etc.), and technical training for breeding, agriculture production for people affected by the project to create new jobs and a stable source of income. - The project should be quickly to minimize the waste of land because land after being acquired is not used and people do not have land for production. Also the project should organize the construction quickly to minimize impacts on the operation and production activities of local people.	expand business scale (selling goods at the market, silver carving).
8	Bai Say commune, An Thi district, Hung Yen province	- We fully support the project implementation and request its fast progress, not only affect the traffic like the construction of Road 5B. - We recommend adequate compensation policies, so our people do not lose. - There is policy that supports us preferential loans or free-interest to raise capital for business, trade or livestock at home. - The navigation clearance of National Highway 38 will be encroached; it is recommended that the compensation for us is taken immediately because the land allocation was taken from 1993 backward. - The State takes over people's land; people agree but request to have resettlement land if their land is used up.	- All of us here are very supportive of the project. - A number of our households are a bit worried because of the psychological fear that it is not stabilizes because of disable children. - We want to be consulted directly, not through intermediaries, we want direct information. Request to support us loans for business, trade, and livestock. Because normally many women get difficult to borrow for business. - The project after completion of the road must have sign boards to let people know for convenience. - We suggest that the project is

No.	District/commune	People's feedback	Focus group discussion
		- We would like to ask the compensation prices? If the land is acquired, is the residential land ensured in accordance with the state regulations? - The State is requested how to calculate to help people suffer less and support to create jobs for our people.	more concerned about our economics because I have a disability child and mental husband. - Wastewater ditches, drains should be built accordingly.
9	Tan Phuc commune, An Thi district, Hung Yen province	- We are very excited to hear the presentation about the project and the policies is very clear, very well. We propose that the project comply with what has been presented and do not assign all the compensation and support for the provinces and the districts. - We recommend the compensation for the business affected during the construction process. - We would like to speak directly about our rights and we do hope the project ensure better compensation policy for land acquisition households to have a better life as before the project implementation. - The project should consult and ask us directly. Before the compensation, prices must be informed us in advance. - We do not have secondary jobs, please support us loan for business. Open training and vocational training in accordance with the age and the current market. - We suggest that when the road construction complete, vehicle speeds on road should be specified to avoid accidents because when the road is expanded, nice, vehicles will run fast that cause accidents.	- All women support and agree to the implementation of the project construction. - We suggest the project how to compensate satisfactorily to people. - When heightening up road, houses and yards should be elevated, does the project support? And thus it will affect trading activities and the risk of environmental pollution for us. - What we are concerned about is that the land has no red book, we suggest the project to support and compensate us in full to avoid disadvantage. - We loss our land and the elderly like us don't not know what to live, what to eat? Please support us. - It should organize direct consultation and disclosure information via village leaders is the best way.
10	Quang Vinh commune, An Thi district, Hung Yen province	- The locals are excited about the project and suggest its deployment as soon as possible. It will be better if the road is straightly aligned with the commune ditches because some locations at the end of the project road go beyond the existing irrigation ditches. - Affected households suggest credit support to recovery livestock activities. - The representatives of Hung Yen Planting Varieties JSC. request the project to compensate the Fruit Tree Project for the Company, including	- We, women, are very excited and will support the project road. - We suggest the project to create jobs for women, such as garment, establishment of garment factories. The compensation will be severed for livestock and business. - Households can join in safe vegetable growing projects. The Provincial Department of Agriculture and Rural

No.	District/commune	People's feedback	Focus group discussion
		infrastructure but not compensate based on the unit prices for affected trees. The Company's Project covers 5 ha longan trees about 9 years old, which is in the 3rd harvesting year. - We recommend preferential loans for households and especially the free-interest loan is the best to support them changing job. Hung Yen Planting Varieties JSC. is willing to provide technical assistance for affected households that change job.	Development is developing An Thi as a rice granary. - According to Hung Yen Planting Varieties JSC., if they are supported loans from 1-5 billion VND, they will support 80-100 employees with a salary of about 3 million VND/month. - We recommend the project informs people 6 months prior the implementation. Project announcement should be read on communal loudspeakers and broadcast daily at about 18:00 PM.
11	Hoang Hoa Tham commune, An Thi district, Hung Yen province		
12	An Thi town, An Thi district, Hung Yen province	- It is recommended that the remaining area cutting by the road is very little and unarable, so the project should acquire all. - The system of canals affected by the project should be rebuilt and returned early to resume normal agricultural production. Arrange reasonable irrigation drains for agricultural production, particularly the drain aperture based on experiences from the Provincial Road 200 Project. - We suggest that during the design of road and irrigation/drainage works, people in the town should be consulted, learning experiences from the Provincial Road 200 Project and rebuilding really necessary locations, where the construction company said that they are not in the design. - We suggest that the connection slopes with village roads, alleys should be smoothly to ensure the convenient travel and avoid steep and high slope. - Support for the living stabilization should not base on the percentage of the acquired land. Since the percentage is different as households have different total area and acquired area. If I miss one pole out of eight poles, I will have very low percentage. Support this compensation should be based on the	No organization of gender group discussions because only 3 female households joined the meeting.

No.	District/commune	People's feedback	Focus group discussion
		acquired area, which is the best. - We suggest supporting for small business and livestock combination. The project can develop a retired program from now on for us for a few hundred thousand per month to compensate for the acquisition of agricultural land.	
13	Quang Lang commune, An Thi district, Hung Yen province	- Quang Lang commune supports the project implementation. The project route formation will bring advantages for people to improve the local transport system and to promote further development of the local economy. - When deploying the site clearance, request the project owner to compensate people under the provisions of the State's policy with fair compensation prices. - The project goes through field. The remaining area is small, fragmental and inefficient so request the project to acquire all remaining land. - Where the project acquires land, the construction should start at once to avoid when land is acquired, people need land but have not. - There is still 5% land in the commune, if households affected by the project want to exchange land for land, the commune can meet them. - Hope that the project will compensated fairly, so that we can save to live when getting old. - When the project starts, the Contractor should arrange draining ditch when the road cutting existing canals to ensure continuous water supply and limit agricultural activities of people.	- The women highly agreed the project implementation. The construction of this road will facilitate the movement of people in the region in particular and the community in general. - Women worry about how to replace income due to loss of productive land. - Women want the project support initial loans as well as livestock technical support after losing their land, so that they can ensure income and stabilize their lives. - Women want the project support loans for children going to school when their families loss productive land, loss income. - We look for the project's livestock and cultivation technical support to set up a livestock groups (livestock farms, crop farms). At the same time, we desire the project to link with the companies that purchase products made by this group (crop products) in order to create us stable income.
14	Nghia Dan commune, Kim Dong district, Hung Yen province	- The commune highly supports the project road. When this project is put into operation, it will contribute to improve the local transport system and create convenient travel and trading in the area. - When the project comes near canals, it will cause sedimentation in canals; therefore after finishing the construction, the project should dredge canals if there is sedimentation. - We look for the project's technical	- Women desire the project's loans to develop small business to restore their living standard after the land acquisition. - Women want the project's support of initial loans as well as farming technical support so that after they loss land they can ensure income and stabilize their lives. - We look the project's support for the establishment of rattan

No.	District/commune	People's feedback	Focus group discussion
		support for livestock and cultivation, plant and animal breeders and so that affected people can breed livestock and cultivate to create income and stabilize their life in the shortest time.	production groups and livestock groups (breeding farms) and linking with the project units which purchase products made by these groups to create a stable income for them.
15	Toan Thang commune, Kim Dong district, Hung Yen province	The project only affects land and assets of the **HT Industry - Agriculture Techniques Co. Ltd.** We worked with the company representative.	
II	**4 bridges on Highway 38B**		
16	Doan Thuong commune, Gia Loc district, Hai Duong province	- Local authorities and households are very excited when there is Trang Thua bridge construction project. Since we heard that the bridge will be built for long time but we do not see anything. We suggest the project to be quickly to facilitate the traffic; the project's impact due to the construction of the bridge is negligible. - We found that if building Trang Thua bridge as in the drawing, the commune health station does not promote its work, restricting movement and emergency care for people's health. We suggest the project build frontage road or fund for building new health station. - We are mainly cut land for building frontage road, we request fair compensation and that's all.	
17	Dong Quan commune, Gia Loc district, Hai Duong province		
18	Thanh Mien town, Thanh Mien district, Hai Duong province		
19	Tu Cuong commune, Thanh Mien district, Hai Duong province	- The locals highly agree with the project implementation to get a road class III through, which will contribute to the regional socio-economic development; at the same time, expanding road will limit traffic accidents on the road section passing our commune. - The project mainly passes rice field so when the project implement, it will acquire production land of people. The loss of productive land will affect people's lives, so we look forward to the	The woman group suggests some ideas for the income rehabilitation of affected households as follows: - Unify the project implementation. - We look forward to the project's support of low-interest loans and the payment period should be 3 - 5 years to scale our production, sales, trading; the loan should be more than 100 million VND.

No.	District/commune	People's feedback	Focus group discussion
		project's capital support to convert rice to livestock breeding (pigs, chickens, cows, etc.) and aquaculture and we also want the project's technical support in the animal husbandry. - We request the project to compensate based on the State compensation rates fairly and equitably. - Some households whose land is affected by the project are old and unable to change career, they want the project's support of an amount of cash to cover cost during the first stage after they loss land. - The project, after acquiring land, should implement quickly to minimize wasting social assets (people have no land for production; the project acquires land but does not works).	- We desire the project's low-interest loans for our children to go to school. - We looking for the project's capital loans to expand our aquaculture (freshwater fish), fruit tree growing (longan, pomelo ...). - We looking for the project's garment training for our children to work in some garment companies located in the area.
20	Cao Thang commune, Thanh Mien district, Hai Duong province	We highly support the construction of the bridges and the road section because the road is severely degraded and affects the movement of people, especially in the last Lunar New Year. We suggest the project's priority for building four bridges on Highway 38B, which is the pressing and urgent problem of our people. We suggest the project compensate acquired land before construction of bridges and road; the compensation and support must be adequate. - We are most concerned about the purpose and significance of the project, having a nice road, convenient and safe for traffic. - Our house is in good condition. Since the construction, the Contractor cracked our walls, how to treat for our house? Prior to the construction, the Contractor should record the current status of our households. - The commune built Highway 38B but some issues we have not understand are that all households were granted with land use right certificates but when the project implemented the compensation, they divided households by 02 period of land use right certification and compensates for two different prices. - We have not seen any meetings that	- We earnestly recommend the construction party to survey and compensate before their commencement of works, especially when our business is affected. - We recommend the compensation for affected business in the construction stage because most of us are living and doing business both side of the road. - The information about the project should be announced through our village heads, which is the best and fastest way.

No.	District/commune	People's feedback	Focus group discussion
		are organized thoroughly and reasonably with careful prepared documents like this meeting. We are ready to sacrifice our benefits for the project.	
21	Quang Hung commune, Phu Cu district, Hung Yen province	- The locals highly agree with the project implementation to get a road class III through; people are very excited, which will contribute to the regional socio-economic development. - The project builds Cau Trang bridge on the existing bridge in the commune. The bridge is 400m long, so the project will acquire land of some residents living near the existing bridge; accompanied is the impact of loss of productive land as well as loss of houses in the area, so we look forward to the fair compensation so that we can buy back a same land or can rebuild house with an equal area. - The project should let people know how the design for the new bridges is different from the old bridges and how high the new bridges compare with the old bridges, so people can plan for building houses accordingly with the bridge elevation and avoid flooding when heavy rains occur because houses are lower than bridges. Besides, we require the project to build drainage system along the bridges to avoid flooding houses when it rains. - We request the project to study the compensation plan so that we have adequate and fair compensation rates to avoid inhibition and lead to delays of the site clearance. - The bridge project is located between 02 provinces of Hung Yen and Hai Duong, so if the compensation unit prices between 02 provinces differ? - After the project acquires land, if the remaining area is too small, please acquire all land because the remaining area is too small for the production. - Whether the construction of the project while rolling and compacting road affects the citizens along the road or not (shaking houses, cracking houses of people)? - Now our family is managing a garment business, the project's land acquisition	- Local people are excited about the project implementation for a wide, smooth bridge. - The affected group of women desires the project's loans to expand business (trading at the market); the level of support should be about 50 million VND. - We look forward the project's loan support with low interest and the interest payment period is about 03 years to expand our production facilities (garment facilities, mechanical processing), business (trading appliances); the lending support is less than 200 million VND. - As a single, aged, ill woman, I desire the project's support of an amount of cost, so that we can cover cost and stabilize our lives when being affected by the project. - The households affected by the project largely live on business, trade. When the project starts, it will limit our business and reduce our income, so we can not pay the bank interest rate (loans for business) as well as ensure a stable life; we expect a project's funding so that they can pay the interest rate during the construction project.

No.	District/commune	People's feedback	Focus group discussion
		affects our business operations, so I want the project's lending support to rebuild and expand our business scale. - In the region, where the project is built, people mainly do business, so we want that these households are reduced business taxes and are supported paying bank interest costs for those who borrow loans for business during the construction progress because in this time the trade or business is restricted. In the construction process, the construction period is longer than the time the Contractor announces and affects our business, so can we get support? - In the commune, there is a village which produces construction materials (bricks, tiles) so that when the project implements, people in the region will lose income, so we look for the project's capital support to develop this trade village.	
22	Doan Dao commune, Phu Cu district, Hung Yen province	- We are very excited to hear that the project restarts. It is recommended that the project starts as quickly as possible. The project must compensate us before building bridges and road. - Before the road construction, the project is recommended to inspect our houses and after the construction if our walls are cracked the project must compensate. - The majority of us do business. If slowing like many projects shown on TV, people will suffer much and it affects our business and is there any compensation? - The project should do correctly and saying must become reality, some households comply, some do not but in the end, it's the same. - We recommend the compensation for business impact due to business interruption.	The group of women highly supports the project. - The project affected households largely live on business, trade. When the project construction starts, it will limit the business and reduce our income, so we can not afford to pay the bank interest rates (because of borrowing for business) so we expect the project will support us a funding so that they can pay the interest rate during the project construction. - Desire the project support low-interest loans so that we can rent nearby premises and continued business. - Desire the project to support loans for rebuilding production facilities and expanding production scale. - Hope the project lending loans to support our children to school.

Table 4.18: Preferences of the households to the income restoration activities (Section Quan Goi – Yen Lenh)

#	District/ Commune	Affected households	HH gave answers	Agricultural activities		Vocational Training		Self-employment		No answers given	
				HH	%	HH	%	HH	%	HH	%
I	**My Hao**	**10**	**-**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0.0%**
1.1	Minh Duc	10	-	-	0.0%	-	0.0%	-	0.0%	-	0.0%
II	**Binh Giang**	**208**	**107**	**47**	**43.9%**	**-**	**0.0%**	**31**	**29.0%**	**29**	**27.1%**
2.1	Hung Thinh	27	19	11	57.9%	-	0.0%	6	31.6%	2	10.5%
2.2	Vinh Tuy	63	17	6	35.3%	-	0.0%	8	47.1%	3	17.6%
2.3	Vinh Hong	12	8	8	100.0%	-	0.0%	-	0.0%	-	0.0%
2.4	Trang Liet	33	30	16	53.3%	-	0.0%	4	13.3%	10	33.3%
2.5	Thuc Khang	73	33	6	18.2%	-	0.0%	13	39.4%	14	42.4%
III	**An Thi**	**451**	**71**	**42**	**59.2%**	**2**	**2.8%**	**13**	**18.3%**	**14**	**19.7%**
3.1	Phu Ung	43	6	4	66.7%	-	0.0%	-	0.0%	2	33.3%
3.2	Bai Say	184	1	-	0.0%	-	0.0%	1	100.0%	-	0.0%
3.3	Tan Phuc	26	-	-	0.0%	-	0.0%	-	0.0%	-	0.0%
3.4	Quang Vinh	78	34	23	67.6%	2	5.9%	5	14.7%	4	11.8%
3.5	An Thi town	34	22	13	59.1%	-	0.0%	4	18.2%	5	22.7%
3.6	Quang Lang	86	8	2	25.0%	-	0.0%	3	37.5%	3	37.5%
IV	**Kim Dong**	**80**	**59**	**47**	**79.7%**	**5**	**8.5%**	**3**	**5.1%**	**4**	**6.8%**
4.1	Nghia Dan	80	59	47	79.7%	5	8.5%	3	5.1%	4	6.8%
Total		**749**	**237**	**136**	**57.4%**	**7**	**3.0%**	**47**	**19.8%**	**47**	**19.8%**

Table 4.19: Preferences of the households to the income restoration activities (Section 4 bridges on NH 38B)

#	District/ Commune	Affected households	HH gave answers	Agricultural activities		Vocational Training		Self-employment		No answers given	
				HH	%	HH	%	HH	%	HH	%
I	**Gia Loc**	**20**	**5**	**-**	**0.0%**	**1**	**20.0%**	**3**	**60.0%**	**1**	**20.0%**
1.1	Doan Thuong	13	-	-	0.0%	-	0.0%	-	0.0%	-	0.0%
1.2	Dong Quang	7	5	-	0.0%	1	20.0%	3	60.0%	1	20.0%
II	**Thanh Mien**	**140**	**53**	**3**	**5.7%**	**13**	**24.5%**	**12**	**22.6%**	**25**	**47.2%**

#	District/ Commune	Affected households	HH gave answers	Agricultural activities		Vocational Training		Self-employment		No answers given	
				HH	%	HH	%	HH	%	HH	%
2.1	Thanh Mien town	41	19	3	15.8%	1	5.3%	2	10.5%	13	68.4%
2.2	Tu Cuong	61	34	-	0.0%	12	35.3%	10	29.4%	12	35.3%
2.3	Cao Thang	38	-	-	0.0%	-	0.0%	-	0.0%	-	0.0%
III	**Phu Cu**	**63**	**-**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0.0%**	**-**	**0.0%**
3.1	Quang Hung	39	-	-	0.0%	-	0.0%	-	0.0%	-	0.0%
3.2	Doan Dao	24	-	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Total		**223**	**58**	**3**	**5.2%**	**14**	**24.1%**	**15**	**25.9%**	**26**	**44.8%**

Figure 7: Some photos about public consultation and participation

Annex 5: DETAILED IMPACT ASSESSMENT ON EIA AND EMP

EMP NH39-1

1.1. Impacts on Environmental and Social

The Project is expected to improve the quality of traffic network along the NH.39, especially is Trieu Duong – Hung Ha section. The upgrade and expention of this road will contribute to develop the socio-economic and brings a positive effect on the environment and society in the region.

The Environmental Impact Assessment Report identified two main issues on environmental and social á follow:

+ Resettlement impacts: Project will acquire land along the road side: Residential land of the people are used to build houses, garden land, pond ... to implemente the project construction items. Currently, PMU3 is conducting prepare draft of RP report for all of VRAMP project, including component to improve the NH39-1. This RP is established base on Vietnamese regulations and accordance with involuntary resettlement policies of the World Bank (OP 4.12). The RP will include the programs to relocate house, land, tombs and other structures of the community. In initial survey, the detail quantities of clearance of the project are presented in the following table:

Table 5. 1: Clearance Quantities

No.	Items	Unit	Quantities
I	*Alignment*		
1	Temporary house	Houses/m^2	76/760
2	Roof house	Houses/m^2	132/2,640
3	House with 1 storey	Houses/m^2	78/2,340
4	House with 2 storey	Houses/m^2	23/690
5	House with 3 storey	Houses/m^2	7/210
6	Concrete yard	m^2	9,985.33
7	Garden	m^2	16,277.63
8	Pond	m^2	15,091.02
9	Fields	m^2	79,341.36
10	Irrigation land	m^2	46,151.25
11	Land (pavement, vacant land)	m^2	79,734.33
12	Residential land	m^2	10,621.48
II	*Bridge*		
1	Nai bridge	Houses/m^2	22/10,304.94
2	Dong Tu bridge	Houses/m^2	6/9,599.17

+ **Environmental Impacts:** building the road in urban and residential areas, and along heavily cultivate lands will require careful planning and management of impacts form construction. Potential impacts include: pollution of irrigation canals and cultivated lands; increased dust, noise and other nuisances on rural communities; increased traffic on local roads; construction

work on and near canals and streams; the presence of a large workforce in and near rural communities; disposal of construction wastes. Some impacts during operation stage of the road such as noises, inceased traffic, etc. is considered negligible. Therefore, environmental management in the construction phase is the main content of environmental management in this report.

Table 5.2 below mention the potential impact on environmental and society in the construction process of project:

Table 5. 2: The potential impact on environmental and society of project

Activity	Potential Impacts
Land clearance and resettlement	- Soil erosion and visual impact; - Loss areas of productive plots /trees;. - Loss of habitat for animals. - Discharge of sediments into watercourses, rice paddies, drainages, and irrigation canals and fields affect the environment and farming activities of the people. - The impact to the business activities of some of households living along the road. - The impact to the architectural and cultural works.
Site Installation	- Contamination of land, surface water and groundwater caused by spillage and leakage from storage of hazardous materials including petroleum products, chemicals, hazardous substances or hazardous wastes. - Water courses, rice paddies, and agricultural land can be easily contaminated with wastewater and solid wastes.
Worker focus, Construction Workforce, Worker's Camp	- Increased demand for infrastructure and utilities; - Tensions between outside workers and local communities; - Social evils like (theft, drugs, alcohol); - Unemployment of local labor - Disruption to livelihoods, cultural activities, and wellbeing of locals - Competition for employment with locals. - Increase a considerable number of waste water and waste - Stockpiling of waste and illegal dumping
Dust and air pollution	Sources or air pollution during construction that can be a nuisance and cause health problems are: - Fugitive dust emissions due to exposure of slope surface, uncovered stockpiling area, earth moving and excavation activities; - Dust emission due to blasting; - Wind blow during transportation of material by vehicles and when transporting on unpaved access roads; - Gases emissions from batching plants and concrete mixing stations; - Gases emissions during payment of road surface by asphalt plant; and - Air pollutant emissions from exhaust of construction plant and vehicles.

Activity	Potential Impacts
Noise and Vibration	Disturbances to livelihoods and damage to structures can be cause by: - Operation of the various equipment during construction (air compressor, concrete mixers, powered mechanical equipment, bulldozers, excavators, etc); - Vehicles transporting materials within construction site and beyond the construction boundary; - Piling activities during construction of foundations / piers; - Blasting;
Earthworks, Fill Slopes, Cuts, Borrow Pits, Disposal sites, Stockpiles	- Loss of topsoil affecting productive land. - Land instability from incorrect earth removal or unstable deposition of spoil, leading to landslides or erosion events. - Discharge of sediments into watercourses, rice paddies, drainages, and irrigation canals. - Erosion of riverbanks, slopes, and productive land - Noise and vibration - Dust emissions affecting health. - Disturbances or damage to physical cultural resources. - Damage to agricultural land and native vegetation - Visual Impacts
Disposal of construction waste	- Destruction of the local vegetation, contamination of lakes and swamps and impact on the land by waste. - Causing the risk of losing safety to workers and local people
Wastewater	Pollution of watercourses, groundwater, natural habitats and productive land caused by : - Wastewater from bored piling locations. Re-suspension of bottom sediment and mud caused by cut-trench river crossings and construction of bridge foundation within rivers; - Soil erosion / flush away from uncovered stockpiling locations, uncovered excavation site and unprotected slope surface during adverse weather conditions; - Uncontrolled surface water run-off carrying sediment laden discharges directly into natural water bodies such as streams, fish ponds, rivers and local irrigation channels; - Domestic sewage generated by construction workers, such as kitchen, shower, campsite, etc.
Solid Waste, Hazardous and Chemical Waste	Damage to local forest areas, pollution of drainage watercourses and natural habitats, and impact on agricultural land caused by: - Surplus excavated materials requiring disposal due to earth moving activities and slope cutting; - Disposal of used wooden boards for trenching works, scaffolding steel material, site hoarding, packaging materials, containers of fuel, lubricant and paint; - Waste generated by demolition of existing houses / buildings affected

Activity	Potential Impacts
	by the project or breaking of existing concrete surface; - Domestic solid waste generated by construction workers, construction campsite, kitchen, toiletries, - Improper disposition of hazardous wastes such as waste oil, spent lubricant, and contaminated materials resulting from leakage of oil and fuel. - Improper handling and storage of hazardous and chemical substances and construction materials
Work in Watercourses	- Discharges of sediment into water courses affecting in-stream habitat. - Changes in habitat as a result of modifications to river bed and banks. - Erosion of river banks - Introduction of invasive species. - Changing water course paths blocking fish passage and affecting in-stream habitat. - Discharges of oil and fuel to water courses affecting water quality.
Fauna and Flora	- Destruction of native vegetation and land outside the construction area; - Destruction of aquatic life - Lack of re-construction of lost habitats and re-creation of diverse ecosystems..
Construction Site Safety	- Risk of falling objects and unstable working platforms; - Risk associated with blasting and fire; - Risk associated with equipment and traffic movements, on and off the construction sites. - Impacting traffic safety and access. - Impacting pedestrian safety.
Community Relations	Lack of communication and consultation with local communities can lead to an opposition to a road project, delays in the construction process, increased costs and unsatisfactory solutions.
Health Issues	- Spread of disease due to poor housekeeping and accumulation of domestic waste within the construction site; - Stagnant water may result in mosquitoes breeding; - Unsafe sex conduct could bring the HIV/AID risk to the local communities; - Illnesses brought by outside construction workers;

1.2. Mitigation Measures

The project has implemented a four -fold approach to minimize environmental and social impacts:

+ **Avoidance:** Alternative analysis has been regarded as one of the most important mitigation measures to minimize potential adverse environmental and social impact. Minimizing land acquisition and resettlement to the extent possible has also been a key criterion for alignment selection during the feasibility and EA studies

+ **Sound Engineering for design and construction:** The project has been designed and will be

implemented with state-of-the art engineering

+ **Comprehensive Mitigation plans:** detailed environmental mitigation plan
+ **Compliance framework:** strict supervision and monitoring on implementation of mitigation measures during construction.

A detailed assessment of mitigation measures was carried out along the alignment of the road. These measures were either: (i) incorporated in project design and hence already included in the bill of quantities; or (ii) included in the environmental specifications for contractors. In addition, site specific measures were identified for all sensitive areas along the road. The types of measures include: special culverts for irrigation canal crossings, lining of canals during construction, special crossings for community connectivity, pedestrian crossings (flyovers), relocation of pumping stations for irrigation, shifting of irrigation canals. Table 5.3 summarizes the sensitive areas and activities and the mitigation measures during the pre- construction and construction stages for specific sections of the Road. These measures have been incorporated in the environmental specifications for contractors and will be supervised by environmental supervision teams as part of the technical supervision of construction.

Table 5. 3: Site Specific Mitigation Measures along the NH.39-1

KM	Location	Sensitive Area or Activity	Mitigation Measures
43+885 – 46+100	Tan Le commune, Hung Nhan Town		
46+100 – 47+700	Hung Nhan town		
47+700 – 50+080	Hung Nhan town, Lien Hiep commune		
50+080 – 52+400	Lien Hiep commune		
52+400 – 55+060	Lien Hiep commune, Phúc Khanh commune, Thai Phuong commune		
55+060 – 55+980	Thai Phuong commune, Hung Ha town		
55+980 – 59+400	Hung Ha town, Minh Khai commune		
59+400 – 61+280	Minh Khai commune, Hong Linh commune		
61+208 – 64+000	Hong Linh commune, Minh Tan commune		

The following images describe the noise resptors that need some type of mitigation measure during the initial construction of the road. These mitigation measures need to be defined and detailed during the detailed design stage in consultation with the affected people.

2. COMPLIANCE FRAMWORK ON ENVIRONMENTAL

2.1. Minimum Environmental and Social Standards

The contractor must comply with the minimum environmental and social standards presented in the following table. The methods and procedures detailed in the EMP Implementation Plan presented by the contractor must be sufficient to meet these minimum standards.

Table 5. 4: Minimum Environmental and Social Standards for the Construction of the Road, Worker's Camp

Source / Impacts	Key Principle / Mitigation Standard	Minimum Mitigation Method
Wastewater discharges affecting water quality	Wastewater to be treated prior to discharge.	Sewerage disposal methods should be designed to the standards outlined by the Vietnamese government
Solid waste polluting the environment and causing health hazards	No waste to be burnt or buried on site.	All solid wastes shall be removed from site and disposed of at a municipal landfill.
Camps using local services and resources, at the expense of villagers.	Refer to the village impacts table below.	Refer to the villager impacts table below.
Workers intruding on village life and disrespecting traditional cultural values.	Refer to the village impacts table below.	Refer to the villager impacts table below.

Table 5. 5: General construction issues

Source / Impacts	Key Principle / Mitigation Standard	Minimum Mitigation Method
Noise of machinery associated with construction activities	Noise must not unreasonably intrude on traditional village life.	▪ Machinery operation to occur only during designated hours (to be confirmed by contractor in agreement with villagers). ▪ Work to be carried out in daylight, in typical working hours. ▪ The noisy equipment to be located as far as practical from villages. ▪ Use of complaints register and procedures to address issues as they arise.
Dust generation from construction activities	Dust must not cause a hazard or nuisance to village life.	▪ Dusty operations to occur only during designated hours (to be confirmed by contractor in agreement with villagers). ▪ Construction of the day, during certain

Source / Impacts	Key Principle / Mitigation Standard	Minimum Mitigation Method
		hours.Use of complaints register and procedures to address issues as they arise
Vibration disturbance from construction activities	Vibration must not unreasonably intrude on traditional village life.	▪ This machinery operation to occur only during designated hours (to be confirmed by contractor in agreement with villages). ▪ Use of complaints register and procedures to address issues as they arise.
Increased utilization of roads by traffic associated with construction activities	There should be no significant increased risk to local populations from traffic associated with the development.	▪ Road upgrades, including signage, speed humps, regrading. ▪ Training of vehicle drivers regarding the driving risks through villages and along remote roads. ▪ Use of complaints register and procedures to address issues as they arise.
Pollution risk activities occurring on site	Develop appropriate storage, transport and use practises for storage and handling of mixed classes of dangerous goods in packages and intermediate bulk containers. There shall be no solid or liquid waste disposal directly or indirectly to any water course (whether flowing or not).	▪ Keep a current list of all potentially contaminating materials used on site. ▪ Develop and implement appropriate storage, transport and use practises to recognised standards. ▪ Solid waste disposal shall be taken off site.
Monitoring	Monitoring shall be undertaken to ensure villager's concerns are recorded and addressed.	▪ A complaints record shall be kept of all issues raised by villagers in response to construction activities. The record shall include responses by the contractor.

Table 5. 6: Soil / Overburden Removal and Placement, Alluvial mining

Source / Impacts	Key Principle / Mitigation Standard	Minimum Mitigation Method
Generation of suspended solids from bare ground and runoff into watercourses	Development activities should not give rise to storm water containing elevated suspended solids. Provide treatment to achieve 75% reduction in suspended solids.	▪ No direct discharge of sediment laden water without treatment. ▪ Earthworks and land clearance should be minimised and phased. ▪ Storm water should be diverted around exposed areas.
Disturbance of natural habitats for spoil / alluvial material.	Soils should be reused where possible in the development – to reduce the need for spoil sites and the need to import fill.	▪ Stockpile and reuse soils before excavating new soils / alluvium.
Efficiency of control measures over time	Control measures should continue to work appropriately throughout the construction period.	▪ Earthworks control measures should be inspected and maintained in efficient operating condition over the construction period.

Table 5. 1: Issues related storage of materials, fuel

Source / Impacts	Key Principle / Mitigation Standard	Minimum Mitigation Method
Pollution risk associated with the storage and use of fuels for all plant, generators and vehicles	No oil, lubricants, fuels or containers should be drained or dumped to ground or waterways. Accidental spills shall be minimised, and procedures put in place to clean up the environmental damage.	▪ Keep a current list of all fuels stored on site. ▪ Keep the Safety Data Sheet of all hazardous materials used on site. ▪ Develop appropriate storage, transport and use practises to recognised standards. ▪ Diesel to be stored in truck tankers or in overhead tanks to a maximum of 5000 litres. ▪ Diesel to be stored on flat ground, and 100m from a waterway. ▪ Dikes to capture 100% of fuel must be placed around fuel storage areas. ▪ All refuelling of vehicles and plant to be done on flat ground. ▪ All significant vehicle and plant maintenance shall be undertaken offsite where possible. ▪ Spill kits and emergency procedures should be used and staff trained.

Source / Impacts	Key Principle / Mitigation Standard	Minimum Mitigation Method
		▪ There shall be no deliberate discharge of oil, diesel, petrol or other hazardous materials to the surrounding soils and waterways.
Runoff of suspended sediments from stockpiles	Stockpiling activities should not give rise to storm water containing elevated suspended solids. Provide treatment to achieve 75% reduction in suspended solids.	▪ No direct discharge of sediment laden water without treatment. ▪ Stockpiles should be compacted as much as practical and not be exposed for extended periods. ▪ Storm water should be diverted around stockpiles.
Dust generation from stockpiles	Dust must not cause a hazard or nuisance to village life.	▪ Stockpiles should be compacted as much as practical not be exposed for extended periods. ▪ Stockpiles should be reused as soon as practicable.

Table 5. 2: Issues related Concrete Manufacture

Source / Impacts	Key Principle / Mitigation Standard	Minimum Mitigation Method
Contaminants in water discharged from concrete manufacturing, including a rise in pH.	No direct discharges of concrete batching water to any water course. Provide treatment prior to discharge to achieve 75% reduction in suspended solids.	▪ Settlement ponds and / or sediment infiltration gallery. ▪ Water to be reused where possible in the process. ▪ Procedures for handling of un-hydrated cement material and wet cement to avoid spills.
Community nuisances.	Noise and dust must not unreasonably intrude on traditional village life.	▪ Concrete batching plants and other noisy / dusty equipment to be located as far as practical from villages.

Table 5. 3: Issues related Works in and near rivers

Source / Impacts	Key Principle / Mitigation Standard	Minimum Mitigation Method
Sediment discharges arising from working in and near the river. *For blasting in or near the river, refer*	Work in the wetted area of the riverbed should be minimised, and only in relation to the construction of	▪ Stabilize works at the end of each working day and prior to storm events. ▪ Do the work during low flow periods. ▪ Culverts shall be placed in access tracks where they cross streams more than 3

to the blasting issues, above.	the power house, weir and intake structure or to insert culverts for stream crossings.	metres wide and 0.5m deep.

Table 5. 4: Impacts on local communities

Source / Impacts	Key Principle / Mitigation Standard	Minimum Mitigation Method
Deterioration of current quality of life and traditional livelihoods	Villagers have the ability to communicate issues to ENVIRONMENTAL OFFICER (UNDER PMU3), SES and contractors. Villagers have the expectation that issues will be addressed and resolved by negotiation. Villagers are not disadvantaged by the influx of temporary workers.	▪ Set up a communication network for discussing issues between ENVIRONMENTAL OFFICER (UNDER PMU3), SES, Contractors and the villagers. ▪ ENVIRONMENTAL OFFICER (UNDER PMU3) to manage a grievance mechanism, and have staff on site at all times to manage grievances. ▪ Developing village protocol that could serve as a guideline for outside workers. ▪ Education and orientation of outside workers to local culture and social norms before the start of work. ▪ Camps to be secure and discourage visitors and workers leaving the camp. ▪ Camps to be self sufficient in resources and services. (refer to the workers camp table below)
Health and safety risks from such activities as increased traffic, blasting, heavy machinery operating	Health and safety risks to villagers are minimised. Villagers shall be adequately informed of all potential hazards to health and safety. Villagers have the expectation that issues will be addressed and resolved by negotiation.	▪ Refer to the sections above discussing impacts from traffic hazards and blasting hazards.

Source / Impacts	Key Principle / Mitigation Standard	Minimum Mitigation Method
Nuisance issues such as noise, dust and vibration	Nuisances shall be minimised. Villagers have the expectation that issues will be addressed and resolved by negotiation.	▪ Refer to the sections above discussing nuisance effects.
Traffic causing safety risks to road users	Construction traffic will be managed to minimise the impact on existing road users.	▪ Signage to be used to identify current risks to road users. ▪ ENVIRONMENTAL OFFICER (UNDER PMU3) and Contractors to discuss major traffic issues with village representatives prior to the event to discuss course of action. ▪ Heavy traffic to avoid the hours when school children walk to and from school.
Sediment affecting river water uses.	Sediment discharges to the river shall be minimised.	▪ Refer to the sections above discussing erosion and sediment control.

2.2. Impacts on Environmental and Social

2.2.1. Social impacts due to land acquisition and resettlement

Social impacts due to land acquisition and resettlement: Currently, PMU3 is conducting prepare draft of RP report for all of VRAMP project, including component to improve the bridges on NH 38B. This RP is established base on Vietnamese regulations and accordance with involuntary resettlement policies of the World Bank (OP 4.12). The RP will include the programs to relocate house, land, tombs and other structures of the community. In initial survey, the quantities of agriculture land acquisition are 5,572 square meters.

2.2.2. Environmental Impacts

The tables 5.11 and 5..12 below mention the potential impact on environmental and society in the construction process of project:

Table 5. 5: The summary of impacts on environmental due to wastes

No.	Impacts/Activity	Location and Affected objects	Note
1	Air pollution	location: Around the project area and approach roads, NH 38B and local roads connecting the NH 38B with borrow pits and material storage. Objects: The households (5 -6 households) are near the construction site.	
2	Water pollution Impact on fauna and flora of the river	Location: Bridge construction site Objects: Nghia Tru river near the construction site.	
3	Impact on environmental and landscape	Location: Bridge construction site Objects : Landscape	
4	Obstructing the river flow	Nghia Tru river at bridge construction site.	
5	Groundwater pollution	Location: Area near the abutments of bridge Objects: Populations area near the construction site	

Table 5. 6: The summary of other impacts of project

No.	Impacts/Activity	Location and Affected objects	Note
1	– *Sedimentation of river flow, damage to irrigation works* – *Impact on socio-economic activities;* – *Impact on traffic* – *Pollution of surface water*	Location: – Approach road area and the abutment; – NH 38B – Construction site Object: – Surface-water near the construction site – Nghia Tru river near the bridge location and irrigation canal; – Residential area along the aproach road.	Medium impacts
2	*Noise and vibration pollutions*	Location: Around the construction site and along the approach roads Object: Residents near the site leveling and households living along the approach road construction site	Medium impacts
3	*Safety and traffic congestion*	Location: NH 38B, Approach road area and along the transport road; Object: Traffic Residents along the roadsides	Medium impacts
4	*Damage to public facilities*	Location: NH38B and local road connecting to NH 38B Object: Local people	Medium impacts
5	*Impact on social life*	Location: Localities in project area Object: Local people	
6	*Impact on hydrology and river flow*	Location: Abutment areas Object: Cuu An river	Medium impacts
7	*Impacts due to material exploitation*	Location: Borrow pits area and transported material road Object:	Small impacts

No.	Impacts/Activity	Location and Affected objects	Note
		Residents and other objects near the borrow pits area and transported material road	

2.3. Mitigation Measures

2.3.1. Mitigation Measures for Social impacts due to land acquisition and resettlement

The project has proposed the measures to mitigate the social impacts due to land acquisition and resettlement including:

+ The Project will provide compensation for various types of land, structure, and livelihood losses for different categories of displaced persons (owners, leaseholders, renters, land users without legal rights to land, workers, manufacturing/commercial firms, and workers);
+ The Project is preparing the income restoration program to provide for affected peoples. The singular objective of the income restoration program is to help the severely affected and vulnerable households rebuild their sources of livelihood and thus regain, if not improve, their pre-project standards of living;
+ The Project has changed alignment of some sections that go through the residential area to mitigate social impacts due to land acquisition and resettlement.

2.3.2. Mitigation Measures for Environmental Impacts

The table 5.13 bellow present specific areas that can be affected by potential environmental impacts and the mitigation measures, the notification issues when implement the project:

Table 5. 7: Site Specific Mitigation Measures of the project

No.	Impacts/Activity	Mitigation measures	Location	Note
Measures to mitigate the impacts due to wastes				
	Management and treatment of solid wastes	− Conduct the classification and treatment; − Re-use to build the construction road; − Collect and choise temporary storage − Moving the local landfill	Construction sites	
	Treatment of hazardous waste (waste oil)	− Management wastes oils; −Control oil-containing wastes from construction activities: Do not discharge directly into the environment, collecting the waste oil into the drum container for disposal.	Construction sites	
	− *Air pollution due to dust generated*	− Water spray − Cover material/ soil disposal when transported;	All of project; Construction	

	from construction (including excavation, material storage): – *Air pollution due to dust arising from transport activities;*	– The vehicles only move in construction area; – Use covered vehicles to transporting; – Control and manage environmental at location that vehicles go through; – Temporary dump is located far from objects as schools, markets; –Monitoring the dust pollution	site gate area	
Measures to mitigate the other impacts				
	Minimize impacts of erosion, sediment and soil drifting	– Quickly construction and compaction; – Colecting and transporting the soil disposal to the backfill area; – Create the dump reasonable; – Setup the mudguards fences; – Clean up spilled lands; – Limit the leveling area; –Make manholds.	Location construct road-bed of approach road	
	Minimize impacts due to noise pollution	– Comply with the general regulations; – Control the noise level: priority using machineries that have low of source noise level; –Monitoring the noise level	Along the construction area of approach road, especially with area focusing the population	
	Minimize impacts due to traffic congestion	– Comply with the general regulations; – Setup the signal boads; –Guiding traffic.	Approach road	
	Minimize impacts due to damage to public facilities	– B To arrange reasonable shipping time: do not transport materials during the period 6 – 8 hours and 18 – 16 hours; – Moving with righ speed; – Agree with local authoritie about the temporary using of local road.	NH 38B and local roads	
	Minimize impact by focusing workers	– Management of workers: To register temporary living for workers, construction workers education; – Coordinate with local authorities in promoting to worrkers understanding of	Construction site	

		the social evils, prostitution, disease, HIV etc. - Use of local labor for simple work.		
	Minimize impacts on hydrology and river flow	- Treated wastes when construct the sub-structure of bridge; - Cleanup the river-bed after construction; - Cleanup and stabilize the river banks after construction	Cuu An river	

2.4. Impacts on Environmental and Social

2.4.1. Social impacts due to land acquisition and resettlement

Social impacts due to land acquisition and resettlement: Project will acquire about 3.03 ha of land areas, in which there are about 450 square meters of residential land, the remain areas area agriculture land and ponds etc. to implement the project construction items. Currently, PMU3 is conducting prepare draft of RP report for all of VRAMP project, including component to improve the bridges on NH 38B. This RP is established base on Vietnamese regulations and accordance with involuntary resettlement policies of the World Bank (OP 4.12). The RP will include the programs to relocate house, land, tombs and other structures of the community.

2.4.2. Environmental Impacts

The tables 5.14and 5.15 below mention the potential impact on environmental and society in the construction process of project:

Table 5. 8: The summary of impacts on environmental due to wastes

No.	Impacts/Activity	Location and Affected objects	Note
1	Air pollution	location: Along the project alignment where excavated location; site construction area; along the road to transport materials (NH 38B and local road) Objects: Residents at Km2+120	
2	Water pollution Impact on fauna and flora of the river	Location: Bridge construction site Objects: Cuu An river, sediment and aqua-system that are near the bridge construction site.	
3	Soil pollution	Rice fields along the approach roads	
4	Groundwater pollution	Abutment area	

Table 5. 9: The summary of other impacts of project

No.	Impacts/Activity	Location and Affected objects	Note
1	– *Impact on people live and livelihood*	Location: – Approach road area and the abutment; Object: – Affected households will be relocated and loss agriculture lands	

No.	Impacts/Activity	Location and Affected objects	Note
2	*Siltation of river flows, damage irrigation canals* *Affect to socio-economic activities;* *Impact on traffic* *Pollution of surface water*	Location: Approach road area and the abutment; NH38B, along the construction areas; Object: Surface water source near the construction site Cuu An river, irrigation canals, ponds Residential areas along the approach road	
3	*Noise and vibration pollutions*	Location: Around the construction site, along the approach roads Object: Residential areas at Km2+120, and authorities office as Tu Cuong PC and Tu Cuong medical centre	
4	*Safety and traffic congestion*	Location: *Approach road area, and along the transport road;* Object: Traffic on existing roads Residents near the interchange area	
5	*Damage to public facilities*	Location: *Along the transport road; local roads* Object: Local people	
6	*Impact on social life*	Location: Localities in project area Object: Local people	
7	*Impact on hydrology and river flow*	Location: Abutment areas Object: Cuu An river	
8	*Impacts due to material exploitation*	Location: Borrow pits area and transported material road Object: Residents and other objects near the borrow pits area and transported material road	

2.5. Mitigation Measures

2.5.1. Mitigation Measures for Social impacts due to land acquisition and resettlement

The project has proposed the measures to mitigate the social impacts due to land acquisition and resettlement including:

+ The Project will provide compensation for various types of land, structure, and livelihood

losses for different categories of displaced persons (owners, leaseholders, renters, land users without legal rights to land, workers, manufacturing/commercial firms, and workers);

+ The Project is preparing the income restoration program to provide for affected peoples. The singular objective of the income restoration program is to help the severely affected and vulnerable households rebuild their sources of livelihood and thus regain, if not improve, their pre-project standards of living;

+ The Project has changed alignment of some sections that go through the residential area to mitigate social impacts due to land acquisition and resettlement.

2.5.2. Mitigation Measures for Environmental Impacts

The table 5.16 bellow present specific areas that can be affected by potential environmental impacts and the mitigation measures, the notification issues when implement the project:

Table 5. 10: Site Specific Mitigation Measures of the project

No.	Impacts/Activity	Mitigation measures	Location	Note
Measures to mitigate the impacts due to wastes				
	Management and treatment of solid wastes	− Conduct the classification and treatment; − Re-use to build the construction road; − Collect and choise temporary storage − Moving the local landfill	Construction sites	
	Treatment of hazardous waste (waste oil)	− Management wastes oils; −Control oil-containing wastes from construction activities: Do not discharge directly into the environment, collecting the waste oil into the drum container for disposal.	Construction sites	
	− *Air pollution due to dust generated from construction (including excavation, material storage):* − *Air pollution due to dust arising from transport activities;*	− Water spray − Cover material/ soil disposal when transported; − The vehicle only move in construction area; − Use covered vehicles to transporting; − Control and manage environmental at location that vehicles go through; − Temporary dump is located far from objects as schools, markets; −Mitigate the dust pollution	All of project Construction site gate	
Measures to mitigate the other impacts				

No.	Impacts/Activity	Mitigation measures	Location	Note
	Minimize impacts of erosion, sediment and soil drifting	− Quickly construction and compaction; − Colecting and transporting the soil disposal to the backfill area; − Create the dump reasonable; − Setup the mudguards fences; − Clean up spilled lands; − Limit the leveling area; −Make manholds.	Location construct road-bed of approach road	
	Minimize impacts due to noise pollution	− Comply with the general regulations; − Control the noise level: priority using machineries that have low of source noise level; −Monitoring the noise level	Along the construction area of approach road, especially with area focusing the population	
	Minimize impacts due to traffic congestion	− Comply with the general regulations; − Setup the signal boads; −Guiding traffic.	Approach road	
	Minimize impacts due to damage to public facilities	− B To arrange reasonable shipping time: do not transport materials during the period 6 – 8 hours and 18 – 16 hours; − Moving with righ speed; − Agree with local authorities about the temporary using of local road.	NH 38B and local roads	
	Minimize impact by focusing workers	− Management of workers: To register temporary living for workers, construction workers education; − Coordinate with local authorities in promoting to worrkers understanding of the social evils, prostitution, disease, HIV etc. − Use of local labor for simple work.	Construction site	
	Minimize impacts on hydrology and river flow	− Treated wastes when construct the sub-structure of bridge; − Cleanup the river-bed after construction; − Cleanup and stabilize the river banks after construction	Cuu An river	

2.6. Impacts on Environmental and Social

2.6.1. Social impacts due to land acquisition and resettlement

Social impacts due to land acquisition and resettlement: Project will acquire residential lands of the people are used to build houses, garden land, and pond ... to implement the project construction items. Currently, PMU3 is conducting prepare draft of RP report for all of VRAMP project, including component to improve the bridges on NH 38B. This RP is established base on Vietnamese regulations and accordance with involuntary resettlement policies of the World Bank (OP 4.12). The RP will include the programs to relocate house, land, tombs and other structures of the community. In initial survey, the detail quantities of clearance of the project are presented in the following table:

Table 5. 11: Clearance Quantities

No.	Items	Unit	Quantities
1	Agriculture land	m^2	6,677.37
2	Residential land	m^2	28.80
3	House class 4	m^2	18.00
4	Electricity pole	Pole	2.00

2.6.2. Environmental Impacts

The tables 5.18 and 5.19 below mention the potential impact on environmental and society in the construction process of project:

Table 5. 12: The summary of impacts on environmental due to wastes

No.	Impacts/Activity	Location and Affected objects	Note
1	Air pollution	location: Along the project alignment where excavated location; site construction area; along the road to transport materials (NH 38B and local road) Objects: The households are near the construction site in Hai Duong province.	
2	Water pollution Impact on fauna and flora of the river	Location: Bridge construction site Objects: Cuu An river, sediment and aqua-system that are near the bridge construction site.	

No.	Impacts/Activity	Location and Affected objects	Note
3	Impact on environmental and landscape	Location: Bridge construction site Objects : Landscape	
4	Obstructing the river flow	Cuu An river, bridge construction site.	
5	Groundwater pollution	Location: Abutment area Objects: Populations area near the construction site	

Table 5. 13: The summary of impacts of project

No.	Impacts/Activity	Location and Affected objects	Note
1	– *Sedimentation of river flow, damage to irrigation works* – *Impact on socio-economic activities;* – *Impact on traffic* – *Pollution of surface water*	Location: – Approach road area and the abutment; – NH 38B Object: – Surface-water near the construction site – Cuu An river near the bridge location and irrigation canal; – Residential area along the aproach road.	
2	*Noise and vibration pollutions*	Location: Around the construction site Object: Residents near the site leveling and households living along the approach road construction site	
3	*Safety and traffic congestion*	Location: *NH 38B, Approach road area and along the transport road;* Object: Traffic Residents along the roadsides	
4	*Damage to public facilities*	Location: NH38B and local road connecting to NH 38B Object: Local people	
5	*Impact on social life*	Location: Localities in project area Object:	

No.	Impacts/Activity	Location and Affected objects	Note
		Local people	
6	*Impact on hydrology and river flow*	Location: Abutment areas Object: Cuu An river	
7	*Impacts due to material exploitation*	Location: Borrow pits area and transported material road Object: Residents and other objects near the borrow pits area and transported material road	

2.7. Mitigation Measures

2.7.1. Mitigation Measures for Social impacts due to land acquisition and resettlement

The project has proposed the measures to mitigate the social impacts due to land acquisition and resettlement including:

+ The Project will provide compensation for various types of land, structure, and livelihood losses for different categories of displaced persons (owners, leaseholders, renters, land users without legal rights to land, workers, manufacturing/commercial firms, and workers);
+ The Project is preparing the income restoration program to provide for affected peoples. The singular objective of the income restoration program is to help the severely affected and vulnerable households rebuild their sources of livelihood and thus regain, if not improve, their pre-project standards of living;
+ The Project has changed alignment of some sections that go through the residential area to mitigate social impacts due to land acquisition and resettlement.

2.7.2. Mitigation Measures for Environmental Impacts

The table 5.20 bellow present specific areas that can be affected by potential environmental impacts and the mitigation measures, the notification issues when implement the project:

Table 5. 14: Site Specific Mitigation Measures of the project

No.	Impacts/Activity	Mitigation measures	Location	Note
Measures to mitigate the impacts due to wastes				
	Management and treatment of solid wastes	– Conduct the classification and treatment; – Re-use to build the construction road; – Collect and choise temporary	Construction sites	

No.	Impacts/Activity	Mitigation measures	Location	Note
		storage – Moving the local landfill		
	Treatment of hazardous waste (waste oil)	– Management wastes oils; –Control oil-containing wastes from construction activities: Do not discharge directly into the environment, collecting the waste oil into the drum container for disposal.	Construction sites	
	– *Air pollution due to dust generated from construction (including excavation, material storage):* – *Air pollution due to dust arising from transport activities;*	– Water spray – Cover material/ soil disposal when transported; – The vehicle only move in construction area; – Use covered vehicles to transporting; – Control and manage environmental at location that vehicles go through; – Temporary dump is located far from objects as schools, markets; –Mitigate the dust pollution	All of project Construction site gate	
Measures to mitigate the other impacts				
	Minimize impacts of erosion, sediment and soil drifting	– Quickly construction and compaction; – Colecting and transporting the soil disposal to the backfill area; – Create the dump reasonable; – Setup the mudguards fences; – Clean up spilled lands; – Limit the leveling area; –Make manholds.	Location construct road-bed of approach road	
	Minimize impacts due to noise pollution	– Comply with the general regulations; – Control the noise level: priority using machineries that have low of source noise level; –Monitoring the noise level	Along the construction area of approach road, especially with area focusing the population	
	Minimize impacts	– Comply with the general	Approach road	

No.	Impacts/Activity	Mitigation measures	Location	Note
	due to traffic congestion	regulations; – Setup the signal boads; –Guiding traffic.		
	Minimize impacts due to damage to public facilities	– B To arrange reasonable shipping time: do not transport materials during the period 6 – 8 hours and 18 – 16 hours; – Moving with righ speed; – Agree with local authoritie about the temporary using of local road.	NH 38B and local roads	
	Minimize impact by focusing workers	– Management of workers: To register temporary living for workers, construction workers education; – Coordinate with local authorities in promoting to worrkers understanding of the social evils, prostitution, disease, HIV etc. – Use of local labor for simple work.	Construction site	
	Minimize impacts on hydrology and river flow	– Treated wastes when construct the sub-structure of bridge; – Cleanup the river-bed after construction; – Cleanup and stabilize the river banks after construction	Cuu An river	

2.8. Impacts on Environmental and Social

2.8.1. Social impacts due to land acquisition and resettlement

Social impacts due to land acquisition and resettlement: Currently, PMU3 is conducting prepare draft of RP report for all of VRAMP project, including component to improve the bridges on NH 38B. This RP is established base on Vietnamese regulations and accordance with involuntary resettlement policies of the World Bank (OP 4.12). The RP will include the programs to relocate house, land, tombs and other structures of the community. In initial survey, the quantities of land clearance are presented in table below:

Table 5. 15: Quantities of land clearance

No.	Items	Unit	Quantity
I	**Land**	m^2	**45,936.12**
-	Agriculture land	m^2	44,476.92
-	Residential land	m^2	1,459.20
II	**Asset**		**45,388.92**
-	Cr ops	m^2	44,476.92
-	House class 4	m^2	396.00
-	House – 1 storage	m^2	480.00
-	House – 2 storage	m^2	36.00

2.8.2. Environmental Impacts

The tables 5.22 and 5.23 below mention the potential impact on environmental and society in the construction process of project:

Table 5. 16: The summary of impacts on environmental due to wastes

No.	Impacts/Activity	Location and Affected objects	Note
1	Air pollution	location: Along the project alignment at excavated and fill-up location; construction area; and local roads connecting the NH 38B with borrow pits and material storage. Objects: The households living along the NH38B (at	

No.	Impacts/Activity	Location and Affected objects	Note
		Km0+840 – Km1+060; Km1+780 and Km1+960).	
2	Water pollution Impact on fauna and flora of the river	Location: Bridge construction site Objects: Dao river near the construction site.	
3	Groundwater pollution	Location: Area near the abutments of bridge Objects: Populations area near the construction site	

Table 5. 17: The summary of other impacts of project

No.	Impacts/Activity	Location and Affected objects	Note
1	*Affect to life and livelihood of people*	Location: – Houses demolition along the road side Object: – Relocation households	
2	– *Sedimentation of river flow, damage to irrigation works* – *Impact on socio-economic activities;* – *Impact on traffic* – *Pollution of surface water*	Location: – Approach road area and the abutment; – NH 38B Object: – Surface-water near the construction site – Dao river near the bridge location and irrigation canal; – Residential area along the aproach road.	Medium impacts
3	*Noise and vibration pollutions*	Location: Around the construction site and along the approach roads Object: Residents near the site leveling and households living along the approach road construction site	Medium impacts
4	*Safety and traffic congestion*	Location: NH 38B, Approach road area and along the transport road; Object: Traffic Residents along the roadsides	Medium impacts
5	*Damage to public facilities*	Location: Along the transport roads and local roads Object: Local people	Medium impacts

No.	Impacts/Activity	Location and Affected objects	Note
6	*Impact on social life*	Location: Localities in project area Object: Local people	
7	*Impact on hydrology and river flow*	Location: Abutment areas Object: Dao river	Medium impacts
8	*Impacts due to material exploitation*	Location: Borrow pits area and transported material road Object: Residents and other objects near the borrow pits area and transported material road	Small impacts

2.9. Mitigation Measures

2.9.1. Mitigation Measures for Social impacts due to land acquisition and resettlement

The project has proposed the measures to mitigate the social impacts due to land acquisition and resettlement including:

+ The Project will provide compensation for various types of land, structure, and livelihood losses for different categories of displaced persons (owners, leaseholders, renters, land users without legal rights to land, workers, manufacturing/commercial firms, and workers);
+ The Project is preparing the income restoration program to provide for affected peoples. The singular objective of the income restoration program is to help the severely affected and vulnerable households rebuild their sources of livelihood and thus regain, if not improve, their pre-project standards of living;
+ The Project has changed alignment of some sections that go through the residential area to mitigate social impacts due to land acquisition and resettlement.

2.9.2. Mitigation Measures for Environmental Impacts

The table 5.24 bellow present specific areas that can be affected by potential environmental impacts and the mitigation measures, the notification issues when implement the project:

Table 5. 18: Site Specific Mitigation Measures of the project

No.	Impacts/Activity	Mitigation measures	Location	Note
Measures to mitigate the impacts due to wastes				
	Management and treatment of solid wastes	− Conduct the classification and treatment; − Re-use to build the construction road; − Collect and choise temporary storage − Moving the local landfill	Construction sites	

No.	Impacts/Activity	Mitigation measures	Location	Note
	Treatment of hazardous waste (waste oil)	– Management wastes oils; –Control oil-containing wastes from construction activities: Do not discharge directly into the environment, collecting the waste oil into the drum container for disposal.	Construction sites	
	– *Air pollution due to dust generated from construction (including excavation, material storage):* – *Air pollution due to dust arising from transport activities;*	– Water spray – Cover material/ soil disposal when transported; – The vehicles only move in construction area; – Use covered vehicles to transporting; – Control and manage environmental at location that vehicles go through; – Temporary dump is located far from objects as schools, markets; –Monitoring the dust pollution	All of project; Construction site gate area	
Measures to mitigate the other impacts				
	Minimize impacts of erosion, sediment and soil drifting	– Quickly construction and compaction; – Colecting and transporting the soil disposal to the backfill area; – Create the dump reasonable; – Setup the mudguards fences; – Clean up spilled lands; – Limit the leveling area; –Make manholds.	Location construct road-bed of approach road	
	Minimize impacts due to noise pollution	– Comply with the general regulations; – Control the noise level: priority using machineries that have low of source noise level; –Monitoring the noise level	Along the construction area of approach road, especially with area focusing the population	
	Minimize impacts due to traffic congestion	– Comply with the general regulations; – Setup the signal boads; –Guiding traffic.	Approach road	
	Minimize impacts due to damage to public facilities	– B To arrange reasonable shipping time: do not transport materials during the period 6 – 8 hours and 18 – 16 hours;	NH 38B and local roads	

No.	Impacts/Activity	Mitigation measures	Location	Note
		– Moving with righ speed; – Agree with local authoritie about the temporary using of local road.		
	Minimize impact by focusing workers	– Management of workers: To register temporary living for workers, construction workers education; – Coordinate with local authorities in promoting to worrkers understanding of the social evils, prostitution, disease, HIV etc. – Use of local labor for simple work.	Construction site	

MEASURES FOR PREVENTION, MITIGATION OF ADVERSE IMPACTS; RESPONSE TO ENVIRONMENTAL INCIDENTS

1. Measures for Prevention, Mitigation of Adverse Impacts of the Project on the Environment during the Pre-Construction

1.1. Mitigation of Impacts on Ambient Air

1.1.1. Control Dust of Housing Demolition

a. Description of mitigation measures

- Moistening: When demolition work on hot dry days;
- Screening by canvas: canvas surrounded the house demolition area to prevent dust dispersed into surrounding areas;
- Transporting waste: Type not be reused will be handled through a contract with the company environment functions.

b. Location and implementation time

- Location: At the places of house demolition (Km0+000; Km4+200 ÷ Km4+350);
- *Implementation time:* 1 week/ area.

1.1.2. Dust control during site leveling

a. Description of mitigation measures

Moistening: Spraying water at least 02 times / day. Water taken from the river, near the location of the channel.

b. Location and implementation time

- *Location:* In six construction sites (Sat Bridge, Tranh 1 Bridge, Tranh 2 Bridge, Bun Bridge, Dia Bridge and Tinh Bridge).
- *Implementation time:* 1 month.

1.1.3. To assess the effectiveness of mitigation measures and residual impacts

Measures to reduce high effective and feasible by simple techniques, inability dust emissions, residual effects are negligible.

1.2. Mitigation of Impacts on public health

Measures to minimize the public health impact of dust pollution was presented in Section 1.1. "Mitigation of Impacts on air environment." Do not bulldoze area residents should be in this section will only present the measures to minimize noise pollution due to the demolition of public health.

a. Description of mitigation measures

The goal is to minimize the noise impact of pollution in residential areas, will be carried out simultaneously following measures:

- *No demolition waste and transport at night: from 22:00 to 6:00*.
- Use equipment with low noise emissions.
- Limit operators and equipment

b. Location and implementation time

- *Location:* In the residential areas (Km0+000; Km4+200 ÷ Km4+350);
- *Implementation time*: 1 week.

1.3. Mitigation of Socio-economic impacts

1.3.1. Impact mitigation due to Residential Land Acquisition

a. Description of mitigation measures

In order to mitigate the adverse impacts of resettlement, in addition to the implementation of the plan for compensation, assistance and resettlement, it is also required to consider the aspirations of displaced persons (DPs).

a1. Implementation plan for compensation, assistance and resettlement

The most effective mitigation measures are implementation plan for compensation, assistance and resettlement. In this measure, the compensation policy is composed in the manner of taking priority of the donor (WB) with the compensation and support which will be done for all impacted persons in the compensation list prior to the date of land acquisition and price is based on the replacement cost.

- Responsibility of the units in relation to land acquisition and resettlement and implementation budget.
    - Following Document No. 1665/TTg-CN on 17/10/2006 of the Prime Minister on the implementation of land acquisition for transportation project construction, land acquisition will be separated as sub-projects by Hung Yen Provincial People's Committee. Hung Ha District People's Committee (Hung Ha DPC) will implement these sub-projects under direction of Hung Yen Provincial People's Committee through the *Board of compensation, assistance and resettlement* of Hung Ha DPC which is established with its chairman shall be a leader of the district and members must be staff from the affected communes, and representatives of the affected.
    - The Project Owner shall assist the Chairman of the Board compensation, assistance and resettlement to make plans for compensation, assistance and resettlement; securing

adequate budget for timely payment of compensation, assistance and resettlement (cost for land acquisition is from State Budget Fund).

- General plan of compensation, assistance and resettlement
  - The general plan of compensation, assistance and resettlement of the project has been made in to a resettlement action plan (RP). The overall objective of RP is to determine the compensation and resettlement program for the project to ultimately limit the number of people and assets affected by the project to ensure that all affected people will be compensated for damage with replacement cost; and, there will be recovery measures to help them improve or at least maintain the standard of living and their ability to generate income as before the project.
  - The plan of compensation, assistance and resettlement is briefly shown in the summary table of compensation, assistance and resettlement policies, and matrix of rights.
  - Measures to mitigate the impacts of land acquisition will be applied during land acquisition period and completed before starting construction.

a2. Consideration of aspirations of displaced people

- Taking consideration in arrangement of resettlement areas near the former place for the involuntary displaced households.
- Compensating by money so that, the displaced households can do on their own with supervision of their resettlement process to ensure that their compensation money is spent for its intended purpose.

b. Objects and implementation time

- *Applicable objects:* displaced households.
- *Implementation time:* completed before commencement of the project.

1.3.2. Regarding Impacts due to Permanent Acquisition of Agricultural Land

a. Description of mitigation measures

Households whose agricultural land is permanently acquired face not only income damage, income loss, but also the difficulties in production recovery or earning new income sources. Therefore, it is not enough to be compensated by the cost replacing the acquired land area. Measures for production support and income restoration plan shall be established and implemented to ensure that the households who are taken their land can restore their minimum income like before the acquisition. The specific measures include:

- *Compensation:* total area of permanently acquired agricultural land, as well as trees and crops on the land will be compensated with the price calculated at the time of inventory.
- *Support for living stabilization*:

- For households who lost 30 ÷ 70% of their production land: support for six months for non-displaced households and 12 months for displaced ones;
- For households who lost more than 70% of their production land: support for 12 months for non-displaced households and 24 months for displaced ones.

– *Support for agricultural land in residential areas:*

- For garden/ pond land in residential areas: support more with 30 ÷ 70% of the price of the adjacent land plot;
- For agricultural land in residential areas: support more with 20 ÷ 50% of the price of the adjacent land plot.

– *Support for career change and job creation:* the households who lost their agricultural land will be supported for career change and job creation in cash with 1.5-5 times higher than the compensation for the agricultural land.

– *Recruitment:* for some simple jobs with low technical requirements, the project's Owner encourages the contractor to recruit local labors, in which households losing their agricultural land will be preferred.

b. Objects and implementation time

– *Applicable objects:* households whose land for rice growing and ponds along the route are permanently acquired.

– *Implementation time:* completed before commencement of the Project.

1.3.3. For the impact of temporarily occupied agriculture land

a. Description of mitigation measures

The aim is to compensate for losses due to temporary occupancy of agricultural land to construction site layout will apply measures:

– *Compensation under the agreement:* Project owner agreed to rent the land owner under the agreement. Land rent will be charged for the time the temporary land occupation for construction and land recovery timeout (about 2 years).

– *Revert*: When not in use, the temporary borrow area will be cleaned and renovated and restored the original commitment before handover to owners.

– *Implementation commitment*: Unified commitment to clean, renovate or revert to serve other purposes. This commitment will be notarized at the CPC to ensure legal.

b. Objects and implementation time

– *Applicable objects:* The owners of agricultural land temporarily occupied.

– *Implementation time:* Prior to start Project's construction.

1.3.4. For the impact of the relocation of graves

a. Description of mitigation measures

The aim is to limit the social impact by moving 13 graves, measure:

- *Announcement early:* Early Notification clearance time for at least 6 months relative to their graves conducting necessary rituals.
- *compensation, support*: Compensation and reasonable funding for the relocation, transportation and burial of new graves.

b. Objects and implementation time

- *Applicable objects:* Relatives of the graves were relocated.
- *Implementation time:* Prior to start Project's construction..

1.3.5. For impact by reducing the amount of infrastructure (irrigation ditches, poles and telephone poles)

a. Description of mitigation measures

The purpose is to prevent unnecessary impacts disturb the socio-economic activities by reducing the amount of infrastructure, project committed to the following:

- *Perform proper design process*: The relocation of infrastructure systems (power, telephone, irrigation ditches) will be carried out and completed before the construction works of the project. While building new infrastructure, the old buildings are still in use to ensure not disrupt production activities and community activities of the people. After completion of construction of new facilities, electricity, telephone and irrigation water will be transferred from the old building to the new building. Then the old building will be demolished to hand over the construction project. As for drainage, culverts will be constructed in the old ditch. After you have completed sewer, water diversion channel on the initial position and the land reverted to temporarily ditch.
- *Provide adequate funding*: This project will ensure adequate funding to provide relocation and improvement system power drain (already included in the total investment of the project).

b. Objects and implementation time

- *Applicable objects:* The ditch was improved, 76 electric poles, 37 communication poles.
- *Implementation time:* Prior to start Project's construction..

1.3.6. Assessment of the Efficiency of Mitigation Measures and Residual Impacts

Experience has shown, with any scale that, when occupied land and create lasting social impact, especially when incurred relocation and resettlement, land acquisition, although this service the

national interest and the public and shall comply with compensation compensation plan, support and resettlement consent of the person affected. Practical experience shows that, if the Council land acquisition compensation and resettlement perform the following, the contradictions in society will be freed many:

- extensive propaganda about economic policy and development policy of the state compensation to the affected people as well as the rights and obligations of their;
- Disclosure of compensation rates for each detail of each affected property. Publicity exact amount of compensation for each household;
- policies to support needy families and family policies;
- policies to reward those who perform hand over earlier than schedule out;
- There are plans to create jobs and job training for those households affected when they ask;
- There are plans to help families lonely, sick ... in dismantling transported to a new place;
- For unskilled workers (usually low-skilled labor, employment instability): Career Organization, opened the class apprenticeship training just learning culture in place to meet the needs of employers in the area. There are no qualified workers through job training age will negotiate with the workers getting their base to do the job less demanding qualifications such as protection, parking, and odd ... learn more at these facilities. However, not once can solve all of this work so there will be further driven as open-field training and educational support to create a workforce with the legacy degrees;
- Instructions on how to spend money compensation: A residential unit after receiving a large amount of compensation has not cleared oriented funds have been used properly creates waste and risk new evils arising burden to society. Thus, there will be specific instructions on the use of capital, especially investment guide business or saving way to fit each specific audience in order to stabilize the long life long;
- Explicit information about the project, construction schedule for local and affected people, policies and schemes of compensation and resettlement;
- Create mechanisms for affected persons in the proposed democratic aspirations as well as support the compensation at complaints mechanisms, responses;
- The settlement of administrative procedures related to the relocation issue is also of concern because there are still many obstacles that life cannot be put into place, such as for changing business forms, business license sales, transfers to their children, doing household ... Creating favorable conditions in the administrative stage is imperative to get the attention of the leaders to help stabilize their lives after being recovered land;
- Project to ensure timely and adequate budget for land acquisition and resettlement.
- Also, in the case of the Project, (i) the provision of land by the local running out, so the

arrangement of relocated households resettled in place by their aspirations and provide timely funding their own resettlement is feasible and the optimal measures. (Ii) measures to mitigate the impact of infrastructure encroachment is the commitment of the project, in accordance with the construction uninterrupted manufacturing operations, funding for this work has been established and included in the total investment of the project.

1.4. Mitigation of Impacts on Environmental Landscape

a. Description of mitigation measures

- *Performing proper categorization and disposal:* upon demolition, waste will be categorized. Those which can be reused as crushed scrap, milled wood will be collected for fuel.
- *Collecting and selecting temporary gathering points:* the wastes generated shall be collected and gathered at some points on the construction site. The project will sign a contract with the environmental unit in charge of waste collection, treatment and transportation.

b. Location and implementation time

- *Location:* the house demolishing area (Km0+000; Km4+200 ÷ Km4+350).
- *Implementation time:* during the demolishing time (1 week) and preparation of construction site (1 month).

1.4.1. Assessment of the Efficiency of Mitigation Measures and Residual Impacts

The waste categorization, collection and treatment will limit the amount of soil, rocks dumped at disposal areas. The waste collection is reasonable and solid waste treatment measure is consistent with the requirements of the Decree No. 59/2007/ND-CP. The proposed measures are feasible, effective and residual impacts are insignificant.

1.5. Request for Completing Preparatory Work for Official Construction

a. Description of mitigation measures

For the purpose of providing information about the project, the environmental protection measures of the project for the local community where the project is located in order to get social consensus, the following measures will be applied:

- *Disclosing information:*
  - After the EIA report of the project has been approved by the Ministry of Transportation, the project's owner will establish, approve and publicly post the environmental management plan at the headquarters of the People's Committee of the communes for community consultation. Contents of the environmental management plan shall comply with Article 22 of Decree No. 29/2011/ND-CP dated 18 April 2011 of the Government on providing strategic environmental assessment, environmental impact assessment and environmental protection commitment. Thereby, local people will update the project's information and

participate in inspection and supervision of implementation of the project's environmental protection measures.

- Along with the environmental management plan, the project will publish information on project scale and scope of construction on the mass media, flyers, signs to get to know the community and not violating construction safety.

b. Location and implementation time

- *Location*:
  - Disclosing information in communes/ towns in the project area.
  - Installing signs at the boundary of land acquisition and construction site.
- *Time*: before official construction

2. Measures for Prevention, Mitigation of Adverse Impacts of the Project on the Environment during Construction

2.1. Mitigation of Impacts on Ambient Air Quality

2.1.1. General Regulations

The measures aim to provide the required contents applicable to construction activities in order to comply with legal requirements on environment protection during construction.

- *Requirements for vehicles:* Vehicles ensure emission standards "TCVN 6438 - 2005 - Road vehicles. Maximum permitted emission limits of exhaust gases." Through the contracts, the project's owner requires the contractor to apply this standard to manage construction vehicles.
- *Requirements for applicable standards:* Limit 0.3mg/m3 of QCVN 05:2009/BTNMT - National technical regulation on ambient air quality is the criteria applicable to safety of dust concentration at sensitive objects with dust generation activities of the project during the construction phase.

2.1.2. Dust Spread Control in the Activities of Excavation, Backfill and Storing Materials

a. Description of mitigation measures

With the aim to prevent and mitigate dust spread from digging access road to bridges, the following measures shall be applied:

- *Spraying water the areas with dust spread:* Spraying water to prevent dust spread. Water shall be taken from surface water in rivers, canals and ponds near the construction site.

Technical solutions:

1. Spraying water at least 02 times a day.

Using standard nozzle instead of normal ones to make the surface equally wet and prevents muddy condition. Spraying water in multiple times instead of once in large quantities.

– *Preventing dust spread at temporary storage yards*: Temporary soil storage years with volume of over $20m^3$ will be covered to prevent dust spread.

Technical solutions:

1. *Covering canvas is made of thick nylon fabric and towards sensitive objects (residential areas, schools, temples, etc).*
2. *The canvas is 30cm higher than the yard's surface.*
3. *The canvas should be reinforced with pile driven in the ground at least 20cm deep not to fall.*

b. Location and implementation time

– *Implementation location:* The construction of the road along the route, the temporary dump materials, waste land;

– *Implementation time:* applied during construction of the road on sunny days, dry.

2.1.3. Control of Emission from Construction Vehicles (Shunt Compensation)

a. Description of mitigation measures

With the aim of mitigating dust pollution, toxic gases emitted from construction machines in the project area, the following measures shall be applied:

– *Using vehicles that meet emission standards* as defined in the general regulations.

– *Setting transportation areas:* Vehicles are only allowed to be used in the construction scope as regulated (site clearance, service road).

b. Location and implementation time

– *Implementation location*: Entire scope of the project and at the site.

– *Implementation time:* within 24 construction months

2.1.4. Regarding Dust Generated during Transporting Waste Materials or Soil

a. Description of mitigation measures

With the aim of mitigating air pollution due to dust generated from vehicles, the following measures shall be applied:

– *Using vehicles that meet emission standards and transportation requirements:*

  o Vehicles must ensure emission standards as defined in the general regulations.

  o Transported materials must be covered to prevent dust spread.

– *Controlling and managing the environment at which vehicles enter/ exit the construction site:* Each construction site has a number of gates for transportation. Vehicles are only allowed to enter at these gates.

– *Cleaning roads near the entrance to construction sites:* vehicles, before transporting, shall be cleaned from mud, soil on tires at the exit gates by mechanical methods.

b. Location and implementation time

– *Implementation location*: construction sites and transport materials.

– *Implementation time:* Within 24 construction months

2.1.5. Regarding Dust Generation of Cement Concrete Mixing Plant

a. Description of mitigation measures

– *Preventing dust spread in the mixed material storage area:* The aggregate storage yards for mixing concrete (sand, gravel, etc.) will be covered with canvas to avoid dust spread. The canvas shall cover all the yard, except one side to moving the materials up to conveyors. The canvas is buried in the ground to avoid flying.

– *Preventing dust spread when dumping materials*: When ben trucks dump materials at the yard, dust shall be generated; immediately spray water for moisturizing.

– *Preventing dust spread from the crushing operation:* Not crushing stones on construction sites. Standard stones/ gravels for concrete mixing shall be purchased at the establishments licensed to operate and supply on site.

– *Preventing dust spreading on conveyors:* mixing materials (sand and gravel) will be moistened before moving up the conveyors to the mixer.

– *Preventing dust spread in the silo:* By design, the silo of cement concrete mixing plant has dust filter. Depending on the capacity and technical specifications, we can use electrostatic dust filter or cloth dust filter. These equipments can filter more than 90% of dust. In the construction phase, the contractor will be required to regularly maintain this equipment to filter the dust effectively.

– *Implementation of environmental monitoring:* Perform monitoring of ambient air at the sensitive objects near residential areas that are likely to be affected by the mixing operations. When measurement results showed that the concentration of dust in the region of 0.3 mg/m3, immediately enhance at-source dust control measures, including additionally spraying water in places with dust spread as on conveyors, when dumping materials, aggregate yard, or covering the yard; inspecting performance of dust filter of silo; suspending the tasks to adjust measures until the dust concentation at such objects reach 0.3 mg/m3, then continue mixing.

b. Location and implementation time

– *Implementation location*:

  o The concrete mixing plants inside the construction sites.

  o Residential areas close to the construction sites.

– *Implementation time:* 24 months of construction.

2.1.6. Dust pollution monitoring

a. Description of mitigation measures

Environmental monitoring during construction: Selection and implementation of monitoring dust at the densely populated or potentially affected places by dust accumulation. If the dust concentration is beyond the permissible limits, implement additional measures including: Considering the level of dust emissions of each activity, enhance control measures from the largest dust activity until the dust at sensitive objects reaches the permissible limits.

b. Location and implementation time

– *Implementation location*: Measures "Environmental monitoring in construction" made in the residential areas along the route refresh (km0 +000, Km 4 Km 4 +350 +200 ÷, ÷ Km44 Km43 +600 +000) and the residential areas along transportation routes (NH39, 1A, Highway 5, PR200 ...) as residential areas Tan Phuc (Km43 Km44 +600 ÷ +000).

– *Implementation time:* Maintenance activities during Excavation and backfill.

2.1.7. Assessment of the Efficiency of Mitigation Measures and Residual Impacts

The proposed measures are based on the principle of mitigating dust from the source not only reduce dust effectively, but also reduce the dust pollution (if any) at sensitive objects, being residential areas. The proposed measures are highly feasible and effective. To increase the feasibility of the proposed measures, the cost of implementation will be included in total investment of the project and content made to the contractor as well as supervision content of consultant will be based on bidding terms; under terms in the economic contract, the project will implement control measures to require contractors as well as the supervision consultant to follow the contract.

2.2. Mitigation of Impacts on Community due to Noise Pollution

2.2.1. General Regulations

With the aim of providing the required contents applicable to construction activities to comply with legal requirements on environmental protection in construction activities; offering implementation contents to ensure noise reduction without spending additional cost.

– *Requirements for applicable standards:* Limit on 70dBA and 55dBA during the day QCVN 26:2010/BTNMT - National technical regulation on noise is the criteria applicable to safety of noise of impacts generated from the project's operation during the construction phase.

– *Complying with regulations on construction organization: including*:

  o Arranging machinery / vehicles generating noise at a location with suitable distance so that the noise spread to residential areas not exceed 70dBA and schools, temples, etc. no more

than 55dBA. Rapid decrease noise level is calculated on the principle of a double increase in the distance, the noise level reduces 3dBA.

- All vehicles parked at the site will stop the engine;
- All construction equipments and machines will be checked every 3 month on the noise level and make the necessary repairs and adjustments to ensure safety and not cause noise exceeding standards under the guidance of United States Environmental Protection Agency. Noise from construction equipments and machines - NJID, 300.1, 31 – 12 – 1971;
- Prioritizing the use of machines and vehicles with low sound emission source object to construction near sensitive to noise;
- Drivers must be well educated to act properly as shutting down vehicles when not necessary and avoid unnecessary noise action as pressing the air horn when not needed while the driving vehicles.
- Normally, the fixed equipments such as generators will be place far away from residential areas, if not they will be placed in the tight box to reduce the noise (recommended the brick box).

2.2.2. Regarding Activities Generated Noise during Construction

a. Description of mitigation measures

– *Complying with general regulations.*

– *Controlling source noise level,* including:

- Limiting construction in night time, if construction at night using only the machinery and equipment sound power levels low.
- When drilling for piers constructed Painting 1 Bridge near residential areas (Km 4 Km 4 +200 ÷ +350) for about 100m layout will make the day
- During the day when the construction is executed at the site 200m from residential areas, select equipments/ machines with low sound sources;
- Vehicles used for transportation will be limited at the speed of 5km per hour.

– *Monitoring noise level:* Monitoring noise level at these sensitive objects - concentrated residential areas. When the measurement result shows that the noise level in this area beyond the permissible limits on daytime, strengthening measures to control noise at source and comply with the general provisions for the construction activities that cause noise in order to set additional measures, even temporarily stop working to adjust the measures until the noise level at sensitive objects reached the permissible limits on daytime, then continue construction work.

b. Location and implementation time

– *Implementation location*:

  - Along the construction route;
  - Sensitive objects are residential areas Km0+000; Km4+200 ÷ Km4+350; Km43+600 ÷ Km44+000, Km44+800, Ngoc Mai Temple (Km0+400), Political Improvement Center and The People's Procuracy (Km2+450), Sa Lung Temple (Km4+550), An Thi district clinic (Km46+100).

– Implementation time: 24 construction months.

2.2.3. Assessment of the Efficiency of Mitigation Measures and Residual Impacts

The reduction of the noise at sensitive objects is highly effective through the implementation of the general regulations as well as measures to reduce noise at source and monitoring noise at receiving objects to take appropriate corrective measures. In order to ensure the feasibility of the proposed measures, the contents of the proposed measures for contractors as well as supervision contents for consultant will be included in bidding terms; according to the terms of economic contracts, the project will implement control measures to require contractors as well as the supervision consultant to follow the contract.

2.3. Mitigation of Impacts on Surface Water Environment and Sediment

2.3.1. Regarding Impacts Generated from the Construction of Routes, Access Road to Bridges

a. Control of risk of sedimentation or soil spillage during excavation of road foundation, horizontal drains and material storage

a1. Description of mitigation measures

With the aim of controlling risk of surface water pollution and reduced irrigation capacity in the irrigation ditches and located adjacent to or land routes cut through by sedimentation and erosion during excavation of road foundation, horizontal drains and material storage, especially for the ponds partly acquired.

– *Limiting the construction scope:* The construction area is limited within land acquisition scope. The temporary organic soil yard will be re-used or soil for construction of road foundation shall be stored in this area. Arranging soil/ material yard at least 50m away from water sources during road construction.

– *Organizing reasonable construction:* In case of rain, temporary yard will be covered with geotextile to prevent rain from causing erosion. The road foundation shall be executed and calculated to be compacted before the rain.

– *Placing mud-collecting barriers:* At the construction cut through the ponds and canals, placing barriers to keep sediment just let the water run out. Mud barrier is placed between the construction location and water sources. The barriers are made of geotextile, buried deep into the ground at least 10cm and reinforced to avoid falling. Mud was stopped before the barrier

will be cleared so that it will not be spilled and allow water to drain easily, this kind of mud shall not be used for road foundation, but treated as disposed soil. In rainy season, the barriers should be regularly maintained at least every two day to be operated effectively. The barriers will be removed after the ground has been cleaned.

b2. Location and implementation time

- *Implementation location:* Along the project, particularly in the pond water Km0+600; Km1+450; Km2+080; Km2+200; Km4+600; Km44+800; Km46+400; Km52+250, ditches along some such Km43+650, Km44+470.
- *Implementation time:* these measures shall be implemented during excavation and backfill (16 months).

2.3.2. Regarding Impacts Generaged from Construction of Bridges

a. Control of bore mud during construction of bridge abutment, pier with bored piles technology that use bentonite

a1. Description of mitigation measures

With the aim of preventing the risk of surface water pollution in the project area and damage to wetland ecosystems because bore mud - soil mixed with bentonite and bentonite spilled in the construction of bored piles using bentonite of bridge abutment, piers, especially for piers adjacent to the flow edge.

- *Complying with general regulations:* It is strictly forbidden to dispose to the surrounding environment the bore mud – soil mixed bentonite and bentonite spilled during the construction of bridge abutment, pier with bored pile technology that uses bentonite.
- *Making partitions to prevent the spillage into the surrounding environment:* Making steel partitions in the flow direction (for the pier on the flow edge) and soil partitions on land. The partitions must be higher than the ground so that dirt cannot be spilled out. Area of the partition frame must be large enough to implement the entire construction process of the pile of foundation and abutment.
- *Strictly following soil mixed bentonite and bentonite spill treatment:* Under construction process, each pile will have pit storing bentonite for reuse. After each construction of one pile, holes need to be filled. Therefore, soil and bentonite arise when drilling holes will be collected and buried in the pits. Bentonite spill and a soil mixed residual bentonite will be transferred into temporary yard, near the foundation construction area, abutment within the land acquisition, preliminary drying for easy transport. Then treated as ordinary solid waste, details are presented in the waste management section below.

a2. Location and implementation time

- *Implementation location:* In the construction sites of all piers and abutments of Sat Bridge and Bun Bridge;

– *Implementation time:* the measures shall be implemented and maintained during the bored pile construction of each abutment/ pier and all abutments/ piers of Sat Bridge and Bun Bridge.

b. Regarding risk of spillage of solid substances during superstructure construction of bridges

b1. Description of mitigation measures

With the aim of preventing risk of pollution of surface water, wetland ecosystems and damage to irrigation, the measures for prevention and processing solid substances dropping during construction of bridges shall be implemented as follows:

– *Treating garbage, waste during construction of bridges:* It is strictly forbidden to dispose garbage, waste arising from the construction activities to surface water flow. Arranging trashes, temporary dump near the construction area for collecting garbage and waste. Then, moving to the centralized waste storage area of the site for further treatment as stated in the "waste management" section below.

– *Cleaning the concrete slabs before assembling:* The joint position of the beams, concrete slabs will be cleaned on land before assembling by breaking and pieces of excess concrete (mavia). These pieces of concrete are waste collected and treated as mentioned in the "waste management" section below.

b2. Location and implementation time

The said measures shall be applied on the construction site of bridges throughout the construction of the superstructure of bridges (4-8 months).

c. Clearance, restoration of river beds and banks at bridge construction area

c1. Description of mitigation measures

With the aim of preventing the risk of long-term pollution of river water environment during bridge construction, the following measures shall be applied.

– *Cleaning river bed upon construction:* Removing all the temporary works including iron, steel, cofferdam, excess concrete by equipments such as excavators, bucket, crane, etc. After removal, waste will be collected and treated as solid waste at the site. Details are presented in the waste management section below.

– *Removing and stabilizing the riverbank after construction:* Removing all scattered rocks, cofferdam around piers, along the river and the bridge area and reinforced the banks in accordance with the design.

c2. Location and implementation time

The said measures shall be applied on (Sat Bridge, Bun Bridge, Tranh 1 Bridge, Tranh 2 Bridge,

Dia Bridge and Tinh Bridge) right upon completion of construction.

d. Regarding Impacts on Groundwater

d1. Description of mitigation measures

– *Construction of cofferdam for stopping dirt water invading at the well casing*: the cofferdam surrounding the support pier of casing shall be installed during the time of drilling of each pile and maintained in the whole process of pile construction to prevent surface dirt water invading into the casing and into the drilling pits.

d2. Location and implementation time

– *Implementation location:* Sat Bridge, Bun Bridge, Tranh 1 Bridge.

– *Implementation time:* during the construction of bore piles.

e. *Regarding Impacts Generated from the Activities of the Construction Site*

e1. Regarding risk of loss of waste oil and water pollution by oil in oily discharge from motor maintenance station on the construction site

e1.1. Description of measures

With the aim of controlling and managing waste oil as hazardous waste in accordance with current regulations and preventing oil in wastewater from motorbike maintenance station on the site; the following measures shall be applied:

– *Managing waste oil:* Machine oil shall be periodically replaced, stored in labeling barrels and placed in the roofed house with high floor to avoid flooding and waterproof, having barrier bank to easily collect in case of spilling outside. Waste oil will be further treated as described in the "waste management" section below.

– *Controlling oily waste from construction site activities:* On each construction site, the wastewater generated from operation and maintenance of machinery and equipment shall not be discharged directly into surface water. Wastewater will pass through a drainage system with partitions to collect the oil film before flowing into the rivers, canals. The partitions are made of geotextile that let water flow through and keep the oil film. Partitions should be regularly maintained to be operated effectively. Oil film is collected on the barrels for treatment under Circular No. 12/2011/TT-BTNMT 14/04/2011 on hazardous waste management.

e1.2. Location and implementation time

said measures shall be applied on construction sites of construction sites of the project during the construction period

***e2.* Regarding domestic waste from worker's site huts on the construction site**

e2.1. Description of measures

With the aim of preventing risk of water eutrophication and toxicity of wetland ecosystems on rivers, canals due to waste from the site huts on each construction site, the following measures shall be applied:

- *Treating washing wastewater:* Washing wastewater will be reused for moisten road surface or the places where dust can spread on site.
- *Treating domestic wastewater:* On each site, in addition to washing wastewater reused as mentioned above, the wastewater from canteens will be pre-treated not to create pollution sources forming organic matters in natural water by the decomposition of uneaten food. Wastewater from the canteens will be directed to the shallow sand tank (about 70cm deep), about 10m2 wide to avoid absorbing down the underground water system after through manholes with nets for collection of solid substances and waste in holes. After permeable through the sand to flow into the drainage system of the site before joining the flow. Replace the sand every week. 3m3 of sand replaced each week can be considered waste after preliminary washing and treated as waste soil.
- *Using portable toilets:* Using portable toilets at each site. Waste from portable toilets will be collected under economic contracts with the urban environment company of the Hung Ha District. The contract will be carried out before the project is prepared for construction.

e2.2. Location and implementation time

The said measures shall be applied on construction sites of construction sites of the project during the construction period.

e3. Regarding sewage of rich TSS and high pH generated from the operation of concrete mixing plant on the construction site

e3.1. Description of measures

With the aim of preventing impacts to the wetland ecosystem in the ponds and reduced capacity of the irrigation canals by waste generated from the operation of cement concrete mixing plant on each construction site, the following measures shall be applied:

- *Treating aggregate washing water and wastewater of cement concrete mixing plant:* the aggregate washing water on site and wastewater from the plant will be re-used to neutralize wastewater with high pH and to moisten the road surface on construction sites or the places where dust can spread on site. Aggregate washing water and wastewater will be directed into the mixing tank at least two compartments, each compartment has a capacity large enough so that sediment can settle for the amount of water discharged from one batch of concrete. Placing a barrier of iron net for waste collection before the entrance gate of sedimentation tank. Upon sedimentation, water will be reused. Sediment will be collected and treated as construction waste. The sedimentation tank and guiding ditch are arranged on site and be prepared concurrently with

the construction, maintained them work well during the entire construction period through the clean-up and maintenance of partitions regularly to ensure the ensure that garbage, rocks, sand and sediment will be retained and released into the canal with no contaminants. Garbage and sand deposits will be treated as waste and waste lands described in "waste management" subsection. After completing the construction, up to the line and they have not before handing over land to the owner.

– *Checking pH at the joint to natural flow:* Checking the pH every day in case of concrete mixing operations at the joint to the discharged water from the construction site to ponds, canals. If the pH is greater than 12, increase pumping water into a tank from mixing plant to dilute.

e3.2. Location and implementation time

The said measures shall be applied on construction sites within 24 months.

e4. Regarding risk of pollution from rainwater runoff on the surface of the site

e4.1. Description of measures

With the aim of controlling dirt penetrated into natural waters by rainwater runoff on the surface of the site. In addition to measures of "Making temporary drains for collection of water runoff during the construction near sensitive objects" as section a, subsection 4.2.3.2, the following measures shall be also applied:

– *Drainage on site:* the elevation of the site will be designed to ensure the collection of rain water on the surface of the site, not flowing through the area with surface contaminants such as petroleum store and does not cause flooding. Surface drainage system on construction sites includes ditches, canals and manholes. Rainwater shall be collected and directed to the ditch through manholes with nets for garbage collection. After water in manholes shall be over flown through the grass before flowing into the water in the canals.

– *Clean the surface of the ground:* Collecting the dirt on the ground to prevent the contamination of the surrounding water.

– A crushed stone layer should be paved on the surface of the construction site; this layer shall either reduce dust or being able to filter the dirt on the surface as raining.

c2. Location and implementation time

The said measures shall be applied on construction sites of the project during the construction period, especially in the rainy season.

2.3.3. Assessment of the Efficiency of Mitigation Measures and Residual Impacts

Most measures are highly effective because they are established on the basis of prevention eliminating the risk of increasing levels of water pollution by TSS, floating objects. The measures are also highly feasible because the area is large enough, the amount of waste is not

much. Water flowing from canteens to the environment only through preliminary treatment to capture the decomposed organic substances is a appropriate and feasible measure because the construction of wastewater treatment in aerobic tank in the field is not feasible due to large expenditures on construction and demolition after construction and create unpleasant odors on site. However, the water flow were pre-treated and joint into drainage flowing through the grass field before jointing into surface water have increased cleaning efficiency of organic matters in wastewater. Many measures comply with regulations on work safety, sanitation and construction organization. Therefore, the implementation contents for the contractor as well as the supervision consultant will be included in bidding terms; under the terms of economic contracts, the project will implement inspection measures to ask the contractor as well as supervision consultant to follow the contract. The feasibility of the proposed measures, thereby, are sure.

2.4. Regarding Impacts on Soil Environment

2.4.1. Regarding Risk of Soil Spillage and Sedimentation of Eroded Soil Due to Rain during Excavation and backfill

a. Description of mitigation measures

In order to prevent risk of burying arable land or causing slippery, muddy soil in residential areas due to soil spillage or mud sediment due to rain during excavation and temporary storage of materials, rocks, the following measures shall be applied:

- *Finishing construction and compacting tightly:* in the rainy season, from May to September, finish construction on each foundation and compacting to avoid erosion by rain, check the foundation before the rain, if case of erosion, reinforcing more.
- *Collecting and transporting immediately waste soil/rock to leveling area:* Collecting soil / rock on the dump within the permissible limits. Waste soil shall not be stored at each yard until finish construction, but gradually moving towards the designated leveling position. Especially, in the rainy season, from May to September, immediately transport to the leveling positions as defined; the rest shall be continued covering from rain.
- *Creating proper dumping sites:*
    - Dumping sites are not allowed at the residential areas or areas with high concentration of economic activities of which elevation is lower than the construction site elevation.
    - Within the site clearance, separate dumping sites will be arranged within the organic soil stored for reuse and waste soil waiting for transportation to the filling positions as defined. Area of each dump area shall not exceed $25m^2$ and stored soil shall not higher than 1.5m to facilitate covering to avoid erosion in case of rains and dust dispersion in strong winds. The temporary dumping sites of soil and waste soil shall be surrounded with fences made of geotextile. The geotextile fence shall be buried on the ground of 15cm to 20cm deep and supported by the poles driving deep down firmly.

- *Installing of mud barrier:* Not only in the rainy period, the installation of mud barriers for prevention of sedimentation and soil spill to surrounding area shall be implemented. Mud barrier are installed at the outer edge of the land acquisition border to surrounding land, according to the section of the route not to interfere the construction. Barrier made of geotextile, buried deep into the ground at least 10cm and reinforced to avoid falling. After finishing each section, the barrier is taken up, cleaned and re-used for the next stage.
- *Cleaning areas with spilled soil:* In the event of the mud spill to agricultural land along two sides of the new route, these areas will be cleaned and returned to the original state.

b. Location and implementation time

- *Implementation location:* At the construction areas near agricultural lands and residential areas along the project.
- *Implementation time:* shall be applied during excavation and backfill of road bed, foundation pit and area of material storage

2.4.2. Prevention and Treatment of Soil Compression

a. Description of mitigation measures

- *Preventing the risk of soil compaction:* limit the scope of construction in the scope of site clearance and service roads by piles. Vehicles are allowed to operate within this limit only.
- *Handling in case of negligence:* In case of negligence, vehicles encroach beyond the limited scope; loosen land by plowing the abused land at least 0.3m deep.
- *Disposing land acquired temporarily after construction:* After construction, in the area which construction sites are located and service roads on site, in addition to cleaning surfaces, loosen land by plowing it at least 0.5 m deep before handing over to the owner.

b. Location and implementation time

The said measures shall be applied on construction site and agricultural land along the project.

2.4.3. Assessment of the Efficiency of Mitigation Measures and Residual Impacts

Mitigation measures developed on the basis of causes and impacts for the purpose of reducing immediately from source simultaneously with the processing of the consequences will be highly effective. Simple techniques are simple, suitable to the contractors' capacity. Residual impacts are acceptable.

However, it is inevitable that vehicles shall encroach beyond the defined boundary. In this case, the project is committed to restoring this land as stated above. On the other hand, during construction, contractors often avoid implementing many environmental measures if not directly influence the construction contents due to concerns about the progress and increased costs. Therefore, to increase the feasibility of the proposed measures, implementation costs will be

calculated to be included in total investment of the project and the implementation contents will be included in the bidding terms. In terms of economic contracts, the project will monitor and ask the contractor to comply with the contract, ensure the feasibility of the proposed measures.

2.5. Regarding Impacts on Transportation

4.2.5.1. Regarding the Risk of Road Traffic Disruption during paving the section coincide with the existing road and construction of intersections.

a. Description of mitigation measures

With the aim of preventing and limiting traffic disruption on the existing road paving the section coincide with the existing road and construction of intersections, the following measures shall be applied:

- *Complying with general regulations:*
  - AC Paving on each side one, just finishing construction safety aside for vehicles traveling, then continue the remaining parts.
  - Do not gather the construction machines of the project on the existing road.
  - Do not let the temporary storage area as material, soil/ rock as waste. They are arranged within the site clearance of the project and at least 7m away from the existing road. In the case of sedimentation or soil spillage on the existing road, immediately cleaning and clearing.
  - Every day, during the construction of intersections, the existing road within the project and in a wide range from the edge of the project road on the two sides will be cleaned. This wide range will be defined by field supervisor based on stains of t the project's vehicles causing on the existing road.
  - The drivers of the project and the construction workers must understand and comply with regulations on traffic safety and alcohol and drug use.
  - Coordinating with local traffic police control of the car on the road.
- *Placing signs:* Signs on guarding the construction area will be located on two sides along the existing road in the driving position easily observed by the drivers and at a minimum distance of 150m. Traffic signs are stable under normal traffic conditions as well as when there are high winds and reflective panels for drivers easily recognizable at night. Scratches, lacerations, punctures on reflective panels will be remedied soon to always promote its reflective effects. After the end of intersection construction, all guarding signs will be removed.
- *Installing guide posts and signal lights:* The piles are placed to limit the scope of the construction of the existing pavement. is the piles are 75cm high at minimum with wide base to ensure no damage by travelling vehicles. All the piles are arranged in white and reflective panels to ensure a clear view both day and night. Pile stable under normal traffic conditions

as well as when there are high winds. On the marker lights are blinking A (low flashing lights), B (fast flashing lights) will be supervising engineer for approval prior to use according to the actual conditions.

– *Traffic guidance:* Guiding the traffic to ensure rational flow of traffic during AC paving of existing road surface. Traffic guide men shall be arranged equipped with flags to guide the traffic movement in and around the construction area.

b. Location and implementation time

Apply implemented in the construction period coincides with NH38 (Km33+963 ÷ Km38+400; Km43+600 ÷ 47+600) the intersection with the flyover approach roads at NH5, dike (Km4+300); access road to Phu Ung vestige (Km5+025), NH38, PR204, PR200, access road to Dien Bien River bank (Km52+390) and NH39 during the construction phase of the project.

2.5.2. Regarding the Risk of Road Traffic Accidents and Damage to Public Facilities during Transportation of Materials, Waste Soils and Rocks

a. Description of mitigation measures

In order to prevent and control the risk of unsafe traffic caused by the spilled material causing slippery on the national highways and provincial roads and the risk of damage to the local road with low solid level when the road is used to transport material or soil/ rock.

– *For the provincial road and national highway:*
  - *Arranging reasonable transportation time*: during peak hours from 6am-8am and 4pm-6pm;
  - *Not transporting over the maximum speed*;
  - *Cleaning*: Spilled soil, rocks shall be cleaned immediately, ensuring not slippery in case of rain.

– *When inter-commune roads are used for transportation:*
  - *Asking permission from local authorities*: Obtaining written consent from local authorities on temporary use of inter-communes for the right transportation purposes.
  - *Organizing reasonable transportation*: Not transporting materials and soil types in the winter time people using contemporary and holidays. Project responsibility to learn, but this time around and is committed to avoid shipping but this time with a particular region;
  - *Implementation of sanitary measures and return to original state*: Make sure you clean, safe in the process of using and maintaining the road, make sure people go back to normal, safe and restored to its original state before assigned to the local board.

b. Location and implementation time

The measures shall be implemented on transportation routes National highway, provincial roads,

NH5, NH1A, NH39, PR200... during the construction (24 months).

2.5.3. For the risk of unsafe water transport due to the operation of floating

a. Description of mitigation measures

To prevent the loss of waterway traffic safety, the measures applied:

- Put signs: Signs realms construction sector is expected on a minimum distance of 300m, where all means of easily observed. Traffic signs stable in normal traffic conditions as well as when there are high winds and reflective panels for easy identification at night. It scratches, lacerations, punctures on reflective panels will be remedied soon to always effective reflective of it. After the end of construction, all signs will be relocated realm.
- Put buoys and lights: buoys are placed to limit the scope of application of the execution time. All buoys are red, white and ensures clear view both day and night. Lights on a blinking buoy type A (little blinking lights), type B (many flashing lights) will be supervising engineer for approval prior to use based on actual conditions.
- Traffic Guide: Guide to traffic to ensure appropriate transport indication. During construction of the layout generation will stand bearer realms and command signals for vehicles at locations near the construction.

b. Location and implementation time

The mitigation measures to be implemented during construction of Bridge Sat (15 months).

2.5.4. Assessment of the Efficiency of Mitigation Measures and Residual Impacts

In fact, it is difficult to eliminate the impact of traffic, especially in areas where traffic density is high and in the river transportation operations. The measure is based on the construction of the content, the traffic conditions (water and land) every area and level of impact can minimize traffic congestion, especially to ensure absolute safety traffic. Residual impact is not significant.

Measures to minimize impacts from transportation activities recommended materials simple, feasible and highly effective. However, to ensure residual impacts are acceptable, the project will work with local government publicly announced plans to transport people bidders findings of non-compliance to the Project this project in conjunction with the construction company requires strict implementation of mitigation measures have been approved as well as additional measures as appropriate.

The mitigation measures for the utility community are committed to the project. Progress of the project depends on implementing this commitment. Feasibility of the proposed measures, therefore, are considered as quite high. Residual impact is negligible.

2.6. Regarding Impacts of Waste Rock and Soil

a. Description of mitigation measures

To prevent the risk of spills and soil at the dump, to apply measures:

- Compaction: rock poured out at the beach will be compacted, this has limited the ability erosion and spill out of the surrounding area while enabling local space for civil works .
- Use barrier: In the pouring process, the rocks are un-compacted, preventing sediment barrier is used to prevent the overflow of land areas around

b. Location and implementation time

The mitigation measures to be implemented in the area of land that position during the dumping of waste soil.

c. Assessment of the Efficiency of Mitigation Measures and Residual Impacts

The mitigation measures for the utility community are committed to the project. Progress of the project depends on implementing this commitment. Feasibility of the proposed measures, therefore, are considered as quite high. Residual impact is negligible.

2.7. Regarding Impacts due to Concentration of many Workers

a. Description of mitigation measures

- *Managing workers:* Project offers conditions in camps, water, electricity will ensure that workers living in camps in the health care field during construction. Registration of temporary residence for workers; education construction workers respect cultural, religious, and local beliefs prohibit drinking while performing construction, prohibits gambling in public school and scheduling (hours and hours of leisure) for workers.
- *Coordinating with local authorities:*
    - Coordinate with local authorities, including the Committee of the Vietnam Fatherland Front and the women for the purpose of promoting public understanding of social evils, prostitution, and HIV epidemics in the region...
    - Coordinate and work closely with local community hygiene as well as symptoms of the disease appear in the region;
    - Coordinate and cooperate with local authorities in preventing and combating social evils;
- *Employing local labors:* Use the unskilled workers, both women and men, local to do the job easy. For some jobs require training, the contractors will be selected from among local workers hired to train for new skills so they can do a good job.

b. Location and implementation time

The measures are implemented during the construction of the project (24 months).

c. Assessment of the Efficiency of Mitigation Measures and Residual Impacts

Mitigation measures by the concentration of workers are also the regulations on work safety and sanitation project in the construction process should be included in the bid contract. This legally is binding to facilitate full implementation of the proposed measures.

2.8. Waste Management and Treatment

2.8.1. Establishing and Implementing Waste Management Plan during Construction

a. Description of mitigation measures

- *Establishing waste treatment plan:* The project will be responsible for materials management and waste generated during the construction of a waste management plan (QMP). QMP built for regular waste (construction waste, waste) and hazardous waste (waste oil). During the construction phase, QMP will be the construction units to use as a construction material for detailed procedures for managing and reporting on waste generated and moved to the materials used for the project. QMP is one of the test objects according to the requirements stated in the environmental monitoring program.
- *Managing waste:* waste is organic soil, excess concrete mortar, soil and bentonite balance after the re-use and is stored temporarily in the dump or switch to leveling in the waste dumps will be identify and deal with a local following in the steps of the project.
- *Managing garbage and domestic waste:* Garbage and solid waste activities after collection will be categorized and stored at each site. Through economic contracts, the project will require the contractor to handle all kinds of waste according to Decree 59/2007/ND-CP dated 09/04/2007 on solid waste management and in accordance with local economy.
- *Managing waste oil and oily waste:* collected and stored according to the instructions of the staff are trained in hazardous waste management in the construction field. Waste oil will be collected and handled in accordance with Circular 12/2011/TT-BTNMT dated 04.14.2011 on hazardous waste management.

b. Location and implementation time

- The measure of "establishing waste treatment plan" "managing waste" and "managing garbage" is implemented within 24 months at 05 site positions of the project.
- The measure of "managing domestic waste", "managing waste oil and oily waste" is implemented within 24 months on 06 construction sites.

2.8.2. Assessment of the Efficiency of Mitigation Measures and Residual Impacts

Develop and implement waste management plan during construction of project commitments and regulations on work safety, sanitation and organization of construction of a transportation project. Therefore, the project to ensure the implementation of previous commitments the state management agencies in each local environment and perform content for contractors as well as content supervision consultant will be taken on a Terms recordings; under economic terms in the

contract, the project will implement control measures to require contractors as well as the supervision consultant to comply with the contract. The feasibility of the proposed measures, so be sure.

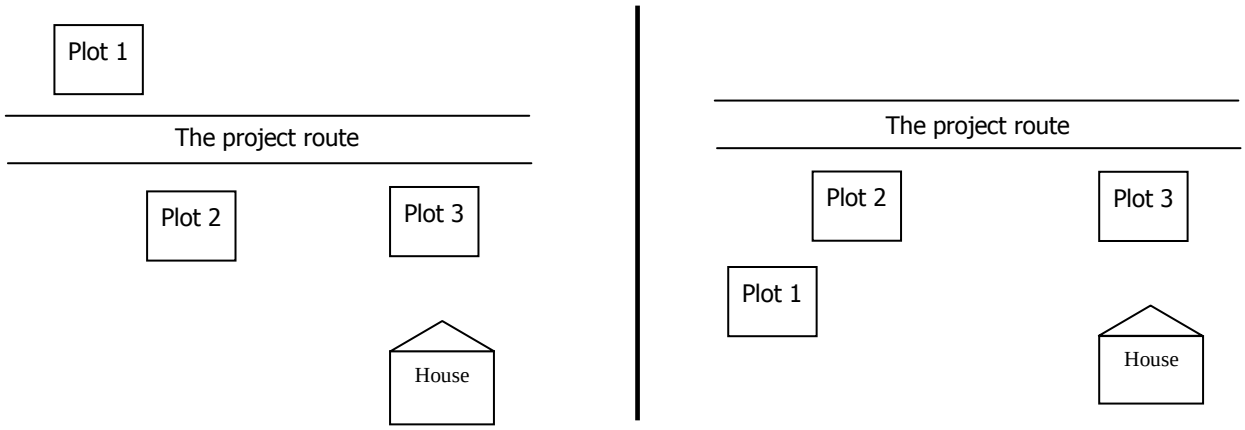
3. Measure for Prevention, Mitigation of Adverse Impacts of the Project on Environment in the Operation Phase

3.1. Mitigation of Impacts Causing Fragmentation of Production Land

a. Description of mitigation measures

Encouraging localities consideration and arrangement of land plots properly: the measures aiming to mitigate the impacts of fragmentation of agricultural land. The project will encourage localities to consider and arrange fragmented plots properly so that an owner only cultivates their land to one side of the road (figure 4.1).

Figure 4.1. Sitemap of Mitigation Measures of Impacts Causing Agricultural Fragmentation



Potential impacts - households must cross the roads to do farming at all plots

Mitigation measure - Household receive new plot and not have to cross the roads

b. Location and implementation time

The measure is implemented on the divided agricultural land.

c. Assessment of the Efficiency of Mitigation Measures and Residual Impacts

The said mitigation measure is a part of design contents of the Project, so it is highly feasible and preventive division at source. Residual impacts are insignificant. However, the measure depends on the ability of land change and land use planning of each locality.

3.2. Minimize impacts of local flooding

a. Description of mitigation measures

To minimize the impacts of agricultural land flooded, in addition to measures to enhance cross culverts with suitable apertures have been incorporated in the project design, the project will work with local land use organic dig the way to exalted to the field and to encourage local use conversion to perennial.

b. Location and implementation time

The plot is located between irrigation canals and roads in the area bypass through the An Thi town Km47+100 ÷ Km49+400;

4. Measures for Prevention and Response to Risks and Incidents

4.1. Response to Technical Incidents

With the aim of preventing technical incidents when assembling girders, the following measures shall be applied:

- The construction unit must submit the construction organization methods to the project's owner for consideration. The project's owner shall consider details of such plans based on specialized regulations and approve the most optimal and safest plan. The construction activities must strictly comply with the construction process as approved.
- The project's owner shall establish plan on vehicles and equipments for addressing technical incidents, including rescue team; organization and plans (leaders, implementation order) and necessary address to be contacted in case of emergency, including hospitals in Hai Duong and Hung Yen.
- The prevention measures shall be implemented during the construction of bridges.

4.2. Prevention of Fire/Blasting Incidents

The following measures shall be applied:

- Petroleum, oil used for construction equipments shall be stored in separated warehouses, away from potential sources of ignition; these warehouses are equipped with temperature monitoring devices and fire-alarming devices.
- Arranging extinguishers, fire water tank, and oxygen tank regularly on the site. Fire prevention/ fighting facilities shall be regularly inspected and maintained.
- Training, propagating to enhance workers' awareness and capacity of fire safety.
- The measures shall be implemented during the construction (24 months).

4.3. Prevention of Industrial Safety Incidents

With the aim of preventing accidents during construction, the following measures shall be applied:

- The project's owner shall set out labor safety regulations during construction.

- Establishing and implementing regular health check programs for officers and employees.
- Training and providing information on acquisition health.
- Workers are fully equipped with necessary protective equipments;
- Establishing adequate communication system to ensure labor safety during the project implementation.
- The project's owner shall establish rescue plans in case of acquisition accidents, including rescue team; organization and plans (leaders, implementation order) and necessary address to be contacted in case of emergency, including hospitals in Hai Duong and Hung Yen provinces.
- Measures for prevention and response to environmental incidents shall be conducted for the project during the construction (24 months).

4.4. Preventing incidents boat accident

Will apply the following measures:

- Equip signaling system: System signals will be located at the base Sat Bridge;
- Coordinate with authorities local waterways: To ensure safe navigation;
- Timely rescue organization: If the incident occurs, including the coordination of the local health authority.
- *Location*: Sat Bridge.

4.5. Demining

- According the Decision No. 96/2006/QD-TTg of the Prime Minister on management and performance of the tasks of sweeping bombs, mines and explosive materials and Circular No. 146 2007 TT-BQP Of September 11, 2007, guiding the implementation of the prime ministers Decision No. 96 2006 QD-TTG of May 4, 2006, on management and performance of the tasks of sweeping bombs, mines and explosive materials; demining work will be carried out in and around the construction site to ensure safety in the process of demining and safety confirmed by defense office handles explosive materials through economic contracts with the Project Owner.
- The area, depth and safety corridor of sweeping bombs, mines and explosive materials for Project is implemented to Decision No.95/2003/QĐ-BQP issued by Minister of Defense dated August 7th, 2003 on promulgating "technical process of detecting and dealing with bomb, mine, explosive materials".
- *Implementation time*: Prior to start Project's construction.

ADVERSE IMPACT PREVENTIVE MITIGATION MEASURES AND ENVIRONMENTAL INCIDENT PREVENTION, RESPONSE

1. Preventive, Mitigation Measures against Adverse Impacts of the Project on Environment in Pre-construction Phase

1.1. Mitigation of Impacts Caused by Land Acquisition, Relocation and Resettlement

For Impacts Caused by Relocation, Resettlement

a. Description of Mitigation Measures

In order to mitigate the adverse impacts of resettlement, in addition to the implementation of the General Plan on Compensation, Assistance and Resettlement, it is also required to consider the aspirations of displaced persons (DPs).

a1. Implementation plan for compensation, assistance and resettlement

The most effective mitigation measure is to implement well the plan on compensation, assistance and resettlement. In which, the compensation policy prioritize the donor's (WB) policy, with compensation and support which will be paid for all impacted persons in the compensation list available prior to the date of land acquisition announcement and price is based on the replacement cost.

- Responsibility of the units in relation to land acquisition and resettlement and implementation funds.
    - Following Document No. 1665/TTg-CN on 17/10/2006 of the Prime Minister on the implementation of land acquisition for transportation project construction, land acquisition will be separated as sub-project implemented by Thai Binh Provincial People's Committee. Dong Hung and Thai Thuy District People's Committees will implement the sub-project under direction of Thai Binh Provincial People's Committee through the *Boards of compensation, assistance and resettlement* set up by Dong Hung, Thai Thuy PC, of which the chairman is a district management officer and members must be officers from affected communes, and representatives of affected persons.
    - The Project Owner shall assist the Chairman of the Board compensation, assistance and resettlement to make plans for compensation, assistance and resettlement; securing adequate budget for timely payment of compensation, assistance and resettlement (cost for land acquisition is from State Budget Fund).
- General plan on compensation, assistance and resettlement
    - The general plan on compensation, assistance and resettlement of the project has been made in to a resettlement plan (RP). The overall objective of RP is to determine the compensation and resettlement program for the project to ultimately limit the number of people and assets affected by the project to ensure that all affected people will be

compensated for damage with replacement cost; and, there will be recovery measures to help them improve or at least maintain the standard of living and their ability to generate income as before the project.

- The plan of compensation, assistance and resettlement is briefly shown in the summary table of compensation, assistance and resettlement policies, and matrix of benefits.
- Measures to mitigate the impacts of land acquisition will be applied during land acquisition period and completed before starting construction.

a2. Consideration of aspirations of displaced people

- Taking consideration in arrangement of resettlement areas near the former place for the involuntary displaced households..
- Compensating by money so that, the displaced households can do on their own with supervision of their resettlement process to ensure that their compensation money is spent for its intended purpose.

b. Objects and implementation time

- *Applicable objects:* displaced households.
- *Implementation time*: completed before commencement of the project.

1.2. Regarding Impacts due to Acquisition of Agricultural Land

a. Description of Mitigation Measure

Households whose agricultural land is permanently acquired face not only income reduction, income loss, but also the difficulties in production recovery or earning new income sources. Therefore, it is not enough to compensate by the cost replacing the acquired land area. Measures for production support and income restoration plan shall be established and implemented to ensure that the households who are taken their land can restore their minimum income like before the acquisition. The specific measures include:

- *Compensation:* total area of permanently acquired agricultural land, as well as trees and crops on the land will be compensated with the price calculated at the time of detailed inventory.
- *Support for living stabilization*:
  - For households who lost 30 ÷ 70% of their production land: support for six months for non-displaced households and 12 months for displaced ones;
  - For households who lost more than 70% of their production land: support for 12 months for non-displaced households and 24 months for displaced ones.
- *Support for agricultural land in residential areas:*
  - For garden/ pond land in residential areas: extra support at 30 ÷ 70% of the price of the

adjacent land plot;

- For agricultural land in residential areas: extra support at 20 ÷ 50% of the price of the adjacent land plot.

– *Support for career change and job creation:* the households who lost their agricultural land will be supported for career change and job creation in cash with 1.5-5 times higher than the compensation for the agricultural land.

– *Recruitment:* for some simple jobs with low technical requirements, the project's Owner encourages the contractor to recruit local labors, in which households losing their agricultural land will be preferred.

b. Objects and Implementation Time

– *Applicable objects:* households whose land for rice growing and fish ponds along the route are permanently acquired.

– *Implementation time*: completed before commencement of the Project.

1.3. Regarding Impacts due to Relocation of Irrigation Canals

a. Description of Mitigation Measure

Aiming to prevent unnecessary impacts that disturb the production activities due to relocation of irrigation canals, the project is committed to:

– *Follow the design procedures*: the relocation of the irrigation canal system will be carried out and completed prior to construction of the project's items. While building a new irrigation canal system, the old ones is still used to ensure no disruption to people's production activities. After the construction is completed, water flow is diverted from the old canal system to the new ones. Then, the old system will be demolished to hand over the site for construction.

– *Adequate funds provision*: The project ensures to provide full funds for canal relocation (already included in the total investment of the project).

b. Objects and Implementation Time

– *Applied objects:* 6.31 km of relocated canal;

– *Implementation time period:* completed before commencement of the Project.

1.4. Assessment of the Efficiency of Mitigation Measures and Residual Impacts

To the best of our knowledge, at any scale, the land acquisition often makes long-term social impacts, especially in case of relocation and resettlement, although the land is recovered for national and public interests and the compensation is implemented according to the compensation, assistance and resettlement plan with the consent of the affected person. The fact shows that social contradictions shall be relieved if the Compensation Council can implement the followings:

- Extensively and deep propaganda about economic development policy and the compensation policy of the state to the affected households as well as their obligations and rights;
- Publicly notifying compensation price with the details of each affected assets. Publicly posting the compensation amount for each household;
- Making policies to support poor households and those under policies;
- Making policies to reward those who do hand over their site earlier than scheduled;
- Establishing job creating and vocational training plan for the affected households at request;
- Establishing plans to help lonely, sick householders, etc. in dismantling and relocating to new places;
- For common labors (usually unskilled ones with unstable jobs): Organizing vocational direction, training with classes for both vocational training and general education in place to meet the need of employers in the project area. For disqualified labors that end the age for both learning and working, they will be requested for low-requirement jobs such as guards, vehicle keepers, cleaners, etc and learn more at these units. However, these labors cannot be employed at the same time, so vocational training schools with educational support shall be opened to form groups of skilled labors;
- Guiding the way of spending compensation money: most of people, upon receiving a large amount from compensation, cannot know how to use such amount properly, which cause waste and risk of new evils burdening the society. As a result, specific instructions will be provided on the use of capital, especially instruction on investment in business and production or savings suitable to each object in order to stabilize their lives for a long time;
- Transparency in information about the project, the construction schedule to local authorities and affected households, policy/ plan on compensation, assistance and resettlement;
- To set up mechanisms for affected people to propose their wishes in compensation as well as complaints and feedbacks;
- The settlement of administrative procedures related to relocation is also a matter of concern because there are still many obstacles that cause people's lives cannot be in order, such as: applying for conversion of business type, business licenses, school transfer for their children, making family register, etc. To facilitate for smooth administrative procedures is also an imperative issue that requires attention by leaders to help people stabilize their lives after the land recovery;
- The project ensures adequate and timely funds for land acquisition and resettlement.

In addition, in the case of the Project, (i) because local reserve land is abundant, the most feasible and optimal measure is that households shall be relocated for resettlement in place according to their willing and funds shall be provided timely for their own resettlement; (ii) measures for mitigate the impacts of infrastructure encroachment are the commitments of the project in

accordance with the construction process not interrupting production activities; the costs for this this task have been prepared and included in total investment of the Project.

2. Mitigation Measures for Impacts of Site Demolition and Leveling

2.1. Dust Control during Demolition of Buildings

a. Measure description

- *Moisturizing by water spraying*: when demolishing the works on the hot dry days;
- *Covering by canvas:* Canvas shall cover the house demolishing area to prevent dust from spreading into the surrounding area;
- *Transporting waste*: Non-recycled waste shall be treated under the contracts signed with functional environmental companies..

b. Location and implementation time period

- *Location:* at building demolition locations (along the project route);
- *Implementation time*: 1 week.

2.2. Dust Control during Site Leveling

a. Measure description

Moisturizing by spraying water: spraying water at least 2 times per day. Water shall be taken from rivers, canals near the construction site and from groundwater in the project area.

b. Location and implementation time period

- *Location:* at 3 construction sites, including bridge site (Go Bridge) and road construction sites at Km95+000, Km105+000.
- *Implementation time period:* 1 month.

2.3. Noise Control during Demolition of Buildings

a. Measure description

With the aim of reducing noise pollution in the residential area, the following measures shall be simultaneously implemented:

- *Not demolishing and transporting scrap at night:* from 10pm to 6am
- *Using equipments with low noise emission*.

b. Location and implementation time period

- *Location:* at residential areas on approach road of Go Bridge - Km98+000; Km91+000 ÷ Km91+220; Km91+760 ÷ Km91+940. Km92+800 ÷ Km93+000; Km96+100 ÷ Km96+400; Km98+500 ÷ Km98+640; Km99+320 ÷ Km99+400; Km100+700 ÷ Km100+780; Km106+400 ÷ Km107+519.05;

– *Application time period*: 1 week.

2.4. Noise Control during Site Leveling

a. Measure description

– *Limitation on leveling time*: not leveling the site at night from 10pm to 6am.

– *Limitation on simultaneous operation of equipments*: operating only one machine, roller or grader for leveling. Stopping the engine of unnecessary machines.

b. Location and implementation time period

– *Implementation location:* At bridge construction site (Go Bridge) and road construction sites at Km95+000, Km105+000;

– *Application time period*: 1 month.

2.5. Mitigation of Impacts on Environmental Landscape

a. Measure description

– *Performing proper categorization and disposal:* upon demolition, waste will be categorized. Those which can be reused as crushed scrap, milled wood will be collected for fuel.

– *Collecting and selecting temporary gathering points:* the wastes generated shall be collected and gathered at some points on the construction site. The project will sign a contract with the environmental unit in charge of waste collection, treatment and transportation.

b. Location and application time period

– *Applicable location:* Building demolition locations along the project route, Go Bridge and road construction sites at Km48+000, Km54+500.

– *Implementation time period:* demolition duration (7 days) and preparation of construction site (1 month).

2.6. Assessment of the Efficiency of Mitigation Measures and Residual Impacts

These measures are highly effective and feasible thanks to simple techniques, dust will no longer spread; no construction at night shall eliminate noise generated at source; turning machines off in case of unnecessary under workers' awareness shall make noise level at sensitive objects lower than the permissible limits in accordance with QCVN 26:2010/BTNMT.

The waste categorization, collection and treatment will limit the amount of soil, rocks dumped at disposal areas. The waste collection is reasonable and solid waste treatment measure is consistent with the requirements of the Decree No. 59/2007/ND-CP. The proposed measures are feasible, effective and residual impacts are insignificant.

3. Request for Completing Preparatory Work for Official Construction

a. Description of Mitigation Measure

For the purpose of providing information about the project, the environmental protection measures of the project for the local community where the project is located in order to get social consensus, the following measures will be applied:

- *Disclosing information:* After the EIA report of the project has been approved by the Ministry of Transportation, the project's owner will establish, approve and publicly post the environmental management plan at the headquarters of the People's Committee of the communes for community consultation. Contents of the environmental management plan shall comply with Article 22 of Decree No. 29/2011/ND-CP dated 18 April 2011 of the Government on providing strategic environmental assessment, environmental impact assessment and environmental protection commitment. Thereby, local people will update the project's information and participate in inspection and supervision of implementation of the project's environmental protection measures.
- *Installing signs*: Signs on construction range shall be installed at the entrance of the project to inform people and not encroaching safe construction corridor. Warning signs shall be installed on the construction sites to prevent unexpected risks, accidents.

b. Location and application time period

- *Applicable location*:
  - Disclosing information in 09 communes/ towns in the project area.
  - Installing signs at the boundary of land acquisition and construction site.
- *Application time period*: before official construction.

4. Measures for Prevention, Mitigation of Adverse Impacts of the Project on the Environment during Construction

4.1. Mitigation of Impacts on Ambient Air Quality

General Regulations

- *Requirements for vehicles:* Vehicles ensure exhaust emission standards "TCVN 6438 - 2005 - Road vehicles. Maximum permitted emission limits of exhaust gases." Through the contracts, the project's owner requires the contractor to apply this standard to manage construction vehicles.
- *Requirements for applicable standards:* Limit of 0.3mg/m3 of Vietnamese code 05:2009/BTNMT - National technical regulation on ambient air quality is the criteria applicable to safety of dust concentration at sensitive objects with dust generation activities of the project during the construction phase.

4.2. Dust Spread Control in the Activities of Excavation, Backfill and Storing Materials

a. Description of Mitigation Measure

With the aim to prevent and mitigate dust spread from digging access road to bridges, the following measures shall be applied:

- *Moisturizing areas likely to spread dust*: Spraying water to prevent dust from spreading. Moisturizing water shall be taken from surface water in rivers, canals and ponds near the construction site.

Technical solutions:

1. *Spraying water at least 02 times a day.*
2. *Using standard nozzle instead of normal ones to make the surface equally wet and prevents muddy condition. Spraying water in multiple times instead of once in large quantities..*

– *Preventing dust spread at temporary storage yards*: Temporary soil storage years with volume of over $20m^3$ will be covered to prevent dust spread.

Technical solutions:

1. *Covering canvas is made of thick nylon fabric and towards sensitive objects (residential areas, schools, temples, etc).*
2. *The canvas is 30cm higher than the yard's surface.*
1. *The canvas should be reinforced with pile driven in the ground at least 20cm to avoid collapse.*

b. Location and implementation time period

– *Implementation location:* Temporary site compounds, dump sites along the Project's route;

– *Implementation time period:* 24 construction months.

4.3. Control of Emission from Construction Vehicles (horizontal leveling)

a. Description of Mitigation Measure

With the aim of mitigating dust pollution, toxic gases emitted from construction machines in the project area, the following measures shall be applied:

– *Using vehicles that meet emission standards* as defined in the general regulations.

– *Setting transportation areas:* Vehicles are only allowed to be used in the construction scope as regulated (Land acquisition ROW).

b. Location and implementation time period

– *Implementation location:* Entire scope of the project and at 03 jobsites.

– *Application time period:* within 24 construction months

4.4. Regarding Dust Generated during Transporting Materials or Waste Soil

a. Description of mitigation measure

With the aim of mitigating air pollution due to dust generated from vehicles, the following measures shall be applied:

– *Using vehicles that meet emission standards and transportation requirements:*
  - o Vehicles must ensure emission standards as defined in the general regulations.
  - o Transported materials must be covered to prevent dust spread.

Technical solutions:

1. *Transported materials will be moistened to enhance dust reduction.*
2. *Using vehicles with cap for transportation.*
3. *In case vehicles have no cap, using canvas to cover materials. Using oil canvas and tying into the truck frame to avoid flying.*

- *Controlling and managing the environment at which vehicles enter/ exit the construction site:* Each construction site has a number of gates for transportation. Vehicles are only allowed to enter at these gates.
- *Cleaning roads near the entrance to construction sites:* vehicles, before transporting, shall be cleaned from mud, soil on tires at the exit gates by mechanical methods.
- *Moisturizing areas likely to spread dust:* Spraying water to avoid dust spread. Water is taken from rivers, streams near the project area. Spraying frequency is adjusted at the request of the supervising engineer suitable to each dust generating source; possibility of cumulative impacts and dependence on sun/ wind level to ensure that dust generated in the construction sites shall not exceed the permissive limits
- *Using standard nozzle:* Using standard nozzle to wet surfaces at which dust can be generated, but not make the surrounding areas muddy.

b. Location and implementation time period

- *Implementation location:* Construction sites and material haul road.
- *Implementation time period:* Within 24 construction months.

4.5. Monitoring of Dust Pollution

a. Description of mitigation measure

Environmental monitoring during construction: Selection and implementation of monitoring dust at the densely populated or potentially affected places by dust accumulation. If the dust concentration is beyond the permissive limits, implement additional measures including: Considering the level of dust emissions of each activity, enhance control measures from the largest dust activity until the dust at sensitive objects reaches the permissive limits.

b. Location and implementation time period

- *Implementation location:* The method of "Environmental monitoring during construction" is implemented in the residential area on approach road of Go Bridge (Km98+1000), beginning point residential area at Km91+000, interchange at Km98+576, endpoint at (intersection at Km107+519,05).
- *Implementation time period:* 24 construction months.

4.6. Assessment of the Efficiency of Mitigation Measures and Residual Impacts

The proposed measures are based on the principle of mitigating dust from the source not only reduce dust effectively, but also reduce the dust pollution (if any) at sensitive objects, being residential areas. The proposed measures are highly feasible and effective. To increase the feasibility of the proposed measures, the cost of implementation will be included in total investment of the project and content made to the contractor as well as supervision content of

consultant will be based on bidding terms; under terms in the economic contract, the project will implement control measures to require contractors as well as the supervision consultant to follow the contract

5. Mitigation of Impacts on Community due to Noise Pollution

General Regulations

The aim is to set forth the mandatory contents applied for construction activities to comply with the legal requirements of environment protection in construction; concurrently, make sure the implementation contents effective in noise reduction without additional cost.

- *Requirements for applicable standards:* Limit on 70dBA and 55dBA during the day QCVN 26:2010/BTNMT - National technical regulation on noise is the criteria applicable to safety of noise of impacts generated from the project's operation during the construction phase.
- *Complying with regulations on construction organization: including*:
    - Arranging machinery/vehicles generating noise at a location with suitable distance so that the noise spread to residential areas not exceed 70dBA and schools, temples, etc. no more than 55dBA. Rapid decrease noise level is calculated on the principle of a double increase in the distance, the noise level reduces 3dBA.
    - All vehicles parked at the site will stop the engine;
    - All construction equipments and machines will be checked every 3 month on the noise level and make the necessary repairs and adjustments to ensure safety and not cause noise exceeding standards under the guidance of United States Environmental Protection Agency. Noise from construction equipments and machines - NJID, 300.1, 31 – 12 – 1971;
    - Prioritizing the use of machines and vehicles with low sound emission source object to construction near sensitive to noise;
    - Drivers must be well educated to act properly as shutting down vehicles when not necessary and avoid unnecessary noise action as pressing the air horn when not needed while the driving vehicles.
    - Normally, the fixed equipments such as generators will be place far away from residential areas, if not they will be placed in the tight box to reduce the noise (recommended the brick box).

Mitigation of Noise Impacts

a. Description of Mitigation Measure

- *Complying with general regulations.*
- *Controlling source noise level,* including:
    - Limiting construction in night time;
    - During the day when the construction is executed at the site 200m from residential areas,

select equipments/ machines with low sound sources;

- Vehicles used for transportation will be limited at the speed of 5km per hour.

– *Monitoring noise level:* Monitoring noise level at these sensitive objects - concentrated residential areas. When the measurement result shows that the noise level in this area beyond the permissive limits on daytime, strengthening measures to control noise at source and comply with the general provisions for the construction activities that cause noise in order to set additional measures, even temporarily stop working to adjust the measures until the noise level at sensitive objects reached the permissive limits on daytime, then continue construction work.

b. Location and implementation time period

– *Implementation location:*

- Along the construction route of roads and intersections at residential areas on approach road of Go Bridge (Km88+100); Km91+000 ÷ Km91+220; Km91+760 ÷ Km91+940; Km92+800 ÷ Km93+000; Km96+100 ÷ Km96+400; Km98+500 ÷ Km98+640; Km99+320 ÷ Km99+400; Km100+700 ÷ Km100+780; Km106+400 ÷ Km107+519.05;
- Vo Hoi and Dinh Vang temple, Vi Long pagoda, Nursing center, Thuy Ha secondary school.

– Implementation time period: 24 construction months.

Assessment on the Efficiency of Mitigation Measures and Residual Impacts

The reduction of the noise at sensitive objects is highly effective through the implementation of the general regulations as well as measures to reduce noise at source and monitoring noise at receiving objects to take appropriate corrective measures. In order to ensure the feasibility of the proposed measures, the contents of the proposed measures for contractors as well as supervision contents for consultant will be included in bidding terms; according to the terms of economic contracts, the project will implement control measures to require contractors as well as the supervision consultant to follow the contract.

6. Mitigation of Impacts on Surface Water Environment and Sediment

Regarding Impacts Generated from the Construction of the Route, Bridge approach Roads

a. Controlling the risk of degradation or soil spilling in embankment earthwork, transverse draining culvert and material storage

a1. Description of Mitigation Measure

With the aim of controlling risk of surface water pollution and reduced irrigation capacity in the irrigation canals and located adjacent to or cut through by the road due to sedimentation and erosion during excavation of road foundation, transverse ditch and material storage, especially

for the ponds partly acquired.

- *Limiting the construction scope:* The construction area is limited within land acquisition scope. The temporary organic soil yard will be re-used or soil for construction of road foundation shall be stored in this area. Arranging soil/ material yard at least 50m away from water sources during road construction.
- *Sensible organization of construction:* In case of rain, temporary yard will be covered with geotextile to prevent rain from causing erosion. The road foundation shall be executed and calculated to be compacted before the rain.
- *Placing mud-collecting barriers:* At the construction cut through the ponds and canals, placing barriers to keep sediment just let the water run out. Mud barrier is placed between the construction location and water sources. The barriers are made of geotextile, buried deep into the ground at least 10cm and reinforced to avoid falling. Mud was stopped before the barrier will be cleared so that it will not be spilled and allow water to drain easily, this kind of mud shall not be used for road foundation, but treated as disposed soil. In rainy season, the barriers should be regularly maintained at least every two day to be operated effectively. The barriers will be removed after the ground has been cleaned.
- *Creating temporary drains to collect water runoff:* Arranging temporary drains between the road construction site and water from ponds, canals and canals to collect rainwater runoff. The drains must be large enough to contain all rainwater runoff; placing nets inside the drain at suitable distance to collect sedimentation.

b2. Location and implementation time period

- *Implementation location:* Ponds at locations of Km91+920, Km95+220 ÷ Km95+380, Km95+800, Km96+240 ÷ Km96+280, Km96+390, Km96+800, Km97+100 ÷ Km97+200, Km99+700 ÷ Km99+920, Km160+300, Km106+855; canal Km96+300 ÷ Km96+800 (right side), Km105+500 ÷ Km106+100 and field rivers such as Bac culvert Km99+955, Ngoai Trinh culvert – Km106+484 ; Diem Ho village in sections of Km92+200 ÷ Km92+800, Km97+500 ÷ Km98+460;
- *Implementation time period:* 24 construction months.

Regarding Impacts Generaged from Construction of Bridges

a. Control of drilling mud from construction of bridge abutment, pier using earth drilling technology that use bentonite

a1. Description of Mitigation Measure

With the aim of preventing the risk of surface water pollution in the project area and damage to wetland ecosystems because drilling mud - soil mixed with bentonite and bentonite spilled in the construction of bored piles using bentonite of bridge abutment, piers, especially for piers adjacent to the flow edge.

- *Complying with general regulations:* It is strictly forbidden to dispose to the surrounding environment the drilling mud – soil mixed bentonite and bentonite spilled during the construction of bridge abutment, pier with earth drilling technology that uses bentonite.
- *Making partitions to prevent the spillage into the surrounding environment:* Making steel partitions in the flow direction (for the pier on the flow edge) and soil partitions on land. The partitions must be higher than the ground so that dirt cannot be spilled out. Area of the partition frame must be large enough to implement the entire construction process of the pile of foundation and abutment.
- *Strictly following treatment procedure of soil mixed bentonite and spilled bentonite:* Under construction process, each pile will have pit storing bentonite for reuse. After each construction of one pile, holes need to be filled. Therefore, soil and bentonite arise when drilling holes will be collected and buried in the pits. Bentonite spill and a soil mixed residual bentonite will be transferred into temporary yard, near the foundation construction area, abutment within the land acquisition, preliminary drying for easy transport. Then treated as ordinary solid waste, details are presented in the waste management section below.

a2. Location and implementation time period

- *Implementation location:* on the construction site of abutments, piers of Go Bridge;
- *Implementation time period:* 3 months of earth drilling for abutment/pier of Go Bridge.

b. Regarding risk of scattering of solid substances during construction of temporary bridge and superstructure of Go Bridge

b1. Description of Mitigation Measure

With the aim of preventing risk of pollution of surface water, wetland ecosystems and damage to irrigation, the measures for prevention and processing solid substances dropping during construction of bridges shall be implemented as follows:

- *Treating garbage, waste during construction of bridges:* It is strictly forbidden to dispose garbage, waste arising from the construction activities to surface water flow. Arranging trashes, temporary dump near the construction area for collecting garbage and waste. Then, moving to the centralized waste storage area of the site for further treatment as stated in the "waste management" section below.
- *Cleaning the concrete slabs before assembling:* The joint position of the beams, concrete slabs will be cleaned on land before assembling by breaking and pieces of excess concrete (mavia). These pieces of concrete are waste collected and treated as mentioned in the "waste management" section below.

b2. Location and implementation time period

- *Implementation location:* Go Bridge construction area;

– *Implementation time period:* 9 months of Go Bridge's superstructure examination.

c. Clearing, restoration of river beds and banks at bridge construction area

c1. Description of Mitigation Measure

With the aim of preventing the risk of long-term pollution of river water environment during bridge construction, the following measures shall be applied:

– *Cleaning river bed upon construction:* Removing all the temporary works including iron, steel, cofferdam, excess concrete by equipments such as excavators, bucket, crane, etc. After removal, waste will be collected and treated as solid waste at the site. Details are presented in the waste management section below.

– *Removing and stabilizing the riverbank after construction:* Removing all scattered rocks, cofferdam around piers, along the river and the bridge area and the banks are consolidated in accordance with the design.

c2. Location and implementation time period

– *Implementation location:* In Hoai river construction site of Go Bridge;

– *Implementation time period:* After completion of Go Bridge construction.

Regarding Impacts Generated from the Activities of the Construction Site

a. Regarding risk of loss of waste oil and water pollution by oil in oily discharge from motorbike maintenance station on the construction site

a1. Measure description

With the aim of controlling and managing waste oil as hazardous waste in accordance with current regulations and preventing oil in wastewater from motorbike maintenance station on the site; the following measures shall be applied:

– *Managing waste oil:* Machine oil shall be periodically replaced, stored in labeling barrels and placed in the roofed house with high floor to avoid flooding and waterproof, having barrier bank to easily collect in case of spilling outside. Waste oil will be further treated as described in the "waste management" section below.

a2. Location and implementation time period

– *Implementation location:* in construction site of Go Bridge (Km88+100), road construction sites at Km95+000, Km105+000;

– *Implementation time period:* 12 months for Go Bridge jobsite, 24 months for 02 road construction site.

b. Regarding domestic waste from worker's site huts on the construction site

b1. Measure description

With the aim of preventing risk of water eutrophication and toxicity of wetland ecosystems on rivers, canals due to waste from the site huts on each construction site, the following measures shall be applied:

- *Treatment of washing wastewater:* Washing wastewater will be reused for moisturize road surface or the places where dust can spread on site.
- *Treatment of life wastewater:* On each site, in addition to washing wastewater reused as mentioned above, the wastewater from canteens will be pre-treated not to create pollution sources forming organic matters in natural water by the decomposition of uneaten food. Wastewater from the canteens will be directed to the shallow sand tank (about 70cm deep), about 10m2 wide to avoid absorbing down the underground water system after through manholes with nets for collection of solid substances and waste in holes. After permeable through the sand to flow into the drainage system of the site before joining the flow. Replace the sand every week. 3m3 of sand replaced each week can be considered waste after preliminary washing and treated as waste soil.
- *Using movable toilets:* Using movable toilets at each site. Waste from portable toilets will be collected under economic contracts with the urban environment companies of the Dong Hung and Thai Thuy districts. The contracts will be executed before the project is prepared for construction..

c2. Location and implementation time period

- *Location:* In 03 jobsites including bridge construction site (Go Bridge) and road construction sites at Km95+000, Km105+000.
- *Implementation time period:* 12 months for Go Bridge construction site, 24 months for 02 road construction sites.

c. Regarding risk of pollution from rainwater runoff on the surface of the site

c1. Measure description

With the aim of controlling dirt penetrated into natural waters by rainwater runoff on the surface of the site, the following measures shall be also applied:

- *Drainage on site:* the plan of the site will be designed to ensure the collection of rain water on the surface of the site, not flowing through the area with surface contaminants such as petroleum store and does not cause flooding. Rainwater drainage system in the surface in construction sites includes collection ditches, and manholes. Rainwater shall be collected and directed to the canal through manholes with nets for garbage collection. After water in manholes shall be over flown through the grass before flowing into natural flowing water bodies.
- *Review of the location of discharging water into canals:* Inspecting the location of irrigation canal, canals and irrigation system every week to measure the solid waste collection and

other contaminants, to ensure that the contaminants from the site shall not follow the water infiltrated into irrigation water when opening culverts. Collected waste will be treated in the order presented in "waste management" section below.

- *Clean the surface of the ground:* Collecting the dirt on the ground to prevent the contamination of the surrounding water.
- A crushed stone layer should be paved on the surface of the construction site; this layer shall either reduce dust or being able to filter the dirt on the surface as raining.

c2. Location and implementation time period

- *Position:* In 03 jobsites including bridge construction site (Go Bridge) and road construction sites at Km95+000, Km105+000.
- *Implementation time period:* 12 months for Go Bridge jobsite, 24 months for 02 road construction sites.

Assessment on the Efficiency of Mitigation Measures and Residual Impacts

Most measures have good performance because they are established on the basis of prevention eliminating the risk of increasing levels of water pollution by TSS, floating objects. The measures are also highly feasible because the area is large enough, the amount of waste is not much. Water flowing from canteens to the environment only through preliminary treatment to capture the decomposed organic substances is a appropriate and feasible measure because the construction of wastewater treatment in aerobic tank in the field is not feasible due to large expenditures on construction and demolition after construction and create unpleasant odors on site. However, the water flow were pre-treated and joint into drainage flowing through the grass field before jointing into surface water have increased cleaning efficiency of organic matters in wastewater. Many measures comply with regulations on work safety, sanitation and construction organization. Therefore, the implementation contents for the contractor as well as the supervision consultant will be included in bidding terms; under the terms of economic contracts, the project will implement cross-check measures to request the Contractor as well as coordinators to perform well the contract. Feasibility of the recommended measure is high.

7. Regarding Impacts on Undergroundwater

Description of Mitigation Measure

In order to prevent the risk of groundwater contamination in earth drilling using bentonite, following measure shall be also applied:

- *Construction of cofferdam for stopping dirt water invading at the well casing*: the cofferdam surrounding the support pier of casing shall be installed during the time of drilling of each pile and maintained in the whole process of pile construction to prevent surface dirt water invading into the casing and into the drilling pits.

Location and Implementation Time Period

- *Implementation location:* Go Bridge (Km88+100).
- *Implementation time period:* during the construction of bore piles.

Assessment on the Efficiency of Mitigation Measures and Residual Impacts

Mitigation measures are easy to implement. The use of cofferdam will avoid the basic substance spill through wall affecting the groundwater quality. Residual impacts are insignificant.

8. Regarding Impacts on Soil Environment

For the Risk of Soil Pollution due to Waste Oil and Solid Waste

a. Description of Mitigation Measure

The risk of soil contamination from waste oil and solid waste arising from the operation of construction sites can be prevented through measures of solid waste and hazardous waste management (presented in section of waste management below)

b. Location and implementation time period

- *Implementation location:* In 03 jobsites including bridge construction site (Go Bridge) and road construction sites at Km95+000, Km105+000.
- *Implementation time period:* 12 months for Go Bridge construction site, 24 months for 02 road construction site.

Regarding Risk of Soil Spillage and Sedimentation of Eroded Soil Due to Rain during Excavation

a. Description of Mitigation Measure

Preventing risks of mud and soil sedimentation down to the low-lying land area (arable land or residential land) from the construction activities like excavation, backfill, temporary storage of material and unsuitable materials which cause degrade the quality of arable land or causing slippery, muddy in residential areas, following measures are applied:

- *Finishing construction and compacting tightly:* in the rainy season, from May to September, finish construction on each foundation and compacting to avoid erosion by rain, check the foundation before the rain, if case of erosion, reinforcing more.
- *Collecting and immediately transporting waste soil/rock to dumping sites:* Waste rock and soil will be collected on the temporary dumping yards inside the land acquisition area. This amount of waste will not be stored in long-term in the interim storage yards until construction is completed but moved to the dumping sites which are approved by local authorities. Especially in rainy season (from May to September), it will not be stored in the temporary dumping yards but will be transported to the dumping sites approved by local authorities immediately. In the case it could not be transported, waste soil and rock must be covered to prevent rain and quickly moved to the dumping sites.

- *Creating appropriate dumping sites:*
    - Dumping sites are not allowed at the residential areas or areas with high concentration of economic activities of which elevation is lower than the construction site elevation.
    - Within the land acquisition range, dump yards shall be arranged with the area of each yard shall not exceed $25m^2$ and stored soil piles shall not be higher than 1.5m to facilitate covering to avoid erosion in case of rains and dust dispersion in strong winds. The temporary dump yards shall be surrounded with fences made of geotextile. The geotextile fence shall be buried on the ground of 15cm to 20cm deep and supported by the poles driving deep down firmly.
- *Installing of mud barrier:* Not only in the rainy period, the installation of mud barriers for prevention of sedimentation and soil spill to surrounding area shall be implemented. Mud barrier are installed at the outer edge of the land acquisition border to surrounding land, according to the section of the route not to interfere the construction. Barrier made of geotextile, buried deep into the ground at least 10cm and reinforced to avoid falling. After finishing each section, the barrier is taken up, cleaned and re-used for the next stage.
- *Cleaning areas with spilled soil:* In the event of the mud spill to agricultural land along two sides of the new route, these areas will be cleaned and returned to the original state.

b. Location and implementation time period

- *Implementation location:* At the construction sites adjacent to the rice fields on the right side of the route Km91+000 ÷ Km91+500, Km92+100 ÷ Km92+360, Km92+500 ÷ Km95+700, Km95+800 ÷ Km96+100, Km96+800 ÷ Km98+450, Km98+600 ÷ Km99+760, Km100+100 ÷ Km100+500, Km105+000 ÷ Km105+300; rice fields on the left side of the route Km91+200 ÷ Km91+700, Km102+700 ÷ Km104+120, Km104+200 ÷ Km104+500, Km104+640 ÷ Km106+200.
- *Implementation time period:* 24 months.

Prevention and Treatment of Soil Compression

a. Description of Mitigation Measure

- *Preventing the risk of soil compression:* limit the scope of construction in the scope of land acquisition range and service roads by piles. Vehicles are allowed to operate within this limit only.
- *Handling in case of negligence:* In case of negligence, vehicles encroach beyond the limited scope; loosen land by plowing the abused land at least 0.3m deep.
- *Treatment of temporary land occupation area:* After construction, in the area which construction sites are located and service roads on site, in addition to cleaning surfaces, loosen land by plowing it at least 0.5 m deep before handing over to the owner.

b. Location and implementation time period

– *Implementation location:* At the construction sites adjacent to the rice fields on the right side of the route Km91+000 ÷ Km91+500, Km92+100 ÷ Km92+360, Km92+500 ÷ Km95+700, Km95+800 ÷ Km96+100, Km96+800 ÷ Km98+450, Km98+600 ÷ Km99+760, Km100+100 ÷ Km100+500, Km105+000 ÷ Km105+300; rice fields on the left side of the route Km91+200 ÷ Km91+700, Km102+700 ÷ Km104+120, Km104+200 ÷ Km104+500, Km104+640 ÷ Km106+200; 03 construction sites.

– *Implementation time period:* 24 months.

Assessment of Efficiency of Mitigation Measures and Residual Impacts

Mitigation measures developed on the basis of causes and impacts for the purpose of reducing immediately from source simultaneously with the processing of the consequences will be highly effective. Simple techniques are simple, suitable to the contractors' capacity. Residual impacts are acceptable.

However, it is inevitable that vehicles shall encroach beyond the defined boundary. In this case, the project is committed to restoring this land as stated above. On the other hand, during construction, contractors often avoid implementing many environmental measures if not directly influence the construction contents due to concerns about the progress and increased costs. Therefore, to increase the feasibility of the proposed measures, implementation costs will be calculated to be included in total investment of the project and the implementation contents will be included in the bidding terms. In terms of economic contracts, the project will monitor and ask the contractor to comply with the contract, ensure the feasibility of the proposed measures.

9. Regarding Impacts on the Ecosystem

Mitigation measures of impacts on the ecosystem are those for mitigation of dust pollution, mitigation measures of solid waste spillage from construction on the bridge, mitigation measures of waste oil from the activities on construction sites; waste from workers' living activities as mentioned above.

10. Regarding Impacts on Transportation

Regarding the Risk of Road Traffic Disruption during Construction of Go Bridge and Road Section Coinciding with Existing NH39

a. Description of Mitigation Measure

With the aim of preventing and limiting traffic disruption on the existing road when construction of existing road and intersection expansion and Go Bridge, the following measures shall be applied:

– *Complying with general regulations:*

  - Implement successive construction by each section.
  - Firstly, construction of the expansion road portion until its asphalt concrete layers, then

the embankment and pavement of the existing road part of NH39 will be started.

- Traffic can be operated on the expanded road part.
- The construction equipment and machinery will only operate in the construction site.
- The temporary dumping yards are arranged inside the land acquisition area. In case of soil dropping in the traffic roads, it is required to be cleared immediately by removal and clean up.
- Daily clean the road surface for transportation.
- The drivers of the project and the construction workers shall be trained of traffic safety and commit to comply with regulations on traffic safety.
- Coordinating with local traffic police for dealing with the problems relating to traffic safety in the project area.

– *Installation of signs:* Signs on guarding the construction area will be located on two sides along the existing road in the driving position easily observed by the drivers and at a minimum distance of 150m. Signs must meet the requirements of technical standards on traffic signs. After construction is finished, all signs will be removed

– *Installing guide posts and signal lights:* Guide posts are placed to limit the scope of the construction. Minimum height of guide post is 75cm with wide base to ensure no damage by travelling vehicles. All posts are painted in white color and with reflective panels to ensure a clear view both at daytime and nighttime. Posts are stable under normal traffic conditions as well as when there are high winds. Lamps on guide posts are blinking lamps type A (slow flashing lights), B (fast flashing lights) will be approved by supervision engineer prior to use according to the actual conditions.

– *Traffic Secure:*

- Guiding the traffic to ensure rational flow of traffic during AC paving of existing road surface. Traffic guide men shall be arranged equipped with flags to guide the traffic movement for construction vehicles and traffic on NH39.
- Construction of access roads and temporary bridge to ensure the traffic before construction of Go Bridge.

b. Location and implementation time period

– *Implementation location:* on the whole project route

– *Implementation time period:* 24 months.

Regarding the Risk of Road Traffic Accidents and Damage to Public Facilities during Transportation of Materials, Soils and Rocks

a. Description of Mitigation Measure

Prevention and control of risks of unsafe traffic caused by the spilled material causing

slippery on the national highways and provincial roads and the risk of damage to the local road with low solid level when the road is used to transport material or waste soil/ rock.

- *For the provincial road and national highway:*
  - Periodically hold training classes on road traffic law, the provisions of the shipping materials, unsuitable rock and soil and raise the transportation awareness for drivers.
  - Drivers are required to commit to comply strictly with the Law on road traffic control vehicles on the road.
  - The transport vehicles are required to ensure technical standards and according to rules on registration time period.
  - The vehicles carrying material or unsuitable rock and soil is specialized vehicles with lid. In case the trunk has no lid, it is required to use dedicated canvas straps on the truck for covering. Ensure materials and unsuitable rock and soil not dropping down in shipping process.
  - *Arranging reasonable transportation time*: during peak hours from 06:00 to 08:00 and 16:00 to 06:00;
- *When inter-commune roads are used for transportation:*
  - *Asking permission from local authorities*: Obtaining written consent from local authorities on temporary use of inter-communes for the right transportation purposes;
  - *Reasonable transportation organization*: Not transporting materials and unsuitable rock and soils in the winter time people using contemporary and holidays. Project responsibility to learn, but this time around and is committed to avoid shipping but this time with a particular region;
  - *Implementation of sanitary measures and return to original state*: Make sure you clean, safe in the process of using and maintaining the road, make sure people go back to normal, safe and restored to its original state before return to the local authorities.

b. Location and implementation time period

- *Implementation location:* NH10, NH39, communal and intervillage roads.
- *Implementation time period:* 24 months.

Assessment on the Efficiency of Mitigation Measures and Residual Impacts

In fact, it is hard to eliminate the impacts on traffic, especially in areas with high traffic density. The measures are based on the content of construction, traffic status every area and level of impact can mitigate traffic jams, especially to ensure the absolute safety of traffic. The impacts shall not be remarkable if well implementation of the mitigation measures.

Measures to mitigate the impact of active transport of materials recommended simple, feasible and highly effective. However, in order to ensure the residual impact acceptable, the

project will work with local authorities publicize contractor's transportation plan so that people have found not compliant enough plan attached to it required the construction company strictly implement the mitigation measures have been approved as well as additional measures as appropriate.

The mitigation measures for public utilities are committed to the project. The progress of the project depends on the implementation of this commitment. The feasibility of the proposed measures, therefore, is considered quite high. Residual impact is negligible.

11. Regarding the Impacts on Historical Relics

a. Description of Mitigation Measure

In order to enhance the awareness of protection and contribution to improve the value of relics, including material and non-material value of the historical relic, the following measures shall be implemented:

- *Education and propaganda:* raising the awareness of the responsibility to respect and protect the value of physical and intangible monuments, the project will invite officials in charge to exchange, train, and provide content about value of historical, cultural and regional works in the project area. Specific contents include:
  - History of the relic;
  - Value of the relic;
  - Contents related to relic protection as prescribed in 2001 Cultural Heritage Act;
  - Contents related to principles for identifying scope of protection area of the relic as regulated in Decree No. 92/2002/ND-CP dated 11 November 2002;
  - Violations that distort cultural heritage as regulated in Decree No. 92/2002/ND-CP dated 11 November 2002.
- *Disseminating construction rules:* The construction rules will include the terms prohibiting violations to the relic and the provisions related to the discipline and reward. The rules shall be disseminated to each worker in charge of this area.

b. Location and implementation time period

- *Implementation location:* Vo Hoi shrine, Dinh Vang temple, Historical Relics of Vi Long pagoda.
- *Implementation time period:* 24 months.

c. Assessment on efficiency of mitigation measures and residual impacts

Organization of civics education on the value of relics, the provisions relating to the protection of the heritage values of the government; Besides, the rules of construction project refers to the prohibitions workers violations with sanctions implementation will create viable conditions

prevent harming the value of ruins.

12. Regarding Impacts due to Concentration of many Workers

a. Description of Mitigation Measure

- *Management of workers:* The project offers conditions in camps, water, electricity will ensure that workers living in camps in the health care field during construction. Registration of temporary residence for workers; education construction workers respect cultural, religious, and local beliefs prohibit drinking while performing construction, prohibits gambling in public school and scheduling (hours and hours of leisure) for workers.
- *Coordination with local authorities:*
  - Coordinate with local authorities, including the Committee of the Vietnam Fatherland Front and the Women Association for the purpose of promoting public understanding of social evils, prostitution, and HIV epidemics in the region, etc.
  - Coordinate and work closely with local community hygiene as well as symptoms of the disease appear in the region
  - Coordinate and cooperate with local authorities in preventing and combating social evils;
- *Employing local labors:* Take the priority in using local unskilled workers, both women and men to do common works. For some jobs require training, the contractors will be selected from among local workers hired to train for new skills so they can carry out the works well.

b. Location and implementation time period

- *Implementation location:* 09 communes/towns of the project area.
- *Implementation time period:* 24 months.

c. Assessment on the efficiency of mitigation measures and residual impacts

Mitigation measures for impacts by the concentration of workers are also the regulations on work safety and sanitation project in the construction process should be included in the bid contract. This legal bond facilitates full implementation of the proposed measures.

13. Waste Management and Treatment

Establishing and Implementing Waste Management Plan during Construction

a. Description of Mitigation Measure

- *Establishing the waste treatment plan:* The project will be responsible for materials management and waste generated during the construction of a Waste Management Plan (WMP). WMP built for common waste (construction waste, etc.) and hazardous waste (waste oil). During the construction phase, WMP will be the construction units to use as a construction material for detailed procedures for managing and reporting on waste generated and moved to the materials used for the project. WMP is one of the test objects according to

the requirements stated in the environmental monitoring program.

- *Management of waste materials:* waste materials are organic soil, redundant concrete mortar, soil mixed with bentonite balance after the re-use and is stored temporarily in the dump or switch to leveling in the waste dumps will be identify and deal with a local following in the steps of the project.
- *Managing garbage and domestic waste:* Garbage and solid waste activities after collection will be categorized and stored at each site. Through economic contracts, the project will require the contractor to handle all kinds of waste according to Decree 59/2007/ND-CP dated 09/04/2007 on solid waste management and in accordance with local economy.
- *Managing waste oil and oily waste:* collected and stored according to the instructions of staff trained in hazardous waste management in the construction field. Waste oil will be collected and handled in accordance with Circular 12/2011/TT-BTNMT dated 14-Apr-2011 on hazardous waste management.

b. Location and implementation time period

- The measure of "establishing waste treatment plan" "managing waste" and "managing garbage" is implemented within 24 months in the whole project.
- The measure of "managing domestic waste", "managing waste oil and oily waste" is implemented within 24 months on 02 road construction sites and 12 months for Go Bridge construction site.

Assessment on the Efficiency of Mitigation Measures and Residual Impacts

Develop and implement the waste management plan during construction of project commitments and regulations on work safety, sanitation and organization of construction of a transportation project. Therefore, the project to ensure the implementation of previous commitments the state management agencies in each local environment and perform content for contractors as well as content supervision consultant will be taken on a Terms recordings; under economic terms in the contract, the project will implement control measures to require contractors as well as the supervision consultant to comply with the contract. The feasibility of the proposed measures, so be sure.

14. Measure for Prevention, Mitigation of Adverse Impacts of the Project on Environment in the Operation Phase

Regarding to the Impacts due to Run-off Rainwater

a. Measure description

Runoff water is an indirect object which creates impact sources related to waste and not related to waste on basin when it run through the basin surface. Normally, the amount of dirt on the basin surface is accumulated due to dry weather, which will reach equilibrium after 10 days. After 10 days, the deposition speed is similar to the movement speed caused by the turbulence of the air. The balance is maintained until appear the phenomenon of "clean". This phenomenon is

defined according to the condition of the wind speeds exceed 5.8m/s or rain exceeds 7mm/hour. Rainfall cleaned very fast dirt on the surface of the basin. From 20 ÷ 30 minutes later, the concentration of contaminants in storm water runoff is negligible.

Thus, the following measures will be applied to prevent the impact caused by storm water runoff which brings dirt on the road surface to the basin causing water pollution during operation phase:

- *Clean the surface periodically and before raining*: Implement regular cleaning surface periodically (about 10 days/times) and before raining to collect dust and dirt. Thus, the level of pollution in the runoff from the first rain is very small. After the first rain, there is no or very little dirt in the runoff of the following rain within 10 days;
- Implementation time: Mitigation measures are maintained in Project's warranty period (2 years).

b. Assessment on mitigation measures and residual impacts

Clean the roads to ensure the safety and well operation, profit is one of the goals of the Project owner. To ensure that the residual impacts may be acceptable, in the operation phase, the monitoring of surface water quality will be carried out to take appropriate corrective measures.

Measures for Prevention and Response to Risks and Incidents

Prevention of Fire/Blasting Incidents

The following measures shall be applied:

– Petroleum, oil used for construction equipments shall be stored in separated warehouses, away from potential sources of ignition; these warehouses are equipped with temperature monitoring devices and fire-alarming devices.
– Arranging extinguishers, fire water tank, and oxygen tank regularly on the site. Fire prevention/ fighting facilities shall be regularly inspected and maintained.
– Training, propagating to enhance workers' awareness and capacity of fire safety.

The measures shall be implemented during the construction (24 months).

Prevention of Work Safety Incidents

In order to prevent accidents in construction, the following measures shall be applied:

– The project's owner shall set out labor safety regulations during construction.
– Establishing and implementing regular health check programs for officers and employees.
– Training and providing information on industrial hygiene.
– Workers are fully equipped with necessary protective equipments;
– Establishing adequate communication system to ensure labor safety during the project implementation.
– The project's owner shall establish rescue plans in case of acquisition accidents, including rescue team; organization and plans (leaders, implementation order) and necessary address to be contacted in case of emergency, including hospitals in Thai Binh province.

Measures for prevention and response to environmental incidents shall be conducted for the project during the construction period (24 months).

Prevention of Incidents due to Natural Disasters (Storms, Heavy Rains, Floods, etc.)

a. Measure description

The following measures shall be applied:

- *Prevention of incidents due to storms, heavy rains*:
  - Arranging manpower to regularly monitor and update the information on storm information when the weather forecast bulletins of Radio Voice of Vietnam announcing the appearance storms approaching Thai Binh and Hai Phong sea regions.
  - Timely notify the storm situation to all staff and workers on site throughout the project to aware for preparation to deal with storms.
  - Check, screen, etc. keep all works and equipments, construction machinery which can be damaged by the storm.
  - Covering new structures with canvas when there are storms;
  - There are lightning conductor system, earthing for scaffolding, steel structures during the construction of the bridge to avoid lightning.
  - Stop all construction activities when there are rains and storms from level 5 or higher.
- *Prevention of incidents due to floods*:
  - In case of flooding (heavy rain, water rises quickly), quickly moving all construction facilities out of the site. Transporting petroleum, oil, chemicals first, then machines and equipments to safe storage places.
  - Setting out plans against flooding. More specifically, arranging places for gathering assets, goods, materials in case of moving.
  - Monitoring meteorological information regularly to make timely response plans.
  - Regularly getting contact with the rescuing units that are army, police and coordinating with local people.

b. Location and implementation time period

- *Implementation location:* whole project area.
- *Implementation time period:* 24 months.

15. Demining

a. Measure description

- According the Decision No. 96/2006/QD-TTg of the Prime Minister on management and performance of the tasks of sweeping bombs, mines and explosive materials and Circular No. 146 2007 TT-BQP Of September 11, 2007, guiding the implementation of the prime ministers Decision No. 96 2006 QD-TTG of May 4, 2006, on management and performance of the tasks of sweeping bombs, mines and explosive materials; demining work will be carried out in and

around the construction site to ensure safety in the process of demining and safety confirmed by defense office handles explosive materials through economic contracts with the Project Owner.

- The area, depth and safety corridor of sweeping bombs, mines and explosive materials for Project is implemented to Decision No.95/2003/QĐ-BQP issued by Minister of Defense dated August 7th, 2003 on promulgating "Technical process of detection and treatment of bomb, mine, explosive materials".

b. Location and implementation time period

- *Implementation location:* In the land acquisition area of the whole project.
- *Implementation time period:* Prior to start Project's construction.

GENERAL SOCIAL IMPACT ASSESSMENT

Potential Impacts and Mitigation Measures

Each Environmental Impact Assessment (EIA) Report or Environmental Protection Commitment (EPC) is respective for each component project which was implemented concretely and concurrently, each report has one chapter summarizing the environmental management and monitoring program. On the other hand, as required by World Bank, each environmental management plan shall be prepared for one component project and it is requested to well implement the mitigation measures outlined in the EMP for each component project to ensure that environmental issues of the project to be prevented and mitigated. This section is only a brief description of the main environmental problems of the entire project based on EIA report and EPC and is presented in Table 5.25 below.

Table 5.19: Environmental Impacts and Major Mitigation Measures

Main environmental impacts	Impacted locations and subjects	Mitigation measures
Air pollution due to dust generated during construction	The projects under Component C (rehabilitation) are likely to have strong environmental impacts on the ambient air due to dust emission especially, on NH38, NH39-1, and bridges on NH38B. Dust is defined to be generated at all construction sites, mining material locations, mixing plant locations and on transportation routes. Dust pollution is forecasted to be able to exceed the permissible limits and may be continuously happening in construction period.	Well implementation of EMP with the major measures. Besides, it is also recommended that the pavement recycling technology should be considered while selecting the construction methods for pavement repair work of the road work projects in component C (maintenance).
Pollution of Surface Water	All bridges and some route relocation sections, concrete batching plants, camps, and machinery and equipment maintenance areas in construction sites of the packages in component C is determined to endanger pollution of rivers and irrigation canals, mainly due to soil, mud and sewage spilling.	It is required to well performance of the EMPs and pay attention to establish a system of collection and treatment of wastewater, waste at the work camps and batching plants. It is recommended that construction should be quick and according to the schedule to ensure mitigating the generation in relation to waste and avoid the complaints of the community.
Solid Waste	Solid wastes of large amount of sediments are mainly concentrated in	Apart from well implementation of the EMP, disposal of solid

Main environmental impacts	Impacted locations and subjects	Mitigation measures
	the bypass sections and bridge construction locations at the packages of component C.	waste should be at a far distance away from the water sources, vulnerable positions (such as hospitals, schools and temples, pagodas). On the other hand, it is required to agreements with local authorities prior to construction commencement. It is recommended to consider and select pavement recycling technologies for repair the road pavement of projects under component B to mitigate solid waste generating. On the other hand, it should be flexible to allow local households to get excavated soil to backfill the their household works.
Impacts due to noise and vibration	The noise and vibration generating is considered to appear at all construction sites. However, level of noise and vibration impacts is assessed to be small to moderate.	EMP should be performed well
The social issues due to land acquisition and resettlement	The projects of component C are identified to have problems due to implementation of land acquisition and resettlement, which are mainly at locations of bypasses construction. Activity of land acquisition will occupy the land and arise involuntary resettlement impacting on livelihood of local communities.	Fully implement the measures outlined in the RP report. It is recommended that land acquisition and resettlement should be done thoroughly avoid ocrastination and prolong affecting the general schedule of the project. The project has designed opening the bypasses crossing crowded residential areas which are considered as a solution to mitigate damages due to acquisition of residential land and involuntary resettlement.
Damages of Public Facilities	The problem of damaging public facilities which include irrigation canals and rural roads are identified to mainly	Compliance with the measures in EMP. On the other hand, it is required to ensure that in

Main environmental impacts	Impacted locations and subjects	Mitigation measures
Including Irrigation Canals and Rural Roads	take place at the sites of C component projects. The damages to the irrigation canals will affect rice planting in this region. However, the problem of increasing traffic accidents in the operational phaseis estimated not only due to the wider roads and faster cruising speed, but mainly due to participants' sense of traffic (currently, it is an urgent problem of Vietnam transportation in general).	any case, not to interrupt the supply of irrigation water. In case of damage occurrence or lack of water caused by the project, it is required to make compensation for the damages. Increasing inspection and penalties to traffic law violation is a good measure. However, to do this, government agencies at governmental level and local authorities shall take the more important roles than the project owner or management unit of the route in the future.
Risk and Incidents of Industrial Safety and Traffic Safety.	The risk of unsafe traffic is forecasted to happen at all construction sites throughout both construction and operation phases. It is a fact that traffic accident rate is usually increased in operation phase because of many factors (poor awareness of traffic law, low quality of means of transport, there are too many elements participating to the traffic on national highways including animals and non-motorized vehicles, etc. while speed of traffic flow is increased) and the improved road pavement both facilitates the movement and development of economic activities and facilitates the control difficult issues to be increased	Compliance with the requirements stated in EMP; concurrently, it is required to coordinate with local traffic police or traffic inspectors to ensure traffic safety during the construction.
Incidents of Works Collapse	Bridge works of the project is evaluated to have potential risk of collapse causing loss of life and property and clogging flows when incidents may occur	Implement of EMP well and strictly compliance with the procedures and technical regulations for construction

Table 5.20: The role of responsible stakeholder

No.	Company/ Unit	Responsibilities
1	DRVN/ PMU3	DRVN is Project owner; PMU3 is representative of the project owner, is responsible for monitoring the overall implementation of the project. PMU3 will be responsible for financial management and for environmental related activities of the project throughout the construction phase and operation.
2	Environmental Officer (under PMU3)	As a department in charge of environment is set internally by PMU. This department has responsible for monitoring the implementation of WB's environmental safeguard policies in all stages and process of the project. These policies will be applied to all project items, including bidding, signing construction contracts, consultant contracts, assessment of documents and reports, extraordinary site checks, appointing departments, dealing with incidents related to environmental management, etc. Environmental Officers will advise PMU's leaders on environmental issues to ensure that the project implementation meets all requirements of WB's environmental safeguard policies.
3	CSC	The Construction Supervision consultant (CSC) will be responsible for supervising and monitoring all construction activities and for ensuring that Contractors comply with the requirements of the contracts and the EMP. The CSC shall engage sufficient number of qualified staff (e.g. Environmental Engineers) with adequate knowledge on environmental protection and construction project management to perform the required duties and to supervise the Contractor's performance. The Environmental Engineers shall be lead by a *Workplace Safety and Environment Supervisor (SES)* who shall have extensive experience (at least 5 years experience is required) in environmental management, supervision and monitoring on construction projects and be familiar with Viet Nam environmental legislatives requirements. The terms of Reference for the CSC shall be clearly stipulated in the contract signed between CSC and PMU.
4	Contractor	Based on an approved EMP, the Contractor will be responsible for establishing an EMP for each construction site area, submit the plan and receive opinions of relevant agencies, complete reports for approval and implementation. In addition, it is required that the Contractor get all permissions for construction (traffic control and diversion, excavation, labor safety, etc) following current

No.	Company/ Unit	Responsibilities
		regulations. The contractor shall be required to appoint a competent individual as the contractor‘s on-site *Safety and Environment Officer (SEO)* who will be responsible for monitoring the contractor‘s compliance with the EMP requirements and the environmental specifications. Approved specific EMP and relevant papers will be the basis for management and supervision in the future.
5	Independent Environmental Monitoring Consultant **(IMC)**	IMC shall be a professional and experienced unit in the environmental management field. IMC will, under the contract scope, provide support to PMU3 to establish and operate environmental management systems, offers suggestions for adjusting and building capacity for relevant agencies during the implementation period and monitor the Contractor’s EMP implementation plan in both construction and operation stages. IMC will also be responsible to support PMU3 to prepare monitoring reports on EMP implementation and submit these reports to DONRE for approval. The IMC shall have extensive knowledge and experience in environmental monitoring and auditing to provide independent, objective and professional advice on the environmental performance of the project. In order to minimize conflict of interests, the IMC shall not be working in the same organization performing the EMP work, be part of the PMU3, Environmental Officer (EO) – (under PMU3) or the CSC.
6	Ministry of Transport	Coordinate with DONRE to regularly check Contractor’s performance in accordance to current regulations, especially matters related to arrangement of fences and signs whether they are following regulations, cleaning works outside fences, excavation, travelling of construction vehicles, etc.
7	Ministry of Natural Resource and Environment (MONRE)	Coordinate with DONRE to regularly check Contractor’s performance in accordance to current regulations, especially matters related to arrangement of fences and signs whether they are following regulations, cleaning works outside fences, excavation, traveling of construction vehicles, etc.
8	DERAs (District Environmental Resources Agency)	With the role of state management in the environmental field, DERAs will be responsible for monitoring and management environmental issues from project implementation process in district area.