

**Hoa Binh Province's Department of Agriculture and Rural Development
CENTRAL PROJECT OFFICE (CPO)**

=====

**VIETNAM DAM REHABILITATION AND SAFETY PROJECT
(DRSIP-WB8)**

SOCIAL ASSESSMENT

**SUBPROJECT: REHABILITATING AND IMPROVING DAI THANG
RESERVOIR
– AN BINH COMMUNE –
LAC THUY DISTRICT, HOA BINH PROVINCE**

Hanoi, March 2015

INTRODUCTION

Social assessment has been developed as a tool for planners to thoroughly understand how the local residents affect and/or are affected by development activities. It is launched to identify main related persons and establish a suitable framework for their participation in the project selection, design, performance, monitoring and evaluation. Social impact assessment aims to ensure that the goals and drives for change may be accepted by the majority of local residents who are expected to benefit from the project and identify early existence of the project as well as the risks that may occur. A number of issues needed to be learnt in the social assessment include: (i) what the project's impacts on different groups are available, especially women and vulnerable groups; (ii) whether there is a plan to mitigate adverse impacts of the project or not; (iii) what social risks that may affect the success of the project are available; (iv) what organisational arrangements are necessary for the project participation and allocation; whether there are sufficient plans to build capacity required at respective levels or not.

The social assessment of Subproject on “Rehabilitating and improving Dai Thang Reservoir’s Safety” was performed by the Institute for Hydropower and Renewable Energy after local field in February 2015 with the support of Hoa Binh Province’s Department of Agriculture and Rural Development, Hoa Binh Project Management Unit, Lac Thuy District People’s Committee and An Binh Commune People’s Committee.

This report is called Social Impact Report (SA) for the Subproject on “Rehabilitating and improving Dai Thang Reservoir’s Safety, Hoa Binh province which is 01 among 12 subprojects for the first year of Project on Rehabilitation and Improvement of Dam Safety (DRaSIP/WB8). It is considered as a standard document in accordance with the requirements and procedures of the World Bank. The report provides information and results of the Project’s social impact assessment for the preparation of documents in safety policies such as Environmental and Social Management Framework (ESMF), Resettlement Policy Framework (RPF), Resettlement Action Plan (RAP), Ethnic Minorities Development Plan, and Environmental and Social Management Framework of the project.

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ABBREVIATIONS

Aps	Affected Persons
CPO	Central Project Office
DARD	Department of Agriculture and Rural Development
DMS	Detailed Monitoring Survey
DPC	District People’s Committee
DRC	District Resettlement Committee
EMPF	Ethnic Minorities Policy Framework
EMDP	Ethnic Minorities Development Plan
ESMF	Environmental and Social Management Framework
GOV	Government of Vietnam
HH	Household
IOL	Inventory of Losses
IMA	Independent Monitoring Agency
MOF	The Ministry of Finance
MOLISA	The Ministry of Labour, Invalids and Social Affairs
NGO	Non-Government Organisation
OP	Operational Policy
PAD	Project Appraisal Document
PPC	Provincial People’s Committee
PMU	Project Management Unit
PRA	Participatory Rural Assessment
RAP	Resettlement Action Plan
RPF	Resettlement Policy Framework
TOR	Terms of Reference
SP	Subproject
USD	United States Dollar
VND	Vietnam Dong
WB	World Bank

SUMMARY

Dam Repair and Safety Improvement Project (DRaSIP/WB8) is implemented based on the proposal of the Ministry of Agriculture and Rural Development and the World Bank (WB) in order to renovate and upgrade the system of reservoirs and dams to ensure better irrigation and partly supply running water for people living in the project area, contributing to the improvement of the efficiency of agricultural production in a sustainable way. The project is expected to be implemented in 2015 - 2020, including 04 investment items in 28 provinces.

Besides presenting the results of the economic survey of households for the Subproject “Rehabilitating and improving Dai Thang Reservoir’s Safety”, this social assessment report also draws an overall picture on the situation of economic development of the Subproject area.

Summary of the key findings of the survey

From the approach to livelihood resources of households, the survey analyzed socio-economic characteristics of households surveyed in human capital (the number of people and laborers in a household, education, occupation, health), natural capital (production land: agricultural land, forest land and aquatic land, land use right), physical capital (housing, properties used for living, properties used for production and business), financial capital (income, changes in living standards, poverty, loan), and social capital (community relations, relatives, authorities and their support) and considered impacts including potential impacts of the project. These resources were analyzed in combination with such factors as Gender, vulnerability and ethnic minorities

Overview on socio-economic situation in the Project Area:

In general, An Binh commune, which is located in the subproject area, and hamlets directly situated in the area benefiting from the subproject have difficult living conditions with many poor people and low income, are vulnerable to natural disasters and climate change, the economy of which are mainly based on agriculture,. People produce depends mainly on water from the reservoir. However, partly due to economic difficulties as well as prolonged construction process of canals and reservoirs in the area, which makes the system no longer suitable with the water demand of the people in the lowlands, Dai Thang Reservoir, built in the 1960s, is seriously degraded and unable to supply water as before. Some households at Thang Loi hamlet had to cease their production for a season because the available water source was too far away from their location.

The components of the project thus meet urgent needs and contribute to removing barriers to the development of the project area as well as other areas in the region

Potential negative impacts of the project:

Renovating and upgrading the system of reservoirs and dams are highly necessary for all provinces in the country, not only Hoa Binh. If the project is implemented and shows some positive effects in the coming years such as sufficient supply of water for production, improved channel surface, over a third of those surveyed had made

their production plans. This shows potential positive impacts of the project on the production activities of people in the project area. Agricultural production will increase; therefore, increasing the number of rice and farm produce seasons within the project area is highly demanded; however, this may lead to increased use of chemical fertilizers and pesticides and the risk of environmental pollution. On the other hand, the increase in rice production will increase the pressure on solving post-harvest problems, such as processing and preservation as well as consumption in order for farmers to benefit more in the value chain of rice.

The social impacts of the rise and transformation of economic activities provided that the project supplies sufficient water for production may be creating more jobs, especially for employed groups, reducing temporary unemployment after harvest time and contributing to poverty reduction. However, the project also has negative impacts such as land acquisition, possibility of conflicts on water use increased use of fertilizers and pesticides, and health risks. These impacts need to be considered and mitigation solutions are needed in project implementation phases.

Potential positive impacts of the project

The project will bring many benefits to the people, namely increased agricultural productivity and output, increased number of farming seasons, aquaculture development thanks to enhanced irrigated area, disaster risk reduction; Increased non-agricultural production and business through agricultural development, increased income, and improved living standards; more jobs, especially for employed groups as main occupation or auxiliary occupation, reduced temporary unemployment after harvest time and contributing to poverty reduction. The positive impacts include a large part of disadvantaged groups as beneficiaries, those who have production land directly benefiting the most from irrigation. The supply of adequate water will serve economic development of the project area.

However, the project also has negative impacts such as land acquisition of 12 households, the 14,935 m² area of permanently affected agricultural land of 10 households, the 500 m² area of affected forest land of 2 households, and the 4,438 m² area of temporarily affected land of 2 households. In addition, for sewer construction, water will be cut, causing water shortage for agricultural production in 3 hamlets in the lowlands which are Dai Dong, Thang Loi, and Dai Thang. These 3 hamlets have Muong people accounting for over 90% of the population, thus forcing the project owner to have appropriate support measures for the land areas of this group of people. On the other hand, the increase in agricultural production such as expanding crop and aquaculture area may pollute water due to increased demand for fertilizers, pesticides, and industrial food.

Part I: Objectives and Methodology

1.1. Objectives

The purpose of this social assessment (SA), conducted in an integral manner with environmental assessment for this subproject, is two-fold. First, it examined the potential impacts of the subproject – positive and adverse impact – on the basis of planned project activities. Second, its findings inform the design of measures addressing identified potential adverse impact and proposing community development activities that are relevant to the project development goal. For identified adverse impact that could not be avoided, consultation with local people, governmental agencies, project stakeholders, etc., were carried out to ensure affected peoples will be appropriately compensated for, and supported in a manner that their socio-economic activities will be promptly and fully restored to the pre-project level, at least, and that their livelihoods will not be worsen off, in the long run, as a result of the subproject.

A gender analysis was also done as part of the SA to understand underlying gender dimensions (from project impact perspective) to enable gender mainstreaming to promote gender equality, and enhance further the development effectiveness of the subproject, and the project as a whole. Depending on the magnitude of the identified potential project impact, and the project development objective, a gender action plan and gender monitoring plan were prepared (Please see Appendix B6).

1.2. Methodology

To ensure all potential impact could be identified during project preparation, the SA was conducted through series of consultations with various project stakeholders. A particular focus was maintained on households who are potentially affected (both positively and adversely). The research techniques employed for this SA include 1) review of secondary data, 2) field observations; 3) focus groups discussions/community meetings, 4) key informant interview, and 5) households survey . A total of 102 respondents participated in the SA exercise for this subproject, of which 70 people participated in the household survey (quantitative), and 32 people participate in focus groups discussions, community meetings, key informant interview (qualitative). In-depth interviews and group discussions involve those from the survey sample and key personnel at provincial, district, commune levels. Each group has 6-8 people. (For the sampling method, see Annex B1)

Part 2 hereof presents SA Findings (both in terms of positive and negative impacts), including the results of gender analysis. Part 3 here of summarizes SA Results and Related Recommendations. Please note that a gender action plan and gender monitoring plan are presented at Annex B6 of this SA) (Community Health Management Plans; Community Consultation and Communication Strategies; are detailed in Annexes B3, B4 respectively).

1.3. Ethnic Minority Screening

As part of the social assessment, where ethnic minority (EM) peoples are present in the subproject area—as confirmed by the EM screening (as per Bank’s OP 4.10), consultation with them were carried out in a free, prior, and informed manner, to

confirm if there is broad community support from affected EM peoples for the subproject implementation. EM screening was conducted as per Bank's OP 4.10, and was done the scope and coverage of the social assessment vis-à-vis (as 4.01) the environmental assessment as follows:

Beneficial areas of the Sub-Project: Thang Loi, Dai Dong, Dai Thang, Duc Binh villages

Affected areas of the Sub-Project:

+ Due to land acquisition and construction: Duc Binh village

+ Due to water cut-off for dam rehabilitation: Thang Loi, Dai Dong, Dai Thang villages

90 % of affected households are Muong people. The total number of affected households is 244 households included 223 Muong households with 821 people.

Various inquiry techniques, such as focus groups discussion, key informant interview, field observation, and households survey, were employed to collect feedback from the EM peoples. Free, prior, and informed consultation (FPIC) – as per Bank's OP 4.10, were maintained during the consultation process. So that affected ethnic people in 3 villages will be supported.

Base on the results of social assessment and consultation => Preparing Ethnic Minority Development Plan for the Sub-Project is necessary.

PART II: FINDINGS

2.1. Results of households survey

2.1.1. Population

The average number of household members in the project area is 4.0, higher than that in the national average figure, 3.89 (2013 Statistical Yearbook of Viet Nam). Such household population differs by hamlets, income group, family's bread winner, woman or man.

On the basis of ethnic group, the average household population of a Kinh family and ethnic minority are 3.9 and 4.1, respectively. Depending on the gender of the family's bread winner, the average household member of a matriarchal family is lower than that of a patriarchal family (3.9 and 4.1, respectively)

The average household member of 4 hamlets is different from each other. Families with only 1-2 members account for 16.8%, families with 3-4 member family represent 48.9% and families with 5-8 members make up 34.8%. There is no family having at least 9 members.

Men are mainly the family's bread winner of large families. Patriarchal families with 5-8 members accounts for 39.6%. The quantitative survey has an explanation for this "Due to the high number of family members, women normally stay home to take care of children, men find a job to feed the family. Therefore, the women are financially dependent" – Women in Dai Dong hamlet.

According to the analysis of household population in the surveyed project area, most families have from 3-4 to 5-8 members. There are few families which have 1-2 members and no family has 9 or more members.

Therefore, census statistics shows that the elementary family in the project area has an increasing trend compared to the province's general situation. However, the percentage of such family model is still low (lower than 70%) in comparison with previous studies. Large families and families with various generations sharing a house still hold a big percentage.

2.1.2. Occupation

Among main occupations of family members, farming and forestry account for the highest percentage, 53.1%, followed by student (24.7%) and office staff, employee, worker (lower than 10% for each kind of work). Handicraft is included in the occupational structure of Kinh people in the project area but not of Muong people. So, agriculture and forestry is leading the socio-economy of the project area where most of the labours concentrate.

Table 2-1: Main occupation of labours (of working household members)

	Incapacitation	Agriculture, forestry, fishery	Trade, service	Office staff	Student	Handicraft	Employee	Unemployed	Not applicable	Other occupation
Total model	4.3	53.1	2.6	3.2	24.7	0.6	4.9	0.8	3	2.8
<i>Peoples</i>										
Kinh	4.2	52	3	3.5	26.5	2.6	3.6	0.2	2.1	2.3
Ethnic minorities	4.8	53.9	1.2	2.4	23.6	0.0	6.1	1	6.1	1.5

Compared to the reality, analysed figures are consistent with the commune’s general situation. The commune is an agricultural place away from a town or main road. Therefore, the main occupation of household members is farming.

The numbers of Kinh families earning from agriculture, forestry and fishery is lower than that of ethnic minorities (52% and 53.9%). The contrary occurs in handicraft, ethnic minority doesn’t work in the handicraft while 2.6% of Kinh families do.

In general, the main livelihood is agriculture, forestry, in which 2-season rice growing and 1-season of vegetables is common. The area of acacia, the main forest tree, is being expanded. Therefore, the main concern of local people is the irrigation, pond safety and water supply. This is especially important to the agriculture of downstream area where local people cannot handle the water supply actively.

2.1.3. Education

Approximately, 94.6% of project area’s population has received education from elementary to college/university level. The number of people finishing secondary and high school accounts for more than 64.6%, whole those finishing college/university or vocational school represent 5.5%. This figure is much lower than Hoa Binh’s average number. 0.2% and 5.2% of the population are illiterate or uneducated respectively. The uneducated percentage of hamlets (5.2%) is lower than that in Statistical Yearbook of Viet Nam 2013. Among hamlets, there is no big difference.

An interesting fact is that the percentage of illiterate people in the ethnic minority is low at 0.6% (mostly elderly (60-and-above year old) people). According to living standard, the percentage of illiterate people of group 1 (the poorest) is only 0.9%.

Table 2-2: Education level of family members (Unit %)

	Highest education level							
	illiterate	Elementary school	Secondary school	High school	Vocational school	College/University	uneducated	Unknown
Total model	0.2	24.5	39	25.6	4.8	0.7	5.2	0.0
<i>Ethnic group</i>								
Ethnic minority	0.6	19.4	44.8	24.8	4.2	0.0	6.1	0
Kinh	0	27	33.5	28.3	5.4	1.2	4.6	0.0

Source: Survey statistics

4 hamlets in the survey model have no dropout case. This should be encouraged because An Binh is a mountainous area with quite difficult conditions. After talking with local people, it can be seen that they have quite modern way of thinking. Studying is the best chance to get away from rural living and get a job. “The result partly comes from the effort of communal level governmental agencies”

2.1.4. Health

Statistics shows that up to 30.2% of local families have had members suffering sickness within the last 12 months (See Table 2-3). This figure is not high. 90.5% of local people have medical insurance. This coincides with the policy of free medical insurance card hand-out for poor and marginally poor families or families of ethnic minority having difficulties or serious difficulties. However, qualitative study shows that the card using rate is not absolute. Some people, especially people of labouring group, hardly use the medical insurance card. There is no big difference in sickness status among hamlets, between Kinh and ethnic minorities.

Table 2-3: Health and health care status

	Sickness over the one last month	Covered with medical insurance
Total model	30.2	90.5
<i>Ethnic group</i>		
<i>Kinh</i>	29.3	90
<i>Ethnic minority</i>	31.2	91

Source: Survey statistics

Through the survey, in-depth advisory and group discussion between social experts and the community, over the last 5 years, the whole commune has 10 persons suffering from cancer each year, mainly stomach and liver cancer. One explanation to this fact is “the alcohol drinking habit, dirty water for cooking”, said the local people. All

families use water from wells for cooking and drinking. Families with members having cancer have to spend hundreds of million dongs. They have financial problem and become poor.

According to local people, the main cause with adverse impacts on people's health is the lack of good domestic water supply. People have to use water from well which is considered not safe by local people. Social and environmental consultants build a plan to test water samples in the project area.

Moreover, expenditure on health care should be considered. This is an important index showing how much local people take care of their health. Up to 51% of local people spend no money on health care and check-up. The rest evenly divided into 5 levels, lower than VND 1 million, VND 1-3 million, VND 3-7 million, VND 10-20 million and above VND 20 million. Family falling into the last group normally has member suffering from severe diseases (cancer, accident)

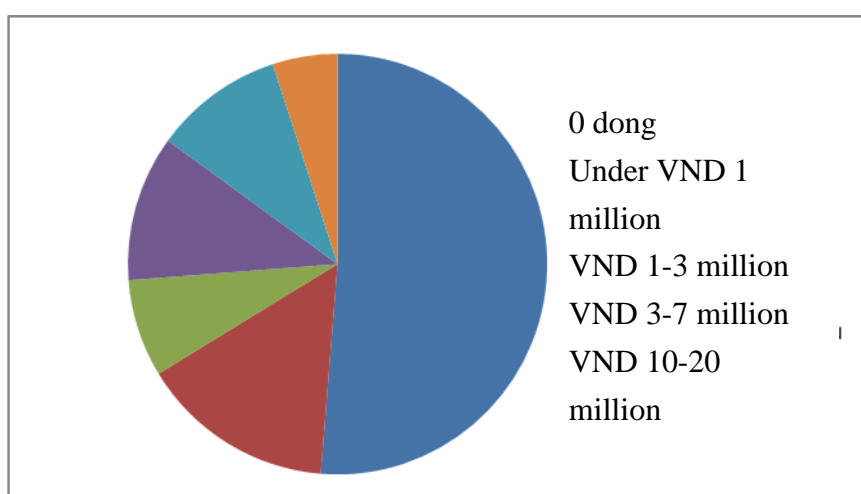


Figure 2-1: Expenditure for health care

2.1.5. Water supply

Washing

97.5% of local families use well water for washing. Other water source is little used. They occasionally use other water from canal, rainwater and reservoir to wash blanket. Although there is no system or construction built by the government to improve the commune's clean water system, there is no sign of skin disease.

Drinking and cooking

Like washing water, cooking water is not specifically tested for quality. However, local people still use water from well and rainwater for drinking and cooking. Water from well is used the most. Local people wish to have a clean water system. Water supply quality in this area is not assured.

Regarding 3 hamlets (Dai Dong, Thang Loi and Dai Thang), 100% of interviewees took water from Dai Thang reservoir.

Regarding Duc Binh hamlet, people use water from Goc Da Reservoir.

As a result, in project area, domestic water supply doesn't satisfy quality and quantity

requirements. Therefore, holding water during shortage period is an important task for the local people in the project area.

2.1.6. Hygiene

In the project area, 61.25% of local families use qualified toilets, 37.5% of which are two-chamber toilets. The percentage of compositing and semi-compositing toilet is low, accounting for 23.75%. This figure is lower than that of Hoa Binh province. 30% of local family use simple toilets. Especially, 3.75% of local family doesn't have toilets. They use toilets of their parents. However, it is a good thing that no family uses the pond or river as toilet.

The statistics unveiled that 39.6% of ethnic minority families have unclean toilets, much higher than that of Kinh people (9.4%)

Table 2-5: WC type owned by surveyed households (% of local family)

	No toilet	Qualified toilet			Unclean toilet		
		Compositing / Semi-compositing toilet	Two chamber toilet	Total	Simple toilet	toilets on river/pond	Others
Total model	3.75	23.75	37.5	61.25	30	0.0	5
By ethnic group							
+ Kinh	0	40.6	34.4	74.5	15.6	0.0	9.4
+Ethnic minority	6.3	2.5	39.6	52.1	39.6	0.0	2.1

Source: Survey statistics

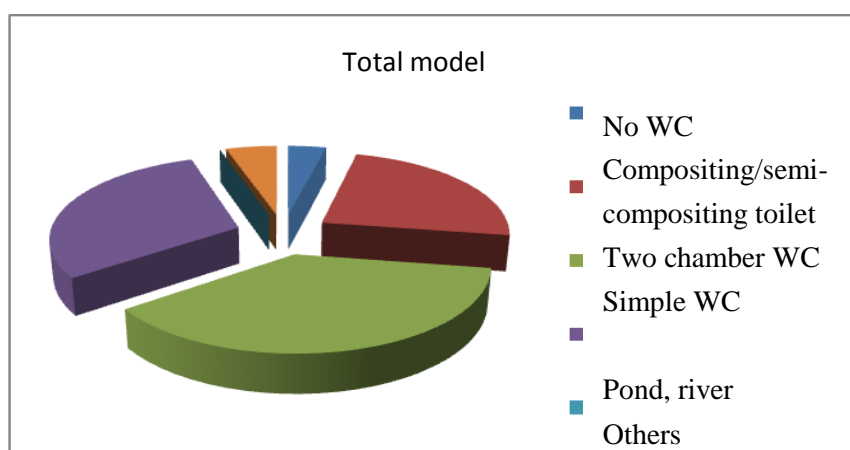


Figure 2-2: Percentage of WC type in the project area

2.1.7. Household income and living standard

Within 4 social groups: Fairly rich, average, in difficulty, and poor, the number of fairly rich families in 4 hamlets is low. The figure of families in difficulty and poor ones is 12% and 10%.

Table 2-6: Self-assessment of living standard (%)

	Fairly rich	Average	In difficulty	Poor
Total	2.5	75.5	12	10
<i>By ethnic group</i>				
+ Ethnic minority	2.1	75	12.5	10.4
+ Kinh	3.7	75.4	11.7	9.2

Source: Survey statistics

Regarding ethnic minority, the percentage of poor family or family in difficulty is 22.9%. This figure is higher than that of Kinh people, 20.9%. However, there is no big difference between Kinh and Muong people.

According to the gender of the family owner, matriarchal families have much higher rate of poverty and difficulty than that of patriarchal families (41.2% to 16.6%). This fact can be explained by quantitative method. Matriarchal families normally lost the husband or the husband is incapable of working. Therefore, the pressure is put on the shoulder of the woman while the chance for women to approach jobs to increase the income is limited in such an agricultural commune.

Therefore, the income and living standard of families living in the project area is generally low. Accumulative percentage of poor families or family in difficulty in 4 hamlets is from 18-23%. People of ethnic minority and matriarchal families have the lowest living standard. With the hope that the rehabilitation and improvement of Dai Thang reservoir safety will enhance the chance to access to clean water supply, increase productivity and partly change the life of local people, especially women and people of ethnic minorities.

The statistics shown in Table 2-7 unveiled that the most common furniture in the surveyed hamlets is TV, bicycle/motorbike, and cellphone. There is no big difference between Kinh and people of ethnic minorities. Furniture showing the change in living standard, knowledge of local people such as computers, air conditioners, washing machines doesn't appear in the house of local people.

Table 2-7: Furniture (percentage of household possession)

	Duc Binh	Thang Loi	Dai Dong	Dai Thang
TV	93.8	78.8	79.7	82.6
Internet	2.5	0	0	0
Motor boat	0	0	0	0
Bicycle/Motorbike	86.8	78.2	84.1	79.4
Telephone	8.8	3.0	3.6	2.8
Cell phone	97.5	93.9	84.1	90.2

Automobile (except for farm vehicle)	1.3	0.0	0.0	0.0
Refrigerator	67.5	42.4	47.7	41.8
Air conditioner	0.0	0.0	0.0	0.0
Computer	2.5	0.0	0.0	0.0
Washing machine	0.0	0.0	0.0	0.0
Gas cooker	38.5	30.3	24.5	29.4
Electric water heater	0.0	0.0	0.0	0.0

Source: Survey statistics

2.1.8. Some problems on livelihood and social security

a. Loans

The survey shows a fact regarding the money-borrowing in 4 hamlets: 41.5% of the asked families borrowing money from projects (Project on poverty reduction and hunger eradication, Project on education support, Project on plant structure development, etc.) and from policy banks, Agribank.

Regarding the scope of loans: A loan with the value of under 30 million VND, 30-60 million VND, and 60 million VND or more, account for 65.9%, 19.2%, and 14.9%, respectively. An explanation to such low loans (under VND 30 million) is that families do not dare to make a big investment while the production condition, livelihood is not secured and they are not able to make a big profit to pay the interest. Families who borrow more than VND 60 million have an intention to do a business, forest development and production, etc. Moreover, some families borrow the money because they have a member suffering from sickness or cancer. Therefore, the investment into agriculture and irrigation infrastructure for production support will encourage local people to borrow money for their business.

Table 2-8: Lending and borrowing reality in hamlets of project area

	Families who borrow money (%)	Loan range		
		Under VND 30 million	VND 30 - 60 million	VND 60 million or more
Total model	41,5	65,9	19,2	14,9
Duc Binh	22,7	55,6	27,8	16,6
Dai Thang	53,3	78,1	18,8	3,1
Dai Dong	39,7	69	17,2	13,8
Thang Loi	56,5	56,4	18	25,6

Source: Survey statistics

Through quantitative survey, 13 loan purposes are specified. Main purposes are livestock, forest planting and agricultural production development, followed by education.

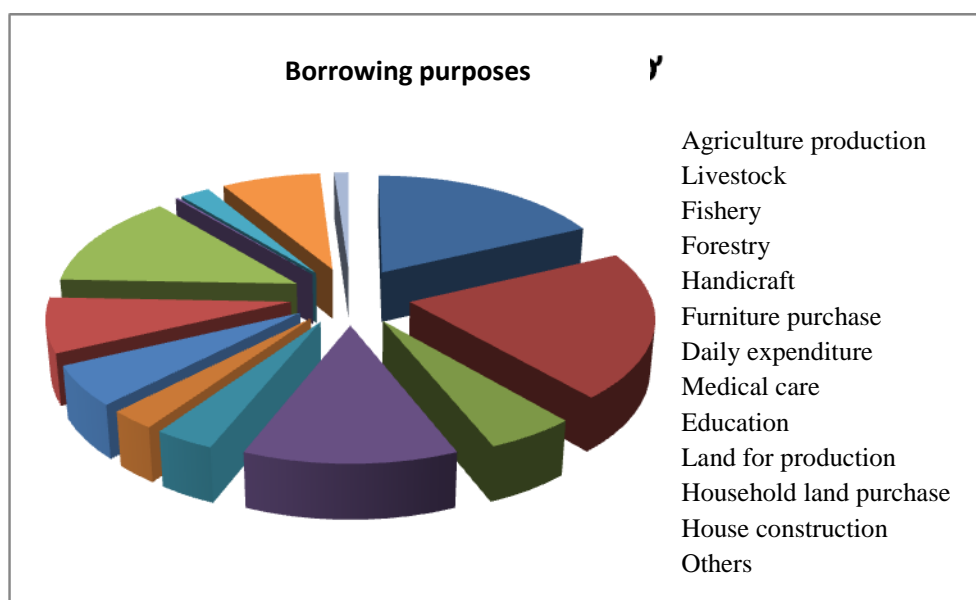


Figure 2-3: Borrowing purposes of local people in the project area

The above figure shows various borrowing purposes. Most of the loan is used for the education, livestock and agricultural production. Those are the main concerns and borrowing motive of local people. Other purposes such as fishery and handicraft account for a smaller portion. Loans for education hold a big part.

Through the comparison of borrowing purposes in each hamlet, the statistics clearly shows that livestock, agricultural production, forest planting account for the highest portion. This happens because local people still focus on the production development and living stabilization. Therefore, the project will open opportunities for local people to increase their income and encourage them to make a loan for their intention.

b. Social security

Recently, social security system for the farmers includes: voluntary medical insurance, voluntary social insurance, social support, hunger eradication-poverty reduction, fundamental social service delivery.

Voluntary medical insurance is carried out by the Government and non for profit. Farmers can join the insurance voluntarily to get health care from medical insurance fund when being sick. With this method, insured of medical insurance will pay their medical bills without support from other entities.

Voluntary social insurance for farmers includes farmers at the age of 15 - 60 (for male) or 55 (for female). After paying social insurance for 15 years or more, the beneficiaries being 60 (for male) or 55 (for female) and above can join voluntary social insurance (for as long as their social insurance has lasted for 20 years) to get their pension and death compensation.

Social support for farmers is an assurance and support from the Government, domestic and international community on the income and other living conditions through various methods. This support is applied to those who have difficulties or, in this case, farmers who cannot afford for the minimal living standard for themselves and their family. Beneficiaries don't contribute to this support. Most of the support comes from

the Government. The rest comes from organisations, individuals, and so forth. Social support exists with two forms, namely occasional and regular support.

Everyone may face difficulties at any time during their life. They can find the support from individual/organization to overcome the problem. Through the survey of difficulties needing financial support, the figure shows that local people mainly seek the support from parents, children, siblings and local government/organization. The support from friends and neighbours is not much, no more than 2%. It can be seen that along with the parents, children and, the local government/organization play an important role in timely offering support local people in difficulty.

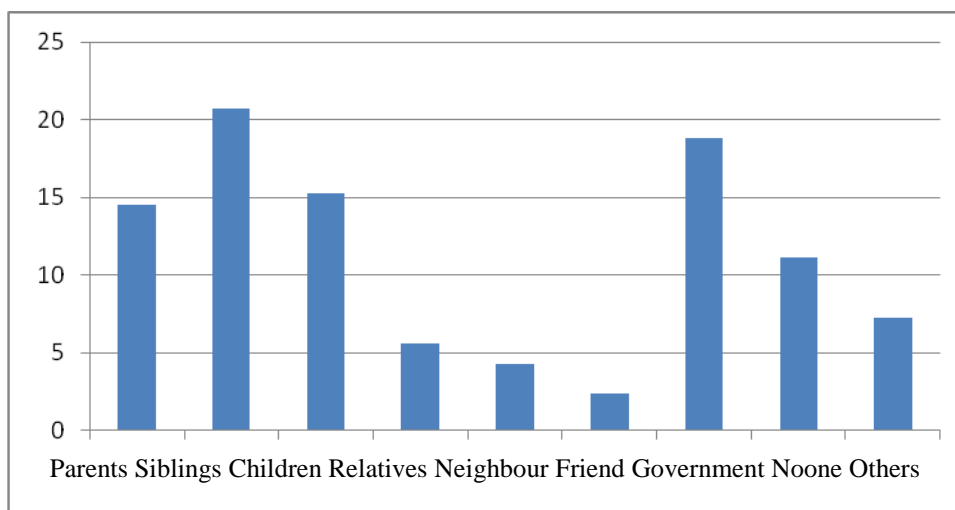


Figure 2-4: Individual/organisation giving financial support

For Kinh people, the rate of “no help from any one” is higher than that of minor ethnic people (13.2% - 9.3%). The most common is from siblings (22.1%). For minor ethnic people, when facing difficulties, they tend to think about the support from government. This can be explained by their difficulties in financial condition. Their siblings are not able to financially support each other.

According to income group, the support from the government/organization plays an important role (31.6%) for the poor (group 1). Following is the support from parents. The support from other entities is little, lower than 15%. Meanwhile, to rich group, the main support comes from siblings (23.8%)

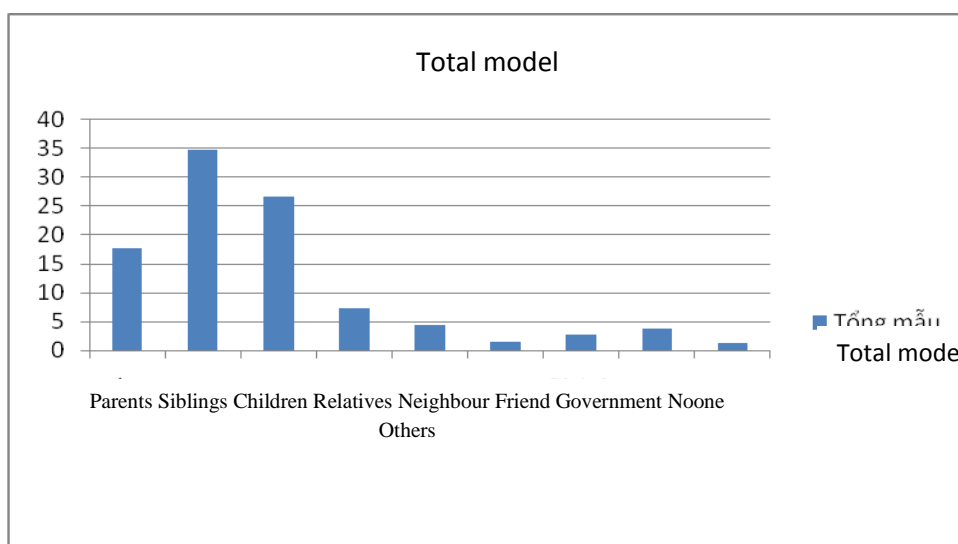


Figure 2-5: Rate of individual/organization giving mental support

The figure shows the results of mental support for local people during hard time. The main mental support comes from siblings, children, and parents. The support from relatives, neighbours, government/organizations and friends is little (lower than 10%).

According to the ethnic or income groups, there is a difference among indexes but such differences shows the important role of siblings, children and parents.

Therefore, the statistics highlights the financial support of the government/organizations to poor people and poor mountainous localities. For other social groups, localities, mental and financial support mainly comes from siblings, parents and children.

c. Living and livelihood plan

Assumed that an amount of money is available from the project, most of local people intend to invest into production (25.5%) find other jobs and invest for children. It is a significant thing that the local people in 4 hamlets plan to invest in production and find another job as well. It is clear that the local people have thoughts and ideas about their life and livelihood in the near future. 17.2% of them will invest for children’s education. This figure clearly demonstrates the wish of local people. Living in a rural area and doing agricultural production as the main job, local people still want to invest to improve the agricultural products and productivity. Some have some ideas and wish to find another job and learn another job. Some even think about changing job. This shows their desire to escape from the poverty. However, due to objective difficulties, poorer infrastructure, lower occupational and cultural level than those of other localities, local people are still struggling to find their way. It is a hope that the execution of Project on rehabilitating and improving Dai Thang Reservoir Safety will open new opportunities and realize local people’s dream on poverty elimination.

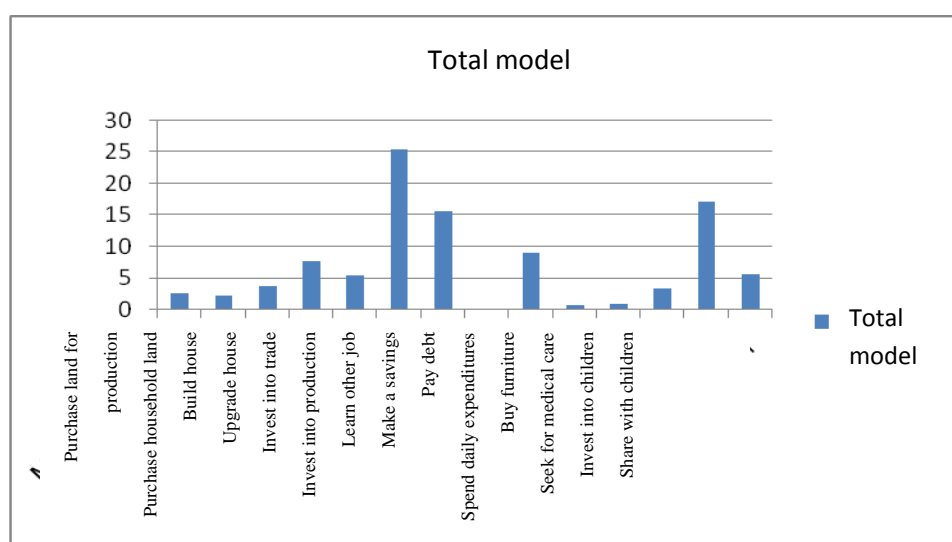


Figure 2-6: Intentions of local families

Table 2.9: Intentions of local families in near future

	Total sample
Purchasing land for production	2.7
Purchasing household land	2.3
Building house	3.7
Improving house	7.7
Investing into business	5.4
Investing into production	25.5
Learning another job	15.6
Making a savings	0.2
Paying debt	9.1
Spending on routine affairs	0.7
Purchasing furniture	0.9
Seeking medical cure	3.4
Investing into children’s education	17.2
Sharing with children	5.6
Others	

2.1.9. Ethnic minority

There are 2 major ethnic groups living in the project area: Kinh and Muong people. 71% of beneficiaries are Muong people, of whom the poverty rate is more than 20%. The project can be considered one of the sub project improving living standard of local people. The annual shortage of irrigation water is one of the reasons causing troubles to people of ethnic minority in the course of improving their living standard and changing plant/cattle structure.

Regarding the household scope: The statistics shows that household scope of Kinh people is smaller than that of ethnic minority population (3.9 and 4.1). In general,

Muong people's family is bigger than Kinh people's family. 29.6% of Kinh families have 5 or more members, 39.6% of Muong families do.

Regarding the occupation: The percentage of Kinh families having agriculture-forestry-fishery occupation is lower than that of Muong people (52% and 53.9%). However, Muong people living in the project area are not involved in handicraft. Meanwhile, the percentage of Kinh people being involved in handicraft is 2,6%.

The percentage of incapacitate people of ethnic minority is 4.8%, higher than that of Kinh people (4.2%). This creates the burden and difficulties for the community.

Regarding the education level: Illiteracy occurs within Muong people's community, particularly elderly persons. To other age groups, there is no big difference between Kinh and Muong people. However, Kinh people clearly have higher rate of education level, from secondary, high school to college/university.

Regarding the health status: The sickness status within the last 1 month is relatively the same to Kinh and ethnic minority. More than 90% of local people have medical insurance. This figure is higher than that of other localities. The main reason is health care, supporting policies of the commune, province.

Regarding the hygiene: Between Kinh and Muong people, there is a difference related to the rate of qualified toilet. 6.3% of ethnic minority population doesn't have toilet. However, those people say that they do not use the river or pond as toilet. Due to their financial difficulty, they have to use the toilet of their parents and siblings.

Regarding the living standard: Kinh people and ethnic minority population have relatively same living standard as self-assessed. Poverty index of Kinh people is lower than that of ethnic minority population (9.2% and 10.4%). Fair richness index of Kinh people is higher than that of ethnic minority population (3.7% and 2.1%). However, such difference is not significant.

Local ethnic minority population in An Binh hamlet and in project area, in general, is facing troubles related to domestic and production water.

During group discussion and intensive interview with ethnic minority population, they occasionally face water shortage for around 2 months. Plants don't receive enough water to grow. Domestic water supply is not abundant but it is not too hard to find.

Quantity survey and interview show that local people living in the project area agree with the execution of the project. They can see that the project will basically bring them benefit and create positive effects on their life and future.

2.1.10. Gender issue

The report will analyse the term of Division of labour on the basis of gender. This term considers various tasks and responsibilities of men and women as answers for questions of who, what, when, how and how long... Another term being included in this report is the social recognition of labour. The division of labour on the basis of gender is acknowledged and understood by every member of the community/society.

Moreover, the report shows the responsibility of women on various tasks including paid jobs, unpaid maternal work and household work. Production is the offering products, services consumed by the family or sold for income). Maternal work includes birth giving, child caring, household work and family life retention.

Community work includes the delivery and retention of resources used by community such as water, health care, education, leadership. It's a trend that men are usually involved in community work and production.¹

Employment issues are the first information which demonstrates the position and role of women in the family and in the society. In 4 villages affected by the project, there are not many women taking over the position as village leader, president, secretary and important positions in the community; 100% is male except women union. Female employment work in the field, and male employment usually has work with higher salary than female. Female often takes part in hiring and farming, and male takes part in agriculture-forestry-aquaculture and construction industry. Over 71.43 % is the percentage for women doing housework. Thereby, this shows a picture of women usually having low income. When being interviewed, almost all women suppose that their husbands make decision to invest in production and important work and women mainly raise children and do housekeeping.

Table 2.10: Task assignment in households in the sub-project area

Production activities	Both genders (%)	Male (%)	Female (%)
Cultivation (rice, other crops)	85.72	8.57	5.71
Husbandry	92.85	5.71	1.44
Afforestation/forest care/forest protection	57.14	35.71	7.15
Exploitation of forest products	50	35.71	14.29
Fishing and aquaculture	57.14	14.28	28.57
Worker/employee	42.86	50	7.14
Business/trade	35.71	21.43	42.86
Work away from home (not often at home)	21.43	71.43	7.14
Family activity			
Child care	64.29	7.14	28.57
Housekeeping	28.57	0	71.43
Cooking/housewife	22.86	0	77.14
Taking part in community work	Both genders (%)	Male (%)	Female (%)
Join in community meetings	85.71	10	4.29
Join in production training	71.42	14.29	14.29
Social and political organization activities	78.57	21.43	0
Decision making			
Making decision on family expenses (shopping on valuable asset, wedding)	92.86	7.14	0
Making decision on children's study and career	57.14	35.71	7.15
Decision on investment and production	71.43	22.86	5.71

(Source: Investigated data)

The results in Table 2.10 show that:

- For production activities: cultivation (rice, crops planting); husbandry, forestry/forest care; exploitation of forest products, worker/employee and aquaculture, both 2 genders male and female take up a dominant part. The activity which makes

¹Source: Gender Analysis in Vietnam, UNDP, 2004

more than 85% is cultivation and husbandry.. Work away from home activity mainly concentrates on male (over 71.43%)

- For family activities: women do most of the work as children care, housekeeping, house works. The housekeeping, cooking/house works take over 71.43%, the household from beneficial region takes 64.29% in sharing the work of child care. This is a time-consuming work for women.

- Taking part in community activities: both genders mainly take part in this activity, concretely, join in community meeting (85.71%); join in production training (71.42%); social-political organization activities (78.57%).

- Taking part in decision making: most of the households agree that both gender make decision. Decisions on large family expenses (valuable properties purchase, wedding) take 92.86%; decisions on study and career of children take (57.14%) and decisions on investment and production take 71.43%.

In general, this is due to cultural features and traditional properties of Viet Nam; for instance women often produce small business and work in agricultural sector such as processing; and other industries such as exploitation is undertaken by male; the other reason is due to the limited awareness of gender equality. In addition to participating in family income, women also have to take care of the family; hence they lack of time of taking rest, leisure and taking part in social activities, as well as the opportunity to take part in training and upgrading the ability. This restricts the ability to access to advanced technology and to contribute to development goals. Hence, without timing and reasonable support the chance for development of women is lower than men. To sustain in this competition, it is required both female and male to improve their knowledge, skills, and determination. If an individual or a certain gender starts at a lower position, and has less time and opportunity to invest to study the risk of failure for them or for that gender would be higher. Therefore in order to improve the contribution of women, chances for access and getting benefit from activities of dam safety and rehabilitation program must be uniform for both 2 genders. In these activities, it should be performed in the most favorable way for women's participation

It can be said that both sexes highly appreciate the role of water resources and wish to have enough water to reduce working time. This data represents the contribution of female and male in production and employment; this indicates the degree of equality and responsibility of each gender in the project area.

2.2. Potential positive impacts of the project.

Rehabilitation and safety improvement of Dai Thang Reservoir will serve for production of agriculture and forestry, crop diversification, food security under the pressure of population growth, unfavourable changes of weather and instability of the world, and to solve water for domestic, industrial, fisheries, tourism activities, maintain and improve the ecological environment, exploitation of hydro power. Develop irrigation for the mountains, especially the particularly difficult area of water sources, associate with the social policy to gradually solve the water source for agricultural and domestic activities to the people and economic development, contributing to the successful implementation of poverty alleviation programs, sedentary, and irrigation development in combination with disaster prevention and reduction.

This section presents the potential positive impacts of the project, bringing benefits for the people living in the project area in general and households in particular. These impacts are presented in the following sub-section under the specific objectives of the project when the project operates effectively.

2.2.1. Improvement of dam safety

As part of the general situation of the safety situation of Vietnam dams, Dai Thang reservoir – Hoa Binh was built from 1960. Therefore, the reservoir no longer meet the demand for water for population, and is facing the risk of losing safety. Implementation of rehabilitating and improving the reservoir safety besides improvement of irrigation capacity, and the more important goal is to improve the dam safety and to ensure life to farmers in the downstream in particular and ensure the social life of An Binh Commune in general.

2.2.2. Enhancement of dam management and irrigation system operation

Project on rehabilitating and improving Dai Thang Reservoir Safety shall help people and management agencies of Hoa Binh Province building scenarios and strategies for long-term rural development and climate change scenarios, realization of activities to implement the National target Program on mitigation and adaptation to climate change; Irrigation Development Strategy 2020 and Vision 2050; National Strategy for water supply and rural sanitation by 2020; The socio-economic development of mountain areas by 2020; The national target of new rural construction; Agricultural development programs.

2.2.3. Rehabilitate of irrigation area and agricultural production

Within the scope of the project, investment results will help rehabilitation of irrigation infrastructure in An Binh commune in general and 04 villages in the benefited area in particular (Dai Dong, Dai Thang, Thang Loi, Duc Binh) to serve and ensure water supply to meet the needs of agricultural water use, irrigation of 130 hectares of rice and crops, creating water supply for living activities and livestock for more than 200 households in the downstream.

Project on rehabilitating and improving the dam safety will meet the needs

of enhancing the quality of arable land, prevention of soil erosion, desertification, and water pollution reduction. Investing in infrastructure will be accompanied with participatory irrigation management program (IPM). The policy of application of scientific and technical progress, advanced technology solutions in the construction of dams, effective irrigation solutions to increase the efficiency of water use, limiting depletion of water resources and adaptation to climate change will contribute significantly in the socio-economic development of the locality.

2.2.4. Support for improving infrastructure, irrigation development for multiple purpose in construction of new rural areas

Results of the survey showed that, in the subproject area, most people engage in activities in the field of agriculture, including rice area accounting for high percentage. Supply water for agricultural activities are mainly taken from the Dai Thang reservoir. Therefore, the provision of sufficient water is one of the important issues for local economic development.

The project's investment in irrigation infrastructure, to improve the efficiency of buildings, irrigation, drainage, work safety in disasters is motivation for the local to continue to invest in remaining categories, to soon complete the construction of new rural area, develop the socio-economic situation stably and sustainably.

2.2.5. Development of welfare to the vulnerable group and increase of social capital for the people in the project area, paying attention to female, poor people and ethnic minorities

It is necessary to have proper identification of female householders, poor households and pay attention to the most vulnerable groups to ensure that their welfare is most interested in the project. Strengthening social activities will create conditions for these groups to participate in the work of planning, design and implementation of sub-projects to ensure that works will bring maximum benefit to them in current conditions and mitigate the adverse effects for them.

In the sub-project area, investment in water supply projects and opportunity to expand local roads will help people, especially women to save time of collecting water, agricultural production through seasonal schedule in an active way, as well as the taking of water for livestock, farming economic development, contributing to the diversity of types of agricultural products and increasing accessibility to the market, improving earnings. Domestic water is provided timely to improve people's health, especially avoid the diseases of women. Through the implementation of the action plan on gender of the project, gender awareness will be raised in all levels of government and community. With reduction of working time, female will have the opportunity to participate in community activities, learn to raise the level of knowledge, education of children, etc.

During the consultations, the people are very supportive of the sub-projects in their area because they are well aware that this is the main mechanism to improve economic conditions. The project will improve traffic conditions, water supply, encourage the development of agriculture, recover some highly profitable crops of

local features, promote circulation of goods, increase labour and outside employment, improve social services and environmental conditions for local people. The project shall support the complete building and upgrading of multi-purpose water supply systems for water storage at the end of the rainy season to support community access to water for farming and livestock of the household. The project pays attention to the community suffering from scarcity of irrigation water through the building, upgrading, improvement and rehabilitation of multi-purpose water supply works for residential areas, including water storage tanks, community water supply cluster, enabling people to use water in many different purposes such as for washing, for livestock and sanitary.

The project will increase agricultural production, improve living conditions, improve irrigation, traffic conditions, the environment and the health status of the people in the project area, especially women and children in the project area.

With the characteristics of the sub-project area, 3 villages including Dai Thang, Dai Thang, Thang Loi with the people in Muong Ethnic minorities accounting for more than 90%; rehabilitating and improving of dam safety will create conditions for people to improve the material and spiritual life and ensure social security.

2.2.6. Promotion of local socio-economic development

During the construction process, with a focus on the number of construction workers at the site, the demand for the goods and services for the life activities of workers increases. Moreover, in the construction process, a wide range of materials must be used such as earth, stone, cement ... to build the category of the sub-project. Therefore, the implementation of the sub-project will promote the development of services, local trade, contributing to create employment opportunities and increase income for local people.

Besides, in the course of construction in the sub-project area, in addition to using the highly qualified engineers, it is necessary to use common workers to do simple tasks. This is an opportunity for people to participate in the activities of the project, in order to increase income.

2.3. Potential negative impacts of the project

This section presents and refers to the potential negative impacts in the project area and required mitigation measures to minimise the negative impacts below.

2.3.1. Land acquisition and resettlement

The construction project will have influence on 12 households (with 45 people), include:

- Total land has permanently acquisition is 15,935 m².
- Total affected land is 4,483 m². The project has
 - + Permanent influence on 12,413 m² agricultural land of 7 households
 - + Permanent influence on 1,718 m² agricultural land and 500 m² forest land of 2 households
 - + Permanent influence on 803,2 m² agricultural land and 500 m² residential land of 1 household
 - + Temporal influence on 3,604 m² agricultural land of 2 households; the project has not only permanent influence on agricultural land and forest land but also temporal influence on 834 m² agricultural land of one family.
 - + Influence on a 60 m² flat-roof house.
 - + Influence on annual trees: 12,578 m² of rice; 3,840 m² of corn, 920 m² of peanut and 822 m² of cane planted in the groove; influence on timber tree: 130 trees of Acacia
 - + In constructing period, there are 244 households affected by water cut and there will be 572,297 m² rice field lack of water from February to June.

2.3.2. Impacts on water supply and use in the downstream

In the construction process, the amount of water will certainly reduce, in such conditions a dispute or dissatisfaction may be happen when some households are in more favourable location for water collection but others are unfavourable. This should have the commitment of the rural households through the meetings. At these meeting, the village chief shall inform of the possible situation.

Sources of water supply for the agricultural production area of Dai Dong, Thang Loi, and Dai Thang will be affected during the construction course. Thus the area of 571, 297 m² of paddy land of 244 households will be affected. In addition, the surface area of the Dai Thang reservoir could not be used for aquaculture (freshwater fish farming) during construction. Except for Duc Binh village, the water for production of the affected households is taken from Dai Thang Reservoir; therefore, upon rehabilitation of the dam, not only 12 households in the Duc Binh village are affected directly, but 244 households in three other villages are affected for rice land.

Water sources for drinking and daily activities are taken from groundwater wells and dug wells; thus, water cut-off for dam construction does not affect the drinking water of the people in the project area.

Objectives of the project are to increase the capacity of the involved agencies in the local area on dam management and improvement, encourage participation, strengthen knowledge and understanding of management and facilitate conditions to enhance cooperation of equality between the users with management agencies and local governments. This will help people and local communities develop water resource management mechanisms collectively to avoid conflicts among the parties concerned and to minimise potential immediate and long-term impacts. Specifically, conflicts may arise between Agriculture and Irrigation Company (or local irrigation officials) and people using services of irrigation water in case of the deviation of the water supply plan. Or conflicts may happen between the water users, especially for households in the upstream and downstream in case of unfair and uneven supply of water.

2.3.3. Impact on graves, cultural heritage and public works

Around the construction area of the sub-project, there are no graves built on the existing site. Besides, in a 30 km radius from the sub-project area, there are absolutely no cultural heritages, so this impact is considered to be negligible.

However, in the course of construction, the number of vehicles operating at peak times can cause degradation of the inter-village roads and earth route on the dam surface.

The transportation of raw machinery materials, construction can cause subsidence, cracking of roads. It is required to implement measures to protect the routes for transportation.

2.3.4. Impact on livelihoods and business by construction

Land acquisition, construction of works, construction of some water supply clusters in residential areas will certainly affect the livelihood and business in the construction area. According to the survey, the number of households living on the approach to the dam is involving in small business, but this is not their main source of income. However, to minimise and limit the impacts, the Employer will closely cooperate with authorities to assess the impact for appropriate support. Also, during the course of construction, contractors need to plan and organize construction to minimise the impacts for the affected households. The local areas shall implement compensation and assistance in accordance with the policies outlined in the RPF, EMDF to ensure not to worsen the business and livelihood of the affected households.

When being asked, 100% of people said they feared the impacts on the environment by transportation of land, construction materials. People also worry that gathering too many workers in the project area shall disrupt the quiet environment of the country, and may cause security issues such as theft.

2.3.5. Enhancement of fertilizer and pesticide use

The conditions of agricultural production have been improved, investing in production to increase profits can increase use of fertilizers and pesticides, and thus this increases environmental pollution. Currently, localities have been applying safe farming measures such as IBM, ACM, "3 down, 3 up", "1 right, 5 down" planting flowers on the field shore. All these activities are aimed at limiting the impacts of fertilizers and pesticides to people's health. However, it is vital to manage the

production and appropriate operation of irrigation systems, including continuing to encourage and guide people to apply new environmentally friendly methods of production.

2.3.6. Risks of health, occupational safety and traffic safety

The project investment will mainly affect the environment during the construction, material transportation and due to the noise of machinery. In addition, too many workers moving from other areas also can bring diseases and their lifestyle can break tradition and local regulations. The management agencies need to consider the health risks such as sexually transmitted infectious diseases, the propaganda activities, closely monitoring of this work.

Labour accidents may occur during construction, transportation of construction materials due to the errors in labour: lack of labour protective equipment, lack of awareness for strict compliance with labour safety rules; or due to illness of workers at the site. These effects will cause a huge impact on the lives and property of the employees.

Traffic accidents: During the construction course, traffic and density increases rapidly due to the operation of the vehicles transporting materials, therefore, there is high potential of traffic accidents.

2.3.7. Impacts on social order and safety in the local area

During construction of the sub-project, An Binh commune will receive on a number of workers from other provinces during construction. The appearance of the number of workers along with living activities and working of the workforce will have a significant impact on the lives of local people. The emergence of a number of male workers will give rise problems as follows in the local area: (i) disturbance to security and order in Duc Binh, An Binh commune; (ii) conflict between workers and local people (iii) conflicts, collisions between workers and local people; (iv) the appearance of social evils such as gambling, alcohol, use of stimulant; (V) the possible risk of overloading the health services, public services, food for the workers.

The insufficient management of workers will lead to many negative issues. As previous precedent in a number of projects, if conflicts between workers and local people are not solved definitely, it will cause a crash fighting leading to body injuries, and the life loss.

2.3.8. Impacts on gender equality and child

During construction, drain repair can cause water cut for a season because dam repair causes water scarcity, which will lead to women spending more time on water collection (because of custom and division of labour by gender)

The area of agricultural and planting crops land will reduce, which has direct impact on incomes of women, this can also be an indirect cause forcing them to move and find works in other places.

The fact is that children can be at risk due to water. In 2014, An Binh Commune had 04 cases of young children fatality from drowning. So there must be policies for child safety and protection of children's rights. Children are not allowed to sell goods or

services around the area of dam improvement and rehabilitation.

Roads will be more difficult and muddy in the rainy season, it can affect children's psychology to the school and is the cause of children refusing to go to school, so that the contractor selected construction plans mainly in the dry season.

However, these effects are considered insignificant by the short time of construction. It is not regarded as the cumulative and long-term impacts causing damage to local life.

2.3.9. Impacts on ethnic minorities

The implementation of the sub-project shall bring a lot of positive impacts on the lives of ethnic minorities, and in particular the Muong ethnic group. But in the process of implementing the subprojects, particularly in the construction process, there are some unavoidable impacts to communities in 03 villages including Thang Loi, Dai Thang, and Dai Dong with the rate of ethnic minorities accounting for more than 90 %. During the construction process, there are no Muong ethnic households being revoked the production land. However, during the construction and repair of the sewers, water cut is required, so the lack of production water in a season affects significantly the lives of many people here, including 223 households from ethnic minorities. The sole water source of downstream is taken from Dai Thang Reservoir without additional plans for other temporary water source.

In addition to the impact of water cut off, implementation of the sub-project will have impacts such as traffic obstruction, dust and noise during the construction phase, temporary demolition of works, canals water and the dangerous effects due to increased transportation after the completion of the project. These effects can be completely reduced or eliminated. Therefore, development plans for ethnic minority of the project that focused consultation to ensure that indigenous peoples have the opportunity to raise their concerns and to participate in and benefit from the project. Screening process, in consultation with the peoples in the project area has been deployed. Communities can give free consultation, which leads communities to accept and support the project widely because of the positive impacts from the project.

For this subproject, a RAP has been prepared to ensure the temporary impact of the crop of EM peoples will be appropriately and timely compensated for. An EMDP has also been prepared for this subproject - on the basis of social assessment and consultation with the EM peoples from this subproject. The EMDP aims to offer development opportunities for these EM present in the subproject area even though they are not adversely affected as a result of the subproject.

On the basis of the social assessment, the RAP and EMDP which have been prepared for the affected EM, the free, prior and informed consultations with EM has confirmed that the EM affected have provided broad community support for the subproject implementation.

PART III. Mitigation and recommendation measures

The survey assessment shows that the sub-project “Rehabilitation and safety improvement of Dai Thang reservoir” will bring huge benefits in both short term and long term to people and Community of the Project area in particular and those of Lac Thuy District in general. Specifically, the project will contribute to ensure the safety of the reservoir, stabilize the irrigation power, and take an important part in the irrigation development for mountainous areas, especially for the areas particularly lacking water resources.

However, during the construction and after the completion of the project, a number of negative factors affecting people's living and communities of the project's area may appear. Negative factors basically arise from issues such as land acquisition for agricultural production permanently and the use of temporary land, livelihood and business are affected by the relocation, conflicts about water use may occur, the use of fertilizers increases, the risk of health, social order arises when the number of workers increase.

The project's positive impacts are dominant and essential. The negative ones are secondary and could be improved.

3.1. Consultation with stakeholders

To minimize the risks related to the negative effects that may arise and to establish communication channels, the Consultant has consulted the local community many times during the project preparation. The Project is financed by international organizations, the level of compensation in one location where exists many types of investment, may apply several inconsistent compensation policy, which complaints may arise. Therefore, the province should have documents to guide the implementation of the inventory, payment, replacement costs of the Project based on the Resettlement Policy Framework . CPMU with local localities to provide information on project investment objectives and policies to the community for them to understand requirements on water use efficiency through propagandas.

3.2. Measures to mitigate the impacts of land acquisition

Resettlement action planning (RAP) for subprojects; during construction of subproject, the requirement of land acquisition and other property acquisition of people is inevitable. According to the World Bank's requirement, the project has established resettlement action plan for 1st round projects and resettlement plan for the 2nd round projects will be made similarly. This plan reflects how the project will mitigate the loss of affected people in the project, restore their livelihoods by giving them compensation, support, and / or allowance. The overall objective of the Resettlement Action Plan is to ensure that all affected people are compensated at replacement cost of their loss and provide support measures for them to restore their livelihoods - at least equal to the pre-project level.

➤ Compensation and allowance payment

To mitigate the impact caused by the misappropriation, conversion of land use purposes, Hoa Binh PMU has collaborated with the Government of An Binh

commune to implement compensation and support work in accordance with Vietnam’s policies and the donor, WB. (Details of independent RAP were conducted for the sub-project)

Total expenditure include following expenses: (1) compensation expense; (2) support expense for occupational change and work creation, expense for organisation of compensation implementation, resettlement and (3) backup expense for higher price which is summarized in detail in the following table:

Table 3-1. Total estimated expense for compensation and resettlement support

No	Types of costs	Amount(VND)
1	Compensation costs	1,273,114,290
2	The supporting cost for career change and job creation, life stabilization, cost for compensation resettlement, agricultural land without water in dam’s implementation support	3,306,019,181
3	Provision cost for incurred price	686,870,021
	Total	5,226,003,000

The total estimated cost is rounded VND **5,226,003,000** (*five billion two hundred and twenty six million nine and three thousand dong*) equivalent to **\$ 243,796** calculated in USD. In particular, compensation cost is equivalent to **1,273,114,000** dong equal to **\$ 58,940**.

3.3. Measures to mitigate the negative impacts due to lack of water supply during construction and the negative impacts caused by water supply during operation

a, Water loss during construction

During construction, in addition to the 12 households whose land was acquired, the rice growing land of 244 households within three villages: Datong, Dai Thang, Thang Loi was affected. Therefore, the area of 571 297 m² of rice growing land will not be used within one season for 244 households. The investor combined with independent consulting unit implement resettlement action plan (RAP) to make support cost plan for agricultural land area without water for production when constructing the dam. (Compensation expense is included in RAP cost)

In addition to monetary compensation, the investor also committed to help people to participate in the construction of the subproject if appropriate.

Table 3-2: Cost for supporting agricultural land area due to water cutoff in execution (This is a part of RAP cost)

No.	Cost for support and administration	Unit	Quantity	Unit Price (VND)	Total (VND)
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I	Cost for supporting agricultural land area due to water cutoff in execution	ha	57,13	14.300.000	816.959.000
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b, Mitigate the negative impacts of water supply during operation

In operation history of Dai Thang reservoir, there have been contradictions arising in the use of water resources among households in the villages.

Therefore, the operation unit of the reservoir shall apply appropriate water distribution plan to limit conflicts among departments, villages using water from Dai Thang Lake:

- From time to time, depending on the demand of water supply for irrigation and the water level in the lake to adjust the valve opening appropriately;
- Propagate, educate people to save water, strengthen and improve management and exploitation level;
- Use, simultaneously protect from degradation and depletion of water resources, pay attention to environmental protection, especially in Dai Thang lake area
- Operating units of the reservoir shall coordinate closely and consistently.

3.4. Integrated Crop Management (ICM) capacity building for farmers in beneficial areas

When the sub-projects go in operation, organize workshops and training of IPM officials at commune and village levels in the sub-project area, with the following contents:

- + Distinguish the main and secondary pests
- + Identify the natural enemies of harmful pests and diseases for crops
- + Method of detecting harmful pests and diseases
- + Understand the impact of pesticides, appropriate use of pesticides
- + Pest control techniques according to the principles of IPM
- + Advanced farming techniques
- + Requirements to manage pesticide packaging after use
- The training program will combine theory and practice in the field. The content can be chosen according to thematic groups: farming, identifying and detecting methods for pests and their natural enemies, IPM techniques in manufacturing, etc.
- Target Training: The technical staffs of cooperatives, village leaders and members. The participants will be trained to go back to the farmers in the project area, the implementation of the model
- The size of each class is from 30-45 participants, organize classes in commune. Time Learning is in phases under the thematic training, each session can last 3-5 days including both theory and practice
- Lecturer: hiring experts from universities, research institutes, extension centers.

3.5. Mitigation measures of transport routes' degradation

To mitigate the roads degradation due to material transport activities, construction units shall commit to ensure the following issues:

- The contractors have to commit to carry defined load on the vehicles; the vehicles' duration must exist and ensure the safety.
- Cover materials with canvas during transportation; avoid dropping materials onto the road;
- The contractors have to commit to repair, return the route as before implementing the subproject;
- Distribute the number of vehicles permitted to be transported in daytime, avoid the rush hours or the time children go to school.

3.6. Measures to ensure labour and traffic safety

As analysed above, the process of subproject construction hides potential risk of occupational accidents and traffic accidents, so the contractor, the construction unit shall perform seriously and adequately the following measures to minimise this impact:

- Comply with safety rules on site: shall provide full range of traffic signs, labour safety signs;
- Must provide a full range of emergency aid equipment on site;
- Organize careful training in theory and practice for direct construction workers and machine operators;
- Establish working rules to ensure labour safety;
- Regularly inspect and maintain machines and equipment;
- Equip lights, barriers for construction at night time;
- Equip barriers, traffic signs, warning signs at the construction sites;
- Provide adequate personal protection equipment such as helmets, gloves, masks, glasses, etc. and shall give guidance and regulations on using;
- Propagate and train regularly for staff and workers involved in the construction on site in the process of labour sanitation safety;
- Propagate, disseminate and enhance knowledge for workers on Traffic Safety Law;
- Fix warning signs at sites to avoid accidents occurring among vehicles carrying materials;
- It is necessary to improve environmental and social management capacity for internal inspectors, to coordinate closely with Hoa Binh PMU, quickly handle any breakdown occurring.
- Enhance the capacity of internal inspectors; assign internal inspection duties to the inspection unit of construction on issues related to labour safety and environment.

3.7. Measures to mitigate negative impacts to the minority.

These negative effects can be basically mitigation or eliminated when applying the measures or methods as putting into Ethnic Minority Development Framework (EMDF) and Ethnic Minority Development Planning (EMDP). It is more important to apply the site management measures to mitigate or eliminate the impact of construction and impact to ethnic minority groups by providing safety signs, respect the customs of ethnic minorities, units involved in the project shall have ethnic translator, if necessary. Through the results from selecting society and consulting ethnic minorities, an EMDP was made only for the subprojects.

The Consultancy Unit consulted ethnic minorities in the project area freely, pre-informed and in a proper manner (FPIC), so they could define 03 affected households that would be supported.

Solutions include:

Solution 1: Support for recovering community livelihood

Solution 2: A media program only for ethnic minorities in the subprojects

Solution 3: Clean water for households

The base cost of EMDP is estimated to **2,553,540,500 VND**. This includes specific measures, the reserved budget. The cost of monitoring and evaluation of EMDP is included in the cost of EMDP monitoring and evaluation.

Table 3-3. State budget for ethnic minorities' development

No.	Programmes and activities	Unit	Quantity	Unit Price (VND)	Total (VND)
1	EDMP Cost				2,220,470,000
	Support for plant restructuring due to water cutoff (seed and fertilizer support for growing corn and peanut)	Ha	57,13	19,000,000	1,085,470,000
	Media support	Time	4	5,000,000	20,000,000
	Clean water support (rainwater pool's construction)	Household	223	5,000,000	1,115,000,000
2	Provision expenses	%	15%		333,070,500
	Total				2,553,540,500

Money for EMDP was donated directly from each household through provinces, districts, communes and hamlets and immediately done after water cutoff to enhance.

Budget to implement EMDPs is supported directly individual households through each province, district, commune and village and performed immediately after cutting water

for the construction of upgrading Dai Thang water reservoir

3.7. Other mitigation measures

Besides measures to address the potential impacts as detailed in the sections above, the implementation of subproject still brings potential or cumulative impacts, such as issues related to local security, diseases, gender equality, etc. The objects suffering from the impacts are residential community surrounding the project area and workers at construction site. Therefore, it is necessary to apply assessment control measures of cumulative impacts. PMU has developed detailed public health management plan (Appendix 1), media plan and community consultation plan (Attachment 2), gender equality plan to minimise the impacts from subproject's activities. The plans have been carried out during the project implementation.

Good preparation and implementation of Public health intervention plan: Hoa Binh PMU collaborates with clinics to offer regular medical services for communities around the subproject area and workers on construction site (80 people) in order to quickly identify diseases related to the subproject's impacts, choose timely measures to control the impacts and remedy measures for those affected. These problems are specified in the public health management plan (Annex 5).

Good preparation and implementation of public consultation, participation and communication strategy: help people to understand, recognize adverse impacts from subproject's activities, they themselves take measures to prevent the adverse effects on themselves and their families. Moreover, each one is a permanent supervisor of activities, implementing plans, solutions and making suggestions to improve the measures so as to minimise the activities.

Good preparation and implementation of Gender action plan: *The* subproject will disrupt the living of households in the area when women play an important role in the use of water resources, especially with the characteristics of three villages: Dai Dong, Thang Loi, Dai Thang since the only water resource for production is taken from Dai Thang lake. The implementation of a gender action plan helps people as well as managers and local government monitor to minimise the negative impacts related to gender.

Part IX: Appendices

APPENDIX B1: COMMUNITY CONSULTATION RESULTS

1.1. *Summary of social community consultation activities deployed during ESA's standard process*

Social consultation is implemented at the same time with environmental consultation. The wide consultation and consultation with full information of TDA were implemented in February 2015. Regarding compensation, site clearance issues and Ethnic minority related issues, the social consultant team has consulted twice in detail for independent reports namely Resettlement Action Plan (RAP) and Ethnic Minorities Development Plan (EMDP).

Consulting objectives

Consulting contents: (i) Project/TDA information (general project information, project scope, the project components, positive and negative impacts and mitigation measures, the project implementation plan); (ii) current livelihood activities of people; (iii) Building new rural, rural infrastructure (traffic and irrigation, education, medical and clean water, rural environment); achievements and barriers; (iv) Use of fertilizers and pesticide; (v) People's awareness of the project; (vi) Policies on resettlement, project grievance redress and expectation of the affected people on compensation and resettlement; (vii) Ethnic minority people related policies.

Consultation program:

- Step 1: Social experts inform the participants of the project and sub-project;
- Step 2: Experts discuss with the participants about the said above mentioned content.

Summary of the consultation content is shown in the table below.

Main issues/opinions mentioned in the consulting include:

- Project information.
- Current issues of the locality in agricultural production, new rural construction: health, rural infrastructure, public services such as hospital, school, economic development conditions, arising issues, etc.;
- Demand for supporting new rural construction, improving rural traffic system, in field roads, irrigation works, expanding two-crop rice cultivation area, managing and operating irrigation works, improving rural environment, highly efficient plant production model, creating non-agricultural job, etc.
- Demand for accessing clean water in the dry season, flood season, water supply for production;
- Demand for solving land acquisition issues faced by the affected households/hamlets in the project area caused by the works construction, dam safety corridor acquisition according to the Ordinance on dykes; for example, satisfactory

compensation for affected land and house (01 household) so as to buy replacing land and;

- Demand for social support, training jobs, improving production, living conditions and income of women, ethnic minorities, demand for training and creating jobs;
- Activities involving community's participation during the project preparation and implementation of the;
- Willingness of the localities taking part in the project; and
- Support for the project.

Besides investigating society related materials, quantitative surveys are also conducted. Consultant also implemented group discussion, depth interviews of affected households and the project participating officers of provincial, district and communal level.

Apart from examining quantitative information, in the in-depth interviews and group discussions, the public consultation was paid attention in order to deeply understand about views as well as attitude of the objects towards the sub-project deployment, especially for ethnic minorities' people and women.

1.2. Result summary of public consultation related social issues during ESA preparation

<i>1</i>	<i>Representative of People's Committee and Fatherland Front of An Binh Commune</i>	<i>Number of participants</i>	<i>Ethnic minorities</i>	<i>Date of consultation</i>
	- Chairman of CPP: Bui Xuan Dung - On behalf of the Fatherland Front Committee: Bui Van Lan - Commune Women's association: Quach Thi Lien - Officer in charge of traffic, irrigation: Vu Van Doan - Representatives of 4 hamlets in the sub-project area			

	<p>- Dai Thang reservoir was built in 1960s, functioning as an irrigation works for water supply and water sources creation for 3 hamlets: Dai Dong, Dai Thang and Thang Loi</p> <p>- However, the works has been downgraded leading to the decrease in so the water supply capacity. Annually, people in the sub-project area often lack water.</p> <p>- Water shortage causes many difficulties to people and results in food insufficiency in some households.</p> <p>- It is expected that 1 household in the residential land is affected in accordance with Ordinance on dam, reservoir safety corridor protection and 12 households' cultivation land is affected.</p> <p>- During the construction, it is scheduled to cut off water one season, so the whole rice cultivation of 3 hamlets of Dai Dong, Dai Thang, Thang Loi will be affected. Thus, the project owner is proposed to have supporting plan for the affected people in the season.</p> <p>- People in the 3 hamlets have rather high percentage of ethnic minority being Muong ethnic. It is required to have special and reasonable supporting plan for the women.</p> <p>- People and the local government have known the sub-project information</p> <p>+ Sub-project owner commits to implement all general regulations, social, environment protection measures related to the project deployment and implementation process.</p> <p>+ Sub-project owner should closely coordinate with the local government during site clearance, compensation, resettlement as well as the works construction in order to ensure the given schedule and quality of the works.</p> <p>+ Ethnic minorities must be supported.</p>			
2	Duc Binh Hamlet	22	Kinh	The 1st time: 07 February 2015 The 2ndtime: 27 March 2015
	<p>Hamlet head: Nguyen Thanh Hai Secretary of the hamlet: Cadastral officer of the commune: Bui Thanh Binh Representative of the households whose land is acquired under the Ordinance on Dykes</p>			
	<p>People have known sub-project information In spite of being close to Dai Thang dam, Duc Binh is not beneficial from the water source but its water is supplied from another site. Right next to the spillway gate are households of Duc Binh Commune, so people are much consent with rehabilitating and improving Dai Thang reservoir safety so that the people surrounding the area feel secured to produce. The Employer is proposed to have compensation, supporting plan for the households whose cultivation land was acquired and 1 household whose residential land was acquired.</p>			
3	Thang Loi hamlet	21	Muong	The 1st time: 06 February 2015 The 2nd time: 27 March 2015

	<p>Hamlet head: Bui Thanh Nhung Cell's secretary: Quach Ba Phuoc Representative of the households whose cultivation land is affected due to water cut-off in one season</p>			
	<p>Percentage of Muong ethnic people in the hamlet is high: About 85% The whole cultivation area of the hamlet is supplied water from Dai Thang reservoir. However, water is still insufficient, so some households plant only one rice crop. People have difficulty in using water. Poor households of the hamlet account for: There are totally 60 affected households due to losing a water season, in which 59 ones being ethnic minorities. Therefore, people support sub-project implementation; however, they should be supported in the water lost season. However, it is necessary to have a management plan in order to prevent social evils from happening where construction workers appear.</p>			
4	Dai Thang Hamlet	<p>The 1st time: 25 The 2nd time: 18</p>	Muong Kinh	<p><i>The 1st time: 06 February</i> <i>The 1st time: 27 March</i></p>
	<p>- Hamlet head: Nguyen Duc Bien - Cell's secretary: Nguyen Van Thuan - Representative of the households whose cultivation land is affected due to water cut-off in one season.</p>			
	<p>People's life in the village still encounter many difficulties. Mainly rely on agricultural and forestry jobs The percentage of poor households: 23% Muong ethnic people make up major percentage There are total 60 affected households due to land loss, in which ethnic households make up major percentage. People, especially women much support the sub-project implementation, apart from agriculture and forestry; women have no chance of taking part in handicraft or industries. Therefore, water cut-off significantly affects people's income. The Employer, State is much proposed to support for the households losing water in the one season. Besides, people expect to take part in the construction works to create more income and avoid idle time.</p>			
5	Dai Dong Hamlet	<p>The 1st time: 30 The 2nd time: 25</p>	Muong Kinh	<p>The 1st time: 06 February 2015 The 2nd time: 27 March 2015</p>
	<p>-Hamlet head: Nguyen Hoang Bay - Cell's secretary: Bui Minh Phuong - Representative of the beneficiary households in the area.</p>			

- | |
|---|
| <ul style="list-style-type: none">- There are 124 affected households due to water loss during the construction, in which 121 ones being Muong ethnic group.- People in the hamlet totally agree with the sub-project implementation.- People expect to be supported during the water cut offseason. Because people's living standard is still low.- Percentage of the ethnic people is rather high, therefore there should be sufficient supporting plan.- It is necessary to well manage vehicles, construction machines, workers from other places in order to avoid social disorder. Effect on children and women.- They expect to have opportunity totake part in the sub-project construction. |
|---|

1.3. Commitment of the Employer

Sub-project owner receives constructive opinions from the local people and government.

- For the households: whose cultivation land is acquired, 01 household whose residential land is affected and others are affected due to temporary water loss during the construction. The Employer commits to be responsible for implementing all polices related to compensation, support and resettlement. These measures are more detailed in independent reports on Resettlement Action Plan (RAP).
- Due to the sub-project area having high percentage of ethnic minorities, the number of ethnic minority people affected by water loss during the construction will cause difficulties in income, especially for women. Employer commits to have supporting measure to ensure the ethnic minorities in the area are not affected. Measures will be detailed in Ethnic Minorities Development Plant (EMDP).
- As for concern about arising number of people during the construction, health problems affecting social environment in the sub-project. The Employer commits to implement in accordance to measures in order to mitigate negative social impacts as shown in the environment and social management Plan in ESIA Report.

APPENDIX B2: Methodologies for Social Assessment

2.1 Assessment methodology

There are various methods and techniques used in assessment; the Consultant has applied the following methods for information collection and assessment.

(i) *Review and analysis of documents:*

Before conducting field investigation, the consultant collected and studied documents available to understand guidelines and policies of the government as well as the sponsor on issues related to resettlement and ethnic minorities, and updated information about the localities in the subproject area. Necessary documents include legal framework and policies of the Government of Vietnam and WB on resettlement and ethnic minorities, aggregated the results from memoranda of project preparation organisations, feasibility report, local project proposals, documents on relevant invested projects; statistics on annual local socio-economic situation; socio-economic development report of the localities in the project area, relevant existing documents, documents available on customs, habits of local people.

The review and analysis of documents related to the project will provide background information about the project and help to explain why there are changes or why there are not. On the other hand, it also helps to identify gaps in data needed to be collected and assessed further. Sources of documents include Hoa Binh Provincial Project Management Unit (PPMU), Hoa Binh Province's Department of Agriculture and Rural Development, Lac Thuy Division of Agriculture, Hoa Binh Department of Natural Resources and Environment, Lac Thuy Division of Natural Resources and Environment, Hoa Binh Statistical Office, Lac Thuy District and An Binh Commune People's Committee.

(ii) *Quantitative research, random sampling survey*

Quantitative research, random sampling survey consists of the Provincial Project Management Unit, an important method in researches, impact assessment of the project to collect basic information on socio-economic situation at household level. Information from quantitative survey reflects the size, frequency, extent and tendency of phenomena/behaviours of objects the survey aims at. The quantitative survey was carried out by interviewing households using questionnaires.

Random sampling survey: to collect information from a large number of affected people by interviewing using questionnaires with specific questions, served for statistical analysis. The survey results will provide a basis for other researches and assessments as they allow collecting important data about implementation issues or specific indicators from a sample. This method requires a sampling strategy (shown below) to assess standards before and after the project.

(iii) *Qualitative research, in-depth interviews and group discussions:*

Use qualitative research with in-depth interviews, group discussions in the community consultation to find information which questionnaires (quantitative research) cannot cover up. Information gained from qualitative research is to answer questions, causes and explain phenomena and factors affecting in the project area. Besides,

qualitative information can exploit deeper thoughts, feelings, attitudes and aspirations of information providers, particularly sensitive issues. Qualitative research uses group discussions and in-depth interviews to collect information. Households selected for this method are selected with similar characteristics in educational background, living standards, etc. Group discussions will be held with at least 5% of the households in the sample, about 6 - 8 people for a group discussion.

In-depth interviews will be applied to who are members of affected households and staff involved in the project at hamlet and commune level.

In addition to qualitative information, in-depth interviews and group discussions also pay attention to community consultation, in order to learn more about views and attitudes of participants to the project development, especially women. A qualitative research is as follows:

Table PL 2-1: Qualitative research

No.	Information collection method	Number of people interviewed	General information about participants
1	In-depth interviews	1	Provincial project officers
2	In-depth interviews	3	Governmental officers at commune level (Chairman, staff in charge of culture, union)
3	In-depth interviews	2	Staff of Farmers Union and Women Union
4	In-depth interviews	6	Members of 6 households in the beneficiary area of the project
5	In-depth interviews	4	Members of affected households have different living standards
6	Group discussions (2 discussions)	16	Participants are members of affected households
7	Total	32 people	There are 2 group discussions and 16 in-depth interviews

(iv) *Direct observation*: this method helps to obtain timely and useful information supplementing data collected, helps to better understand the context in which information and data are collected and help explain survey results.

2.3 Research samples

Based on the basic design, the Consultant and officers of the Provincial Project Management Unit and commune cadastral officials make a list of households affected by each project in each hamlet. In the list of affected households provided by localities, the Consultant selects 100% of affected households and 20% of unaffected households in the project area (of which 100% of households are expected to be relocated) to interview by questionnaires. Samples selected ensure gender ratio, poor

households and ethnic peoples.

In-depth interviews and group discussions were selected from survey samples and key information providers at provincial, district, commune levels and people. Each group discussion consists of 6-8 people.

Because the project area is located at 04 hamlets of 01 commune, it is quite favourable for the surveying. Therefore, the consulting group has carried out the survey as follows:

Table PL 2-2: Survey samples are allocated by region as follows

Households affected directly (production land loss) (Duc Binh 2 hamlet)		Households affected indirectly (Water loss in a construction season)		
Households	Rate	Thang Loi	Dai Thang	Dai Dong
12	100%	20 households	16 households	22 households

Appendix B3: PUBLIC HEALTH INTERVENTION PLAN

The necessity of the construction of public health management plan

The activities of the subproject will generate impacts on the surroundings quality: air, water and soil environment, in addition it may arise disease. All these factors will affect directly 50 workers, the entire population around the project area and households along the transport route. The consequence of these effects lead to increase occupational accidents, traffic accidents, diseases related to respiratory and intestinal system and eyes.

There are 50 workers directly contacting with sources of pollution and disease from the activities of the project, although subproject has had measures to limit pollution such as dust, emissions, wastewater and epidemics, but there are potential impacts that we do not see immediately, so need to take measures for early detection of disease and sources of disease. The plan indicates the measures to minimize and prevent those impacts.

Objective

To control and prevent diseases, raise awareness of the people and the workers to protect health yourself; help people access fully medical services. Organize regularly medical examination to detect early disease due to impacts of the subproject; to build treatment plans for incidents related to diseases, occupational accidents and traffic.

Measure and content of public health management

- To train and raise awareness, prevent impacts on health
- Organize regularly medical examination for workers and people in the subproject region
- Build plan to minimize the impact on public health
- Build plan to prevent and treat diseases

Role and responsibility of agencies, organizations and individuals

Department of Agriculture and Rural Development (DARD)/ Project Management Unit (PMU):

- DARD and PMU are responsible for building materials about public health safety training.
- Coordinate all levels of authorities in An Binh commune,(local authorities, Fatherland Front, Women's Union, Farmers' Union, Youth Union, hamlet representative) organize advocacy activities about health safety.

Department of Health, Lac Thuy district Preventive Medicine Center

- To train and raise awareness for all basic levels, contractors and residents about prevention measures and treatments of diseases;
- Check the medical examination process;
- To direct promptly when epidemics appear, resolving incidents related to public health.

People’s Committee, Social Organizations

- To direct, guide and organize the health safety work; to coordinate closely with contractor, Department of Health and Preventive Medicine Center when epidemics appear.

Health Station: To prepare the medical examination plan and guide water pollution treatment, epidemic prevention and treatment.

Implementation Schedule

Public Health Management Plan implemented at 3 stages of the subproject and extended 6 months at operation stage.

Table B2-1 Implementation Schedule of “Public Health Management Plan”

No	Measure	Content	Responsible unit	Cost	Time
1	To train and raise awareness, prevent impacts on health	<ul style="list-style-type: none"> -Identify the impact of air and water environment, food safety. -Preventable measures (using a comforter when entering the affected area, treat water pollution by alum and chloramine B) -Cleaning household sector, ranch house 	<ul style="list-style-type: none"> -Department of Agriculture and Rural Development (DARD) -Project Management Unit (PMU) -Lac Thuy district Preventive Medicine Center -Health Station at commune/ward - Contractor 	15.000.000 millions	2 stages in the early and the mid-stage of the project
2	-Organize regularly medical examination for workers and people in the subproject region	<ul style="list-style-type: none"> - Check the health of workers 3 months/ time, residents in the affected areas 6 months / time - The diseases related to respiratory system, intestinal tract, eyes - To consult the affected people during examination - Advise or handle when the detection of abnormalities related to the impact of subproject (timely notify to the authorities and functional units) 	<ul style="list-style-type: none"> -Department of Agriculture and Rural Development (DARD) -Project Management Unit (PMU) -Lac Thuy district Preventive Medicine Center - Health Station at commune/ward - Contractor 	Budget of Lac Thuy district	3 months/ time from the start of construction to 6 th month

No	Measure	Content	Responsible unit	Cost	Time
3	<ul style="list-style-type: none"> - Build plan to minimize the impact on public health 	<ul style="list-style-type: none"> - Medical staffs at commune/ ward monitor regularly the implementation of the mitigation measures of construction units. - To treat timely occupational accidents and traffic - To vaccinate completely children, pregnant woman 	<ul style="list-style-type: none"> -Department of Agriculture and Rural Development -Project Management Unit (PMU) -Lac Thuy district Preventive Medicine Center - Health Station at commune/ ward - Contractor -Women's Union -Fatherland Front 	Budget of Lac Thuy district and contractor	Continuously during the construction time
4	Build plan to prevent and treat epidemic	<ul style="list-style-type: none"> - To spray fly and mosquito- spray in the project area with the frequency of 3 months/ time. - To guide the water sanitation; use chloramine B for pretreatment of wastewater on work site and households. - When appearing epidemic, we need localize epidemic, isolate infectious objects and spray chloramine B to disinfect. 	<ul style="list-style-type: none"> - Department of Agriculture and Rural Development (DARD) - Project Management Unit (PMU) - Lac Thuy district Preventive Medicine Center - Health Station at commune/ ward - Contractor - Women's Union - Fatherland Front 	Budget of Hoa Binh province (Department of Health) and contractor	Continuously during the construction time (18 months)

APPENDIX B4 - PUBLIC CONSULTATION, PARTICIPATION AND COMMUNICATION STRATEGY

The necessity of the construction of communication plan

The subproject “Rehabilitation and safety improvement of Dai Thang reservoir” cause impacts: (i) positive impacts: Dai Thang Reservoir supplies irrigative water for 100 ha of paddy rice, 30 ha of farm produce as well as depletes groundwater for 200 households surrounding; (ii) negative impacts: acquire land and assets on land of 12 households, affect economy and public health, impact on gender equality...

The communication and public consultation plan is done throughout from the establishment of the investment project to the project operation. This helps local communities and managers to understand and visualize the entire impacts (positive, negative) to provide mitigation measures the impact on the natural environment and society, especially vulnerable objects include children, the elderly, women and sensitive ecosystem.

Information from communication and public consultation plan help managers, local authorities, monitoring unit to give decisions quickly or change timely decisions or plans during the project implementation.

Objective

To publish information about sub-project and provide all materials on the action plan to government at various levels, social organizations, unions and resident in sub-project areas. To consult local communities and organizations for the plan will be made for each stage of the project. The feedback helps the investors and the management level to improve plans to meet practical needs prior to the implementation of the action plan

Contents

- Information on the subproject and policies of interest will be disseminated to people by Project Management Unit (PMU);
- Environmental and Social Management Plan: (i) the PMU and consultancy units provide information of impacts and mitigation measures; (ii) To consult the local authorities and social organizations, unions, people around the project area.
- Resettlement Action Plan: Provides information about land acquisition, resettlement, compensation cost apply framework and support policies of the subproject and the provisions of Hoa Binh Province and government at various

levels, affected people

- Gender Action Plan: provides information about gender equality for the local authorities and social organizations, unions, people around the project area.
- Public Health Management Plan: provides information on the solutions, disease prevention plan, medical examination periodically.
- Social security, traffic safety, social evils: provide information about law, legal education for workers, people around the subproject area.
- Dam Safety: disseminate plans when occurring dam safety incidents in the construction process and the rainy season.
- Operate mining and flood discharge: provide information and detailed plans for the flood discharge to people around the project area and downstream area; make protection plan for the people, the buildings in downstream of the dam.

Forms of communication, community consultation

In order to organize the effective communication activities, need understand the basic elements of the communication process and public relations of them.

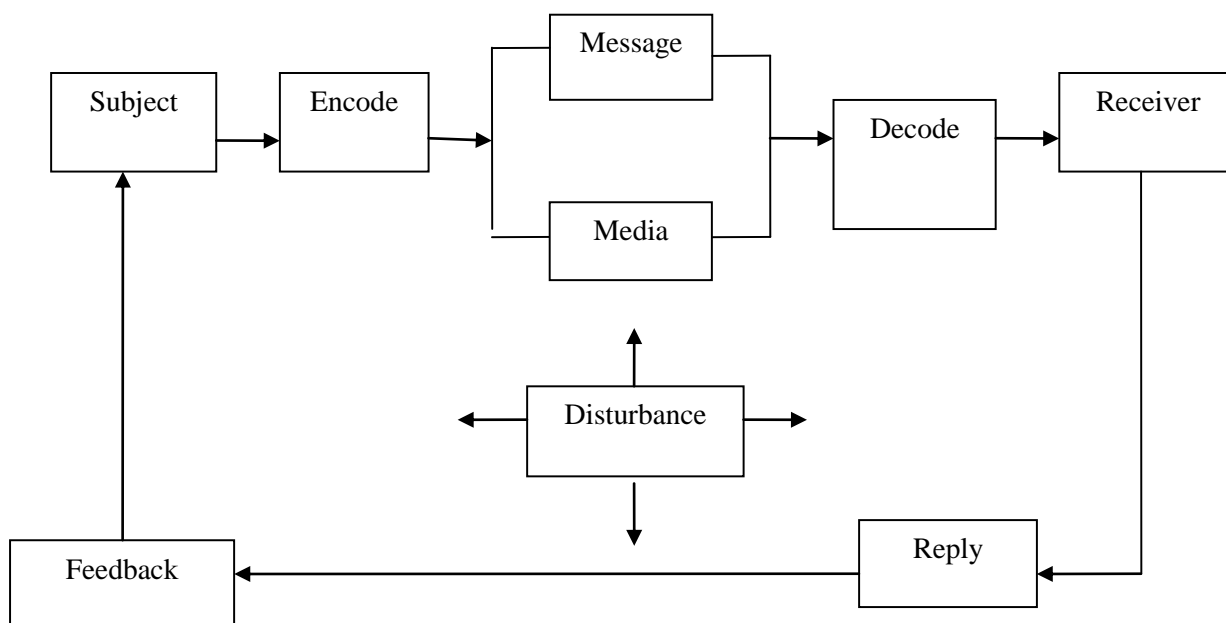


Diagram B3-1: The elements of the communication process

- Organize meetings to disseminate information for local authorities, social organizations, unions, people of the subproject region (An Binh commune);
- Through the mass media, basis loudspeakers, commune and village boards.
- Issue brochures, consultative questionnaires to local authorities, unions, people of the subproject area;
- Through the activities of organizations and clubs;
- Training;

- Other media and information forms.

Role and responsibility of agencies, organizations and individuals

Department of Agriculture and Rural Development represents Hoa Binh province people's committee is an investor, and Project Management Unit for investment and construction in Agriculture and Rural development of Hoa Binh province is the project implementation unit.

Department of Agriculture and Rural Development (DARD)/ Project Management Unit (PMU):

- DARD and PMU are responsible for building materials about communication plan and participatory public consultation.
- Coordinate government at various levels in An Binh commune, (local authorities, Fatherland Front, Women's Union, Farmers' Union, Youth Union, hamlet representative) organize propaganda activities for this plan.

People's Committee, Social Organizations

- To direct, guide and organize the propaganda activities and disseminate contents of communication, participatory public consultation.
- Direct news agencies, local propaganda agencies to spend the appropriate time for disseminating plans and the impact of the subproject.

Land Clearance Committee

- Provide information about land acquisition, resettlement, compensation cost apply framework and support policies of the subproject and the provisions of Hoa Binh Province and government at various levels, the affected people.

Health Station: disseminate information on the disease prevention plan, medical examination periodically, solutions when having epidemic.

Implementation Schedule

The communication plan and participatory public consultation implemented under stages of the subproject; to provide completely information for local people and government at various levels.

Table B3-1 Implementation Schedule of “Communication Plan, Consultation with Community Participation”

No	Stage	Content	Form	Responsible unit	Receptive unit	Note
1	Preparation	Disseminate information, consult the authorities about subproject: scale, type of investment, the main works, incidence, benefits of the subproject.	Organize meeting at government at various levels, mass organizations.	DARD and PMU	Hoa Binh Province People’s Committee, Department of Planning and Investment, Department of Finance, Department of Natural Resources and Environment, Lac Thuy district People’s Committee, Government of An Binh commune	
		Disseminate information about policies, compensation plan, the draft of resettlement action plan.	Meetings, leaflets, consultation votes at all government levels, the affected households around the subproject area.	PMU coordinate with design consultancy unit, resettlement action plan consultancy unit.	Lac Thuy district People’s Committee, An Binh commune, Women's Union, Fatherland Front, Farmers’ Union, Cadastral Division of commune/ precinct, 354 households in the project area.	Perform 2 times: to prepare and present a draft of resettlement action plan
		Disseminate information about project, present the draft of ESIA and ESMP reports, gender plan, public health, communication, etc.	Meetings, leaflets, consultation votes at all government levels, the affected households around the subproject area	PMU coordinate with design consultancy unit, ESIA consultancy unit	Lac Thuy district People’s Committee, An Binh commune, Dong Son Precinct, Women's Union, Fatherland Front, Farmers’ Union, Cadastral Division of commune, 354 households in the project area.	Perform 2 times: to prepare and present a draft of resettlement action plan.

		Compensation and resettlement	Organize meetings to disseminate information about measure, counting, compensation plan, post information in noticeboard of commune/ precinct and village/ urban groups.	PMU coordinate with Compensation, Assistance and Resettlement Board	An Binh commune People’s Committee Women's Union, Fatherland Front, Farmers’ Union, Cadastral Division of commune/ precinct and 12 affected households.	Implement according to Resettlement Action Plan report.
No	Stage	Content	Form	Responsible unit	Receptive unit	Note
2	Construction and Operation	Gender Action Plan	Meetings, leaflets, basic broadcasting, consultation votes at government at various levels, the affected households around the subproject area	PMU and Social Supervising Consultant	An Binh commune People’s Committee Women's Union, Fatherland Front, Farmers’ Union, Cadastral Division of commune/ precinct and 354 affected households.	Implement in 3 phases of the subproject.
		Public Health Management Plan				
		Social Management Plan		PMU and Environmental Supervising Consultant	DONRE, An Binh commune People’s Committee, Women's Union, Fatherland Front, Farmers’ Union, Health Station, Cadastral Division of commune/ precinct and 70 affected households.	Implement in 3 phases of the subproject
		Environmental Management Plan				
		Public order and social evils		PMU and contractor	An Binh commune People’s Committee , Women's Union, Fatherland Front, Farmers’ Union, Health Station, Cadastral Division and Police of commune/ precinct .	
		Traffic Safety and Fire Prevention and Extinction				

Monitoring Assessment: PMU make a monitoring report of communication plan and participatory public consultation to control communication content, synthesize feedback from the Monitoring Consultant Unit, local government, social organizations, unions and citizens to supplement or amend policies and measures of the management plan to suit each stage of the subproject.

Implementation Cost

The implementation cost of this plan is integrated with other plans (communication content and methods will be acquired and build by other plans. Social Management Plan chairs other plans related to social issue. Cost of this phase focuses primarily for broadcasting and organizations, the expected cost is 50,000 million (fifty million VND) in 8 months

Appendix B5 - GRIEVANCE REDRESS MECHANISM

Any complaint related to any aspect of the project will be handled through negotiation to obtain a consensus. A complaint will undergo 3 phases prior to being put to a legal court as the last resort. CPO will incur all administrative and legal expenses arisen by complaints handling and complaints.

1. Initial phase, commune People's Committee

An affected household who is dissatisfied will present their complaint to any member of the commune People's Committee through the village head or directly to the CPC, written or verbal. The above member of the CPC or the village head shall inform the CPC about the complaint. The CPC will work individually with the affected household who has a complaint and will have 30-45 days to handle after receiving the complaint. The secretariat of the CPC is responsible for documenting and archiving all the complaints that it handles.

When the CPC promulgates a decision, the household may appeal within 30 days. If the household is still not satisfied with the secondly issued decision, they may appeal to the DPC.

2. Second phase, the District People's Committee

When receiving a complaint from a household, the DPC will have 30-45 days to handle since receiving the complaint. CARB is responsible for documenting and archiving all the complaints it handles.

When the DPC issues a decision, the household may appeal within 30 days. If the household is still not satisfied with the secondly issued decision, they may appeal to the Provincial People's Committee

3. Third phase, the Provincial People's Committee

When receiving a complaint from a household, the PPC will have 30-45 days to handle since receiving the complaint. The PPC is responsible for documenting and archiving all the complaints it handles.

When the DPC issues a decision, the household may appeal within 30 days. If the household is still not satisfied with the secondly issued decision, they may appeal to a court within 45 days. The PPC has to pay compensation into an escrow account.

4. Final phase, civil court

If a complainant files their case to a court and the court decides to side with the complainant, then the provincial authority must satisfy compensation to a level decided by the court. In case the court takes side with the PPC, the complainant will take back payment paid to the court.

To ensure the above complaint handling mechanism be practical and acceptable to PAPs, consultation with local authority and community has taken into account distinctive cultural characteristics as well as traditional cultural mechanisms in raising and handling complaints and conflicts. Objects and efforts of ethnic minorities have also been defined and culturally acceptable methods have been determined to find an acceptable solution.

Complaint handling process for an affected person has been described in information about the sub-project for "Rehabilitation and safety improvement of Dai Thang Reservoir" and has been issued to the affected person. To avoid the case that an affected person do not know who to meet at the communal, district or provincial level to handle their complaint and the document has provided name, address and telephone number of the persons in charge of handling complaints in order to help the affected person to effectively complain.

The affected people will be exempted from all expenses related to administrative and legal procedures. Complaints submitted to a court are also exempted from filing expenses. All the complaint profiles and handling methods will be kept at the People's Committee of communes, communal public consultation board and investors in work of the sub-project for "Rehabilitation and safety improvement of Dai Thang Reservoir".

APPENDIX B6: GENDER ACTION PLAN

1. Necessity to combine a gender integration plan into Dai Thang reservoir, at An Binh commune, Lac Thuy district, Hoa Binh Province

Gender integration into a socio-economic development plan is a relatively new concept in our country. Similar to gender integration into the policy, the nature of gender integration into a socio-economic development plan does not mean that there are separate plans for men and women, even no plans given to women only. Instead, gender integration into the plan means considering influence, impact of each plan (national, agency, local, grass-root level, etc) for demand and development of women

Law on Gender Equality, which has been effective since 01 July 2007, has created favourable conditions for success of the National Strategy for "the Advancement of Vietnamese Women". Therefore, it's necessary to combine gender integration into socio-economic development planning of the country in general and the plan for repairing, upgrading the reservoir in particular. This must bring about practical effects, promote equality in social development or creates the same opportunities for everyone, men as well women in order that they may develop harmoniously, in right direction and for proper purpose.

Gender integration is here to meet demand for labour, employment, opportunities for men and women to access and enjoy the state's policies, in which the priority choice is to provide both men and women with the same opportunity to stable employment and income with labour structure appropriate, beneficiary to both men and women.

2. Bases to build a gender integration plan

- Draft on socio-economic development comprehensive planning of Hoa Binh province in 2011 - 2020 period;
- 5 year socio-economic development plan of Hoa Binh province in 2011 - 2015 period;
- Current status of gender in households entitled to profit from Dai Thang reservoir project, Hoa Binh province from direct survey, investigation of the project's engineering group in March, 2015.

3. Method to build a gender integration plan

- Gender integration activities are developed based on activities of the project for repairing, upgrading Dai Thang reservoir at An Binh commune, Lac Thuy district, Hoa Binh province managed by the Ministry of Agriculture and Rural Development (MARD). This is an integration plan not a separate plan.
- Build objectives for the gender integration plan in Dai Thang reservoir project of the province.
- Write the gender integration plan and get approval from the project management unit (PMU).
- Consult with relevant partners: Private and state sector.

- Modify and finish the plan.

4. Current status of gender issue in Dai Thang reservoir project at An Binh commune, Lac Thuy district, Hoa Binh province

Shortcomings of analysing current status of the reservoir project:

- Lack of initial basal information.
- Lack of gender based statistic data and database

This part will be supplemented when analysing gender in Dai Thang reservoir project at An Binh commune, Lac Thuy district, Hoa Binh province.

Dai Thang reservoir project at An Binh commune, Lac Thuy district, Hoa Binh province plays a significant role in meeting social demand, strengthening economic development of rural areas according to policies of the Party and the State. The project will have significant influence on social resources such as increasing agricultural output, creating jobs as well as reducing poor households, in which women make an important contribution to this development.

With the objective of eliminating gender discrimination, providing equal opportunities for women and men in socio-economic development and human resources development towards actual gender equality between men and women and establishing, enhancing cooperation, supporting between men and women in all aspects of social life and families, XIth National Assembly, Law No. 73/2006/QH11 has promulgated Law on gender equality. Gender equality in fields:

- Gender equality in politics
- Gender equality in economics, labour
- Gender equality in education and training
- Gender equality in health care
- Gender equality in families

Conduct survey of work assigned in enjoyable families. Statistic results are given in table 2:

Table PL 6-1: Work assignment in households of the project area

Production activities	Both genders (%)	Male (%)	Female (%)
Cultivation (rice, other crops)	85.72	8.57	5.71
Husbandry	92.85	5.71	1.44
Afforestation/forest care/forest protection	57.14	35.71	7.15
Exploitation of forest products	50	35.71	14.29
Fishing and aquaculture	57.14	14.28	28.57
Worker/employee	42.86	50	7.14
Business/trade	35.71	21.43	42.86
Work away from home (not often at home)	21.43	71.43	7.14
Family activity			
Child care	64.29	7.14	28.57
Housekeeping	28.57	0	71.43
Cooking/housewife	22.86	0	77.14
Taking part in community work	Both genders (%)	Male (%)	Female (%)
Join in community meetings	85.71	10	4.29
Join in production training	71.42	14.29	14.29

Production activities	Both genders (%)	Male (%)	Female (%)
Social and political organization activities	78.57	21.43	0
Decision making			
Making decision on family expenses (shopping on valuable asset, wedding)	92.86	7.14	0
Making decision on children's study and career	57.14	35.71	7.15
Decision on investment and production	71.43	22.86	5.71

(Source: Survey data)

Results from table 6-1 show:

- For production activities: cultivation (rice, crops planting); husbandry, forestry/forest care; exploitation of forest products, worker/employee and aquaculture, both 2 genders male and female take up a dominant part. The activity which makes more than 85% is cultivation and husbandry.. Work away from home activity mainly concentrates on male (over 71.43%)

- For family activities: women do most of the work as children care, housekeeping, house works. The housekeeping, cooking/house works take over 71.43%, the household from beneficial region takes 64.29% in sharing the work of child care. This is a time-consuming work for women.

- Taking part in community activities: both genders mainly take part in this activity, concretely, join in community meeting (85.71%); join in production training (71.42%); social-political organization activities (78.57%).

- Taking part in decision making: most of the households agree that both gender make decision. Decisions on large family expenses (valuable properties purchase, wedding) take 92.86%; decisions on study and career of children take (57.14%) and decisions on investment and production take 71.43%.

In general, participation is influenced by cultural and traditional characteristics of Vietnamese people; for example: women tend to undertake small business and work in agricultural sector such as processing while other work such as exploitation is normally done by men; such participation is also partly due to limited awareness of gender equality. In addition to participation in generating income for families, women must give their mind to caring their families, so they lack time for rest, recreation and participation into social activities in communities as well as opportunities to participate in training courses, refresher courses in order to strengthen competence. This has restricted women's access to advanced technologies to make contribution to development objectives. Therefore, women's development opportunities will be lower than men's ones if not reasonable and timely support.

To stand firm in this competition, both men and women are required to enhance their knowledge, skills and determination; if an individual or a gender with lower starting point and less time and opportunity to invest, learn, such individual or gender will have a higher risk of failure. Therefore, to improve women's effective contribution as well as opportunity to access and benefit from activities, the program for upgrading

the dam's safety must pay the same attention to both men and women. In these development activities, it's required to develop, organize conveniently for women to participate.

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Gender integration into the project for repairing, upgrading the reservoir's dam of Hoa Binh province is necessary to increase women's contribution to building the country. Gender integration will be an issue of concern in the whole process of implementing the project to ensure an opportunity for women to participate and benefit from gender equality to men in all activities when implementing plans of the project.

5. Objective - Output and strategy for implementing gender integration plan

5.1 Objective

Equality between men and women in access, participation and benefiting from support activities between men and women in planning, implementing the program for rehabilitation and safety improvement of reservoirs of Hoa Binh province.

5.2. Output

- Competence for women in activities of the project, production households, preference group are improved similar to men in access and participation into activities, programs and services that promote benefits of the project.
- Build output results guaranteed with participation of both genders.
- Clearly define the number or percentage of benefited person to be men or women. Output results reflect positive changes of each gender after participation in the project.
- Minimise negative impacts of the project on women.
- Point out potential issues and remedies to minimise negative impacts, to encourage women to participate, maximize benefit of the project for them.
- Propose planning and implement tasks to access and solve gender issue in the project.
- Propose method of access and interference to promote benefit of the project for women and their participation in the project.
- There are woman representatives and women's participation in organisations.

5.3 Solution groups to attain the objective

5.3.1 Heighten women's competence

- Define and heighten competence for agencies/partners related to the project area and women labour in order that these objects support and enhance competence of women in the project area.
- Evaluate the demand for training women
- Organize training based on women's conditions to enable them to easily attend. (require a certain percentage of women participating in training)

5.3.2 Improving women's access and use of information

Evaluate demand and appropriate information channel for women in the project area and hired labour to build an information system for these objects

Support application of information for women

5.3.3 Favourable policy and support for women

- Hold dialogues with the project owner on policies appropriate for women in the project area (priorities for women in use of land, access to capital, training, etc)

6. Implementation organisation

6.1 Gender specific priority activities:

Priority activities include:

- Recruit gender cadres (propagandize, canvass residential group to move from the project area to hasten construction progress in order to minimise impacts on people's health, safety).
- Train in gender issue in the project area for the PMU and action cadres group to help them to have awareness and capability of necessity for gender integration in building plans
- Train in gender issue for cadres of districts, communes in the project area
- Train PMU, action cadres group and group in charge of gender analysis in gender analysis.
- Implement gender analysis in the project on the dam's safety, which is a very important activity to define advantages, difficulties of women as a basis to build appropriate gender integration activities.

6.2 Supervision for plan implementation

- Coordinators of each component, gender cadres and PMU take interest in gender integration when implementing (based on indexes and criteria).
- Cadres supervise, evaluate, monitor implementation of gender integration plan (in coordination with gender cadres, coordinators), report, and evaluate supervision with consideration of gender criteria.

- Present result of gender integration implementation in periodic reports.
- Recheck annual action plans and adjust accordingly.

Gender specific activities in next years will be defined and planned based on results of gender analysis and rechecking this plan annually.

The above gender analyses show that a gender action plan is very necessary to facilitate women's maximum participation in the construction phase of the project, to provide new opportunities for women to raise income without increasing their life burden and to contribute to enhancing role and position of women in the project area. The objectives of this plan are as follows:

- (i) Local contractors will employ at least 30% women labour in maintaining, construction and repair;
- (ii) For a similar type of work, women labour must be paid equal to men labour;
- (iii) Safety conditions must be the same for both men and women;
- (iv) Local contractors aren't allowed to employ child labour;
- (v) Encourage utilization of local labour and avoid establishment of site huts;
- (vi) Women group and Women Union will be consulted in design of the sub-project;
- (vii) Train gender integration for national, provincial and local agencies (or PMUs and other relevant parties).
- (viii) Train and build competence for women participating in making decisions of the community and sub-projects in the most significant way (or training in participation and negotiation skills, marketing skills and train in mathematics and literacy;
- (ix) Ensure women's participation in tours for study of the project
- (x) Agricultural expansion encouragement services aimed at women are designed and handed over to women.
- (xi) Strategy for enhancing awareness of HIV/AIDS will be introduced prior to commencement of civil works. PMU will be responsible for monitoring and reporting indexes of implementing the gender action plan including women's participation, target work and training and campaigns to prevent HIV pandemic.
- (xii) At least one woman will represent the commune in the commune supervision board (making up 1/3 total members).

Table PL 6-2: Gender action plan of the project

Results of the project	Work and indexes	Responsibility	Time:
Result 1: Increasing the dam's safety, improving irrigation conditions	Contractors must preferably employ unskilled labour (through sub-contracts); at least 30% total labour is local unskilled labour; Among 30% local labour, give priority to to unskilled women labour; women labour and men labour will be equally paid for the same type of work;	PMU/the project coordination consultant will be responsible for ensuring that these provisions will be written in contracts; commune cadres will provide the contractor with the list of people who	During construction period

Results of the project	Work and indexes	Responsibility	Time:
	Contractors aren't allowed to employ child labour; The people who want to work for the project will register their name in the list of village/hamlet. Village leaders and commune cadres will provide this list to the contractor, the contractor will select based on giving priority to poor households, vulnerable households	want to work for the project; Commune cadres are responsible for guaranteeing to meet the proposed objective. Commune Women Union is also responsible for ensuring that women of the commune are employed by the project.	
Result 2: Strengthen competence of the people to exploit advantages of the sub project	At least 30% women participate in agricultural expansion encouragement classes	Provincial level project management board cadres, District level cadres, Communal level cadres,	During construction period
Result 3: Raise awareness of potential social evils for the vulnerable people, especially women and ethnic minority people	Program for prevention of HIV/AIDS and slave trade. Program for community based risk mitigation Information about risk mitigation will be delivered to communes, villages affected by the project by using an approach with main participation of poor households and vulnerable households (for example: ethnic minority people, households with women as a householder, households with old people, handicapped people) Data, information must be appropriate in languages, culture and gender, especially they must be translated in ethnic minority languages	The provincial level and communal level Women Union are responsible for organizing and implementing the program (training and preparing documents) in co-ordination with commune, district health centers. Village/hamlet women union is responsible for propagandizing, popularizing information. Commune, district health centers will support commune women unions.	monthly before and during construction of the project

Results of the project	Work and indexes	Responsibility	Time:
	<p>depending on each region; Women Union, representatives of the center for HIV/AIDS prevention and the communes will train propagandists for each commune/village in the project area.</p> <p>The programs will be implemented at communes/village by two propagandists (village leader and 1 member of Women Union).</p> <p>The program will be implemented at villages and market days through distribution of documents on the project, documents on the program and on loudspeakers</p>	<p>The project coordination consultant will provide domestic and international gender experts and ethnic minority experts.</p> <p>Gender experts and ethnic minority experts will check existing documents and supplement (if necessary) for the program</p>	
	<p>The program for minimizing risk during construction:</p> <p>PMU and the contractor will closely coordinate with commune, district health services to deploy programs to raise awareness, train, prevent, diagnose and treat diseases for workers.</p> <p>All the programs and documents are developed with gender integration including vulnerability and demand of both men and women.</p> <p>The contractor will:</p> <p>Deploy programs to raise awareness for workers and communities including providing information, educating, propagandizing HIV infection and guiding prevention measures.</p> <p>Provide free advice and encourage workers to test for HIV in order to ensure that all of them know their health state.</p>	<p>PMU Contractor Local health center Communal level cadres, Women Union will implement general coordination to create a bigger total strength in HIV prevention</p>	<p>During construction period</p>

Results of the project	Work and indexes	Responsibility	Time:
	Support access to health service and encourage HIV infected people to admit their HIV infection state; Provide medical devices (provide condoms free of charge) to workers at site huts;		
Project management	- Instructions about Gender and development and training will be provided to employees of the PMU, local organisations and contractors. All activities and development of competence will include objectives for women's participation and EM. Consult for implementation of the project PPMU in design and initial implementation	Consult for implementation of the project PPMU	During design and initial implementation
Project Results	Activities and indicators	Responsibilities	Time
	PPMU in design and first implementation		

Table PL 6 - 3: Trainings with support on gender integration during the implementation of the Dai Thang Reservoir/Dam Rehabilitation and Improvement Sub-Project

	Activities relates to Gender	Class	Cost
1	Training for gender awareness improvement and gender intergration.	2 class	10,000,000
2	Training for HIV/AIDS prevention for female	2 class	10,000,000
3	Communication on gender integration, HIV/AIDS prevention; sanitation and environmental protection; traffic safety for female	2 class	10,000,000
4	Pano, poster, leaflet, propaganda		10,000,000
	Total		40,000,000

Budget: The budget for this is considered a part of project management budget

Appendix B7 - DESCRIPTION OF PREPARATION WORK INCLUDING ORGANISATION, INSTITUTION AND SUPERVISION, EVALUATION

Unit	Role and responsibility		
	Preparation for the sub-project	Implementation of the sub-project	Operation of the sub-project
CPO	Guide safety policy cadres of the province Project management unit (PMU) during preparation of the report for checking social environment impact assessment Consider and contribute ideas to the report for the province PMU to submit superior level	Guide the PMU cadres to implement Social environment management plan during construction; Supervise progress during construction; Gather 6-month environment reports months from the province PMU;	Guide Safety policy cadres of the province PMU to implement Environment management plan in the first year of operation; Supervise progress in the first year of operation; Gather environment reports from the province PMU;
The province People's Committee	n/a	The project owner is the highest responsible for environmental activities of the sub-project during construction;	The project owner is responsible for environmental activities in the operation phase including implementation of Environment Management Plan in the operation phase;
The province PMU	Engage a consultant and take overall responsibility for preparation of the Social environment impact assessment report and submit it for approval; Ensure that cadres are fully trained in environmental issues;	Be responsible for implementing the Environment Management Plan before and during construction; Ensure that details of the contract and bidding documents include environmental requirements; Conduct survey and supervision of environmental issues during construction; Coordinate the environment monitoring report for the Central Project Management	Be responsible for implementing the Environment Management Plan in the first year of operation; Conduct survey and supervision of environmental issues in the first year of operation; Support the project owner to put environmental requirements in operation and maintenance procedures of the

Unit	Role and responsibility		
	Preparation for the sub-project	Implementation of the sub-project	Operation of the sub-project
		Unit;	works;
The district People's Committee	Approve the Commitment to Environment Protection (CEP) of the sub-project in accordance with legal regulations of the Vietnamese Government;	Supervise implementation of the Environment Management Plan through their internal supervision system	Supervise implementation of the Environment Management Plan through their internal supervision system;
Community supervision board and members of local community supervision boards(CSBs ²)	Participate in consultation activities and define and prepare sub-projects; Contribute ideas to environmental assessment documents after the documents are introduced to them;	Participate in environmental supervision activities according to Vietnam law and according to training sessions	Participate in environmental supervision activities according to Vietnam law and according to training sessions
The construction supervision consultant	n/a	Undertake to train environmental courses for supervision consultants Participate in environment supervision according to approved EMP in the Social environment impact assessment report Prepare a supervision report and submit to the province PMU	n/a
Construction contractor	n/a	Prepare Detailed field environment supervision plan to meet general requirements for an EMP of the sub-project;	n/a

² CSBs, established according to decision No. 80/2005/QĐ-TTg dated 18 April 2005 by the Prime Minister on promulgating Investment supervision mechanism of communities. Article 8 of Decree No. 80/2006/NĐ-CP provides communities with opportunities to check compliance, supervise implementation and evaluate investment results at the commune including environmental impacts.

Unit	Role and responsibility		
	Preparation for the sub-project	Implementation of the sub-project	Operation of the sub-project
		Allocate sufficient human resources to meet compulsory requirements and regulations of a field EMP;	