

**BINH THUAN PROVINCIAL PEOPLE COMMITTEE  
DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT**

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# **SOCIAL ASSESSMENT**

**DAM REHABILITATION AND SAFETY IMPROVEMENT PROJECT  
SUB-PROJECT: QUAO DAM REHABILITATION AND SAFETY IMPROVEMENT  
IN BINH THUAN PROVINCE**

**CONSULTING FIRM**

**Binh Thuan, 18 June 2015**

## ABBREVIATIONS

AP	Affected person
CPO	Central Project Office
CPC	Communal People's Committee
DARD	Department of Agriculture and Rural Development
DMS	Detailed Measurement Survey
DPC	District People's Committee
DRC	District Resettlement Committee
DRASIP	Dam Rehabilitation and Safety Improvement Project
EIA	Environment Impact Assessment
EM	Ethnic Minorities
EMPF	Ethnic Minorities Policy Framework
EMDP	Ethnic Minorities Development Plan
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
GOV	Government of Vietnam
HH	Household
IOL	Inventory of Losses
IMC	Independent Monitoring Consultants
WB	World Bank
LAR	Land Acquisition and Resettlement
LURC	Land Use Right Certificate
MARD	Ministry of Agriculture and Rural Development
MOF	Ministry of Finance
MOLISA	Ministry of Labours – Invalids and Social Affairs
NGO	Non-government Organisation
OP	Operating Policy
PAD	Project Appraisal Documents
PPC	Provincial People's Committee
PPMU	Provincial Project Management Unit
PRA	Participatory Rapid Assessment
REA	Rapid Environment Assessment
RAP	Resettlement Action Plan
RPF	Resettlement Policy Framework
TOR	Terms of Reference
USD	United States Dollar
VND	Vietnamese Dong
WB	World Bank

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## **Part I. General introduction**

### **1.1. Background of the project**

Vietnam has one of the largest networks of dams and hydraulic infrastructure in the world alongside China and the United States. This network comprises over 7,000 dams of different types and sizes. More than 750 can be classified as large dams (over 15m in height or between 5 and 15m with reservoir storage in excess of 3 MCM) and with the number of small dams (less than 15m and 3 MCM) estimated to be in excess of 6,000 largely earth embankment dams. Of the total four million hectares of agricultural land, more than three million hectares are irrigated via 6,648 dams.

The development of this infrastructure platform has resulted in a number of inherent challenges. Many of the medium and small-size reservoirs were built in the 1960s-1980s with limited technical investigations, inadequate design, and poor quality construction. These issues have been compounded by limited operations and deferred maintenance. As a result, many of these dams have deteriorated and the safety is below accepted international safety standards, presenting a substantial risk to human safety and economic security. The deterioration of these dams, coupled with the increased risk and uncertainty resulting from hydrological variability due to climate change and rapid upstream development, has placed many reservoirs at risk. The risks are wide spreading, resulting from inadequate cross section e.g. too thin to be stable, through subsidence of the main structure, seepage through main and/or auxiliary dam and around the intake structure, deformation of up/downstream slope, spillway malfunction, and inadequate and ineffective use of safety monitoring devices. Failure to secure the operational safety of the existing network and strengthen the capacity for further development has the potential to undermine Vietnam's economic gains.

Recognizing the importance of securing the foundations for sustained and secure economic growth, the Government first launched a sectoral program focused on dam safety in 2003. The proposed Vietnam: Dam Rehabilitation and Safety Improvement Project with possible the World Bank financing will support the Government of Vietnam's Dam Safety Program. This will be achieved by supporting both the structural safety of the dams and reservoirs themselves, along with the operational safety required to safeguard the populations at risk and downstream socio-economic infrastructure. This is directly aligned with the Government definition of dam safety outlined in Decree 72. The project will also support Government to ensure a more holistic, basin level integrated development planning to improve institutional coordination, future development and operational safety.

## **1.2. Project description**

### ***General objective***

The project objective is to support the implementation of the Government dam safety program by improving the safety of prioritized dams and reservoirs as well as to protect people and assets of the downstream communities.

### **Project outputs**

- i) Improve dam safety and performance by rehabilitation, improvement, installation of monitoring equipment, operation and maintenance planning.
- ii) Strengthen institution of dam safety management at national and system levels by completion of institutional framework on dam safety, including the construction and management of databases, addition of regulations, standards, guidelines, building capacity and coordination mechanism between stakeholders.
- iii) Flood management capacity building in the basin level and coordination mechanism of reservoir operation by improving forecasting capacity, developing integrated flood management plan and training capacity building.

### **Components of project**

It is proposed that the project consist of four principle components.

#### **Component 1: Dam Safety Rehabilitation (US\$385 million)**

This component will improve dam safety through physical rehabilitation of existing infrastructure. This will include two different approaches required for the rehabilitation of large/medium and small, community-managed dams. The difference between the two relates not only to the types of works and the regulatory framework, but also the institutional and implementation arrangements required to undertake such works and ensure their sustainable operation and maintenance. This would include support to (i) Detailed design, supervision and quality control of rehabilitation works for prioritized dams and associated infrastructure; (ii) rehabilitation works, including civil works, hydro-mechanical works and installation of hydrological and safety monitoring equipment; (iii) preparation of Operation and Maintenance Plans and Emergency Preparedness Plans; and (iv) adoption of standardized checklist for community-managed dams.

#### **Component 2: Dam Safety Management and Planning (US\$60 million)**

This component will improve the planning and operational framework for dam management to safeguard the people and socio-economic infrastructure within downstream communities. This would include provision of support to: (i) hydrological observation network and information systems; (ii) integrated development planning and operational coordination mechanisms between irrigation and hydropower

reservoirs; (iii) regulatory and institutional support and strengthening on coordination mechanism including national dam policy on registration, regulation, inspection, safety compliance and penalties; (iv) technical specifications, safety standards and regulations to internationally-accepted levels; and (v) capacity enhancement, basin-wide integrated dam reservoir operation plans, emergency preparedness plan including dam break analysis, downstream flood mapping and benchmarking, awareness raising and evacuation drills for local communities living downstream.

### **Component 3: Project Management Support (US\$15 million)**

This component will provide the necessary enabling environment to support project implementation. This will include support for the following: (i) Project Steering Committee composed of MARD, MoIT and MoNRE to coordinate all project interventions; (ii) Project Management Unit (PMU) within MARD to provide the necessary support services for timely and effective project implementation, including monitoring & evaluation, procurement, financial management, safeguard monitoring, etc.; (iii) Technical Assistance for beneficiary departments within MoIT and MoNRE to provide the necessary support services for timely and effective project implementation; (iv) Establishment and operations of a National Dam Safety Review Panel; (v) Independent audits of prioritized dams before and after rehabilitation; and (vi) Incremental operating costs for project related activities.

### **Component 4: Disaster Contingency (US\$ 0 million - no fixed allocation, but not to exceed 20% of the total project cost)**

This component will improve the response capacity of the Government in case of an emergency relating to dam failure during project implementation. In the event of an emergency, this contingency component would facilitate rapid utilization of loan proceeds by minimizing the number of processing steps and modifying fiduciary and safeguard requirements so as to support rapid implementation. This component would allow expenditures to be made in accordance with the rapid response procedures of OP/BP 10.00 subject to the list of positive goods and services to be defined during project development. Such a component is not a substitution for insurance, and does not remove the need for construction covering dams included under the project. A generic positive list may be combined with a list of excluded goods that could trigger safeguard policies. This is intended to help ensure sufficient liquidity in the case of an emergency by financing the government's overall response to the emergency and providing some measure of protection to Government's fiscal accounts.

#### **1.3. Background of sub-project in Binh Thuan province**

Due to the topographic characteristics, rivers and streams in the province are divided according to individual regions, independent of each other and production regions often formed in the basin. Flow regime in rivers are also different depending on the region, basin, especially related to rainfall in the upstream and water distribution among the irrigation works. The project area can be divided into two regions of water supply and irrigation as Southern Binh Thuan and Northern Binh Thuan:

- Southern Binh Thuan region includes: basins of Ca Ty river; Phan river; Dinh river; La Nga river;
- Northern Binh Thuan region includes: basins of Quao river; Luy river; Long Song river.

Results of water balance calculations show that total lack of water volume was 228.485 million m<sup>3</sup>, of which: The lack of water in Northern Binh Thuan is 41.455 million m<sup>3</sup>, accounting for about 18% / total water shortage in the province. Southern Binh Thuan is lack of 187.03 million m<sup>3</sup> water, accounting for 82% of the water shortage.

Results of water balance calculations for 2020 show that total lack of water volume was 298.407 million m<sup>3</sup>, of which: The lack of water in Northern Binh Thuan is 112.51 million m<sup>3</sup>, accounting for about 37.7% / total water shortage in the province. Southern Binh Thuan is lack of 185.895 million m<sup>3</sup> water, accounting for 62.3% of the water shortage.

Based on the status of irrigation and water supply capacity of the river basin, total solution for water resource exploitation project areas are: (i) Additional works specially created new sources water supply concerns for coastal areas; (ii) Networked sharing water between irrigation works; (iii) Capacity building the existing system.

According to approved irrigation development planning in 2011-2020 of Binh Thuan province, the province should build, repair and improve 78 reservoirs and dams, flood safety and for irrigation of 300,000 hectares. Out of 43 reservoirs, 12 large reservoirs with a volume of more than 3 million m<sup>3</sup>, Quao reservoir has the largest capacity of 73 million m<sup>3</sup>; 04 reservoirs with a capacity of 1 to 3 million m<sup>3</sup>; 26 reservoirs from 0.5 to 1 million m<sup>3</sup> and 01 reservoir with a capacity below 0.2 million m<sup>3</sup>. Including over 60% of the investment reservoirs built before 2000, the majority of the earth dam has long exploited over time and not to invest in upgrading.

On one hand, due to limited local budgets, funding repair works were difficult while many buildings in the province were built long ago, has deteriorated, causing unsafe, reduce irrigation capacity especially in terms of the situation of climate change currently taking place on a complex and unpredictable. On the other hand, Binh Thuan under conditions under different climate, harsher than other regions in the country;



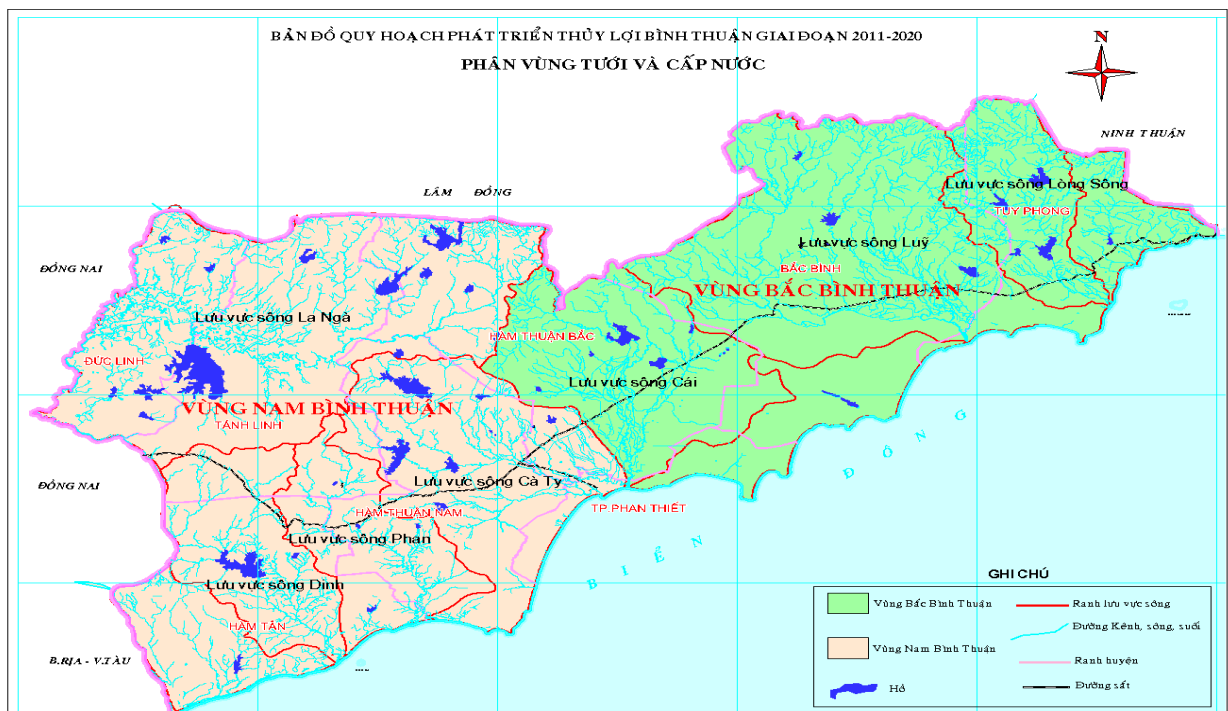
terrain conditions, geological province has many disadvantages in the management and safety of reservoirs and dams as: erosion; sedimentation of reservoirs; subsidence; Sliding cracked; significantly reduced life expectancy and capacity; rafts of grass in the lake ... So the degraded irrigation works in the province's permanent threat to people downstream areas as well as local authorities.

With interest support from the Central Government, so far there has been investing 07/43 lake ensuring safety upgrades, and 36 lakes that have not been invested. While 28 seriously degraded lakes, especially Quao reservoir has 73 million m<sup>3</sup> capacity and 40m height. Therefore, the Binh Thuan Department of Agriculture and Rural Development has proposed to the Government, the Ministry of Agriculture and Rural Development, the ministries, central agencies and the World Bank to consider and facilitate Binh Thuan province are involved in the "Dam Rehabilitation and Safety Improvement Project" loans by the World Bank (WB) to enhance dam safety and improve dam safety management in the province of Binh Thuan.

The Dam Rehabilitation and Safety Improvement Sub-Project in Binh Thuan province is done in the province 06 districts and towns of Binh Thuan Province, including Tuy Phong district, Bac Binh district, Ham Thuan Bac, Ham Thuan Nam, Duc Linh, Tanh Linh district, Ham Tan district.

#### 1.4. The Quao Dam Rehabilitation and Safety Improvement Sub-Project

Quao river basin: Derived from Bao Loc plateau and flows into the sea in Phan Thiet. The total area is 1068.3 km<sup>2</sup> basin, including the basin area is 976.7 km<sup>2</sup> in the province.



Quao Reservoir was started construction in 1986, and 1998 completed and put into exploitation and utilization management. Reservoir is located in Ham Tri and Thuan Hoa can accommodate about 70 million m<sup>3</sup>, up to 6.8 km<sup>2</sup>. Tasks designed to irrigate the paddy land 8.120ha Ham Thuan Bac district and water supply for the people in the region and many works pond, ponds, and other dams. Currently it is supplemented by water from the Luy river, so total irrigated area the whole system of Quao irrigation works is 11,000 ha and water supply to Phan Thiet with a capacity of 25,000m<sup>3</sup> / day. But now happened 72 position subsidence diameter from 0.5m to 3m; depth from 0.5m to 1.5m. Which left the main dam has 39 branch locations subsidence. In particular, deformed downstream movement, but so far the authorities have not yet found the province's cause.

Subproject: The Quao Dam Rehabilitation and Safety Improvement Sub-Project, in Ham Tri and Thuan Hoa communes, Ham Thuan Bac district ensure stable supply of irrigation water to 2759.62 (ha) farm of Thuan Hoa and industry of 3282 (ha) of Ham Tri, Ham Thuan Bac district. In addition, the project will improve the water supply for the people in the project area. To ensure the safety of reservoirs, to protect the lives and property of the people downstream, increase productivity, yield; security, food contribute contributing to improving the lives of people in the project area, promoting socio-economic development and environmental landscaping project area.

## **Part II. Methodology of Social Assessment**

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. Objective of this assignment is assessment of socio-economic situation and planning for implementation of safeguard policy of sub-project. The social assessment and preparation of the social safeguard documents required for project in the preparation phase to ensure that the interventions are take into account the social issues Assembly and comply with the legal requirements of the Government of Vietnam and safeguard policies of the World Bank.

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 the environmental assessment (OP 4.01). 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 these plans in the Annex 4 of this SA).

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 (Please see Annex 1 for how the Sampling Frame). A total of 261 of respondents participated

in the SA exercise for this subproject, of which 151 people participated in the households survey (quantitative), and 110 people participated in focus groups discussions, community meetings, key informant interview (qualitative).

In Section 3, we will present briefly the SA results. In Section 4, we will present the findings of the SA (positive and adverse impact) along with the recommendations on the basis of the SA findings, including the result of the gender analysis. Please note that a gender action plan and gender monitoring plan are presented at Annex 4 of this SA), and the public health intervention plan and public consultation and communication plan were presented at Annex 2 and 3, respectively).

## **Part III. Bio-physical and socio-economic characteristics of project area**

### **3.1. Summary of main findings**

- In general, the local socio-economic situation is in good growth. One of two communes achieved "New Rural" standard in 2014, the other has achieved 14/19 criteria and set goal of "New Rural" standard in 2020;
- Poverty rate in female-headed households is higher than male-head households; Poverty rate of ethnic minority household is higher than the Kinh households;
- Compared with previous years (especially before the Gender Equality Law), the local gender issues has improved, including domestic violence reduction, increase of primary education rate (100% of children birthed from 2005 is gone to school);
- Nevertheless, situation of male children dropping out of school is still going on and the dropout rate of male children is higher than female because male children are attracted to the social evils (games, etc.);
- Poor households have more difficulties in accessing services and health education;
- Water is the urgent need of people in the area, especially for Thuan Hoa commune;
- The project has positive impacts rather than negative impacts. Specifically, dam safety improvement will increase water storage capacity of Quao reservoir, reduce damage to downstream when discharging water. Besides, dam safety improvement will create opportunities for construction of irrigation system of Thuan Hoa commune; provide water for about 2,000 ha;
- Negative impacts in the community are issues on security, sanitation and disease during duration of project construction when workers crowd on construction site. Besides, the project can affect to agricultural land during and after the construction process and irrigation water due to water cut during construction process;
- In term of communication, the social associations are the units which carried out effectively direct communication (as a reasonable form for ethnic minority). However, the poor, female and ethnic minorities are more restrictive than those in the other groups in participating in social associations;
- To promote efficiency of the project, it should have strong communication on positive impacts of the project and improves community in sharing the difficulties in the implementation process. Besides, there should be measures to minimize negative impacts in construction process.

### **3.2. Overview of socio-economic situation of Binh Thuan province**

#### ***3.2.1. Bio-physical characteristics***

Binh Thuan province is located in the Southeast region, coordinates from 10°33'42" north latitude to 11°33'18" east longitude, far away 1.518 km from Hanoi and 200km from Ho Chi Minh City with coastline of 192 km. The province is bordered by:

- Lam Dong province in the north;
- East sea in the South with a coastline of 192km;
- Dong Nai and Ba Ria - Vung Tau in the West;
- East Sea and Ninh Thuan province in the East and Northeast.

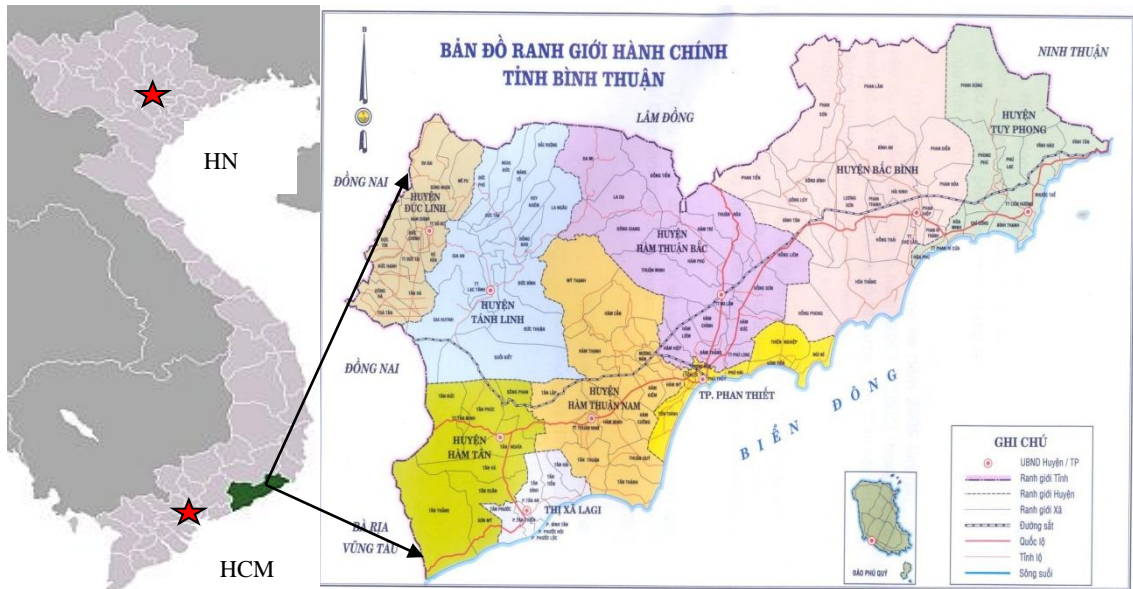


Figure 1: Administrative map of Binh Thuan province

Binh Thuan terrain changes from highland to the coastal plain with diversities and complexity. The north and northwest are high mountains with average height of 500-1500m. The south and southeast are low, narrow plains with small valleys river and sand hills along the coast. Elevation of the terrain can be divided into four categories: medium mountains (> 500 m); low mountains (average elevation of 200-500 m); hills in coastal line (elevation of from 100 m to 200 m); alluvial plains (elevation of 5-100 m).

Topography features facilitate economic development but also cause difficult for production and living of the people.

Binh Thuan province's weather is hot in most months of the year, large evaporation, tropical monsoon climate, and no winter. The dry season lasts 6-7 months; the amount of rainfall in dry season is 10% total annual rainfall. The rainy season is from 5-6 months, the amount of rainfall in rainy season account for 90% of the year.

Binh Thuan is one of the regions with higher average temperatures, ranging from 26<sup>0</sup> C to 27<sup>0</sup> C. The temperature decreases from north to south and from the plains to the mountains. Temperature fluctuates between day and night change from 8<sup>0</sup> C to 9<sup>0</sup> C. The highest absolute temperature in the year is 37-39<sup>0</sup> C occurred in December, 2001.

Absolute lowest temperature is 17-18<sup>0</sup> C occurred in 12/2001. Average temperatures fluctuation between months is not much, is favorable conditions for plant growth.

The average annual rainfall is about 1,400 mm, with the disparity between regions. Due to the strong influence of the southwest monsoon, rainfall tends to decrease from southwest to northeast. La Nga River area in Tanh Linh district has high amount of annual rainfall, the highest average annual rainfall in the La Nga River is 2,354 mm; coastal areas have lower amount of rainfall, for example 831 mm in Mui Ne.

Binh Thuan has seven main river basins, 74 primary and secondary rivers. Besides, some independent rivers are Co Kieu River and Nuoc Man River. The total length of the river in the province is 1977 km; in which the main river has a length of about 665 km account for 34% of total length of river in the province.

General characteristics of streams and rivers are short and steep; average density of network river is 0.211 km / km<sup>2</sup>, with the biggest density of 0.368 km / km<sup>2</sup> (Ca Ty River Basin) and the smallest density of 0.148 km / km<sup>2</sup> (Dinh river basin).

Water resources of the region relies on surface water of 7 river basins, including Luy river basin, Long Song river basin, Quao river basin, Ca Ty river basin, Phan river basin, Dinh river basin and La Nga river basin with a total catchment area of 9.871km<sup>2</sup>. According to calculation results of average rainfall in many, total amount of water generated from rainfall is approximately 6.4 billion cubic meter, in which within the province of 3.6 billion cubic meter and from outside the province of 2, 8 billion cubic meter. However, due to the influence rainfall distribution, the total average amount of water is unevenly distributed over space and time. The amount of water in the rainy season is 5.1 billion cubic meter (80% of water in the year), the amount of water in dry season 1.2 billion cubic meter (including 913.2 million cubic meter water coming from outside the province, accounting for 73.33% of total amount of water in dry season).

Overall Binh Thuan province is not lack of water, but in terms of river basin, water distribution is uneven over space and time. The amount of water is mainly in Luy river basin and La Nga river basin. Generally, remaining river basins are limited amount of water. Due to disadvantage water distribution, the provinces have difficulties in extraction and use of water resources.

In dry season, water in the river and its tributaries are very small. Due to increase of agricultural land area, forest area reduces. The amount of flow in dry season tends to decrease, almost many small rivers in the basin in dry season is no flow. Due to disadvantage water distribution, the provinces have difficulties in extraction and use of water resources.

### ***3.2.2. Summary of demographic and labor characteristics***

### *a. Demography*

Binh Thuan population was 1,201,200 people in 2013, a population density of 154 people/km<sup>2</sup>. In which the population in rural areas accounted for 60.71%, the population in urban areas accounted for 39.29%. Percentage of population natural growth tends to decrease, in 1996-2000 average population growth rate was 2.5% / year, 2001-2005 was 1.57% / year and in the period 2006 – 2010, the population growth rate was 1.01% / year.

Binh Thuan population has young group of 0-14 ages accounted for 35.14%; Population in the labor age group accounts for 57.3%; over working age group accounts for 7.6%. The fluctuations in the age structure of the population tends increasingly reasonable, this could be seen as an advantage in human resources in the coming period. However it is also difficult for job creation, poverty alleviation, education and other social issues.

The province has 34 ethnic groups, including the Kinh with 93.04%, Cham with 2.84%, Raglay with 1.21%, Hoa with 1.07% and 1.84% of other ethnic groups with customs, traditional, festive, cultural monuments, history ... gave Binh Thuan specific cultures and diversity.

Due to the impact of the characteristics and location and topography, Binh Thuan population is unevenly distributed, densely populated in coastal plains and river basins. The region with the highest population density is in Phan Thiet (1,053 people / km<sup>2</sup>), the district with the lowest population density is Bac Binh district (64 people / km<sup>2</sup>).

### *b. Labor*

From 2000 to present, the population of working age continues to increase at an average rate of 2.6%/year (2.8% of nationwide). Human resources mainly concentrated in rural areas, but with the urbanization process, has tended to increase the proportion of human resources in urban areas.

Educational attainment of human resources, literacy rate is quite high (94.96%). However, the percentage of illiterate persons is 5.04%, also higher than the national average and the South Central Coast region (4.04%, and 2.56%, respectively). Percentage of people graduated from secondary school is only 38.04% (while the whole country is 53.8% and the South Central Coast is 56.5%).

Labor structure in the economy reflected the level and quality of human resources. In the period from 2000 until now, the process of restructuring of labor between sectors tend to better. Percentage of employee by 3 sectors (Agriculture - Forestry - Fishery, Industry - Construction and Services) are 64.88%, 17.72% and 17.4% respectively. Labor concentrates mostly on agriculture, while labor structure of South Central Coast is 49.7%, 21.4% and 28.9% and Central Key Economic Region is 46.9 %, 23.0% and 30.1%.



### 3.2.3. Summary of economic characteristics

Socio-economic situation in 2014 of Binh Thuan province shows that the province's gross domestic product rose 8.75%, food production reached 778,237 tons, the output of 188,800 tonnes of seafood, exports reached 400.037 million USD, total state budget revenues 7,100 billion VND, of which domestic revenue is 3,975 billion VND, expenditure development from centralized budget is 661 billion. The economic structure continues to shift towards reducing the proportion of agriculture and forestry sectors - fisheries, increasing the proportion of industry - service. Irrigation system of the province meets the total cultivated area of 203,515 ha, food production of 778,237 tonnes. Total budget revenue is estimated at 7,100 billion VND. However, agricultural production is facing difficulties due to prolonged local drought, especially in areas inhabited by ethnic minorities, fruit tree area continues to grow rapidly, while the markets are unstable, depend on a market. The violation of fishery resources, forestry remains complicated, particularly deforestation in the adjacent areas, the life of a part of the people, especially ethnic minorities, coastal area is still difficult.

### 3.2.4. Summary of socio-economic characteristics of project area

The socio-economic situation of project area is assessed on the basis of socio-economic assessment reports of two communes surveyed and results of quantitative and qualitative surveyed in the local.

- **Socio-economic situation of two communes surveyed**

*Table 1. Socio-economic situation of two communes surveyed in 2014*

Item	Ham Tri	Thuan Hoa
Mobilizing 6 year olds children go to school	100 %	100%
Mobilization 5 year olds children go to school	100%	100%
Rate of universalizing secondary education	-	81.6%
Rate of households participating in health insurance	-	71.0%
Rate of households participating in voluntary health insurance	-	29.9%
Poverty rate	3.65%	8.06%
Rate of households using electricity	99.1%	99.5%
Rate of households using sanitary water	99.9%	100%
Rate of households with sanitary toilet	99.62%	88.0%

*(Source: Report on socio-economic, security and defense in 2014 and tasks in 2015, Ham Tri and Thuan Hoa CPC)*

In general, socio-economic situation of two communes develops well and relatively uniform. However, the poverty rate in Ham Tri commune is lower than Thuan Hoa

commune. Ham Tri commune also achieved "new rural" standard in 2014, while Thuan Hoa reached 14/19 criteria, expected to be complete by 2020. The results observed in the field also show that Ham Tri commune more favorable position, and terrain than Thuan Hoa commune and irrigation system severs for irrigation of agricultural land. Hence, Ham Tri commune has more conditions for development than Thuan Hoa commune.

According to the "Activity report" of 2012, 2013 and 2014 of Thuan Hoa commune and "Report on the socio-economic development, security and defense" in 2012, 2013, 2014 of Ham Tri commune, the annual growth targets are better than last year, which included all the criteria as the poverty rate, education, health care, the use of electricity, water use in domestic use and production activities. For example, the poverty rate of Thuan Hoa commune in 2012 is more than 12%, 8.06% in 2014 and expected 6.05% in 2015. Every year, the two communes are implemented plans to issue certificates of residential land and production land use right and land in production and supplied irrigation and drinking water for the people. These activities effect to daily life and production of local people.

#### **Box 1: Land use right certificates**

Land use right certificates are provided for 0.658 / 0.630 ha, accounting for 104% of the plan and 39.231 ha of agricultural land.

*Report on socio-economic, security and defense in 2014 and tasks in 2015 (Thuan Hoa CPC)*

During the year, part time officers built drain canal in Kho village - Lam Giang village, with length of 450 m, irrigation for 12.4 ha.

*Report on socio-economic, security and defense in 2014 and tasks in 2015 (Ham Tri CPC)*

In Ham Tri commune, basically, there is no water shortage due to water supply from Quao reservoir, but potential flooding in downstream areas caused by flood discharge in the rainy season may damage considerably life and property of the people in the region. Meanwhile, at the time of field survey, March 2015, Thuan Hoa commune is severely short of water for both the living and production (image).



*Image 1. Drought in Thuan Hoa commune*

### 3.3. Socio-economic characteristics of communities in project area

#### 3.3.1. Demography

**Table 2. Demographic characteristics**

	Average person per household	Classification of person per household (%)			
		1 - 2 persons	3 - 4 persons	5 - 8 persons	9 or more persons
<b>Total</b>	4.81	7.5	39.1	49.6	3.8
<b>By commune</b>					
<i>Ham Tri</i>	4.93	8.2	35.6	52.1	4.1
<i>Thuan Hoa</i>	4.67	6.7	43.3	46.7	3.3
<b>By ethnic</b>					
<i>Kinh</i>	4.65	9.8	39	48.8	2.4
<i>Cham</i>	5.18	3.9	39.2	51	5.9
<i>Other ethnics</i>	4.77				
<b>By gender of householder</b>					
+ <i>Male</i>	4.83	6.2	39.8	49.6	4.4
+ <i>Female</i>	4.71	15	35	50	0
<b>By income group</b>					
<i>Group 1 (the poorest)</i>	3.54	60	26.9	9.1	0
<i>Group 2</i>	4.81	20	21.2	19.7	20
<i>Group 3</i>	4.74	10	26.9	16.7	20
<i>Group 4</i>	5.48	10	11.5	27.3	40
<i>Group 5 (the richest)</i>	5.46	0	13.5	27.3	20

Average person per household is 4.81 person, including 7.5% of 2-3 persons person per household, 39.1% of 3-4 person per household, 49.6% of 5-8 person per household and 3.8% of more than 9 person per household. Average person per household in the poorest households is 3.54% lower than the general average rate, 60.0% of the poorest households have 1-2 persons. Those with high person per household belong to two richest groups. In which, person per household of the richest group is 5.46 person, and

no household in this group has 1- 2 person. These results partially confirmed that human resources are essential in the process of economic development of households, especially in rural areas.

### 3.3.2. Occupation

Agriculture, forestry and aquaculture attract the most labors in the province. 45% of the population is involved in these works. The other occupations account for small proportion such as workers (5.9%), officers/employees (4.3%), short-term employees (2.6%), business (1.6%) and housework (1.6%).

### 3.3.3. Income and living standard

- **Self-assessment of living standard**

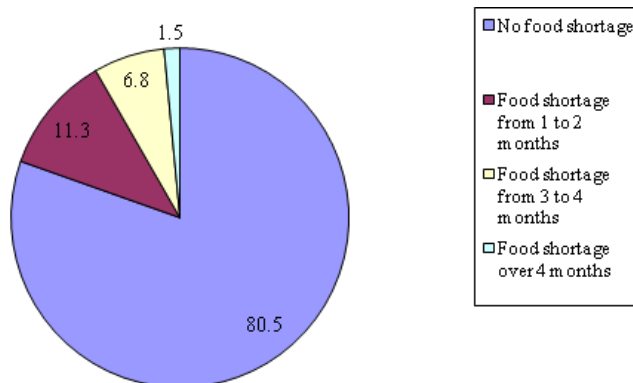
**Table 3. Self-assessment of living standard of households**

Wealthy		Medium		Needy		Poor	
n	%	n	%	n	%	n	%
16	12.0	87	65.4	22	16.5	8	6.0

Self-assessment of life is not high, only 12.0% of wealthy HH, 65.4% of medium HH, 16.5% of needy HH and 6.0% poor HH. The proportion of self-rated poverty is 5.5% in Ham Tri and 6.7% in Thuan Hoa commune. It is different from poverty rate of CPC in 2014 (3.65% in Ham Tri and 8.06% in Thuan Hoa). The female-headed households have lower living condition than male-headed households; ethnic minority households (Co Ho, Ra-giai,...) have lower living condition than than the Kinh and Cham. The proportion of poverty in female-headed household is 15.0% compared with 4.4% in male-headed households; 23.2% of poverty in ethnic minority households and 10.5% of poverty in Cham households and 1.2% in Kinh HHs.

As for food of households: 80.5% of households is not in food shortage, only 1.5% of households in food shortage in 4 months a year, 11.3% of households in food shortage from 1 to 2 months, 6.8% of households in food shortage from 3 to 4 months.

**Figure 1. Level of food shortage in the past 12 months**



However, the proportion of households not in food shortage in Ham Tri and Thuan Hoa communes are significantly different (84.9% and 75.0%), ratios of households in food shortage from 1 to 2 month in Ham Tri and Thuan Hoa are respectively 8.2% and 15.0%, which is consistent with the observations of the consultants on food situation reports as well as the socio-economic situation of the two communes. Food shortages also differ significantly correlated to gender and ethnicity of the household head. The proportion of female-headed households fall into food insecurity is higher than male-headed households (5.0% and 0.9% of food shortage over 4 months; 25.0% versus 3.5% of food shortage in 3 to 4 months). Only 50.0% of female-headed HHs has enough to eat (not lack of food), this ratio of male-headed HHs is 85.8%. Similarly with the ethnic minority households, no Kinh HH is in food shortage in four months, while that proportion of Cham households and other ethnic groups (Co Ho, Ra-giai ... ) is respectively 2.6% and 7.7%. Specifically, only 38.5% (1/3) of other ethnic households has enough food, nearly 2/3 of the remaining is in food shortage from 1 to 4 months.

Thus, gender and ethnicity of the householder has certain influences to the food situation of the HH. Food situation of the HHs reflects the results of economic development, according to the evaluation results, we can see the main issues of concern is accessibility to support programs aimed at economic development of local households, for example, accessibility to economic information, knowledge production and business development, loans or land resources for groups of people in the locality. It should be noted to the characteristics of the family relationship of the population in the area: The Kinh households are under patriarchy and men serve as householder, while Cham, Ra-giai and Co Ho HHs are under matriarchy and women are householders. Participation in community activities such as public meeting to hear the information dissemination, knowledge is often assigned to the men, while the women, especially minority women, are not really "confident" in participating in this activity, and this more or less restricted access to their information, including economic information as well as the opportunity to access knowledge in economic development. Regarding access to loans, there are not too many differences in opportunity. All those who have been consulted have the same general opinion that the loan is based on the agreement of both spouses; however the householder retains a higher decision. As for land and other resources, according to the policy on land, the ethnic minority households in the province are provided 1 ha of agricultural land to produce, the poor get grant money to buy one cow worth 7 millions (Program 135). Besides, the local authorities performed relatively well the Land Law 2003 on the granting of land use right certificates with the name of the husband and wife, which facilitates more

benefits for both genders in access to land resources.

- ***Income generating activities are variable:***

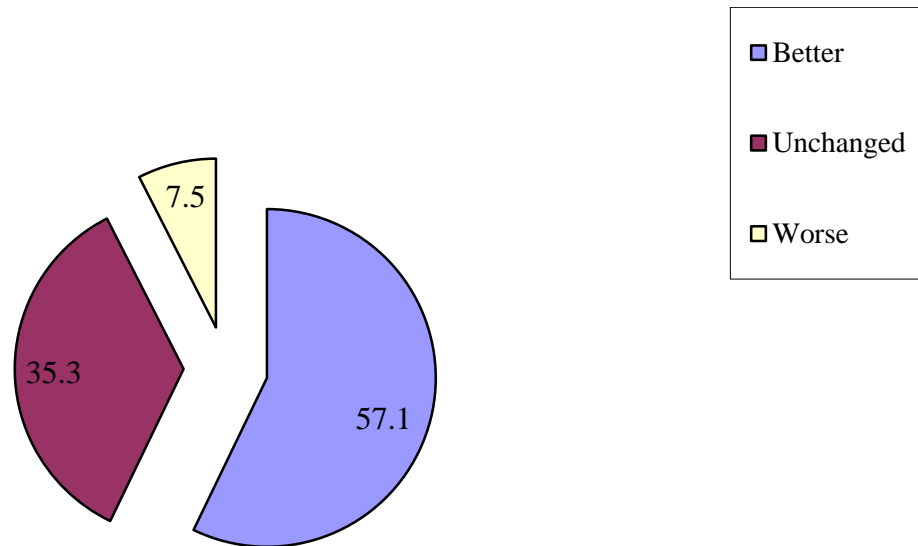
Agriculture, trade / services, handicraft, salary / wages, savings / offerings and assistance for social-assisted HH. Fluctuation of the total average annual income of households is quite large (from 520 million to 9 million VND). Consultants divided into five income groups, including: Group 1 below 41 million VND; Group 2 from 41 to 76 million VND; Group 3 from 76 million to 107 million VND; Group 4 from 107 million to 178 million VND; and Group 5 with more than 178 million VND. The majority of households' economic development are agriculture, even the trade / service household or salaried workers also work towards the agriculture development by purchasing more land or invest in fruit as eligible for financing. People are very interested in the development of dragon fruit and consider this to help them out of poverty, but one hectare of dragon fruit needs investment of 70 to 80 million VND, and supply of water and other activities. For the households in Ham Tri commune, investment opportunities are relatively easier than Thuan Hoa commune for more abundant irrigation water, although they still have concerns about the difficulties during the flood discharge. This reflects the urgency of the rehabilitation of irrigation systems in the area.

The correlation between income groups and geographical areas, the proportion of households with incomes below 41 million VND in Ham Tri is 12.3% and 28.3% in Thuan Hoa. 45% of all female-headed households have an average income of less than 41 million VND a year, whereas only 15% of male-headed households in this group. On the results of the correlation between the two communes, one of the main reasons is the difficulty of irrigation water. If these households are considered to have less opportunity to invest in household economy, there is tight relationship between water, capital - the ability to escape poverty - investment – development opportunities.

A local staff of Thuan Hoa commune shared opinions: "*Thuan Hoa commune is not lacking land at the moment, however, water is a problem, therefore, people are difficult in the farming or livestock. While they do not have enough food, it is difficult to develop and enrich*".

- *Changes of living condition*

**Table 2. Changes of living condition**



The majority of the interviewees rated the good trend in local development in the last three years, only half of households has better living conditions than 3 years ago, Percentage of households have a better life in both communes are equivalent. However, the number of households has unchanged life in Thuan Hoa is higher than Ham Tri commune (38.3% and 32.9%) and the number of households with worse living condition in Thuan Hoa is less than Ham Tri (5.0% and 9.6%).

The majority of male-headed households have better living conditions (60.2%), while only 40% of female-headed households have better living conditions, and the proportion of households with worse living conditions is 7.1% of male-headed HHs with 10.0% of female-headed HHs. According to the analysis above, the male-headed households have economic life better than those with female-headed. So, it needs a more focused support for female-headed households to have more opportunities to their family's economic development towards a better life.

68.3% of the Kinh HHs have better living conditions, while in the ethnic minority households, this rate does not vary much (39.5% and 38.5% of Cham households and other ethnic minority households). Few Kinh have worse living conditions (4.9%) and 13.2% of the Cham have worse living conditions. This data confirmed the results of direct consultation, the Kinh households "seem" having plans and thinking towards development investment and economic life, better than households of ethnic minorities. Nevertheless, it is also good to households in other ethnic groups, although

they are not well developed as the Kinh, but the proportion of households with worse living conditions is low (7.7%) and nearly equal to the local ratio (7.5%).

### 3.3.4. Education

**Table 4. The education level of the households' members**

<b>Education attainment</b>	<b>Ratio %</b>
Illiterate	10.8
Not yet school	8.3
Primary school	38.8
Secondary school	21.8
High School	13.5
Vocational school	1.1
College/university	4.9

Educational attainment in primary and secondary school accounts for higher percentage than other education groups (38.8% and 21.8%). The ratio of children dropping out of school in the province is not high (18.0%). Both communes have made universal primary education and 100% of 5 year old children went to preschool. However, the issues related to education may be summarized as follows:

- The school system in good Ham Tri is better than Thuan Hoa due to non-government projects funded;
- All households of ethnic minorities are entitled to the allowance for children to go to school, but the number of children dropping out of school has fallen into the households of ethnic minorities, Co Ho and Ra-giai.
- Universal primary education has been made for children born after 2005, so the status of illiterate children born before 2004 is still happen.
- Boys drop out of school than girls, the main reason is playing preference, attracted by the issues related to social evils such as shops, electronic games ...

### 3.3.5. Land use

- **Total productive land of HHs**

According to socio-economic reports in 2014, the total area of cultivated land in Ham Tri is 3223.8 / 3248.47 ha and Thuan Hoa is 3196.7 ha. Over 93% of households have productive land in the local.

- **Land use right certificate (LURC) and representative person**

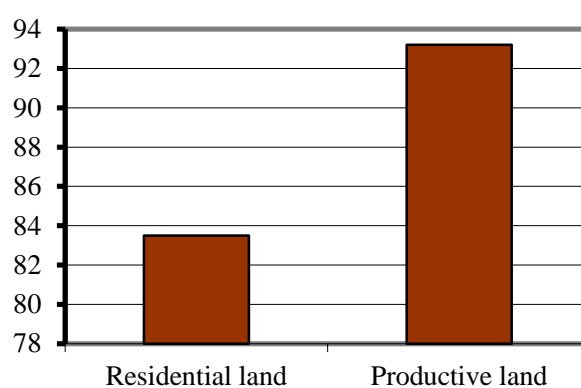
LURC are granted for land user, also confirms the ability to access resources such as land and other resources that the certificate is regarded as a condition (eg financial resources). Consultations on the issue: "Who is representative person of LURC?" show that the HHs has agreement on it, either Kinh or ethnic minority. Moreover, the



purchase, sale, mortgage must be signed by both spouses. Thereby, it can affirm equality in access to resources in the province.

As reported by the CPCs, every year, the commune submitted to the district plan for the issuance of LURC for local people (including residential land and productive land). Thus, the ratio of lacking LURC is not high: 16.5% of residential land; 6.8% of productive land.

**Table 3. Land use right certificate**



The proportion of LURC possession in households headed by men and women are equal. But there are significant differences between ethnic groups with the Kinh and Cham. 46.2% of other ethnic groups do not have a LURC in comparison with 18.4% of Cham and 11.0% of Kinh. This is also the group with worse living conditions and economic conditions than the other two groups. So, the absence of LURC is one of the reasons for this group struggling economic development.

### 3.3.6. Health and health care system

- **Sickness situation**

Within one year, more than two thirds of interviewees said that they have sickness, the common health problems include:

**Table 5. Sickness situation**

Sickness	Ratio (%)	
	Yes	No
Flu	49.0	51.1
Respiratory	12.2	87.8
Cold fever	-	100.0
Malaria	2.0	98.0
Liver	2.0	98.0
Poisoning	-	100.0
Injury	4.1	95.9

- **Health insurance**

83.5% of respondents have insured, 15.8% have no health insurance. Number of households accounted for 87.8% Kinh have health insurance, the number of households was 76.3% and the Cham ethnic people is 76.9%. Under the health insurance law, the minority of the economic difficulties in the area of social support enjoyed by the health insurance. Thus the rate of 70% of ethnic minorities in areas of health insurance is still seen and there are many objects that were omitted.

- **Clinic facilities**

83.5% of respondents have insured, 15.8% have no health insurance. Number of households accounted for 87.8% Kinh have health insurance, the number of households was 76.3% and the Cham ethnic people is 76.9%. Under the health insurance law, the minority of the economic difficulties in the area of social support enjoyed by the health insurance. Thus the rate of 70% of ethnic minorities in areas of health insurance is still seen and there are many objects that were omitted.

**Table 6. Clinic facilities**

Clinic facilities	Ratio (%)	
	Yes	No
Commune clinic	30.6	69.4
Inter-communal clinic	-	100.0
District hospital	42.9	57.1
Provincial hospital	32.7	67.3
Central hospital	4.1	95.9
Private clinic	4.1	95.9
Pharmacy	24.5	75.5
Traditional medicine	-	100.0
Home-made medicine	6.1	93.9
Self-recovery without treatment	-	100.0

These factors undermine the health of people including: Vegetables / food insecure 48.3%; Drinking water contaminated with 37.9%; Environmental contamination and 29.3%.

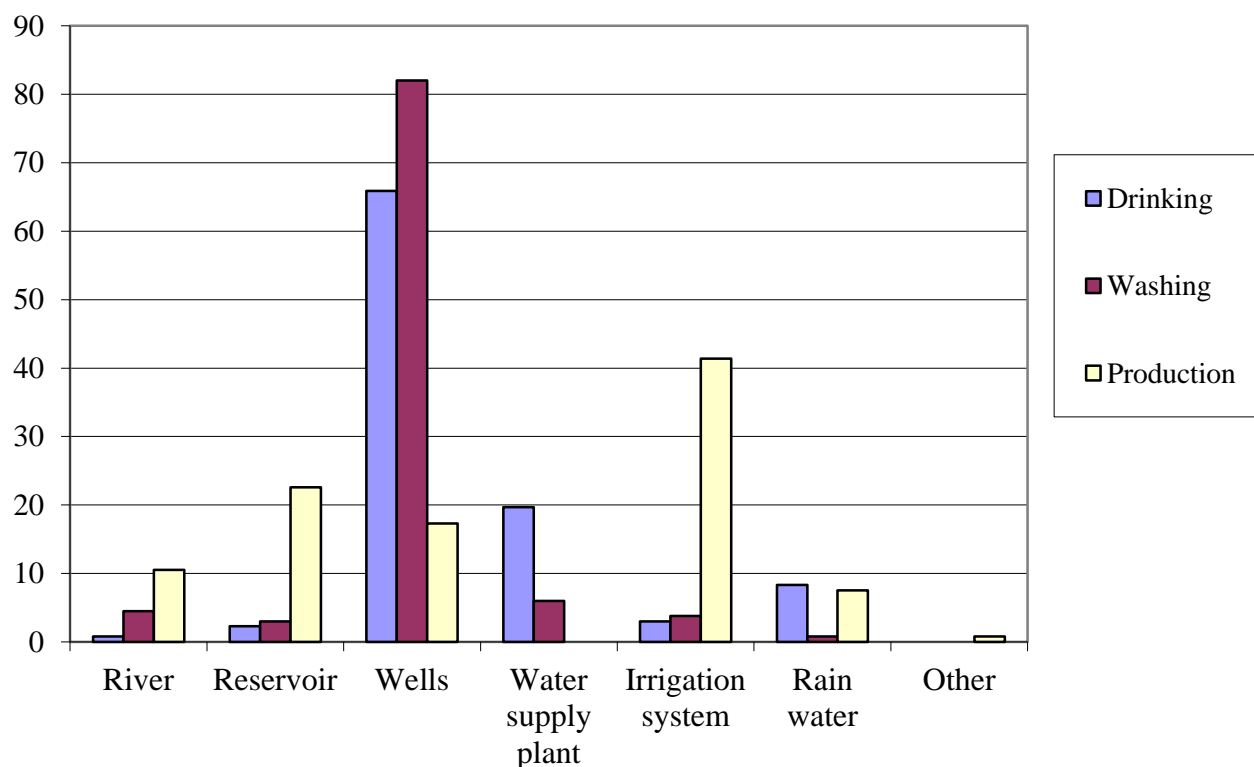
### **3.3.7. Water supply**

- **Water use**

Water resource use is relatively diverse, however, the use of water for the operation is quite concentrated. The use of water for activities such as eating, bathing mainly from wells / dug and water resources of the state, producing water taken from lakes and irrigation systems. Nevertheless, Binh Thuan province is located in the driest areas of Vietnam to the drill / dig wells for water and having a lot of trouble, people here

said: "There has been quite a lot of exploration drill water be done, but the results are not very satisfactory because the water has dried up and no water " .

**Table 4. Water use situation**



These difficulties, lack of water more concentrated in Thuan Hoa commune, when they do not get access to irrigation systems Quao River Lake. People Thuan Hoa water for domestic use and production are from water wells / dug (diet: 93.2%; bath: 91.7% and 93.2% of production), the time the difficulties they have to buy water from the tank car, a family of four who buy up to 150,000 VND is enough water for domestic use within 3 days.

### 3.3.8. Housing and sanitation

- **Housing situation**

Housing is considered as one of the important criteria for assessment of the standard of living of the people. Housing is one of the criteria aim to "new rural" localities, according to the "Report on the results of the national target program built NTM 2014. In 2015 in Thuan Hoa commune, 87.7% of HH has the housing standard of Ministry of Construction and no temporary housing.

#### **Box 2. Rural housing standard of Ministry of Construction**

- The area of the house is more than 14 m<sup>2</sup> / person.
- The use life works from home in 20 years.
- Ensure planning, spatial layout of the site (including housing and works to ensure

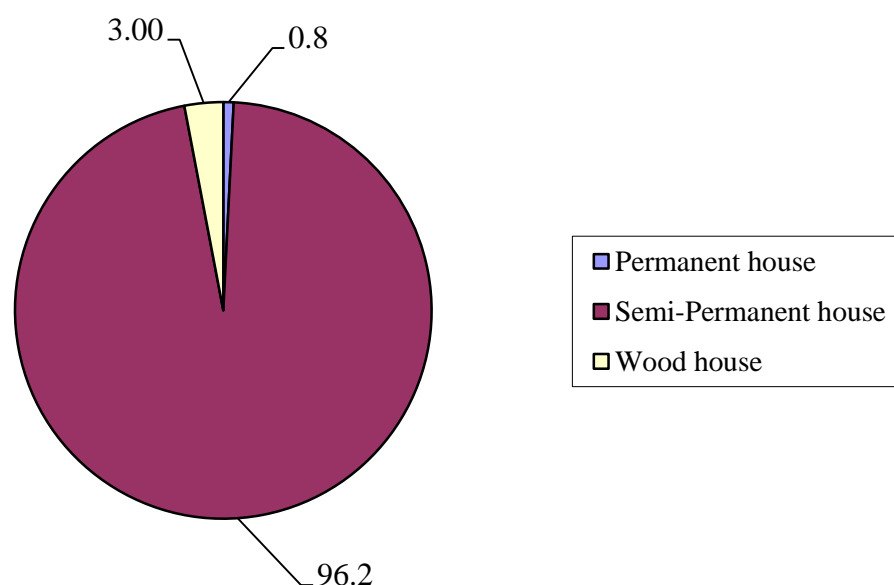
minimum daily needs such as kitchens, toilets ...) to ensure consistent, convenient for activities for every member of the family; and works to ensure minimum requirements for use area.

- Having the technical infrastructure support facilities such as electricity, clean water, sanitation ... Transportation from accommodation to connect with the common transport system of the village, ensuring easy good for travel to other media as well as motorized vehicles, motorcycles ...

- Architecture, housing patterns to suit customs, habits and lifestyle of the local tradition.

According to the survey results: 96.2% of households live in this kind of semi-permanent housing; 3.0% of households in the timber, roofing sheets and only 0.8% of households in permanent housing.

**Table 5. House types**



Although the report on the economic situation - Ham Tri society does not raise the proportion of households with housing standards, but as quantitative data collected in the province, the content of the Site without wood, roofing leaves, Harmony has 6.7% of households in this category. The ratio of the semi-permanent Ham Tri 98.6% and 93.3% of Harmony.

According to the standards of the Ministry of Construction, the housing standards to ensure adequate infrastructure facilities such as electricity, clean water, sanitation, however hamlet area 29 Population Association Thuan Hoa is the residence of the household Co Ho family is severely limited area under the dry season, the entire area people live in conditions lacking clean water, no toilets, temporary living. People here

said, they usually go away (to zone 34) to get the water to eat / drink and a dug a little closer to taking bath / laundry. In the men's families, the men will be responsible for carrying water for family use, the family also single women, this is a big problem for them because the burden on the water distances is a relatively heavy work. While the lack of water and sanitation to cause negative effects to children and women more than men because of their biological characteristics. The lack of water for a long time not only affect production but also affect the health of people.



**House of Co Ho ethnic in hamlet 29 Thuan Hoa commune**

### **3.4. Gender issues**

Gender issues in the province have been improved since the Law on Gender Equality. For instance, there is hardly case of serious domestic violence, women are more involved in solving family problems, as well as participate in social activities, there is no gender discrimination in education and health ... It should be noted that in the project area, namely two communes selected for the survey, is inhabited by the Kinh, Cham, Co Ho and Ra-giai, in which only the Kinh are under patriarchy, while other ethnic groups are under matriarchy. These features have a certain influence to gender issues in the province. Consultants collected data on the situation of the public officials of the two communes to analyze gender issues in the decision-making process of local and other quantitative information.

#### ***3.4.1. Gender in socio-political agencies***

Gender issues in socio-political agencies are evaluated based on the summary of the situation of full-time and part-time civil servants of the communes in the project area. Because the data collected is not really sufficient, the analysis is only based on data collected in Ham Tri commune.

In general, the percentage of women in the full-time and part-time civil servants is relatively high: 2/11 full-time officer; 8/14 servants; and 11/23 part-time officers. Most of them were trained from intermediate to university level.

In the table of assignments, two female officers include one Deputy Chairman in charge of culture, one Head of Communal Women Union, while Chairman and Deputy Chairman in economy are male. Out of 8 female civil servants, three persons work in office, two accountants, two in charge of justice and household management and one in charge of arts. In three local land use management officers, no one is female.

Thus, although the percentage of women involved in the communal government system is not low, but women do not get the position to make decisions on either economic or politic issues.

Besides, the persons in the right position to make decisions at the local are Kinh ethnic (Secretary of the Party, Chairman and two Deputy Chairmans of the CPC).

In general, local government officials (both women and men), members of socio-politic associations and people said that the situation of women's participation in socio-politics has improved. Results of data analysis show that the improvement is only in terms of quantity, but in essence, women remains lower than men in positions of significant decisions in the local and this affects participation in the decision making process as well as the benefited opportunities of women. This problem should be included in gender action plan to improve the status of women in political participation.

#### ***3.4.2. Participation in activities of family and community***

We can see clearly the division of labor by gender in the project area. Although all activities are involved with women and men, but there are activities that are mostly undertaken by men (61.7% afforestation; 81.3% forest production; 57.1% aquaculture), and housework, home care are undertaken by women (childcare 56.5%; 59.4% cleaning house; 60.9% cooking). The labor division by gender in the sub-project is not so different as analysis of the gender division of labor in Vietnam today. Women are involved in the production, reproduction and caring while men are mainly engaged in production activities.

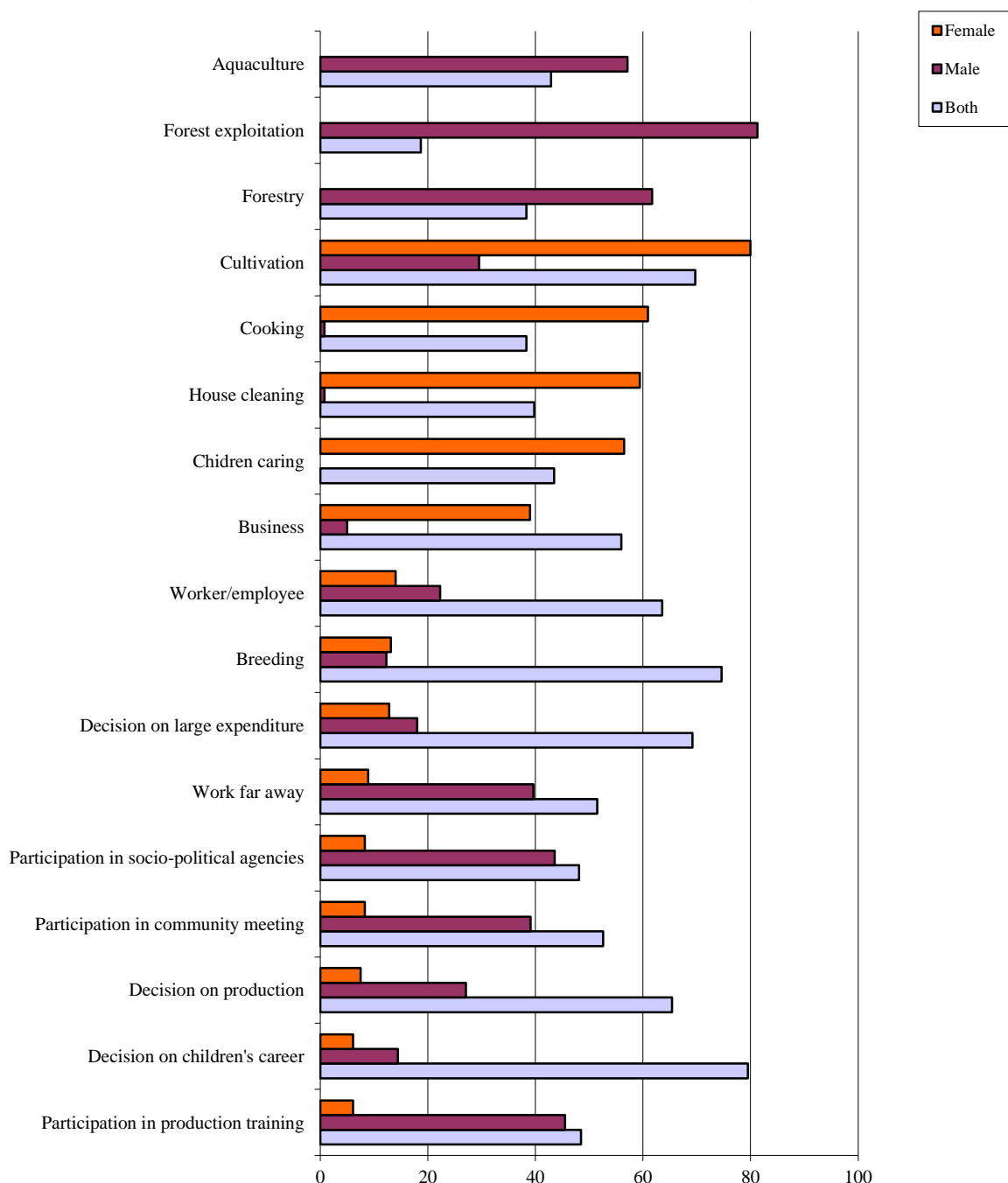
The community activities such as community meetings, training on production, activities of political organizations are participated by both men and women, approximately 50% for each. The remaining participation rate of men is higher than

women (39.1 community meetings, training on production of 45.5%, and the activities of political organizations, 43.6%). Thus, men are occupied key role in participating in community activities. And this reflects the restrictions on women's access to information, knowledge, including information, knowledge production, economic development family.

There is a link between the active group in the division of labor by gender is as follows: When women have to spend too much time on the care and reproduce, they will not have time for production and operation community, moreover, the limited knowledge and information due to lack of time to participate in community activities makes it difficult to engage in productive activities. Meanwhile, the only new production activities to generate income and assume that it is more important activities. Clearly, inequality is happening in the province within the division of labor by gender. For issues related to the project activities such as consultations with people, organizing publicity, counting activities, compensation ... .bat equality makes women more vulnerable when not have the opportunity to participate.

Women do not generate income, lack of knowledge, lack of information so they are limited in participation in the decision-making in the family. The survey results have proven for this and can say it is an obvious consequence of gender inequality in the division of labor. Although the proportion of women and men participate in deciding the issue of family in 60.0% (decision expenditures 69.2 big family, decided to study / career 79.5 of children; investment decisions and production activities 65.4%), but the proportion of men decided to work in the family is still higher than women, for instance investing in the Exported to nearly one third (27.1%) men decided, while only 7.5% are women.

**Table 7. Distribution of labor in the family**



### ***3.4.3. Female householder and gender issues in family***

In female-headed households, the involvement of equality between husband and wife in the care and production, the rate of female participation in community meetings and social and political organizations than men (35.0% community meeting for women compared with 5.0% of men and participate in the political and social organization of 30.0% compared with 15.0% women, men), in the this case, women have access to information than men. During the consultation process, consultants questioned the invitation of community discussions on issues related to land, projects or activities that produce the responses that often will invite all households - Affordable here is why



one is led to the head of the household will have more opportunities to access information.

Female-headed households also play a decisive role in the family than men. About decided to spend large family headed women, 70% decided by the couple and 30% is decided by his wife, men do not participate in the decision in this matter. On the issue of choosing a career, the proportion of women than men decision was 30.0% and 10.0%; Women who decide to invest in production accounted for 35.0% compared with 10.0% of men.

#### ***3.4.4. Gender equality in ethnic minorities***

In which Kinh and ethnic other (Co Ho, Ragiai ...) equal than group care in the production and care. In other ethnic groups (Co Ho, Ragiai ...), women and men share the responsibility for the care, manufacturing and community groups is higher than the Kinh and Cham. For example, in reforestation activities, participation rates of households respectively: ethnic households (Co Ho, Ragiai ...) 62.5%, 37.9% and Kinh households Care 32.1%. This is an activity that either spouse to join alone or men make, no single women perform, but nearly 2/3 of other ethnic households (Co Ho, out- period ...) have both male and female participants, this confirms the shared work evenly among heterosexual families in other ethnic groups (Co Ho, Ragiai ...). Child care activities, respectively ratio: 46.2%; 48.1%; and 32.4%, although in this activity, women in all ethnic groups are assumed to be the main, however, this ratio also shows the different ethnic (Co Ho, Ragiai ...) and Kinh have shared more than the protection of ethnic Cham. Regarding participation in community activities, the ethnic group with high participation rate than other ethnic groups (Co Ho, Ragiai ...) and the Cham group, in other ethnic groups (Co Ho, Ragiai ...) the percentage of women participating in community activities than men, while the other two groups, male participation rate than females. For example in community meetings: Percentage join two of the Kinh, Cham and other ethnic groups (Co Ho, Ragiai ...) were: 54.9%, 50.0% and 46.2 %; The proportion of women participating in the meeting were: 3.7%, 7.9% and 38.5%; The proportion of men participating in the meeting were: 41.5%, 42.1% and 15.4%. In the decision, the couple Kinh and ethnic groups (Co Ho, Ragiai ...) joined more than households who care, for example: Decision large expenditures in the family ( The Economics 74.4%, 55.3% and the Cham ethnic 76.9%).

Thus, although the characteristics of family relationships between different ethnic groups (eg the Co Ho, Ragiai relatively similar Cham are patriarchal gender issues but not identical and whether matriarchy but Cham women still disadvantaged compared to other ethnic groups.

### **3.5. Ethnic minorities**

Ham Tri and Thuan Hoa communes are inhabited by six ethnic groups, including the Kinh, Cham, Co Ho, Ra-giai, Gia Rai and Tay. Proportion of ethnic minorities in each commune accounted for 18.2% (Thuan Hoa) and 20.5% (Ham Tri) (Source: Center for Population - Ham Thuan Bac 2014). In total six ethnic groups, Coho, Ra-giai and ethnic Cham live long time in Ham Tri and Thuan Hoa communes. Survey results showed that no ethnic minority households are affected either by land acquisition or adverse effects resulted from project implementation. Consultation with ethnic minorities shows that they agree with the project and they are aware of the project will bring many benefits for the development of the local economy. The revenues of the majority of ethnic minority households depend on agricultural activities that they are having some problems in water source for production. They said that rehabilitation of Quao reservoir will supply more water for production, thereby helping to increase household economy. In conclusion, the ethnic minorities in the sub-project area will get more benefit from the project rather than adverse effects. Issues of EM are presented more details in the Ethnic Minorities Development Plan of the sub-project.

## Part IV. Project impact assessment

### 4.1. Positive impacts

**Table 9. Number of households benefited by the project**

No.	Commune	Population, ethnic minorities					Poverty ratio (%)	No. of benefited households
		Population (person)	No. of HH	EM and ratio	No. of EM	Ratio of agriculture HHs (%)		
1	Thuan Hoa	5482	1429	13.63	747	87.74	8.66	1211
2	Ham Tri	8677	2081	25.63	2224	89.57	3.31	1864
3	Ham Phu	8482	2011	11.84	1004	94.16	4.57	1894
4	Ma Lam	14630	3588	10.12	1481	62.07	2.14	2227
5	Ham Chinh	14398	3523	0.15	22	84.76	3.54	2989
6	Ham Liem	11297	3048	0.18	20	75.39	2.98	2298
7	Hong Liem	10093	3347	0.31	31	89.82	3.44	2108
8	Ham Thang	19153	4646	0	0	53.94	1.91	2506

#### 4.1.1. Improvement of dam safety

Most irrigation projects in Vietnam, including Quao reservoir have been built since the 80s of the last century, so far out of date, many works have been damaged, the Additionally, irrigation schemes often work in very complex environments including sun, rain, wind and storm, temperature, humidity etc. and especially, in the context of climate change significantly reduce energy force, the longevity of the system of irrigation works.

Quao reservoir with 73 million m<sup>3</sup> capacity was completed construction before 2000, the earth dam has existed for a long time without rehabilitation. Thus the current state of the work are already degraded, reducing the volume of water and poor flood control, high safety risk. Besides, the building was built long ago on the basis of natural conditions, hydrology, design standards are no longer appropriate to the situation, current weather conditions, particularly in terms of the situation climate change is currently taking place on a complex and unpredictable.

Therefore, the implementation of the project will remodel the damaged items were works and contributes to the safety of the facility.

#### ***4.1.2. Safety for people in the downstream of dam***

Due to the deterioration of irrigation works are potential threats to the lives and property of the people and the downstream beneficiaries. Besides, the flood also caused serious damage to the people in the locality of people, animals and property. At Tri Ham area, people figured that, during the flood, in addition to the loss of life and property, people have to pay for transportation costs for agricultural products have detour to avoid the discharge area flood, estimated costs 10 times as compared to the dry season. So improving dam safety will ensure the safety and cost savings for people in productive activities.

#### ***4.1.3. Capacity improvement for water distribution for agricultural development***

The irrigation and drainage under conditions of climate change, consistent with the standards of irrigation and flood control current; The work will help stabilize and increase the flow in the dry season, thus extending the irrigated area, improve conditions for domestic water supply and reduce salinization downstream. Facilitate the work of flood control, and reduce part damage due to floods caused;

Gradually promote agricultural production and rural life increasingly enhanced, contributing to stable food security in the province during the renovation period. Contribute to improving the lives of people in the region benefit: Binh Thuan is the driest area in Vietnam, and that water is critical needs of people in the area, water shortage has caused the exploitation Land is also very limited, many lands were abandoned by prolonged drought. In Thuan Hoa, people here said: *"There was plenty of water exploration drill was conducted but results are not very satisfactory because water sources have dried up and there was no water"* . The implementation of the project to improve dam safety Quao River reservoir will improve the capacity of the water storage tank, thereby creating opportunities for the construction of sewer irrigate 2,000 hectares of agricultural land in the commune, Thuan Hoa .

#### ***4.1.4. Reduce environmental pollution, minimize the negative impact of climate change***

When the irrigation lake water area will contribute to microclimate lake, restore environmental landscape, increased humidity areas, creating favorable conditions for the formation and development of good vegetation, work positively affect the ecosystem around the reservoir. There are irrigation reservoirs will contribute to reduced daily temperature range, will create conditions for a heat-loving crops grow and improve groundwater level water level to combat forest fires during the dry season while helping the to pump water for irrigation or higher in the region are favorable. Regulators, balancing water between areas and regions; between surface water and groundwater etc.

#### ***4.1.5. Promote local economic development, increase income and improve the lives of people***

Currently, the main source of income to improve the lives of people in two and Ham Thuan Hoa Tri based on the dragon tree, beside the demand for land and water is a problem which is indispensable. While land resources are relatively full, the loan can be supported from the bank or from the local authorities, the mass of water is a problem of people, especially the people Thuan Hoa. The data on the poverty rate, the proportion of households with Thuan Hoa higher than the Tri Ham, while land resources of Thuan Hoa is no shortage but mainly caused by lack of irrigation water. Besides, the lack of water also cause inconvenience in daily life of local people as sanitation problems, especially affecting women and children. Thus, the repair improve dam safety, do Quao River reservoirs improve the lake's water reserves, contributing to rehabilitation of irrigation systems for two communities, increase the supply of irrigation water, water for Thuan Hoa, since then, people have more opportunities to develop dragon fruits, raise incomes and improve livelihoods.

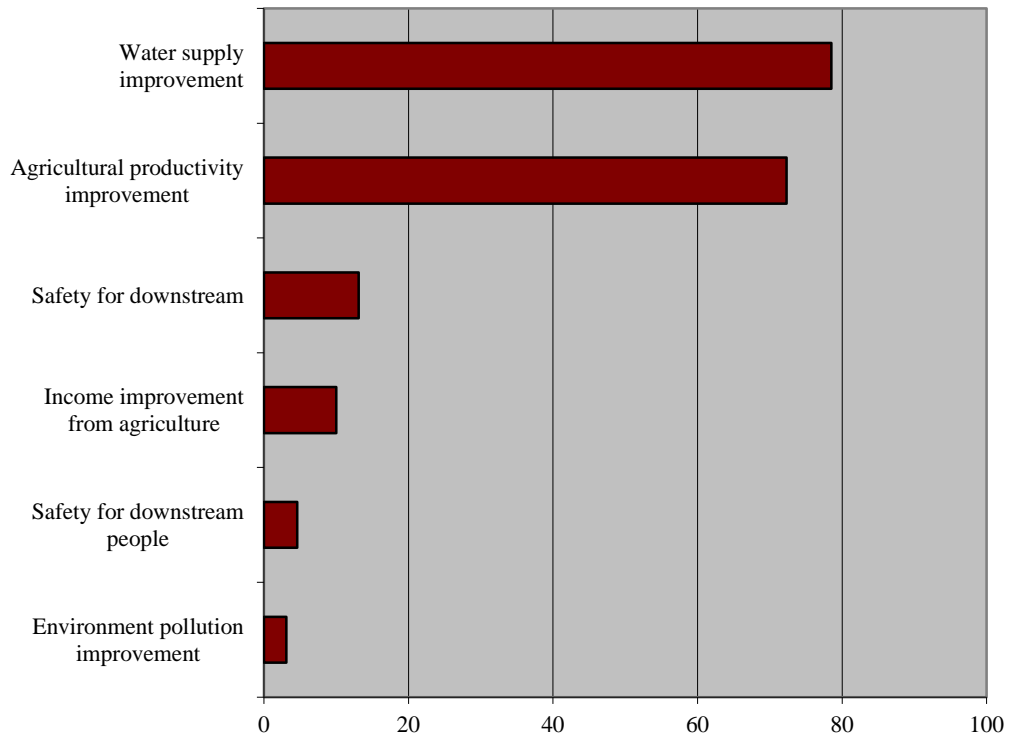
#### ***4.1.6. Impact on gender issues***

The lack of water in domestic production and create a lot of adverse effects to the people in the locality. In many areas, the lack of water, men and women that frequent periods spent most of the day to go to the family carrying water for production and living, for those households family single women or elderly, it really is a difficult problem than other families.

Lack of water is the cause of the problems of hygiene, environment, toilets, baths, laundry ..... women, boys and girls are subject seriously affected by structural problems because of their biological characteristics, and the lack of water is the risk that they may be infected than men.

Thus, the provision of sufficient water for production and daily life will shorten the time cost for the production of male and female residents in the area, creating conditions and opportunities for them to participate in social activities Assembly. Provide enough water also contribute to reducing the burden on vulnerable groups such as single women, elderly and reduce the risk to women and children.

**Table 9. Positive impacts of project**



## **4.2. Negative impacts**

### **4.2.1. Land acquisition and resettlement**

The survey data show that in Thuan Hoa, 18 affected households with land acquisition of 164.32m<sup>2</sup> of which, 162,000m<sup>2</sup> is permanently productive land acquisition, 2,332m<sup>2</sup> permanently residential land acquisition and no temporarily land acquisition. All 18 HHs are severely affected, lost more than 20% of farmland and homes, including 10 relocated households, 3 households of vulnerable groups (1 poor, 2 lonely HHs). The relocated households are now living within the dam's protected area..

To minimize the impact on land acquisition, during detailed design, design consultant should consult the local community to seek measures to minimize land acquisition and other adverse effects to people. On the other hand, a Resettlement Policy Framework for the whole project and an action plan for resettlement for each sub-project has been prepared to ensure that all losses of people affected by the project are caused fair compensation.

### **4.2.2. Conflict in water use**

Conflicts may arise between the households in the watershed and downstream water when the water supply appears unevenly. Conflicts may arise between the affected households with those not affected if the affected households said that they were not adequately compensated while others are not affected, but those benefits equal to or

even more than they are. Therefore, there should be methods of communication to the public about the benefits of the project, in addition to ensuring maximum damage as well as fairness and equality among households in the water supply.

During the consultation of stakeholders from the provincial to the grassroots level, the information obtained shows, Binh Thuan province will regulate to ensure enough water for irrigation and drinking water during construction (if cut water during this time). However, it should be noted, if this commitment is not done, it will happen conflict between locals with investors and implementing unit construction. Therefore, to calculate all the necessary plans, and minimize the risks.

#### **4.2.3. *Risks in security and health***

A large number of workers will be present in the locality during the construction, which caused disturbances for certain economic life - society - the local culture.

Although local area reserved for workers in focus, but a large number will rise to a lot of different needs such as food, accommodation, entertainment, recreation, and cultural needs other goods. It may occur to these needs with culturally different from the local community, thus creating a certain disturbance to the community, especially for ethnic minorities.

On the other hand, the local people are very concerned about the problem of insecurity, order or social problems can occur when there is no local response plans.

The construction will be accompanied by a negative impact on the environment, such as dust, noise. Besides, the disease problems can also arise due to a pull of people from one place to another.

The use of some roads to transport materials will cause the impact on the movement of people and the risk of traffic accidents.

Therefore, the project owner, the unit responsible for construction to prepare management plans for the room's maximum liability of adverse effects on the community. On the local side, to prepare the communication plan to equip people with knowledge of minimum social issues that may arise as the disease model to create mechanisms to protect people from risks coming from outside.

#### **4.2.4. *Risks in production***

According to the commitment of local governments at all levels and related entities shall not happen to lack / loss of water during construction, but should develop a plan to regulate the specific country to avoid being in the provide water for people in construction time, reduce the economic losses due to water shortage.

Besides, the conduct of flood discharge during construction will cause damage to people downstream. Thus, flood discharge planning needs and to notify the plan to the people through the media as loudspeakers, paste in the CPC to inform people plan to respond, to avoid damage can happen.



## **Part V. Mitigation measures**

Basically, the project to repair and upgrade the water reservoir function Quao River, Binh Thuan Province, will bring positive benefits than negative impacts. Specifically, the project will contribute to ensure the safety of reservoirs, irrigation stable power, is an important factor for the development of irrigation for the region, especially the particularly difficult area of water, an important contribution in economic development - local society.

However, during construction and after completion of the project may appear a number of negative factors affecting people's lives and communities project area. The negative factor is the fundamental issues such as land acquisition and resettlement, livelihoods are affected by displacement, conflict can occur on water use, the risk for community safety and health ...

The positive impact of the project is to highlight and mainly, the negative effects are minor and can be overcome. Orientation overcome and minimize the negative effects brought by the project will include the following activities:

### **5.1. Consultation with stakeholders**

To minimize the risks related to the negative effects that may arise and to establish communication channels, during project preparation has consulted many times with the local community. Due to the project nature of foreign loans, the level of compensation on a geographical co-exist many types of investment with the compensation policy inconsistencies will support complaints so the province will have the documents guide the implementation of the inventory, payments, replacement costs of the project based on the resettlement policy framework. PMU coordinates local government propaganda widely in the community about the project investment objectives and policies of the project to the community aware of the requirement to increase water use efficiency and water efficiency water use.

Consultation with EM peoples:

For this subproject, a RAP has been prepared to ensure the loss of land/crop anticipated at the reservoir site will be appropriately and timely compensated for. There is no adverse impact anticipated for the EM peoples present in the project area. An EMDP has 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.

Free, prior and informed consultations with EM indicated that because there is no adverse impact anticipated for the EM peoples, and that the EMDP was prepared to provide additional development opportunities to EM peoples, there has been a broad community support from the EM peoples consulted for the subproject implementation.

## **5.2. Implementation of resettlement policy framework**

In order to avoid or minimize adverse impacts due to land acquisition, compensation and resettlement, land donation document compliance with OP 4.12, the project has established resettlement policy framework for the consultation between MARD - CPO and the World Bank. The policy framework is to ensure that those affected are compensated and / or full support to ensure the rights of the project affected households. Resettlement Policy Framework describes the objectives, policy / regulations as well as rules and procedures will be applied in the implementation of projects related to compensation assets and income withdrawn affected adverse effects, including measures to ensure that people affected or affected households can restore the lives of at least pre-project. Resettlement Policy Framework launched objectives, principles, criteria for entitlement valid, forms of compensation, procedures participation and consultation, and complaint resolution mechanism. The policy framework also regulates the steps to be followed when preparing and implementing action plans for resettlement (RAP).

## **5.3. Resettlement Action Plan (RAP)**

Although efforts have been done to avoid land acquisition and relocation on local people, it would be unavoidable to recover land and other assets of farmers. According to the World Bank requirement, a Resettlement Action Plan (RAP) was prepared for the 1st phase of subprojects and 2nd phase subprojects will be similar. This plan reflects on how the Project will minimize losses of the project affected people, restore their livelihoods by providing them compensation, assistance, and/or allowances. The overall objective of the RAP is to ensure that all APs will be compensated at replacement cost for their losses, and provided with rehabilitation assistance so that they could restore their livelihood – at least to the pre-project level.

## **5.4. Minimizing the loss of land, trees and property**

There will be many activities that take place during construction process, such as the land acquisition for accommodation activities of workers, gathering materials, machinery, construction corridor, garbage storage, etc. In addition, construction unit

will use roads to transport materials, construction waste that causes certain effects to living, production and transport of people.

Therefore, it should be to develop specific plans, plan temporal living area of workers, areas of materials, construction waste storage; Planning on certain routes for the transport and regulation time of the truck on the road to avoid affecting production and transport of people.

Make sure the return of the status of areas where are used as temporary housing for workers, storage of materials, waste and routes after construction.

#### **5.5. Developing plan to mitigate the damage caused by flooding or drought during construction process**

Need a specific plan for cutting / discharge water during construction process as well as water regulation plan as well as to inform the plans to local people to avoid damage to agricultural production and people's lives.

#### **5.6. Measures to reduce risks for vulnerable groups**

Vulnerable group includes the ethnic minorities, single women, the elderly, boys and girls. In the process of project implementation, negative impacts can be arisen, so it should be concern to vulnerable groups. It should attract the participation of this group in the communication or consultation activities to collect their needs for projects, thereby building plans with timely response. It should be pay attention to boys, girls and ethnic minorities in equipping the knowledge related to issues on health, community safety as social evils and security.

## **Part VI. Roles of stakeholders**

### **6.1. Overview of stakeholders**

In the process of preparing and implementing the project, involvement of stakeholders has particularly important. First of all, recommendation of stakeholders will contribute importantly to adjust the design to meet the technical requirements and increase socio-economic efficiency - as well as investment effectiveness, reduce at minimum level undesirable effects for people living caused by structures, especially social and environmental impacts during construction and operation of structures. Bad collaboration between stakeholders is potential of waste of resources, resulting in slow progress of the project, have a negative impact on society and environment as well as investment efficiency, etc. In project implementation process, good collaboration between stakeholders will ensure schedule of project implementation.

The roles and responsibilities of stakeholders are as follows.

### **6.2. Roles of stakeholders**

#### **6.2.1. Roles of managing agencies**

Binh Thuan PPC makes investment decision with missions decentralized in the project and are responsible for the entire compensation site clearance and resettlement implementation within provinces such as approving RAP, compensation plans and steering land acquisition and resettlement implementation.

Binh Thuan DARD is the owner of sub-project, responsible for the activities of the sub-projects of local decentralized, responsible for implementation of social and environmental impact assessment of sub-projects, establish and update RAP, manage implementation of compensation, assistance and resettlement of the sub-projects.

Department of Planning and Investment shall coordinate with relevant departments to help implement PPC capital plan, annual budget preparation and implementation guidance PMU funding procedures; Support PMU about the procedures and processes for evaluation of the technical report, the project components and bids, bid evaluation. Coordinate with relevant departments to advise the provincial appraisal and approval of projects and help solve the problem PMU problems in the project implementation procedures.

Department of Finance: To coordinate with the Department of Planning and Investment provides annual funding for the project according to the provincial budget. Support PMU financial planning and evaluation of the financial costs, the operation of the provincial People's Committee approved the PMU; Valuation for compensation and implementing policies to support resettlement and livelihood restoration under

current regulations and social safeguard policies of the World Bank. Support PMU solve the problems financial problems during project implementation

Department of Natural Resources and Environment: Guidelines PMU legal procedures and process of appraisal and approval dossier environmental impact assessment; coordinate with relevant departments appraisal plan of resettlement compensation, site clearance and land grant for the project; PMU and implementation guide management, environmental monitoring during project construction.

Provincial State Treasury: Supports PMU legacy and procedures in the process of disbursement and provide counterpart funds for the project.

Compensation and site clearance unit is responsible for implementation of compensation and site clearance for projects in the district, including developing compensation plans and submitting to the DPCs/PPCs for approval. Implementing compensation and site clearance.

District/Commune People Committees are the administrative units and responsible for assistance of project in the implementation of program activities and social safeguard programs at commune level. In which, focusing on activities of dissemination and mobilization of people to implement resettlement policy framework and legal compliance; Land use protection and planning and protecting safety corridors of the dams, maintaining security and order in the locality; Providing Cadastral maps, determining the origin of land use for the District Compensation Committee, and assigning officials involved inventory group; Coordinating with district Resettlement Committees to organize for information dissemination and community consultation; Solving questions related inventory activities.

### **6.2.2. Role of associations and communities**

Social and political organizations at the local (such as Farmer Union, Women's Union, Youth Union, Veterans Association, Association of the Elderly, Red Cross Association, ...) are organization involved in monitoring and implementation of the project, especially the period of land acquisition, compensation, assistance and resettlement of affected households to ensure compliance with policies and resettlement and the objectives of the project. The community organizations are where grasp the issues and responses of people related to the operation of the project during the preparation, construction and put into use. The monitoring of these organizations to coordinate with the population groups in the community is crucial in helping the management and implementation units to adjust timely design, operation construction activities to minimize undesirable social impacts on people lives in the affected areas.

The hamlet: The grant works directly with the people, reflect the issues raised during the preparation, construction and putting into operation of the project category.

Hamlets will be the last place the activities implemented to provide information to residents of the project and is the first place to receive the feedback of the people related to the project. The role of village officials/neighbors very important, objectively and timely reflect the aspirations and legitimate petitions of the people for the monitoring of the project implementation process to minimize the impact Unwanted project to life of the people. In addition, the comments reflected from village officials, neighbors also makes construction project categories more relevant, bring economic benefits for society than community benefit area direct the project.

### ***6.3. Structure of managing agencies***

Working mechanism, the relationship between the agencies during implementation and project management according to the provisions of the laws of Vietnam and in accordance with the provisions of the donors. Similar to some other WB projects being implemented in the Ministry of Agriculture and Rural Development, the mechanism and the relationship between the agencies will apply for subproject generalized as follows:

- PPC is the project management agency. Investors project is Mining Limited Company in Binh Thuan irrigation works. The departments and agencies involved to coordinate and implement the province's content within the sub-project. PPC is responsible for directing the project investor, the departments concerned of the provincial branch of the implementation of compensation and resettlement, land acquisition, environmental action plans of subprojects in line with domestic regulations and the donors. PPC will propose, proposed MARD, CPO to deal with problems that arise during project implementation;
- Investor project implementation management categories within the project through the Project Management Board. Investor Project and Management Board project implementation functions, tasks, reports, proposals and recommendations to the General Departments, Departments of MARD and the departments concerned of the province under the current regulations on management of construction investment and the tasks assigned MARD and authorization. Project Owner and Project Management Board will under the direction and guidance of CPO directly on issues related to implementation of sub-projects comply with the commitments in the financing agreement.
- Forms of organization and management of the project to comply with Decree 38/2013 / ND-CP of the Government dated 23/4/2013 Management funded with official development assistance (ODA) and the current regulations on management of construction investment's current Government.

- The province will be responsible for the management and implementation of the subproject. PPC is the primary agency project, the company IMC was tasked investors, management and administration of the implementation of sub-projects within the province. Investor TDA will establish a sub-project management unit (PPMU). PPMU Board will be authorized, on behalf of the investor directly managing the implementation of the work content under the subproject.

#### ***6.4. Coordination between stakeholders***

In the process of preparing and implementing the project, the involvement of the stakeholders have particularly important implications. Firstly, with the participation in the process is designing the project items will contribute important in regulating the design, meet the technical requirements and increase economic efficiency - social as well as brand investment performance, reduce to a minimum the undesirable effects caused by the construction work caused to the lives of people in the community, especially the impact on society and the environment during the construction process and operation of buildings. Collaboration between stakeholders is not good will of the potential waste of resources, causing delays in project implementation, have a negative impact on society and the environment as well as the efficiency of investment ... In project implementation process, the good cooperation between the parties will ensure that the project implementation schedule.

#### ***6.5. Training needs for stakeholders***

Management Board but has experience in managing the implementation of ODA projects, however, nearly half of workers are part-time staff and no experience in project management. Therefore, training needs in capacity building projects are defined focus for task forces, in addition to a number of officials of the departments concerned of the province.

Content capacity is defined as: training, professional training, specialized training for the members of the PMU, the experts of relevant departments to project management of projects, tendering, construction supervision, project management and operation.

## **Part VII. Conclusion and recommendation**

### **7.1. Conclusion**

- Regarding the demographic situation in the surveyed areas: two Tri Commune and Thuan Hoa Ham, Ham Thuan Bac district, Binh Thuan province is home to many ethnic groups, in which Kinh majority, moreover is of ethnic minority groups such as Care, Coho, Ra-class, young population structure ..... and in the working age majority; Overall, the illiteracy rate is not high, in 10 years, local make good basic education at the primary level, the percentage of students graduating from secondary school has tended to rise;
- Primary production activities in the project area is agriculture with crop groups mainly food crops, vegetables and fruit. Besides, animal husbandry, fisheries, forestry and services as well as income generating activities for the people in the area;
- Basically, the provinces have done relatively well in solidifying housing, temporary housing barely, but still a small percentage of the population does not ensure proper building standards, lack of protection area born, not of environmental hygiene;
- The situation of the disease to humans and cattle still occur every year depending on the change of weather, climate and environmental impacts such as water, air, and from food .... not guaranteed;
- The implementation of the project to improve dam safety Quao River reservoirs will create a positive impact on the people in the area, but there are also potential negative impacts and to take measures mitigation;
- In general, people in the province to support the implementation of the project, but there are concerns about the potential negative impact.

### **7.2. Recommendation**

- Develop communication plan with content related to the project include: The information about the project; These positive effects / negative arise during project implementation; And options for risk reduction; Regarding communication methods need to use direct communication through government officials, local organizations, the group meetings / group / club; Note to the media to use language appropriate for ethnic minority groups, especially for women and the elderly;
- Training, provides information and knowledge to the people in the project areas on ways to prevent negative impacts on society that could arise during the project implementation as service issues diseases, infectious diseases, social problems, security, traffic safety ....;
- It is necessary to attract the participation on an equal footing of all groups living in the province in all project activities. In particular it should be noted to the vulnerable



groups in the province as ethnic minorities, women, children, the elderly, the disabled ....; Capacity monitoring of project activities at the grassroots level for local community associations, particularly to note the participation rate of women, ethnic minorities in the supervisory board plus co.

- In the operation of the TDA grassroots issues of concern to create jobs for local workers, regardless of which target groups are women and equal pay for women and men;
- Seriously implementing measures to reduce risks in the locality of the project.

## Part VIII: Annex

### Annex 1: Summary of survey results

#### Sampling Frame

Field survey in provinces of the project, household survey combined with field observations and focus group discussions, key informant interviews with local leaders, representative of the AH group and displaced households. These activities aim to collect general information of socio-economic situation, socio-economic characteristics of people/locals of project area, as the basis to propose appropriate solutions for minimizing direct and indirect negative impacts of the project.

#### Household survey by quantitative questionnaires:

Based on list of affected people, local consultants will interview each household to collect information. Besides questions with available answers designed questions, open questions will collect more information, also serving for assessment and verification of information, consideration of assistance demand, livelihood restoration and risk when displacement.

#### Selection of survey sample for household interview

Quao reservoir has scope of impacts on 7 communes of Ham Thuan Bac districts as follows.

Commune	Natural area (ha)	Population (person)	No. of HH
Thuan Hoa	10549	6,319	1,538
Ham Tri	6532.7	8,859	2,091
Ma Lam	1696.9	14,124	3,272
Ham Chinh	4543	14,763	3,426
Ham Thang	1820.9	18,598	4,647
Phu Long	2550	16,950	4,120
Phu Hai	12123	13,637	3,006
<b>Total</b>	<b>39815.5</b>	<b>93,250</b>	<b>22,100</b>

(Source: Statistical data in 2013)

According to the guidance of sampling and scope of study from the Central Social Consultants, the consultants of sub-project conducted screening social impacts, local consultation and sampling survey of 151 HHs including 18 affected HHs (household survey combined with inventory of loss) and 133 other benefited households and affected by flood discharge (socio-economic survey), 73 HHs in Ham Tri commune and 60 HHs in Thuan Hoa commune. Out of 18 affected households, 10 are displaced HHs and 8 HHs are affected productive land.

#### - Key informant interview

Composition interviewed includes:

Members of PMUs, compensation committee of city, town and district;

Local authorities;

Officers of local unions;

Representatives of affected households, direct and indirect beneficiary

- ***Focus group discussion***

Consultants will work with local leaders, and sub-projects to plan group discussion.

Each group has from 5 to 8 people. People interviewed are selected from households with the following criteria: AHs (direct, indirect), woman householders, and difficulty households (the elderly, disability households, policy households ...).

- ***Field observation***

Consultants will visit in the field, taking pictures and talking with people, to clarify results of in-depth interviews, group discussions as evidence for assessment results.

<b>Object</b>	<b>Key informant interview</b>	<b>Focus group discussion</b>	<b>Consultation</b>
AHs (direct or indirect)	03-05 HHs	X	X
Displacement households (if any)	X	X	X
Ethnic minorities (if any)	X		
Project management and operation staffs	X		X
Local leaders	X		X
Polotial and social associations		X	
Staffs in charge of irrigation at commune level	X		X
Administration agencies on agriculture and irrigation of the locals (Departments)	X		X
Others (health care agencies, communication agencies, etc.)	X		
<b>Total</b>			

*(With gender composition of AHs interviewed and need to have participation of severely AHs, ethnic minorities, disadvantaged people, ...)*

## 1.1. Qualitative survey results

**Table 1. Gender of householder**

<b>Gender</b>	<b>Ratio (%)</b>	<b>No. of person</b>
Male	84,2	112
Female	15,8	21

**Table 2. Persons divided by hamlet**

<b>Hamlet</b>	<b>Ratio (%)</b>	<b>No. of person</b>
Lam Giang	29,3	39
Phu Thai	21,1	28
Phu Hoa	4,5	6
Dan Tri	23,3	31
Dan Hoa	9,0	12
Dan Le	2,3	3
Dan Hiep	10,5	14

**Table 3. Persons divided by communes**

<b>Commune</b>	<b>Ratio (%)</b>	<b>No. of person</b>
Ham Tri	54,9	73
Thuan Hoa	45,5	60

**Table 4. Person per household**

<b>No. of person</b>	<b>Ratio (%)</b>
1	0,8

2	6,8
3	9,8
4	29,3
5	30,1
6	9,8
7	2,3
8	7,5
9	2,3
10	1,5

**Table 5. Occupation of household members**

<b>Occupation</b>	<b>Ratio (%)</b>
Laborless	2,0
Agriculture, forestry & fishery	45,0
Business, service	1,6
Employee of state	4,3
Student	12,8
Worker	5,9
Housework	1,6
Retirement	0,4
Short-term employee	2,6
Jobless	0,9

**Table 6. Education of HH members**

<b>Education</b>	<b>Ratio (%)</b>
Illiterate	10,8
Primary school	38,8
Secondary school	21,8
High School	13,5
Vocational school	1,1
College/ university	4,9
Not yet school	8,3

**Table 7. Housing type**

<b>Type</b>	<b>Ratio (%)</b>	<b>House</b>
Permanent house	0,8	1
Semi-Permanent house	96,2	128
Wood house	3,0	4

**Table 8. LURC**

<b>LURC availability</b>	<b>Productive land</b>	<b>Residential land</b>
Yes	93,2	83,5
No	6,8	16,5

**Table 9. Water use**

Water sources	Water use		
	Drinking	Washing	Production
River	0,8	4,5	10,5
Reservoir	2,3	3,0	22,6
Bore hole	65,9	82,0	17,3
Water supply plant	19,7	6,0	41,4
Irrigation system	3,0	3,8	7,5
Rain water	8,3	0,8	0,8

**Table 10. Toilet types**

Toilet types	Ratio (%)	Toilet
No toilet	0,8	1
Septic toilet	72,9	97
Two-compartment	15,8	21
Simple toilet	9,8	13
Water surface toilet	0,8	1

**Table 11. Living condition**

Living condition	Ratio (%)	HH
Wealthy	12,0	16
Medium	65,4	87
Needy	16,5	22
Poor	6,0	8

**Table 12. School dropout children**

<b>School dropout children</b>	<b>Ratio (%)</b>	<b>No. of children</b>
Yes	18,0	24
No	82,0	109

**Table 13. Reason of school dropout**

<b>Reason</b>	<b>Male (%)</b>	<b>Female (%)</b>
Economic difficulties	27,3	15,8
Production	13,6	10,5
Not interested	40,9	15,8
Low learning capacity	22,7	
Difficult traveling	-	5,3
No need high education	-	

**Table 14. Common sickness**

<b>Common sickness</b>	<b>Ratio (%)</b>	<b>No. of person</b>
Flu	49,0	24
Respiratory	12,2	6
Cold fever	-	
Malaria	2,0	1
Liver	2,0	1
Poison	-	
Injury	4,1	2



**Table 15. Health insurance**

<b>Health insurance</b>	<b>Ratio (%)</b>	<b>NO. of person</b>
Yes	83,5	111
No	15,8	21

**Table 16. Loan sources**

<b>Loan sources</b>	<b>Ratio (%)</b>	<b>HH</b>
Friends	2,2	2
Lender	3,2	3
Credit fund	9,8	9
Social policy bank	66,7	62
Other banks	2,2	2
Program	2,2	2
Poverty fund	-	
Associations	4,3	4

**Table 17. Requirement of project's assistance**

<b>Requirement</b>	<b>Ratio (%)</b>	<b>HH</b>
Production	51,5	67
Land use change	3,1	4
House improvement	16,2	21
New occupation training	-	
Extension training	21,5	28
Education for children	3,8	5

Health insurance	18,5	24
Clean water supply	16,9	22
Clean toilet	6,2	8
Connection to electric grid	3,1	4
No requirement	12,3	6

**Table 18. Number of households benefited by the project**

No.	Commune	Population, ethnic minorities					Poverty ratio (%)	No. of benefited households
		Population (person)	No. of HH	EM and ratio	No. of EM	Ratio of agri-culture HHs (%)		
1	Thuan Hoa	5482	1429	13.63	747	87.74	8.66	1211
2	Ham Tri	8677	2081	25.63	2224	89.57	3.31	1864
3	Ham Phu	8482	2011	11.84	1004	94.16	4.57	1894
4	Ma Lam	14630	3588	10.12	1481	62.07	2.14	2227
5	Ham Chinh	14398	3523	0.15	22	84.76	3.54	2989
6	Ham Liem	11297	3048	0.18	20	75.39	2.98	2298
7	Hong Liem	10093	3347	0.31	31	89.82	3.44	2108
8	Ham Thang	19153	4646	0	0	53.94	1.91	2506

## **Annex 2: Public Health Intervention Plan**

### **1. Objective**

#### **1.1. Overall Goal**

Minimize the negative impact of the project on the health of local residents and workers from elsewhere to perform the activities of the subproject.

#### **1.2. Specific objectives**

- Strengthen communication and health education for workers, farmers, local authorities about the risk of potential diseases in the construction process subproject;
- Good control adverse impacts and risks to public health in the construction period subproject;
- Proactive prevention of diseases arising in the course of construction subproject, and effective coping with disease cases arising;
- Strict control occupational safety issues inside and outside the construction area, the maximum prevention of the factors causing unsafe labor.

### **2. Responsible for implementation**

#### **2.1. Person / agency responsible**

Project Management Board Agriculture and Rural Development in Binh Thuan province;

Social safeguard consultants;

Contractor;

The local governments;

Communal clinic centers;

Workers;

Local proplr.

#### **2.2. Specific responsibilities**

***Project Management Board Agriculture and Rural Development in Binh Thuan Province:*** general supervision responsibility all project activities, including media planning, public health consultations. The problems related to public health is also one of the items reflected in the complaints mechanism of the project;

***Social safeguard consultants:***

- Support local build content propagation and disease prevention; labor accident prevention; content of propaganda aimed at providing knowledge, raising awareness for the community (including workers and local people, local authorities, the project manager in the Agriculture and Rural Development) ;
- Monitoring of the complaint and resolve complaints related to health problems due to the subproject.

***Contractor:***

- Assign to the commander of the works or a worker in charge of occupational safety and health for workers to monitor and support related issues;
- Cooperate with village health officers for timely updates on the disease situation in the localities or the health problems of workers could spread;
- Cooperate with local governments, health stations to inform about issues related to the safety of people's ears at the construction site or transport route construction materials / waste;
- Cooperate with CPC / clinic centers for coordination mechanism to handle when accidents happen or disease;

- The commanders of the works will be on behalf of the contractor to coordinate with local authorities implementing communication activities, consultations related to public health and workers;

***Local governments:***

- Responsible for all issues arising in the commune. Commune authorities may assign community monitoring committee to monitor media activities, this consultation at local level;
- CPC / clinic centers examine the hygiene, safety at construction sites and workers' camps.

***Communal clinic centers:***

- Function of management, monitoring and initial first aid, report the problem to public health in the commune. Thus, the problems related to public health and the monitoring, supervision and support from this unit.

***Workers:***

- Participated in the media about health problems in the area;
- Successful implementation of the regulations on labor safety and hygiene.

***Local people:***

- Participate in the media about health problems in the area;
- Successful implementation of the regulations on labor safety and hygiene;
- Consciously avoid impacts arising during the implementation of subprojects for yourself, family and community.

**3. Place**

Planning community health management will be implemented in areas where the activities related to the project such as the construction sector subprojects Quao reservoir; worker living area in Ham Tri, Thuan Hoa communes.

**4. Implementation period: Before and during the construction period of subproject.**

**5. Indicators for monitoring and management**

- The guide first aid / medical response services contractor accident used / provided for the workers;
- The communication materials on public health of the subproject;
- Number of direct communication sessions for workers, residents and the community;
- The number of workers was guiding / training on issues related to public health;
- The number of people being tutorial / training on issues related to public health;
- The number of labor accidents caused by construction sub-projects;
- The number of traffic accidents caused by vehicles used in construction sub-projects;
- Number of sick workers, particularly infectious diseases;
- The availability of the medicine cabinet for workers in camps;
- The number of people with health problems related to the implementation of subproject, particularly infectious diseases.

**6. Funds for implementation**

- For contractors: Funding of contractors in the construction and installation contract.

- For clinics: No funding for this operation because it is the responsibility of the health unit in the management of community health.

## **7. The content of the management plan of public health**

### **7.1. Controlling construction site subproject**

To protect the environment and human health, construction areas will be strictly controlled in order to minimize the entry of people. Before starting the construction works, the contractor will apply measures to maintain security and control of the entry locations. Contractors will localize the construction sector; flags to trees, bushes and fixed milestones in the construction area, the impact is not allowed; and the boundaries of their region to restrict entrance. The hazards inside the construction area includes land and earthworks dam means machinery moving, so only the construction workers will be allowed into the area. This information will be communicated reported at the meetings and regularly repeated on communal radio speakers.

### **7.2. Prevention of construction waste dump out**

The construction waste should be gathered and transported to disposal sites have been identified prior to construction. Waste trucks must be covered to prevent spillage affecting the environment and the activities of local people leads to health problems.

### **7.3. The risk of the outbreak and spread of epidemics**

- What kind of diseases, especially infectious diseases often have on project sites
- The risk of the spread of infectious diseases or risks to public health caused by workers from elsewhere about staying local, and vice versa.

### **7.4. Avoid personal injury**

- Workers directly involved in construction, must be equipped with protective clothing labor, masks, gloves, hard hats, cotton earplugs, ... according to current regulations on occupational safety. Dissemination of knowledge on hygiene, occupational safety for all workers.

- Local people need to be controlled to place on the construction site as item 7 .1.

### **7.5. Responding to emergencies**

***Providing contact details:*** Contractors and localities should give local people the address and contact phone in case of emergency incidents. Can provide route map to the nearest medical facility.

***Problems may occur during construction subproject include:*** Car accident or construction machinery, fire or environmental accidents (oil spills caused by malfunctioning machines, containers for domestic waste workers broken, ...).

When the incident concerned the right contact at the address provided above. Where to aid accident victims before taken to medical facilities. Where fires, explosions or other environmental incidents must localize the problem and contacted the relevant authorities to handle.

***In the event of a disaster, such as earthquake, flood, or other dangerous weather conditions,*** contractors will stop all construction activities and bring the workers to safety. The work area will be fenced off to prevent the liquid poured out can prevent machinery and vehicles are not required to maintain definitely affects the community.

### Annex 3: Public Consultation, Participation And Communication Plan

#### Communication on the project

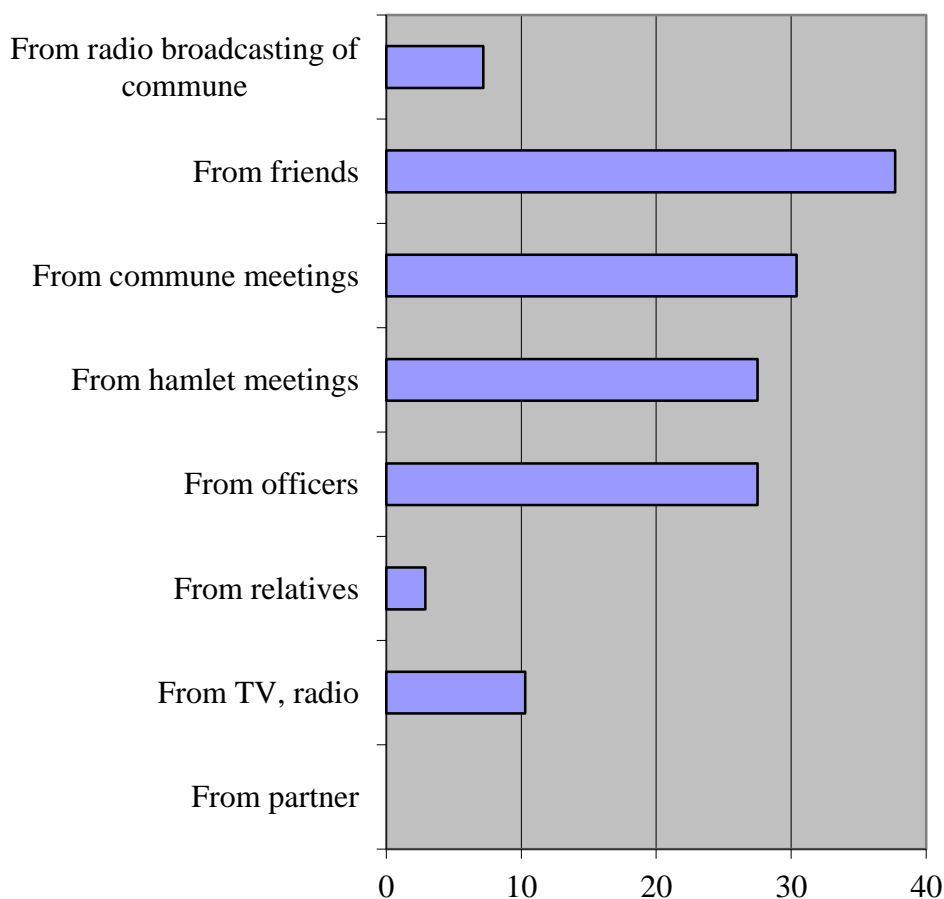
Communication is one of the very important issues affecting the success of the project, review of communication issues of projects to contribute to building the communications strategy, providing information and capacity building for people in the project area.

**Table 8. Awareness of project**

Yes		No	
n	%	n	%
68	52,3	62	47,7

Ratio of people know and do not know about the project is almost equal and approximately 50%. Source information obtained primarily through direct communication methods like friends / neighbors say (37.7%), due to communal officials say listen (27.5%), which was popular from village meetings / neighbors (27.5%) and disseminated from meetings in communes (30.4%), sources from radio, newspapers and TV are negligible.

**Table 7. Supplies information about the project**



The media activities in the province often assigned to the associations to perform, one method is performed through periodic meetings of the expenditure / organizations unions Association, the club meetings and the beneficiaries of the information and communication are the members of the Association of unions. Thus, people will have the opportunity to access information when they are members of a mass organization. However, during the survey, consultants noticed, there are many groups of people are not members of the association and it is possible to note problems in communication activities of the project, to find a method to attract people to participate in media activities even if they are not members of any association.

Besides, this is a region with many ethnic minorities, most of them already speak Kinh, so officials and local people agree that, no need for special tools Communication activities such as images, translations EM ..... However, through observation, advisory notice: First, the majority of older people (over 60 years old) do not speak Kinh; Second, young people but has not been to school or lower education level, especially women can communicate in Vietnamese language, but can not communicate comfortably in activities because of their gatherings speak and understand their language slower Kinh Kinh. Therefore, advise that, still need to have the appropriate communication tools with ethnic minorities in the province and cell transmission ng th in ethnic minority languages is essential.

### **1. Objectives**

- Increase access to information in their own interests to the people in the project area;
- People are informed, update the project construction schedule to proactively plan for production and daily life;
- Info for developers: improving access to information for people's lives and contribute to improving quality of life;
- Enhancing the participation of the people.

### **2. Subjects to be communication and consultation**

- The people in the commune, especially in the area of construction projects and village / hamlet with transport construction materials go through
- Local governments, village officials / neighbors
- Workers and staff of the school construction
- For the community, encourage the participation of both men and women, ethnic minorities

### **3. Content of consultation**

- Content, the main items of subproject, funds for implementation;
- The effect brought about by the sub-project;

- Organizations implementing building local subproject: information on the investor, the contractor, the supervision is done;
- Planning, scheduling the construction of major works;
- These impacts may occur during construction impact on the environment, society and the people of the province in the project area;
- Participatory mechanisms of local people, community monitoring mechanism, mechanism for resolving complaints and grievances;
- The problem was discovered during project implementation: revealing, conflicts arise, flammable materials, violations committed by contractors, investors ...
- Notify employers of local popular participation in construction activities.

**Time: Before and during sub-project construction.** Prior approximately 1 month, the contractor will coordinate with local authorities informed about the construction plans as well as the potential impacts related to energy community health.

#### **4. Location:**

In communes in the areas of construction subproject

#### **5. Methods of communication and consultation**

Communication activities and consultation through the following main forms:

- *Communication on social loudspeakers.* Currently, at 2 Tri Commune and Thuan Hoa Ham have radio speakers in all villages. Most of the other activities of local media communities are made through this form. Therefore, the system will be used loudspeakers to communicate to people around the commune of the issues involved in the construction process subprojects.
- *Community Meeting / Public Consultation:* This mode will perform with the involvement of officials in the commune villages project; i quintal people communes in the project area, where the sub-project construction and households along the route of transportation of construction materials or disposal.
- *Communication integrated into the activities of mass organizations or governments:* Monthly, governments often have meetings with social workers and the mass organizations in villages, therefore, the media content Media can integrate into these activities.

#### **6. By Whom:**

*a. Before the project implementation:*

Safety Policy Advisory Unit will be conducting communication activities, public consultation on the issue of safety policies in general.

*b. In the course of project implementation:*

Project Management Board, the Contractor will coordinate with local governments and social organizations, rural / village under construction and implementation of communication activities according to the method as above.

#### **7. Tracking, monitoring implementation**

Media planning and public consultation relating to the participation and supervision of the following units:

- **Project Management Board of Binh Thuan Province billion.** Project Management Committee will be responsible for overall monitoring all project activities, including media planning, consultation with community involvement. The problems associated directly with the people about the



environment, society, compensate affected property is also one of the items reflected in the complaints mechanism for the project.

- **The authorities of the communes in the area subprojects.** The commune authorities responsible for the general all the issues arising in the commune. Commune authorities may assign community monitoring committee to monitor communication activities, the local consultation.
- **Contractors:** The Commander of the work will be on behalf of the contractor to coordinate with local authorities carry out communication activities, in consultation with the participation of the community and site workers.

## **Annex 4: Gender Action Plan**

### **1. Principles of gender action plan**

- Project opportunities and equal sharing of benefits between women and men;
- Systematic measures aimed at reducing gender inequalities in the project area in the activities related to dam safety improvement;
- Approach with poor women;
- Collect data on gender analysis including monitoring and evaluation designed by stakeholders;
- Create favorable environment to support the capacity building and the participation of women at all the operational phase of the project on gender beside ethnic minorities development plan;
- Promote presence of women in decision-making bodies at all levels.

### **2. Base for building gender action plan**

- The legal documents of Vietnam and the donor's policies;
- Results of gender analysis in the locality of the project;
- The specific activities in the implementation of project components.

### **3. Outputs**

- Raising awareness on gender for local government leaders and the local population;
- Raising awareness of local people, including women and men about the positive and negative impacts of project;
- Ensure the involvement of women (at least 30%) in the community's supervisor group;
- Ensure the involvement of women (at least 30%) in the consultation activities of the project;
- Ensuring the participation of women, men in the locality in the communication activities in order to minimize the negative impact of the project;
- Ensuring equality of access, benefit for women and men in the community for programs to reduce the adverse impact on health during project execution;
- Ensuring equality of access, benefit for women and men in livelihood support programs, especially among single women, poor women, women from ethnic minorities.

#### 4. Gender Action Plan

Action	Goal	Responsibility	Time
<b>Component 1: Dam Safety Rehabilitation</b>			
(i) Detailed design, supervision and quality control of rehabilitation works for prioritized dams and associated infrastructure	<ul style="list-style-type: none"> <li>- Project information is announced publicly for the local people, including detailed design drawings construction site, construction time. It should ensure that the information to women and vulnerable groups;</li> <li>- Establishment of community's supervisors, which ensures that at least 30% of members are women;</li> <li>- Organize training on community supervision in the implementation of irrigation projects for the community's supervisors</li> <li>- Organize propaganda, training, raising awareness to the people about the risks that may occur during project construction, ensure minimum 30% of women involved in training.</li> </ul>	<p>PMU/ project coordinators are responsible that these terms will be specified in the contract; commune officials will submit contractors a list of people who want to work for the project; CPC officers are responsible for ensuring the achievement of its objectives; Women's Union is responsible for ensuring ratio of women involved in activities.</p>	During construction
(ii) Rehabilitation works, including civil works, hydro-mechanical works and	<ul style="list-style-type: none"> <li>- The contractors will have priority use of unskilled labor (through subcontracting); must be at least 30% of the total labor force is local unskilled labor;</li> <li>- Give priority to women</li> </ul>	<p>PMU/ project coordinators are responsible that these terms will be specified in the contract; commune officials will submit</p>	During construction

Action	Goal	Responsibility	Time
installation of hydrological and safety monitoring equipment	<p>workers in the 30% of local labor; men and women labor will receive the same wages for the same type of work;</p> <ul style="list-style-type: none"> <li>- The contractor must not employ child labor;</li> <li>- People want to work for the project will write their names in the list of villages. Head of the village and commune officials will provide this list to the contractor, the contractor will select on a priority basis of poor and vulnerable households, women and ethnic minorities.</li> </ul>	<p>contractors a list of people who want to work for the project; CPC officers are responsible for ensuring the achievement of its objectives;</p> <p>Women's Union is responsible for ensuring that women are employed in accordance with their expectations.</p>	
(iii) Preparation of Operation and Maintenance Plans and Emergency Preparedness Plans	<ul style="list-style-type: none"> <li>- Consultations with local communities are held before, during and after the establishment of the plan, ensuring that at least 30% of women involved in the consultation process;</li> <li>- Vulnerable groups, single women should be listed in the plan and ensure the minimum of risk in the operation against them.</li> </ul>	<p>PMU/ project coordinators are responsible that these terms will be specified in the contract; commune officials will submit contractors a list of people who want to work for the project; CPC officers are responsible for ensuring the achievement of its objectives;</p> <p>Women's Union is responsible for reviewing plans to</p>	During construction

Action	Goal	Responsibility	Time
		ensure mitigation of risks for vulnerable people.	
(iv) Adoption of standardized checklist for community-managed dams	- Ensure at least 30% of women in the project management unit at the grassroots level and in the community;	CPC officers are responsible for ensuring the achievement of its objectives; Women's Union is responsible for ensuring women in the project management unit.	During construction
<b>Component 3: Project Management Support</b>			
Capacity development, integrated dam operation plan in the basin, emergency preparedness plan including dam break analysis, mapping flood in the downstream and set of benchmarks, raising awareness and evacuation	- Prepare diagram and list of households affected by the dam operation, which should mark the protection of ethnic minorities, single women, the elderly and children;  - Training, awareness raising and risk prevention training organization, emergency response for local communities in the downstream, which should ensure that at least 50% of women involved in training and communication.	PMU / project coordinators are responsible for ensuring that these terms will be specified in the contract; At the same time ensuring the implementation of activities;  CPC officers and Women Unions are responsible for ensuring the achievement of its objectives;	During construction

Action	Goal	Responsibility	Time
training for local communities in the downstream.			
<b>Component 3: Project Management Support</b>	- Organize training activities in order to increase gender awareness for the project management unit at all levels; local leaders; community workers; local people.	PMU, contractors and project consultants cooperate to implement	During construction
<b>Component 4: Disaster Contingency</b>	Organize training on measures to reduce disaster risk for project management units at all levels, local government, community workers and local people, to ensure a minimum of 30% women involved in the training.	PMU, contractors and project consultants cooperate to implement	During construction

### 5. Cost estimate

No.	Activities		Cost (VND)
1	The public disclosure of information relating to the project	All of 4 components	5,000,000
2	Organize training on community supervision in the implementation of irrigation projects for the community monitoring committee	Component 1	20,000,000
3	Communication and raising awareness to the people about the risks that may occur during project construction,	Component 1	5,000,000
4	Communication and raising awareness through organizing training for local communities downstream of the risks	Component 2	10,000,000
5	Organize gender training activities	Component 3	20,000,000
6	Training on these measures to reduce disaster risk for the project management unit levels, local authorities, community officials and local residents	Component 4	20,000,000
Total: 80,000,000			

## **Annex 5: Grievance redress mechanism**

Complaints relating to any matter of the Project will be settled through negotiations aimed at achieving consensus. The complaint will pass through three stages before it can be filed to the court. The Enforcement Body will incur all administrative and legal fees relating to complaint handling.

The complaints relating to the Project shall be settled in compliance with Article 138 of the Land Law 2003; Article 28 of the Law on Complaints; Article 63 and 64 of Decree No.84/2007/ND-CP; Clause 2 of Article 40 of Decree No.69/2009 and regulations on complaints in Decree No.75/2012/ND-CP dated 20/11/2012. According to Clause 2 in Article 138 of the Land Law 2003 and 2013:

- (i) In case of complaints against administrative decisions and administrative actions on land management first settled by the Chairman of the People's Committees of districts, towns and cities under the province, without contentment of the complainant, the complaints can be filed to the People's Court or appealed to the Chairman of the People's Committees of provinces and centrally-run cities. In case of appeal to the Chairman of the People's Committees of provinces and cities under central authority, the decision of the Chairman of the People's Committees of provinces and cities under central authority is the final one.
- (ii) In case of complaints against administrative decisions and administrative actions on land management first will be settled by the Chairman of the People's Committees of districts, towns and cities under the province, without contentment of the complainant, the complaints can be filed to the People's Court.
- (iii) The time limit for complaints against administrative decisions and administrative actions on Land Management is thirty (30) days after the date of receipt of the administrative decision or being informed of that administrative decision. Within 45 days from the date of receipt of the first complaint resolution decision, the complainant, if disagree, can make an appeal to the state authority or the People's Court.

In terms of complaint settlement, in Law on Complaints, Article 14: Rights and obligations of the person competent to settle first-time complaints:

- (i) The person competent to settle first-time complaints should:
  - a) Ask the complainant, relevant agencies, organizations and individuals to provide information, documents and evidence within 07 days of the request as a basis for complaint settlement;
  - b) Determine to employ or cancel the emergency measures as defined in Article 35 of this Law;
- (ii) The person competent to settle first-time complains should perform the following obligations:

- a) To receive the complaint and issue a notice in writing to the complainant, agencies, organizations, or individuals entitled to appeal and the state inspection agencies at the same level of acceptance of resolving complaints against administrative decisions and actions;
  - b) To settle the complaints against administrative decisions and actions if required by the complainant;
  - c) To open a dialogue with the complainant and agencies, organizations and individuals concerned;
  - d) To decide complaint settlement and be responsible before the law for settlement results. In case of complaints from authorized agencies, organizations and individuals, the results shall be notified to agencies, organizations and individuals in accordance with law;
  - e) To provide information, documents and evidence relating to the complaint for the complainant when they are required by the complainant for second-time settlement or appeal to the People's Court.
- (iii) To compensate for first-time settlement and damages due to administrative decisions and actions in accordance with regulations on the State responsibilities.
  - (iv) The person competent to settle first-time complaints should perform their rights and obligations as stipulated by Law.

In terms of announcement of complaint settlement decision: In Article 12 of Decree No.75/2012/ND-CP dated October 3rd, 2012 of the Government detailing the implementation of some articles of the Law on Complaint.

- (i) Within 15 days from the date of decision of complaint settlement, the person competent to settle the complaint for the second time shall announce the complaint settlement decision by one of the forms specified in Clause 2 in Article 41 of the Law on Complaints.
- (ii) In case of announcement at a meeting, the attendees of the meeting must include: the person issuing the complaint settlement decision, the complainant or their representatives, the person subject to complaint and agencies, organizations and individuals concerned. Before conducting a public meeting, the person competent to settle complaints must send a notice to agencies, organizations and individuals involved 3 days in advance.
- (iii) The announcement of complaint settlement decision shall be made on the mass media (television, radio, printed and electronic newspaper). If the agency of the person competent to settle complaints has their own portal or website, the complaint settlement decision should be made public on this portal or website. The minimum number of announcement is 02 times on radio, television, and printed publications. The period of announcement on



electronic publications, portals or websites should be at least 15 days from the date of notification.

- (iv) In case of notice at the office or the Reception Room of agencies and organizations competent to settle complaints, the period for the notice of complaint settlement decision to be posted up is at least 15 days.

The procedure for complaint settlement consists of 4 stages as below:

**First Stage, Commune People’s Committee:** An aggrieved affected household may bring his/her complaint before any member of the Commune People’s Committee, either through the Village Chief or directly to the CPC, in writing or verbally. It is incumbent upon said member of CPC or the village chief to notify the CPC about the complaint. The CPC will meet personally with the aggrieved affected household and will have 15 days following the lodging of the complaint to resolve it. The CPC secretariat is responsible for documenting and keeping file of all complaints that it handles.

**Second Stage, District People’s Committee:** If after 15 days the aggrieved affected household does not hear from the CPC, or if the affected household is not satisfied with the decision taken on his/her complaint, the affected household may bring the case, either in writing or verbally, to any member of the DPC or the DRC. The DPC in turn will have 15 days following the lodging of the complaint to resolve the case. The DPC is responsible for documenting and keeping file of all complaints that it handles and will inform the DRC of any determination made. The DRC must ensure this decision is notified to the AP.

**Third Stage, Provincial People’s Committee:** If after 15 days the aggrieved affected household does not hear from the DPC, or if the affected household is not satisfied with the decision taken on his/her complaint, the affected household may bring the case, either in writing or verbally, to any member of the PPC. The PPC has 15 days within which to resolve the complaint to the satisfaction of all concerned. The PPC is responsible for documenting and keeping file of all complaints that reaches the same.

**Final Stage, the Court of Law Arbitrates:** If after 15 days following the lodging of the complaint with the PPC, the aggrieved affected household does not hear from the PPC, or if he/she is not satisfied with the decision taken on his/her complaint, the case may be brought to a court of law for adjudication. The court's decision will be final.

Decision of grievance redress shall be sent to the complainant and the parties concerned and shall be publicly posted at the headquarters of the People's Committee in charge 03 days after the decision/grievance redress at ward / commune / town and 07 days after at the district or province.

To ensure that the grievance mechanism described above is practical and acceptable

for the PAP, consultation with the government and local communities taking into account the distinctive cultural characteristics as well as the traditional culture mechanisms in addressing and resolving grievances and conflicts issues.

Grievance redress mechanism for affected people is described in the document on sub-project's information to distribute to the affected people. Documents also provide the name, exact address and telephone number of the person in charge of receiving complaints from affected people.

Those affected will be free of all expenses related to administrative procedures and legal. The appeal court has the right to be free of cost for filing. All records of complaints and redress measures will be stored in the CPCs, community consultation board and investors of the sub-project.

## **Annex 6: Information disclosure, accountability and monitoring**

### **1. Consultation and disclosure**

The main objective of the information disclosure and public consultation is to ensure the participation of affected communities, of families, local governments and organizations involved in the sharing of information on projects, advice on selection of technical options, expected impacts on land, income and assets on the ground ... The disclosure is an important contribution in promoting progress of the project in the implementation process, prepare, and when the project goes into operation with the consensus of the community, government project management committee. This will minimize the possibility of conflicts arising and other risks, increase investment efficiency and social significance of the project.

Program information and community consultation to ensure that:

- The competent authorities of the local as well as representatives of the people affected will be involved in project planning and decision making process. Project Management Board will work closely with the commune / district in the project implementation process. The participation of the people affected in the implementation process will be continued by asking the commune / district representatives invite people affected participation of council members compensation, clearance and resettlement and engage in active part of resettlement.
- Share all information on items and activities of the project planned for the affected people.
- Collecting information on the needs and priorities of those affected, as well as get information about their reaction on policies and the proposed activities.
- Ensure that those affected can be fully informed decisions directly affect the income and their life and they have the opportunity to participate in activities and decision-making on issues Photo direct bearing on them.
- Ensuring transparency in all activities related to land acquisition, compensation, resettlement and rehabilitation.

For the World Bank, who are affected by the project need to be fully informed and must be consultation about resettlement and compensation plans. Consultation is the starting point for all activities related to resettlement. Persons affected by resettlement may fear that they could affect the livelihood and community relations, or fear the benefits are not guaranteed. Being involved in the planning and management of their resettlement help alleviate fears and bring the affected people the opportunity to participate in decisions that will affect their lives. The implementation of resettlement without consultation may lead to an inappropriate strategy and ultimately ineffective. No consultation, affected people may react negatively to the project, causing social problems, significantly slow the completion of goals or even ignored, and costs will increase. Therefore, when a consultation, the initial opposition of the project can be translated into constructive participation.

For Vietnam, the next important step in strengthening democracy at the grassroots level is Directive No. 30-CT / TW of the Central Communist Party of Vietnam in "Building and implementing regulations democracy Base "and Decree No. 79/2003 / ND-CP on the issue as well. The key point of this legislation is the famous slogan "people know, people discuss, people do and people check"; Ordinance 34/2007 / PL-UBTVQH11 point out the problems that local governments and communities

consulted before the competent authority decision-making; which include the construction of the compensation and resettlement assistance related to projects, works in the locality ward / commune; Article 39, paragraph 2, of the 2003 Land Law requires disclosure of related issues of resettlement, as the reason, plan land acquisition, relocation plans, general plan compensation, clearance work for those affected.

- Thus, consultation and participation is an innovation in the implementation of projects in Vietnam. This policy will overcome the shortcomings in the process of deployment and implementation of projects, by both local people and project implementers are inexperienced in this field.

The following points need attention in order to encourage the relevant parties involved in the consultation process on the project:

- Identify and involve all stakeholders, especially the people living in the project area, the affected people (men, women, the poor, ethnic minorities ...), in process of consultation and participation;
- Developing strategies for participatory planning, implementation, monitoring and evaluation of projects.
- Develop content themes for the campaign to promote and disseminate information, and build processes to affected people negotiate their interests.
- Attractive stakeholders in decision making at all stages of the project (eg the design plans, compensation methods, consultation of the people affected in the way of compensation , implementation schedules, etc ..).
- Set up a schedule to complete the operation as a campaign to provide information, the extent and form of compensation, benefits, location and relocation plan.
- Develop procedures for settling complaints.

Regular community consultation should be done with the unit up and detailed design of the project categories. This ensures the design proposals with the participation of the community and limit adverse impacts on the community. This also works with community-friendly and user.

- Consultations should also perform with the stakeholders, including the unit will be responsible for managing the operation of works, ensuring that they are consulted and feedback on the design.
- During the construction phase, the project should be broadcast on the mass media about the construction activities and expected progress, measures to support the people affected and to acquire and process feedback information from the community. Affected persons will be informed about the policies and procedures of the project to ensure their later life did not change much. APs will be notified if they have any questions about the project, the project manager can help solve.

#### ***Content and form of consultation / information disclosure***

<b>No.</b>	<b>Consultation content</b>	<b>Time</b>	<b>Organizing agency</b>
1	Project information, consultation of facility demand, basic design of facilities	Project preparation	<ul style="list-style-type: none"> <li>- Binh Thuan Irrigation Company</li> <li>- DARD/PPMU</li> <li>- Locality</li> </ul>
2	Consultations on the impact of the	Project	<ul style="list-style-type: none"> <li>- Binh Thuan Irrigation</li> </ul>

	projects and policies of the projects and interests of APs, consultation about resettlement plans, the cost of replacement, the construction impacts, mitigation measures	design	Company - DARD/PPMU - Locality
3	Consultation on impact of construction, feasible construction alternatives	Construction period	- Binh Thuan Irrigation Company - DARD/PPMU - Locality - Contractor
4	Consultation on facility protection, dam safety, notification of flood discharge, water supply schedule	Operation period	- Binh Thuan Irrigation Company - Locality

## 2. Social Accountability

- The disclosure about the proposed methodology of the project to the affected people and stakeholders during the public consultation and field surveys of the social assessment consultant is to give a paradigm for public information a way to continue in the process of project implementation. Moreover, as has been requested at all community meetings, those affected will want to have meetings to exchange information regularly with the project manager at the headquarters of the CPC with communities affected during the project implementation. Therefore, the report on the resettlement plan and environmental management plan needs to be shown the responsibility of the project manager to ensure that the public receive regular information about the project project.
- In addition to regular meetings between the PMU and the affected community in CPC offices, community meetings in all communes where made community consultation has identified the need to establish a connection to facilitate close contact maintained easily and quickly with the project management committee. The best way to make a tight connection is provided phone numbers and addresses of the PMU is responsible at all performance venues construction of the project categories and the headquarters of all the communes both components of the project.

## 3. Participatory monitoring

- For the components of the project to ensure the effective, necessary to have a monitoring plan with the participation of relevant stakeholders such as the Department of Natural Resources and Environment, Department of Construction, Department of

Planning and Investment, Department of Transportation information ... The agency / direct management unit, operation of the project categories after completion directors also need to be involved in the design process and construction.

- Along with independent monitoring parts of the project, there should be a monitoring unit at Community level, monitoring of project activities, especially activities related to resettlement, sanitation School and construction of various items. Supervision department will include representatives of local leaders, representatives of groups such as the Women's Union, Fatherland Front, Veteran, Farmers Union, which represents the people ... Parts surveillance This community level with independent monitoring of projects based on indicators of social safety monitoring of project activities. Indicators of rehabilitation, production, indicators of environmental sanitation, traffic will be built to serve the monitoring plan of the project. Through grasping reality, community supervision department can promptly report the relevant information to project progress, problems arise during project implementation to inform promptly resolved PMU . The responsibilities of this department is to collect feedback from citizens submitted to the competent authority and the project management unit. At the same time people are also involved in the process of construction supervision, safety and environmental hygiene in the construction phase.

- Community supervision department should be set up a training plan for strengthening monitoring and evaluation of project activities. Skills in monitoring activities will be training directly for this division and is considered as part of the monitoring plan with the participation of the project.

Noting the application of Resolution 80 / CP on community supervision for construction projects locally.