

THE SOCIALIST REPUBLIC OF VIET NAM
NINH THUAN PROVINCIAL PEOPLE'S COMMITTEE

THE COASTAL CITIES SUSTAINABLE ENVIRONMENT PROJECT
PHAN RANG - THAP CHAM CITY SUB-PROJECT

SOCIAL ASSESSMENT REPORT

(Final Draft)



PHAN RANG - THAP CHAM, OCTOBER 2016

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EMPLOYER
**IMPLEMENTATION UNIT FOR CAPACITY
DEVELOPMENT AND ODA WATER
RESOURCES PROJECTS
IN NINH THUAN PROVINCE**

CONSULTANT
**VIETNAM WATER, SANITATION
AND ENVIRONMENT JSC.**

PHAN RANG - THAP CHAM, OCTOBER 2016

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ABBREVIATIONS

PMU	Project Management Unit
AP	Affected People
BTCT	Steel-reinforced concrete
GoV	Government of Vietnam
ECOPs	Environmental Code of Practices
PDO	Project Detail Outline
EIA	Environmental Impact Assessment
SA	Social Assessment
TOR	Terms of Reference
IDA	International Development Association
IBRD	International Bank for Reconstruction and Development
EMP	Environmental Management Program
FS	Feasibility Study
WB	World Bank
TCXDVN	Vietnam standards for Construction
RP	Resettlement Plan
CCSSED	Coastal Cities Sustainable Environment Project
WWTP	Wastewater Treatment Plant
PC	People's Committee
USD/ US\$	U.S.dollar

1 PROJECT DESCRIPTION

1.1 BACKGROUND

1. In response to the Government of Viet Nam's request to finance further, the World Bank supported The Coastal Cities Sustainable Environment Project (CCESP) implemented in Nha Trang City (Khanh Hoa Province), Quy Nhon City (Binh Dinh Province) and Dong Hoi City (Quang Binh Province). The project focused on construction/upgrading the main drainage / sewerage system (including the interceptors) to collect and treat wastewater as well as upgrading the lakes and channels and solid waste collection and treatment facilities in order to reduce flooding and improve environmental conditions.
2. Vietnam has made remarkable progress in economic growth and poverty reduction in recent years, and has recently graduated to lower middle income country status. Over the last two decades, the country has recorded among the highest growth rates in the world, which in turn enabled poverty reduction at record pace. GDP growth, however, fell from an average rate of 7.3 percent during 2000-2007 to 5.8 percent during 2008-2012. Growth has subsequently recovered to around 6.0 percent in 2014, an estimated 6.7 percent in 2015, and a forecast 6.0% in 2016. The external sector has held up well despite the global situation, but domestic demand remains weak on account of subdued private sector confidence, overleveraged SOE and (undercapitalized) banking sectors, and shrinking fiscal space. The slowing of the growth rate has had limited impact in large cities which continue to attract domestic and foreign investment. An integral part of Vietnam's transition from low-middle income to advanced status has been its transition from a largely rural to urban economy. The country's economic progress has coincided with rapid urbanization, with Vietnam sustaining a 3 percent annual urban population growth rate from 1999 to 2011. The urban population is currently 35 percent of the total population and is expected to reach 40 percent by 2020. This growth has contributed to the significant challenges in service delivery and infrastructure in the cities, in general, and specifically, for sanitation management (wastewater, drainage and solid waste).
3. The proposed Coastal Cities Sustainable Environment Project (CCSEP) will build on the success of the Coastal Cities Environmental Sanitation Project (CCESP) (P082295/P122940) which had the PDO: to improve the environmental sanitation in the project cities (Dong Hoi, Nha Trang and Quy Nhon) in a sustainable manner and thereby enhancing the quality of life for city residents. The CCESP was implemented from June, 2007 to November 30th, 2014. The design indicators of the CCESP were achieved and the following results were realized in the project areas: i) flooding decreased significantly and no wastewater was discharged onto beaches and into canals; ii) lakes, canals and rivers were upgraded; (iii) public toilets and toilets at schools have been properly operated and maintained; and; iv) capacity of the PMUs and relevant authorities was strengthened. With the gradual increase of wastewater and solid waste tariffs cost recovery and project sustainability were improved.
4. This Project will be implemented over a period of five years and will finance priority investments in the four participating project cities (Dong Hoi, Nha Trang, Phan Rang-Thap Cham, and Quy Nhon). The Project will consist of the following four components with a total estimated project cost of US\$273 million. This will be financed through (i) an International Bank for Reconstruction and Development (IBRD) loan of US\$46 million, (ii) an International Development Association credit of US\$190 million, and (iii) counterpart resources of US\$37 million from the government of Vietnam central budget,

- Binh Dinh Province, Quang Binh Province, Khanh Hoa Province, and Ninh Thuan Province.
5. The Project development objective is to increase access to sanitation services and enhance flood protection in selected areas, and strengthen the operational performance of sanitation utilities in selected cities. The Project has 4 components:
- **Component 1: Sanitation Infrastructure Expansion (US\$186.0 million).** This component will contribute to PDO achievement in increasing access to sanitation services and enhance flood protection in select areas.
 - **Component 2: Urban Connectivity Improvement (US\$46.0 million).** This includes priority roads and bridges along canals, drains and rivers to support urban development - over 7km of strategic roads and four bridges.
 - **Component 3: Compensation and Site Clearance (US\$4.0 million).** This component will provide funding for compensation, site clearance and resettlement site works. The Bank's funding will only be used for the construction of technical infrastructure (roads, utilities etc) for the resettlement area in Phan Rang-Thap Cham.
 - **Component 4: Implementation Support and Utilities Reform (US\$13.0 million - all counterpart funding).** This component will contribute to PDO achievement (strengthen the operational performance of sanitation utilities in select cities) through a capacity strengthening program for the PMUs and relevant agencies, and reform activities related to implementation of Decree 80 (institutional reorganization, household connection policy, service contracts and private sector participation, tariffs/cost recovery):
6. The Coastal Cities Sustainable Environment Project - Phan Rang – Thap Cham City Sub-project is proposed to be implemented over the scope of 15 wards and 01 commune as Bao An, Dai Son, Do Vinh, Dong Hai, Dao Long, Kinh Dinh, My Binh, My Dong, My Hai, My Huong, Phu Ha, Phuoc My, Tan Tai, Thanh Hai and Thanh Son. The fund for the Phan Rang - Thap Chap sub-project is estimated at 87.91 million US\$, including 75.15 million US\$ of ODA loan; 0.50 million US\$; and 12.26 million US\$ of counterpart fund.

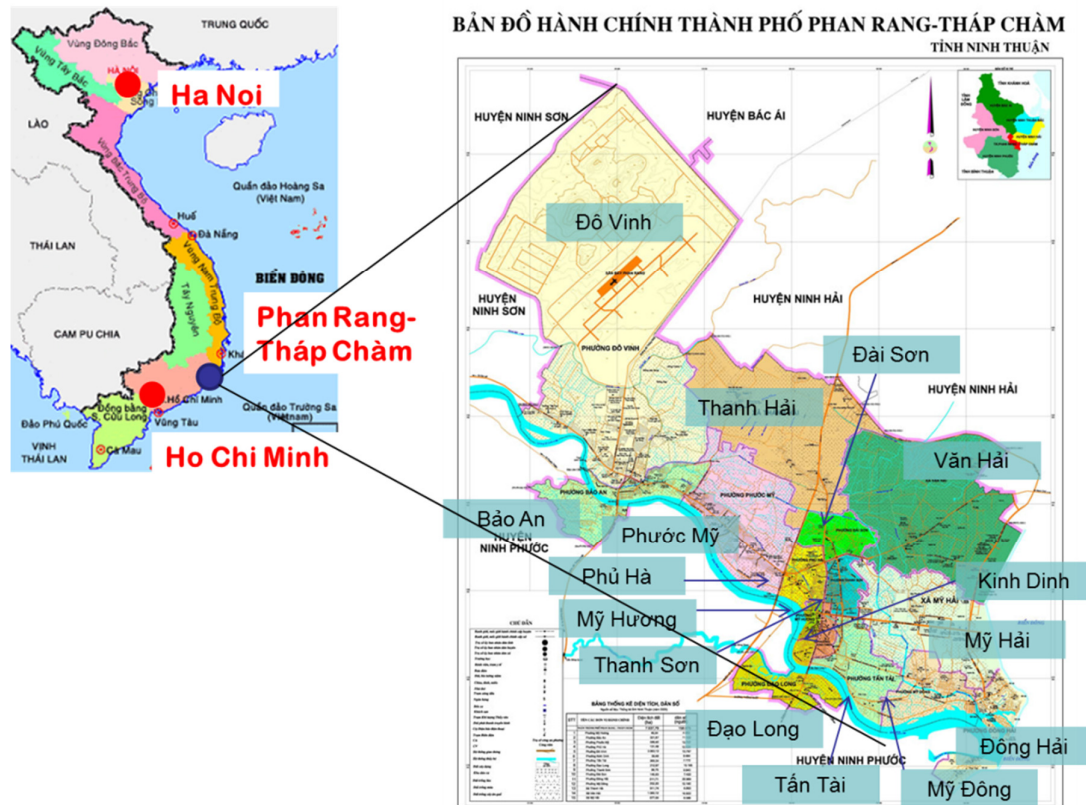


Figure 1: The scope of the Phan Rang – Tháp Chàm city subproject

1.2 THE SUB-PROJECT OBJECTIVES

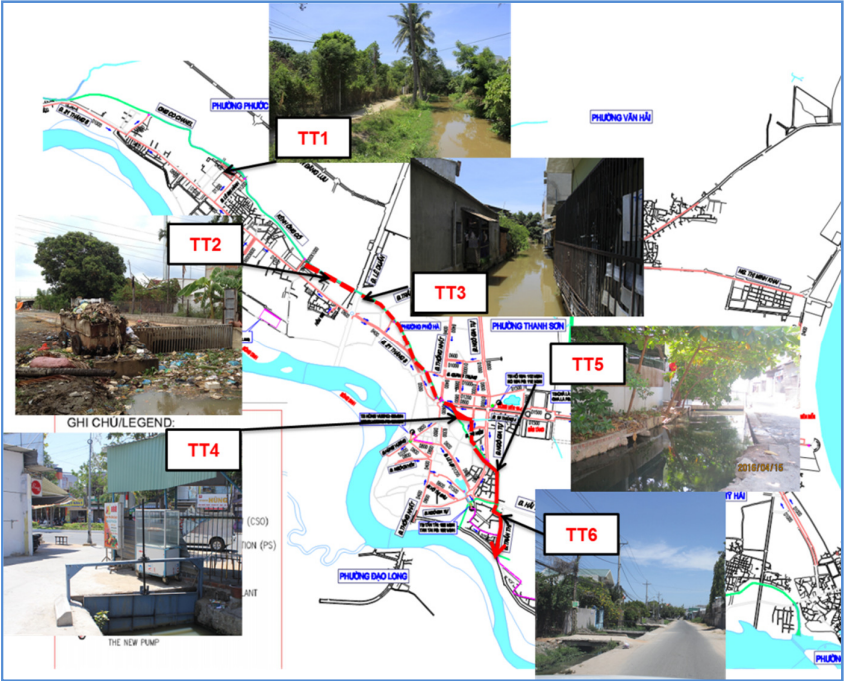
7. The sub-project's specific objectives are:

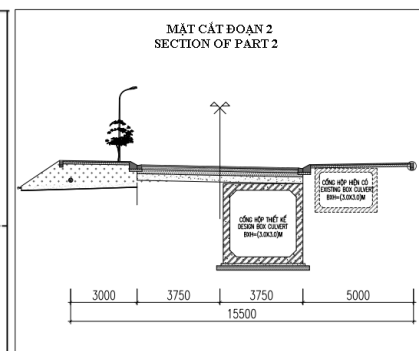
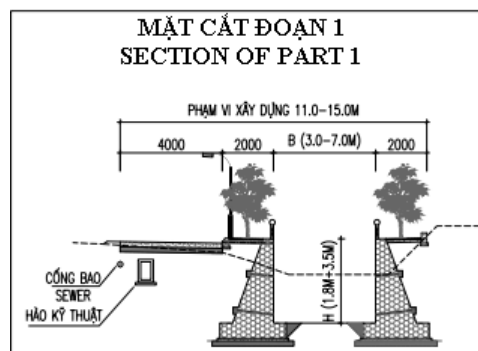
- Improvement of the drainage capability and reduce number of flooded places.
- Enhancement of wastewater collection and treatment capability, aiming to improve the water, soil and air environment.
- Enhancement of capacity and efficiency of solid waste collection.
- Improvement of school and public sanitary conditions.
- Improvement of inner urban transport and drainage, sewerage infrastructure.
- Improvement of project administration, management and operation capacity for the PMU, provincial departments, sector, public work institutions and project stakeholders.
- Ensuring technical and financial sustainability after the project completion.
- Mitigation of project's environmental and social impacts to people, improvement and enhancement of the living conditions for the local residents and tourists.

1.3 THE SUB-PROJECT'S COMPONENTS

8. The Phan Rang – Tháp Chàm subproject is proposed with 4 components and contained many investment activities that has various requirements on land acquisition. Summary of proposed investment items of the subproject and land acquisition for each investment item is described in the table following.

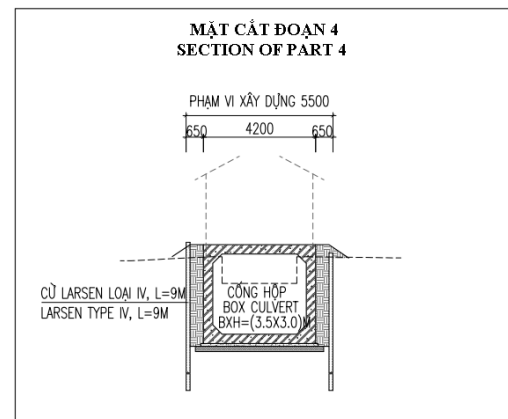
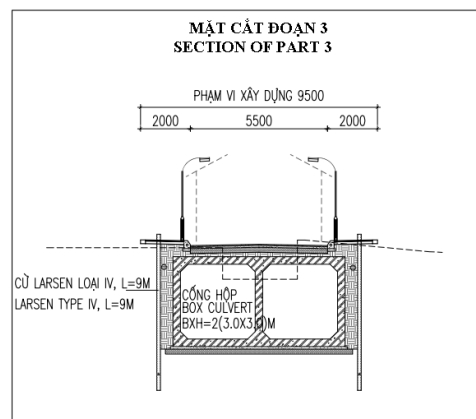
Table 1: Summary description of the sub-project's investments

No.	Investments	Description
1	Component 1: Sanitation Infrastructure Expansion	
1.1	Upgrading and expanding channels	
a	Rehabilitation of Tan Tai channel (6,949 m)	<p>This channel is divided into six parts as follows:</p>  <p>TT1- from the starting point to the stadium: embankment channel with dimension BxH=(3.0-7.0)x(2.3-4.0)m and operation road on the left in the width of B=4.0m and sidewalk in the width of B=2.0m on the two sides of the channel with length of 3,438m</p> <p>TT2- behind the stadium (332 m): culvertization with dimension BxH=3.0x3.0m running along with the existing box culvert BxH=2.4x1.6m.</p>



TT3- Le Duan to 16/4 Road (1,481 m): culvertization with dimension $2 \times B \times H = 2 \times (3.5-3.7) \times 3.0\text{m}$ and operation road on the sewer $B=5.5\text{m}$, with sidewalks on the two sides $B=2.0\text{m}$.

TT4- 16/4 Road to Ngo Gia Tu Road (722m): culvertization with dimension $B \times H = 3.5 \times 3.4\text{m}$ and operational road on the culvert.



TT5- Ngo Gia Tu to Hai Thuong Lan Ong road (415m): Rock rivetment for vertical channel embankment, with dimension $B \times H = (3.0-5.0) \times 3.9\text{m}$, completion of the operation road on the right channel and sidewalk on the left channel in the width of $B=2.0\text{m}$

		<p>TT6 - Hai Thuong Lan Ong road to the north Dinh River dike (561m): To construct a box culvert with dimension BxH=1.5x1.8m and operational road/ pavement on the culvert.</p> <div data-bbox="714 324 1612 751" data-label="Figure"> </div> <p>Along the channel and operational road, the technical infrastructure such as interceptor (8,521 m), CSOs (6 pcs), regulation gates (03 pcs), green trees, lighting system and 4 sewage pumping stations will be invested completely. The investment contents in terms of policy and alignment are consistent with the approved planning of Phan Rang – Tháp Cham City.</p>
b	Construction of Dong Nam channel (SE) (1,379m)	<p>A new SE channel along the approved planned road from Tan Tai channel to Cha La channel is constructed. Its functioning is to drain for whole basin of Kinh Dinh channel toward Cha La Channel. It is recommended to construct the open channel with vertical embankment in dimension BxH=10.0x2.7 for convenient operation, management and enhancing wet surface area for the city. Open channel system is connected in the city, including upstream Tan Tai channel, Cha La channel, Nhi Phuoc channel and Dong Nam channel.</p>

		<p>MẶT CẮT ĐIỂN HÌNH - TYPICAL SECTION</p>
c	<p>Rehabilitation of Cha La Channel 4,429/7,485m (embankment in length of 3,657 m, dredging in length of 772m)</p>	<p>This channel is divided into six parts as follows:</p>

CL1- from beginning section to Nguyen Van Cu Road (3,056m): to be maintained as the existing embankment, and only carrying out the dredging of the channel bed.

CL2: Section from Nguyen Van Cu Road to the Existing Lake (942m): To construct embankment on both sides, concrete roads on both sides, each 4.0m width and sidewalks 2.0m width

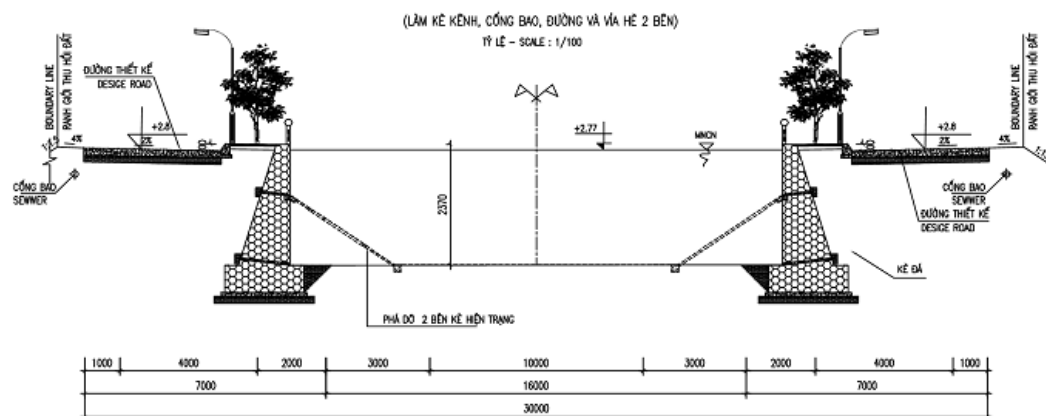
CL3- from existing lake to 16/4 Road (258m): to be maintained as the existing embankment and road, and only carrying out the dredging of the channel bed.

CL4- Section from 16/4 Road to Hai Thuong Lan Ong Road (Cha La Bridge 1) (1,311m): To construct vertical embankments on both sides with the width dimension $B=16.5\text{m}$, $H_{tb}=2.6\text{m}$.

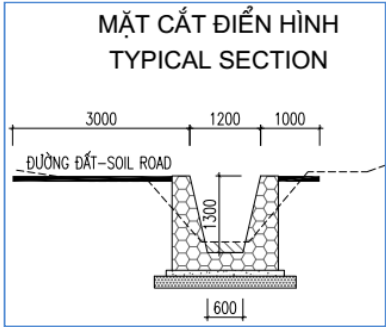

CL5- Section from HTLO road (Cha La Bridge 1) to Vo Nguyen Giap Road (toward An Dong Bridge) (1,404m): Vertical embankment on both sides with dimension $B=18.5\text{m}$, $H_{tb}=2.6\text{m}$.

CL6- Section from Vo Nguyen Giap Road to end of the alignment (Da Bac Bridge) (514m): To be maintained as the existing condition of the channel embankment, and only carrying out the dredging of the channel bed.

MẶT CẮT CÁC ĐOẠN: CL2, CL4 VÀ CL 5 SECTION OF PARTS: CL2, CL4 AND CL5

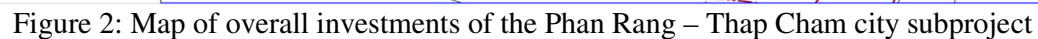


Along the channel and operational road, the comprehensive technical infrastructure such as interceptor at proper locations (6,421 m), CSOs (4 pcs), regulation gates (3 pcs), green trees, lighting system and 2 sewage pumping stations will be

		invested. The investment contents in terms of policy and alignment are consistent with the approved planning of Phan Rang – Tháp Cham City.
d	Rehabilitation of TH5 Channel (662 m)	<p>Channel widening and construction of operational road along the channel. TH5 is proposed to embanked in dimension of $B1 \times B2 \times H = 0.6 \times 1.4 \times 1.5\text{m}$ and construction of operational road on the right side.</p> 
e	Rehabilitation of Nhi Phuoc channel (L=1,695m)	<p>The channel plays the role of distributing flow from Tan Tai Channel to Cha La Channel to reduce the load in Tan Tai Channel. This channel is divided into four parts as follows:</p> 

		<p>NP1- from 16/4 Road to the Education Center (93 m): culvertization in dimension of 2xBxH=2x2.5x3.0m and operation concrete road on the culvert.</p> <p>NP2-NP3 Section from the Education Center to the Museum (708m) and along the museum (510m): To construct box culvert BxH=3.0x3.0m, revetment for 1 side of the channel and the other side as wall of box culvert BxH=3.0x3.0m to form the open channel in B=3.0m wide, concrete operational road on the culvert.</p> <p>NP4- Section from the Museum to Cha La Channel (384m): Open channel with vertical embankment in dimension BxH=7.0x3.0m for convenient operation, management and enhancing wet surface area for the city.</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>MẶT CẮT CỦA ĐOẠN NP1 SECTION OF PART NP1</p> </div> <div style="text-align: center;"> <p>MẶT CẮT CỦA CÁC ĐOẠN: NP2 VÀ NP3 SECTION OF PARTS: NP2 AND NP3</p> </div> <div style="text-align: center;"> <p>MẶT CẮT CỦA ĐOẠN NP4 SECTION OF PART NP4</p> </div> </div>
1.2	Regulation lake	
a	Construction of the city center regulation lake (S=22.69ha)	Total land use area is 22.69 ha, including the lake area of 17.7 ha and the remaining area of green trees and internal roads, etc. The investment items include Regulation Lake, operational roads and green trees along the operational roads and lighting system.
b	Rehabilitation of Dong Hai regulation lake (S=5.2ha)	Total land use area is 5.2 ha, including 3.4 ha of the lake and the remaining area of green trees and internal roads, etc. The investment items are regulation lakes, operational roads, interceptors, CSOs and green trees along the operational roads and lighting system.
1.3	Rehabilitation of secondary sewerage lines for flood settlement	To construct the secondary flooding-prevention sewers for the main flooding areas of the city including 3.76km drain D600-D1500, 251 manholes for water collection and odor prevention.
1.4	Wastewater collection in new urban areas, central and coastal urban areas	
a	Secondary sewerage lines for flood prevention	Construction of secondary sewerage lines for the main flooding areas of the city, in total length of 3.76km sewers D600-D1500, new construction and rehabilitation of 251 manholes for storm water collection and odor prevention.

b	Wastewater collection in new urban areas, central and coastal urban areas	To construct the tertiary sewers with the total length of 29.6 km D150-300 and channels B400 and 413 manholes for storm water collection and odor prevention
c	Construction of wastewater collection system in Dong Hai and My Dong Wards	Total length of sewerage lines, channels B400-B500 is 20.9km and 834 new manholes.
1.5	<i>Upgrading capacity of Phan Rang-Thap Cham WWTP</i>	Upgrade the current wastewater treatment plant from 5,000 m3/day to 7,500 m3/day, using the same current technology of aerated lagoon.
1.6	Public and School Sanitary Program	
a	Public Sanitary Program	Construction of 4 public toilets in 16/4 and Binh Son parks
b	School Sanitary Program	Construction of 3 toilets for 3 schools: Phu Tho, Do Vinh 2 and Nguyen Van Troi
2	Component 2: Urban Connectivity	
2.1	<i>Expand and prolong 150 alley (L=980m)</i>	The road will be built with a length of 980 m and technical infrastructure including roads system, stormwater drains, wastewater collection, green trees, sidewalks, lighting, technical trenches and traffic safety systems. The road width each side with 2 travelled lanes is 14 and 15m wide road edge, sidewalks on each side is 6.0 meters wide, total cross section of the road is 27m.
2.2	<i>Expand and prolong Huynh Thuc Khang road (L=920)</i>	The road investment is basically identical to the investment plan, the first crossing with 21/8 road and the ending point crossing with Phan Dang Luu Road. The road will be built with a length of 920 m and technical infrastructure including roads system, stormwater drains, wastewater collection, green trees, sidewalks, lighting, ground sewers and traffic safety systems. The road width is 7 and 14m wide for the length of 478 and 442 m, respectively. Sidewalks on each side are 4.5 and 6.0 meters wide.
2.3	<i>Construction of operational roads</i>	Construction of operational roads (L=3,657) and necessary infrastructure along Cha La Channel from Nguyen Van Cu to Vo Nguyen Giap Road.
3	Component 3: Resettlement and site clearance	
	<i>Construction of resettlement area</i>	Construction of a resettlement area including roads, electrical system and lighting system, communication cables and water supply and drainage, sewerage for the resettlement area in area of approximate 6ha with 250-300 land plots for the project.
4	Component 4: Technical assistance and institutional reform	
	The component shall consist of supporting activities for project implementation such as project preparation, independent designing consultant and remaining design works of the project. The component 4 is also aimed to improve capacity building and institutional reform for provincial departments and public works companies.	



2 OBJECTIVES AND METHODS OF THE SOCIAL ASSESSMENT

2.1 OBJECTIVES

9. Social assessment was carried out to ensure that the benefit of expected infrastructure development is distributed according to the demand. The Social Assessment is implemented simultaneously with the environmental assessment of the sub-project with two objectives. Firstly, it examined the potential impacts (positive and adverse impact) of the subproject on the basis of planned sub-project activities. Secondly, its findings informed the design of measures addressing identified potential adverse impact and proposing community development activities that are relevant to the project development objectives. The determination of the negative impacts that could not be avoided should be in consultation with local residents, government agencies, project stakeholders, etc.
10. During the assessment process if there are any negative impacts occurring as a result of the sub-project, appropriate measures must be taken immediately (before the sub-project implementation) to avoid, mitigate and minimize these negative impacts, or if unavoidable, the compensation for affected people should be proceeded.

2.2 SCOPE OF WORK AND METHODS

11. According to the TOR for Social Assessment (SA), there are 4 tasks to prepare SA report, including:
 - Task 1: Socio-economic profile
 - Task 2: Stakeholder analysis
 - Task 3: Public Consultation and Participation
 - Task 4: Socio – economic baseline survey
12. Social Assessment (SA) is a process to ensure that the project activities will (i) cover relevant major social issues and develop mitigation measures, and (ii) integrate the participation strategy of many stakeholders. Social Assessment is an iterative process and must be carried out several times in several stages of the project cycle. The following figure shows an overview of the process/steps of typical social assessment.

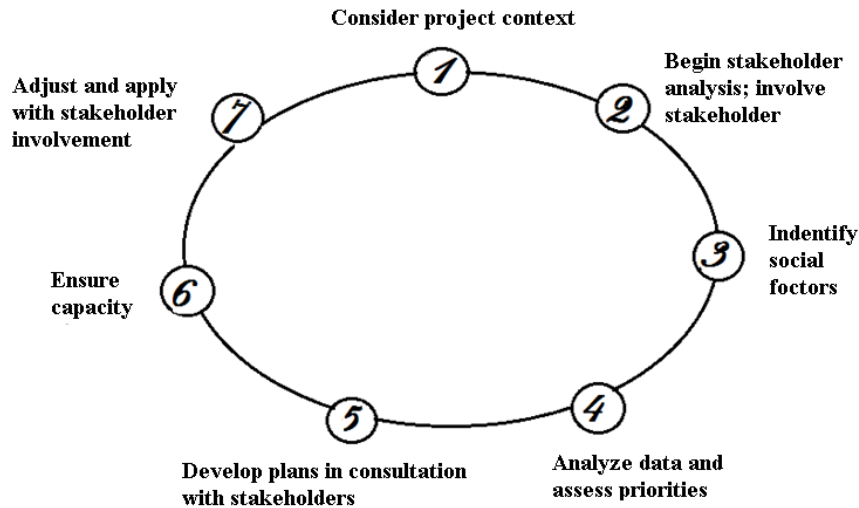


Figure 3: Social Assessment Process

2.2.1 General Principles

13. The following principles are used to ensure the quality of the research
 - *Bottom-up approach principle:* Bottom-up approach principle is applied to increase and ensure wide participation of different communities, including poor households in the communities. Therefore, project managers can hear their voices; understand the aspirations and suggestions of many different social groups.
 - *Principle of combining qualitative data and quantitative data*
 - *Crosscheck:* The collected information was always cross-checked from various sources to ensure reasonableness and accuracy.
 - *Actual inspection of the area:* Actual inspection of the area is used to ensure reasonableness and accuracy of the information
14. The following methods and techniques will be used in order to gather information and assess:

2.2.2 Desk study

15. The review and analysis of documents related to the project will provide baseline information about the project and help to explain why there are changes or why not. On the other hand, it also helps to identify gaps in data that need to be further collected and assessed. Information and data relating to the project were collected from the project management unit (PMU) and from the other the sources of analyzing the socio-economic situation for example Statistical Yearbook of Ninh Thuan province, the socio-economic reports of town/city /wards, communes and socio-economic studies of the relevant projects etc.

2.2.3 Quantitative method

16. After studying the documents of the project and carrying out preconditioning survey, a framework of headline and survey methods are discussed to determine the appropriate sample size, techniques and methods to collect data. Two main selected techniques for surveying are:

- Using surveying templates/forms for Local authorities in in the wards/communes the project area;
 - Using structured questionnaire to interview, survey socio-economic condition of households (See details at Appendix 1 -). This method requires a sampling strategy to conduct evaluation criteria before and after the project implementation.
17. As mentioned in the TOR, the socio-economic survey about affected or/beneficial households. This survey provides documents about the affected area by the project and the existing social situation and trend, including:
- Local authorities: Representatives of relevant line agencies and organization in the project area in the city, wards/communes;
 - Households: Beneficiaries, vulnerable households, households at risk of being affected by the project, households with different living standards, etc.
18. Stratified sampling method was chosen to implement the data collection from affected and beneficiary communities with 2,276 samples. The Consultant conducted random sampling from two lists of households as following:
- The first list includes of households living in the selected study area: Based on the overall map of the investment items of the Sub-project, the Consultant will choose study areas that are fully representing investment components of the Subproject. From then, the Consultant in coordination with local officials (statistical officials of the PCs of ward/commune or leaders of village/hamlet) makes a list of households living in the selected study area.
- Survey samples will also depend on the geography of each residential area with the specific investment items in order to sampling the appropriate rate among households living on the street, households inside the neighborhood, households adjacent to investment items and households inside or adjacent to the area of land acquisition serving for the investment items of the Sub-project.
- The second list includes households affected by each investment item: Based on the Basic design, consultant and the provincial PMU's officers and land officers of the project communes make a list of household affected by each project work item in the area of each commune/ward.
19. The socio-economic survey was carried out within 3 weeks from February 17 to March 4, 2016 with 2,276 households in 12 wards/commune of Phan Rang – Thap Cham city. The number of households participating in the survey is shown in the table below:

Table 2: Number of surveyed households in the basin of the Sub-project

No	Ward/ commune	Investments	Number of surveyed HHs		
			Beneficiaries	PAHs	Total
1	Phuoc My	Tan Tai channel; Huynh Thu Khang road; Alley 150; resettlement site.	300	100	400
2	Bao An	Tan Tai channel	150	50	200
3	My Binh	Central lake; Cha La channel; TH5 channel.	300	70	370
4	Dong Hai	Dong Hai lake, Cha La chanel; Public/school toilet.	150	50	200

No	Ward/ commune	Investments	Number of surveyed HHs		
			Beneficiaries	PAHs	Total
5	Tan Tai	Tan Tai channel; Public/school toilet; WWTP	100	30	130
6	Thanh Son	Tan Tai channel; Public/school toilet	100	20	120
7	Phu Ha	Tan Tai channel	100	20	120
8	Kinh Dinh	Tai Tai channel	100	20	120
9	My Dong	Cha La channel; WWTP	100	20	120
10	Van Hai	Cha La channel; TH5 channel	100	20	120
11	My Hai	Cha La channel	200	56	256
12	Dai Son		100	20	120
Total			1800	476	2276

- Respondent: Head of household (husband or wife) - is the economic decision makers in the family. During the survey process, the male/female proportion of respondents was balanced to ensure the gender balance.

2.2.4 Qualitative method

20. Qualitative survey aims to seek information that the structured questionnaire (quantitative method) cannot cover all. The information gained from qualitative survey is to answer the questions: why, how? And go further in explanation of occurring phenomenon/behavior. Besides, the qualitative information can further exploit thoughts, feelings, attitudes and aspirations of respondents to provide information, particularly sensitive issues. The qualitative survey was conducted by organizing group discussions and in-depth interviews. The communes selected for this method were also the same areas as the quantitative survey above.
21. Qualitative research was conducted through in-depth interviews with 196 key informants including leaders of the Provincial/City/wards, communes; officers of sectorial economic/construction planning/land use planning departments at the Provincial level; officers of Infrastructure division at the City level; leaders/vice-leaders of residential areas at the communal level, households located in the project area (including the affected households and beneficiary households).
22. In addition, 12 group discussions were also conducted with the objects including 130 households of Bảo An, Phước Mỹ, Mỹ Bình, Đông Hải, Tấn Tài, Thanh Sơn wards/commune (about 6-10 people for a discussion group).
23. Besides researching qualitative information, in-depth interviews and group discussions also pay attention to the public consultation techniques. Developing and implementing an effective public participation plan to involve all affected and beneficiary stakeholders is vital for the project. This involves identifying the population that will either benefit or be adversely affected by the project. Public participation techniques for collecting information about public response to proposed project investments, throughout the implementation and monitoring are required. During this preparation phase, 16 public consultations in 16 wards/commune were carried with participation of the following stakeholders:

- Representatives of local authorities of 16 selected communes/wards.
 - Mass organizations: Fatherland Front, Women's Union, Youth Union, Farmers' Union, Veterans' Union of 16 selected communes/wards.
 - Representatives of HHs in the project area included households with potential land to be acquired, beneficiary households, especially vulnerable households. Participants of meetings were paid attention to the male/female rate to ensure gender balance.
24. The issues discussed during public consultation include: (i) Introduction about investment items of the project; (ii) Overview of local socio-economic situation; (iii) The status of infrastructure of residential areas, including technical infrastructure and social infrastructure, like electricity, roads, schools and health stations; (iv) Demand for investment in construction and renovation of the local infrastructure; (v) Screening/Assessment of potential impacts may be occur in construction phase and could affect the socio-economic, culture of people in the subproject area; (vi) The ability of people to participate in the Sub-project of investment and development the local infrastructure, particularly their willingness in compensation, land clearance works; (vii) Proposal of people in the process of preparing and implementing Sub-project...

2.2.5 Direct observation method

25. This method helps obtain timely and useful information, adding to collected data, and helping understand better on the context of the collected information and helping explain surveyed results collected

2.2.6 Methods of processing and analyzing data

26. The answers from questionnaires (structured interviews) are processed by SPSS software (Statistical Package for Social Sciences).
27. Qualitative information is processed in two ways: (i) Direct use of techniques in the field if applicable, e.g. observation (ii) Quotes and case studies are used to make quantitative information more clearly.

2.3 The process of organizing socio-economic survey

28. The process of socio-economic survey serving the formulation of Social Assessment Report is shown in the figure below:

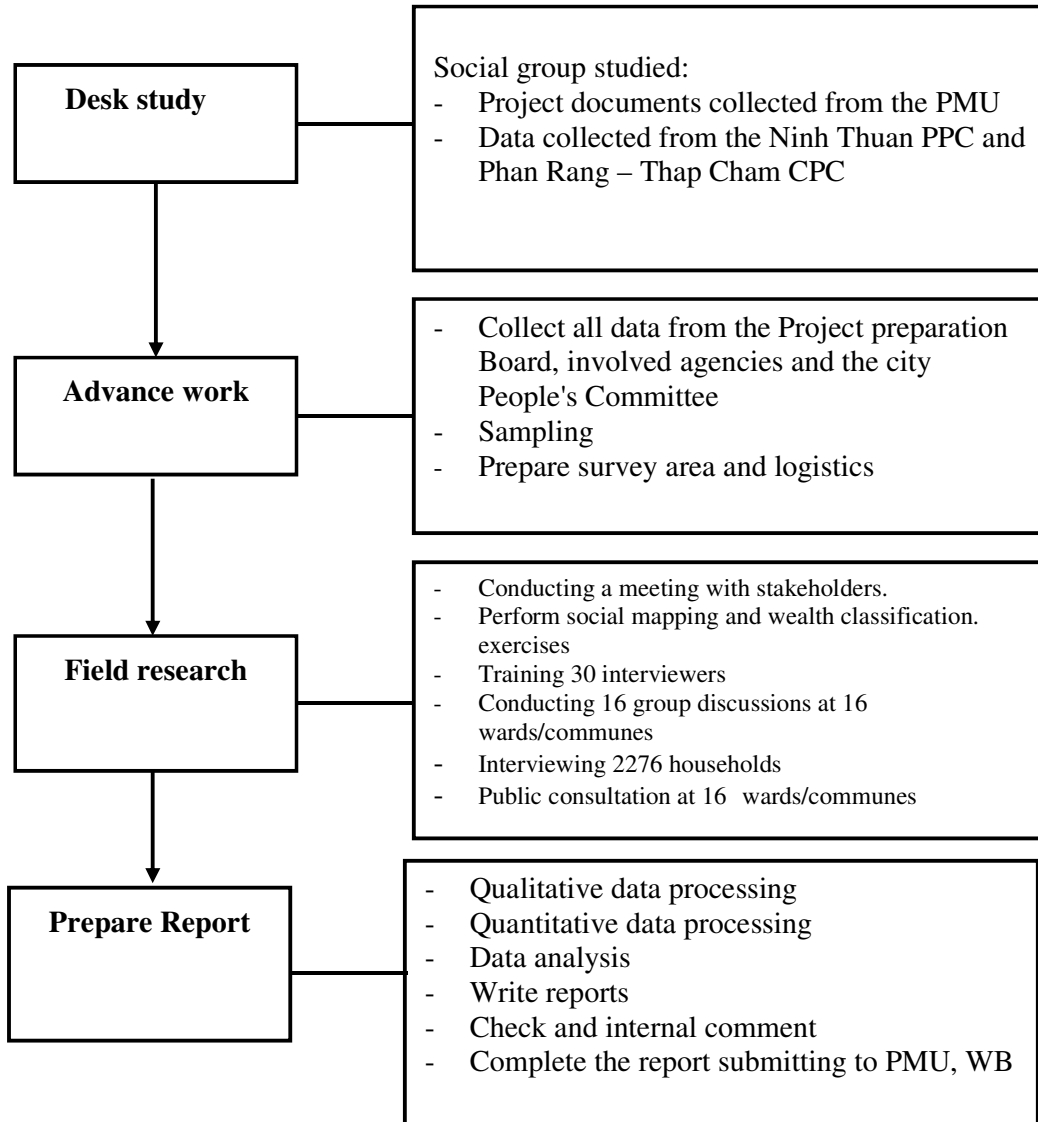


Figure 4: Process of organizing socio-economic survey

3 NATURAL, SOCIO-ECONOMICAL CHARACTERISTICS, LAND AND POPULATION SCALE

3.1 Natural characteristic

Geography

29. Phan Rang - Thap Cham city is the center of politics, economy, culture - social and science technology of Ninh Thuan province. It locates 50km South from Cam Ranh International Airport, 100km South from Nha Trang city, Khanh Hoa province; 350km North of Ho Chi Minh City and 110km East of Da Lat city, Lam Dong province. Total area (under the current administrative boundaries) is 79.17 km². Phan Rang-Tháp Chàm city locates at the junction of National Highway 1A and Highway No.27, connects to the North-South Railway at Thap Cham Railway Station and conveniently links with Ho Chi Minh city, Da Lat, Nha Trang and other big cities.

30. Phan Rang – Thap Cham City adjoins Ninh Hai District to the North, Ninh Phuoc District to the South, the East Sea to the East, and Ninh Son District to the West.

Topography

31. The city locates on the low-hill area and South Central coastal plain, direction of slope mainly from the Northwest to Southeast, the terrain includes:

- Low-hill terrain: including the low hills in the area of Thap Cham with the height from 15m - 55m – hillside slope from 10% - 30%
- Plain shape terrain: including riverside alluvial areas and high field, the the height from 3m - 15m, leveling slope from 1% - 10%
- Low-lying terrain: including lying fields, alternate pond and lake, the high level < 2,5m and always flooded. [3]

Climate

32. The city has typical climate of South Central – hot dry climate and little rain - average annual evaporation is high. Winter is not cold, sunny, very strong influence of hot dry West wind. Rainy season deviates to the end of year. The climate of the region Phan Rang - Thap Cham is sunny, little rainfall, only concentrates in a short time, the drought period from August to September seriously causes water shortages, unfavorable for

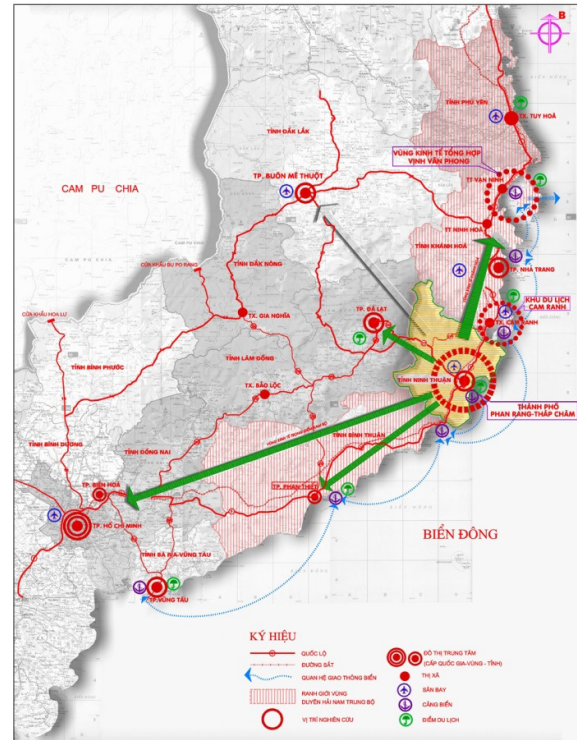


Figure 5: Location of the city in the area of South Central Part and Tay Nguyen

farming, but suitable to some trees such as grape, onion, garlic, apple with high productivity. [3]

Hydrography

33. Phan Rang - Thap Cham directly influenced by hydrological regime Dinh River. Dinh River, also known as Phan Rang Cai River originates from the upper E Lam high mountain chain, adjacent to Lam Dong Province, heading to the East China Sea at Phan Rang bay. Dinh River is influenced by flood and flood tides. The river length is 119 km with the basin area of 3.000km², average flow is 39m³/s let out by Da Nhim hydroelectric to serve watering discharge 12.000ha. In the upper reaches, the river has terrace form with elevation of 800m - 1000m, riverbed is sloping and has carved stone, basin of river branches is allocated by root formation. From Tan My to downstream, through low hill area is Phan Rang delta, river flow regime is proper to seasonal distribution of the region:

- Dry season is from January to August. The flow depends on water discharged of Da Nhim hydroelectric for lowlands.
- Rain season is from September to December with huge flood flows.
- Dinh river level reaches highest when the floods correspond to the frequency measured at Dao Long bridge. [3]

Geology

34. In the city, stratum structure of ground layers is quite identical in accordance with 2 main direction including layers: sandy, loam, and sandy clay, the changing of thickness depends on each area, generally favorable for construction, with load capacity of > 1,5kg/cm².
35. Low-lying field area, upper layer is rich soil and mud, low load capacity, need to be reinforced the foundation of the construction, below layer is sandy, sandy clay, with load capacity is 1,0kg/cm² - 1,5kg/cm².
36. Hills and mountains area have structure of loam texture of gravel and grit, carved stone, stone and soil, weathered grit stone, loam, good loading capacity ground, but must leveling and embankment the slopes during the construction. [3]

Geophysics

37. According to the forecast document of Institute of Geophysics, Phan Rang – Thap Cham locates in forecasting earthquake of level 5; therefore, during the construction of major and high buildings, it is necessary to have structure and foundation solutions in order to ensure safety of the building in the area on above mentioned earthquake forecasting. [3]

3.2 Scale of land and population

Scale of land

38. Phan Rang – Thap Cham has 16 administrative divisions including 15 wards (Do Vinh, Bao An, Phuoc My, Phu Ha, My Huong, Thanh Son, Kinh Dinh, Dai Son, Dao Long, Tan Tai, My Hai, My Dong, Dong Hai, My Binh, Van Hai) and Thanh Hai commune. Total natural land area is 79.17km².

- Current condition of urban construction land: 15.36 km² (including these types of land: urban living land, public construction land, greenery land, transportation land inner city area).
- Average living floor area inner city (including the conversion of the population): 18.84 m² floor/person. [3]

Scale of population

39. According to the 2014 Statistical yearbook of Phan Rang – Thap Cham, the entire city by the end of 2014 has 170,720 inhabitants, of which: accounted for 5.47% rural; 94.53% for urban (15 wards). The rate of population growth of the city is 1.78 %, which:
- Natural population growth rate : 1.24 %
 - Mechanical population growth rate: 0.54 %

Population allocation

40. The population allocation in the next uninterrupted years (2012 – 2014) pursuant to administrative divisions is shown in the following table.

Table 3: Population allocation of Phan Rang – Thap Cham

No	Ward/commune	Area (km ²)	Population (person)			Population density in 2014 (person/km ²)
			2012	2013	2014	
1	Thanh Hai Com.	9.12	8950	8960	9330	1023
2	Dao Long W.	2.13	10288	10313	9603	4508
3	Dong Hai W.	2.12	20824	20904	21674	10224
4	Do Vinh W.	30.43	13094	13150	13577	446
5	Dai Son W.	1.47	7230	7310	7489	5095
6	Van Hai W.	9.27	14935	14960	15662	1690
7	Tan Tai W.	2.68	9196	9693	9470	3534
8	Thanh Son W.	0.99	9497	9649	9845	9944
9	Phu Ha W.	1.31	10904	10973	11375	8683
10	Phuoc My W.	5.99	14881	15039	15517	2590
11	My Dong W.	2.4	11590	11686	11974	4989
12	My Hai W.	2.75	4929	4979	5130	1865
13	My Huong W.	0.47	4066	4224	4143	8815
14	My Binh W.	4.44	8081	8118	8441	1901
15	Kinh Dinh W.	0.38	6951	7042	7203	18955
16	Bao An W.	3.22	9895	10007	10287	3195
Entire city		79.17	165311	167007	170720	2156

(Source: Statistical department of Phan Rang – Thap Cham city, 2015)

41. The average population density of the entire city in 2014 is 2,156 person/km², which is most concentrated in Kinh Dich ward with the population density up to 18,955 person/km² (about 8.5 times to the average level of the entire city) and population

density of Do Vinh ward is lowest, only 446 person/km². This figure below shows the population density of wars/commune under Phan Rang – Thap Cham city in 2014.

4 SOCIO-ECONOMIC FEATURES OF PEOPLE IN THE PROJECT AREA

4.1 General features

42. The consultant company has conducted socio - economic survey in 12 communes/wards of the project with a total of 2276 households surveyed, including 1800 households will benefit directly from the project and 476 households will be affected by the project, the average member of household / household estimate of 4.2 people / households. Based on the content of each investment communes / wards that percentage in the survey communes / wards is different (see Table 1 - Number of household joint socio-economic survey).

Gender of respondent

43. In this socio-economic survey, participation rate of female respondents is accounted for a low proportion; in total 2276 interviewed participants, only 870 respondents were female (38. 2%), the male respondents were majority with 61.8%.

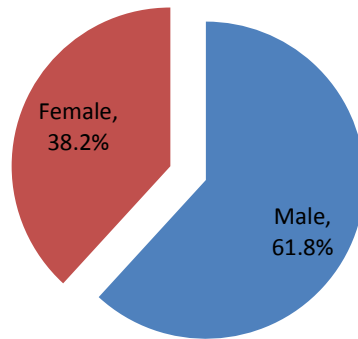


Figure 6: Gender of respondent

(Source: Socio-economic survey, 02/2016, N = 2276)

44. The survey results also showed that women in the project area quite well aware of the social and economic problems and participate very actively in the movements and activities in the local community, position of women has changed and rose higher. In recent years, with support of the Women's Union, women have actively participated in community meetings. They actively make the decision to work in the household (spending and saving for the family, education and employment of their children), and the social problems of the community (discuss technical solutions for the proposed project).

Age group of respondent

45. Age group of people is one of the important variables indicating conceptions and opinions of each generation of the same problem. In a socio-economic survey, the respondents' age is a very important factor, representing the objectivity and reliability of

the survey results. In this survey, the age of the participants answering in the ward / commune of the project is shown as follows:

Table 4: Age group of respondent

No.	Communes	From 20 - 30		From 31 - 50		From 51 - 60		Above 60		Total	Rate (%)
		Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)		
1	Phuoc My	29	7.3	173	43.3	140	35.0	58	14.5	400	100.0
2	Bao An	30	15.0	102	51.0	37	18.5	31	15.5	200	100.0
3	My Binh	5	1.4	211	57.0	113	30.5	41	11.1	370	100.0
4	Dong Hai	14	7.0	100	50.0	60	30.0	26	13.0	200	100.0
5	Tan Tai	2	1.5	63	48.5	30	23.1	35	26.9	130	100.0
6	Thanh Son	10	8.3	70	58.3	27	22.5	13	10.8	120	100.0
7	Phu Ha	6	5.0	64	53.3	27	22.5	23	19.2	120	100.0
8	Kinh Dinh	9	7.5	65	54.2	37	30.8	9	7.5	120	100.0
9	My Dong	3	2.5	76	63.3	24	20.0	17	14.2	120	100.0
10	Van Hai	6	5.0	70	58.3	30	25.0	14	11.7	120	100.0
11	My Hai	14	5.5	142	55.5	35	13.7	65	25.4	256	100.0
12	Dai Son	8	6.7	74	61.7	24	20.0	14	11.7	120	100.0
	Total	136	6.0	1210	53.2	584	25.7	346	15.2	2276	100.0

(Source: Socio-economic survey, 02/2016, N = 2276)

46. The survey results showed that the age of the respondents mainly from 31 to 50 years old (accounts for 53.2%); followed by 51 to 60 years old (25.7%), the number of respondents aged over 60 years old accounts rate for 15.2%, the number of participants interviewed between 20 and 30 years old accounts a very small percentage (6.0%).
47. This table shew that the interviewed participants are householders or elders in the family. These are mostly people who have a voice in the family should be favorable for the recognition and evaluation on the actual condition of issues related to the socio-economic situation of the family as well as of the local. It is also a group of people who decides mainly on the key issues of the family, decides the ability and the willingness of the family to participate in the activities of local projects.

Relation of respondent with householder

48. The survey results shew that interviewed participants who are mainly householder accounted for 90.5%, in which Tan Tai and Bao An ward have the highest number of householder join the interview with the rate respectively 93.0% and 98.5%. In the other ward/commune, the rate of the interviewed householder are slightly less than 2 above ward/commune, instead of that, the wife/husband and relatives of the householder stood out for interviews. Relations between the interviewer and all householders in each basin are detailed in the table below:

Table 5: Relationship of respondent with householder

TT	Communes	Householder		Wife/husband of householder		Child		Father/mother		Total	Rate (%)
		Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)		
1	Phuoc My	337	84.3	50	12.5	11	2.8	2	0.5	400	100.0
2	Bao An	186	93.0	14	7.0	0	0.0	0	0.0	200	100.0

3	My Binh	343	92.7	21	5.7	3	0.8	3	0.8	370	100.0
4	Dong Hai	181	90.5	15	7.5	3	1.5	1	0.5	200	100.0
5	Tan Tai	128	98.5	2	1.5	0	0.0	0	0.0	130	100.0
6	Thanh Son	109	90.8	10	8.3	1	0.8	0	0.0	120	100.0
7	Phu Ha	107	89.2	12	10.0	1	0.8	0	0.0	120	100.0
8	Kinh Dinh	89	74.2	27	22.5	3	2.5	1	0.8	120	100.0
9	My Dong	83	69.2	36	30.0	1	0.8	0	0.0	120	100.0
10	Van Hai	89	74.2	30	25.0	0	0.0	1	0.8	120	100.0
11	My Hai	207	80.9	45	17.6	2	0.8	2	0.8	256	100.0
12	Dai Son	85	70.8	32	26.7	2	1.7	1	0.8	120	100.0
	Total	1944	85.4	294	12.9	27	1.2	11	0.48	2276	100.0

(Source: Socio-economic survey, 02/2016, N = 2276)

Ethnic background of the respondent

49. According to the survey results, Kinh people were accounted for 99.5% of respondent, the remaining of 0.5% is Chinese ethnic. Although there are Chinese ethnic but not many; they are scattered, intermingled with the Kinh. Due to a long-standing with the Kinh, so their customs, living habits are the same with the Kinh. They all know how to read and write Vietnamese.

Table 6: Ethnic background of the respondent

No.	Ward/commune	Kinh		Chinese		Total	Rate (%)
		Frequency	Rate (%)	Frequency	Rate (%)		
1	Phuoc My	399	99.8	1	0.2	400	100.0
2	Bao An	200	100.0	0	0.0	200	100.0
3	My Binh	370	100.0	0	0.0	370	100.0
4	Dong Hai	197	98.5	3	1.5	200	100.0
5	Tan Tai	130	100.0	0	0.0	130	100.0
6	Thanh Son	120	100.0	0	0.0	120	100.0
7	Phu Ha	118	98.3	2	1.7	120	100.0
8	Kinh Dinh	115	95.8	5	4.2	120	100.0
9	My Dong	120	100.0	0	0.0	120	100.0
10	Van Hai	120	100.0	0	0.0	120	100.0
11	My Hai	255	99.6	1	0.4	256	100.0
12	Dai Son	120	100.0	0	0.0	120	100.0
Total		2264	99.5	12	0.5	2276	100.0

(Source: Socio-economic survey, 02/2016, N = 2276)

Education level

50. Any community developing program is directly or indirectly aimed at improving and enhancing the people's life, encourage people to participate in all steps from the preparing to complete step of the project. Especially monitoring project's activities process, people have the important role than ever. In order to let all households not only understand the goal of the project, but also monitor the project activities, so finding the educational level of the respondents is one of the important factors.

Table 7: Education level of respondent

No.	Communes	Primary		Secondary		From High school to above		Total	Rate (%)
		Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)		
1	Phuoc My	17	4.3	229	57.3	154	38.5	400	100.0
2	Bao An	15	7.5	122	61.0	63	31.5	200	100.0
3	My Binh	32	8.6	176	47.6	162	43.8	370	100.0
4	Dong Hai	13	6.5	109	54.5	78	39.0	200	100.0
5	Tan Tai	15	11.5	80	61.5	35	26.9	130	100.0
6	Thanh Son	32	26.7	41	34.2	47	39.2	120	100.0
7	Phu Ha	23	19.2	57	47.5	40	33.3	120	100.0
8	Kinh Dinh	32	26.7	64	53.3	24	20.0	120	100.0
9	My Dong	15	12.5	76	63.3	29	24.2	120	100.0
10	Van Hai	23	19.2	70	58.3	27	22.5	120	100.0
11	My Hai	36	14.1	137	53.5	83	32.4	256	100.0
12	Dai Son	29	24.2	55	45.8	36	30.0	120	100.0
	Total	282	12.4	1216	53.4	778	34.2	2276	100.0

(Source: Socio-economic survey, 02/2016, N = 2276)

51. The table shows that primary education accounted for the lowest percentage with 12.4%, followed by people with qualifications from high school or higher with 34.2%, primary level accounts the highest rate for 53.4%. Thus, we can say education level of questionnaires respondents are relatively high, proportion of secondary and from high school to above are majority. This is one of the confirmed factors for the understanding and trusting in the process of providing information; this is also extremely advantageous in mobilizing people to participate in project activities.

Number of households in a family

52. The selection of family life according to the traditional model which has three, four generations under the same root or modern family-style couples with children today depends on the circumstances of life and socio-economic conditions of each family, every region and locality, territory. There is public standards prescribing model for all families. However, today the nuclear family model has only one generation is growing trend for families. Phan Rang - Thap Cham city is not outside this trend, particularly in the number of households living in a house at communes / wards in the project areas as follows:

Table 8: Number of households in a family

No.	Ward/commune	01 household		02 household		More than 02 household		Total	Rate (%)
		Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)		
1	Phuoc My	367	91.8	30	7.5	3	0.8	400	100.0
2	Bao An	178	89.0	19	9.5	3	1.5	200	100.0
3	My Binh	345	93.2	12	3.2	13	3.5	370	100.0
4	Dong Hai	181	90.5	19	9.5	0	0.0	200	100.0
5	Tan Tai	123	94.6	5	3.8	2	1.5	130	100.0
6	Thanh Son	119	99.2	1	0.8	0	0.0	120	100.0
7	Phu Ha	117	97.5	1	0.8	2	1.7	120	100.0
8	Kinh Dinh	106	88.3	12	10.0	2	1.7	120	100.0
9	My Dong	110	91.7	7	5.8	3	2.5	120	100.0
10	Van Hai	120	100.0	0	0.0	0	0.0	120	100.0
11	My Hai	234	91.4	18	7.0	4	1.6	256	100.0
12	Dai Son	108	90.0	9	7.5	3	2.5	120	100.0
Total		2108	92.6	133	5.8	35	1.5	2276	100.0

(Source: Socio-economic survey, 02/2016, N = 2276)

53. The survey results show that the trend of nuclear families, one generation living in the same house accounts for 92.6%. The next is the two generations living together accounting for 5.8% and from two or more households accounts for only 1.5%.

Scale of households

54. According to the traditional conception of Vietnamese people in the past, especially in the countryside, a rich family is a family having a lot of children. This concept is true in the human aspect - the humanities, but perhaps not in line with aspects of the current economic development. The number of people in families affects considerably on the economic development potential of each household. Total are 2276 surveyed households with 9486 members; average household scale rate is 4.2 persons per/household.

Table 9: Household scale and average members in a family

Ward/co mmune	H <4 per.		H =4 per.		H= 5-6 per.		H >6-10 per.		Total		Total	average per/H
	Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)		
Phuoc My	116	29.0	160	40.0	80	20.0	44	11.0	400	100.0	1720	4.3
Bao An	64	32.0	80	40.0	48	24.0	8	4.0	200	100.0	760	3.8
My Binh	99	26.8	130	35.1	92	24.9	49	13.2	370	100.0	1647	4.5
Dong Hai	66	33.0	116	58.0	18	9.0	0	0.0	200	100.0	800	4.0
Tan Tai	49	37.7	57	43.8	24	18.5	0	0.0	130	100.0	507	3.9
Thanh Son	42	35.0	43	35.8	26	21.7	9	7.5	120	100.0	504	4.2
Phu Ha	36	30.0	35	29.2	32	26.7	17	14.2	120	100.0	480	4.0
Kinh Dinh	47	39.2	48	40.0	25	20.8	0	0.0	120	100.0	492	4.1
My Dong	30	25.0	40	33.3	21	17.5	29	24.2	120	100.0	492	4.1
Van Hai	40	33.3	43	35.8	36	30.0	1	0.8	120	100.0	528	4.4
My Hai	66	25.8	75	29.3	61	23.8	54	21.1	256	100.0	1100	4.3
Dai Son	38	31.7	53	44.2	26	21.7	3	2.5	120	100.0	456	3.8
Total	693	30.4	880	38.7	489	21.5	214	9.4	2276	100.0	9486	4.2

(Source: Socio-economic survey, 02/2016, N = 2276)

55. The result shows that, number of 4 persons/ household is accounted for 38.7%, following is 1-3 person/household accounting for 30.4%, 5-6 persons/ household is 21.5%, 7-9 persons/ household is only accounted for 9.4%. Thus we can say, currently the size of households in the project area is most of medium households with average size.

4.2 Actual condition

4.2.1 Occupation and household economy

Occupation of householder

56. Life of households depends a lot on the occupation and the stability of the main breadwinner in the family, especially the householder. Therefore, the identification of the householder occupation here is very important in assessing the stability of the daily life of people.
57. The survey results show that, in total of 2276 participated households in interviews, business/services households hold the highest percentage with 43.1%; followed by farmers is 30.9% rate; staff/workers and employees account for 19.2%, other industries account for only a small percentage. The proportion of respondent' occupation in each basin of the project is shown in the figure below.

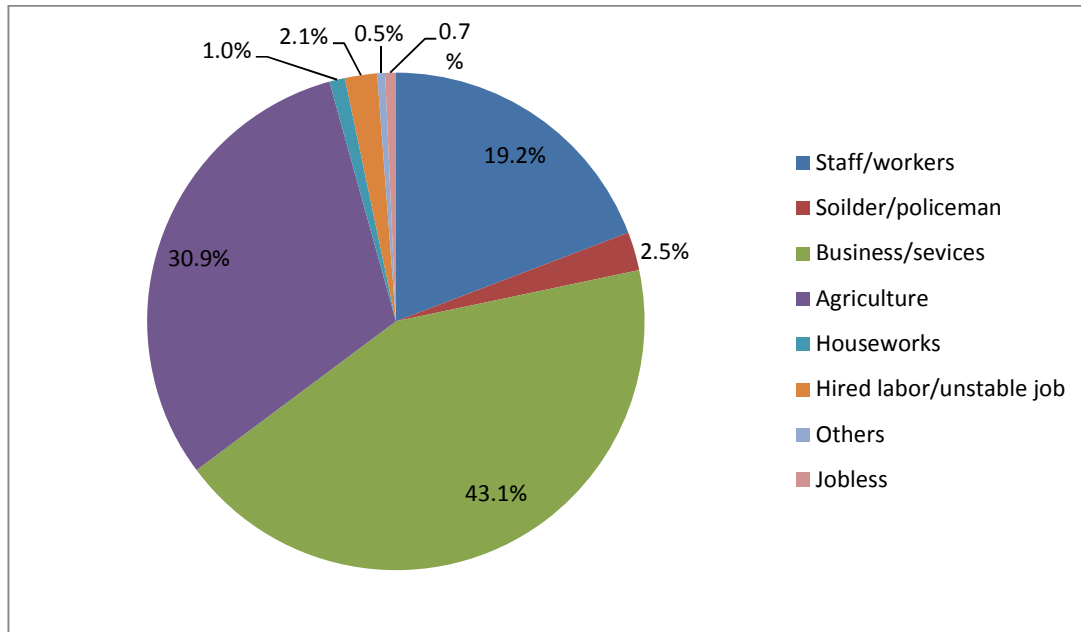


Figure 7: Occupation of householder

(Source: Socio-economic survey, 02/2016, N = 2276)

58. In term of householder's occupation by gender, the percentage difference between male and female groups is pretty much, in particular: For the agricultural profession, male group is 15.9% while this rate of female group is 55.0. For non-agricultural sectors, female group accounts 41.6% while this rate of male group accounts for 79.2%. The same with housework/jobless accounts for 3.4% in male group and 4.9% in female group.

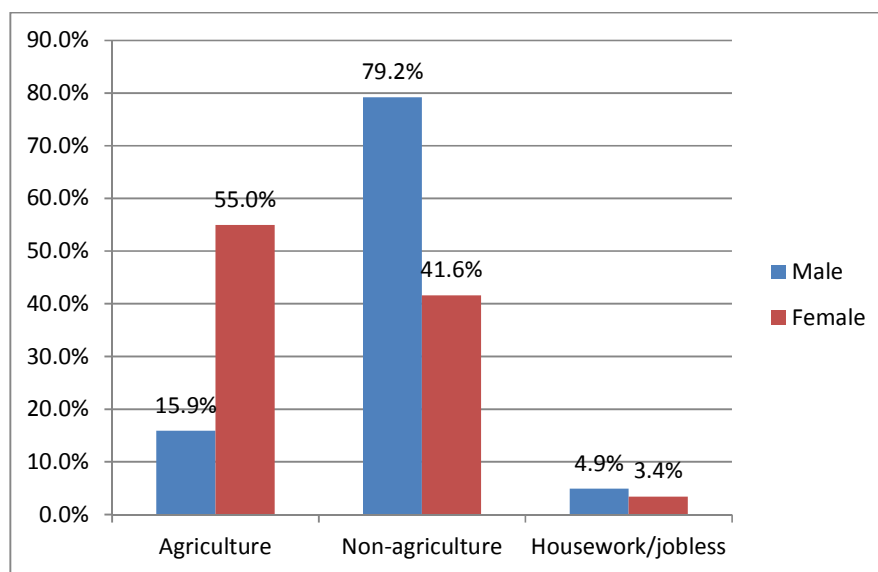


Figure 8: Occupation of householder by gender

(Source: Socio-economic survey, 02/2016, N = 2276)

**Assets of the family**

59. Regarding valuable assets, according to the survey results, televisions are multimedia which are widely used in most of households in the wards/ communes, this rate reaches 60.4%. Television is one of the essential assets of every household, it is not only addressing the needs of entertainment, information for all members of the family but also are the mass media to disseminate the project and the activities in this project in the future. For motorcycles, in the past, if any household had motorbike, they was considered prosperous/rich; but now when this item becomes very diversified, plentiful with many designs and reasonable prices, motorbikes are so close to the families. They not only use it as a means of transportation but also a means of livelihood, even many families have more than 01 motorcycles, but mainly in better-off households.

Table 10: Assets of the family by household living standards

No.	Assets in the family	Poverty group		Average group		Better-off group		Total	Rate (%)
		Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)		
1	Car	0	0.0	2	0.2	61	20.4	63	2.8
2	Motobike	249	33.6	839	63.3	299	100.0	1387	60.9
3	Air condition	0	0.0	77	5.8	192	64.2	269	11.8
4	Luxury wooden furniture	3	0.4	57	4.3	187	62.5	247	10.9
5	Sound system	5	0.7	165	12.4	279	93.3	449	19.7
6	Telephone	70	9.4	764	57.6	297	99.3	1131	49.7
7	Colour television	338	45.6	1236	93.2	299	100.0	1374	60.4
8	Refrigerator	125	16.9	698	52.6	299	100.0	1122	49.3
9	Washing machine	3	0.4	406	30.6	287	96.0	696	30.6
10	Electric heater	5	0.7	74	5.6	123	41.1	202	8.9
11	Bicycle	221	29.8	354	26.7	98	32.8	673	29.6

(Source: Socio-economic survey, 02/2016, N = 2276)

60. The number of households owning a mobile phone accounts for 49.7%, this is the channel of communication among family members and in the transaction. The number of families using household refrigerators is 49.3%. With expensive assets such as cars, this proportion accounts for 2.8% of the total form and is concentrated in the rich and wealthier households.

Household economic classification

61. Due to the particularization, each project has different economic situation. Therefore, the household economic point in each place also has the difference. In this area, may be the economy of this household might be well off but compared to other areas, that household economy is just average. So, the role of the investigators in the classification of household economy is very important. Investigators will base on the following basis to classify the household economy:

- Based on the poverty rate according to MOLISA¹ standard applied for the period 2016 - 2020: The income level of the poverty households (including poor and near-poor) \leq 900.000 VND/person/month; the average household income of over VND 1.300.000 to 1.950.000 VND/person/month; Better-off households (including wealthier farmers) have incomes above 1.950.000 VND/person/month or more.
- Based on the perspective from the local authorities of life, the economy of households (income, expenditure / household / month, assets and living facilities for families...).
- During the interview, investigators need to observe the economic conditions of the household; such as housing, living facilities for families.

Table 11: Economic household groups by average monthly income per person

No.	Communes	Poverty group		Average group		Better-off group		Total	Rate (%)
		Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)		
1	Phuoc My	42	10.6	313	78.2	45	11.3	400	100.0
2	Bao An	32	16.0	150	75.0	18	9.0	200	100.0
3	My Binh	18	4.9	255	68.9	97	26.2	370	100.0
4	Dong Hai	86	43.0	100	50.0	14	7.0	200	100.0
5	Tan Tai	42	32.3	60	46.2	28	21.5	130	100.0
6	Thanh Son	49	40.8	53	44.2	18	15.0	120	100.0
7	Phu Ha	62	51.7	46	38.3	12	10.0	120	100.0
8	Kinh Dinh	88	73.3	20	16.7	12	10.0	120	100.0
9	My Dong	81	67.5	35	29.2	4	3.3	120	100.0
10	Van Hai	82	68.1	31	26.0	7	5.8	120	100.0
11	My Hai	120	46.9	108	42.2	28	10.9	256	100.0
12	Dai Son	39	32.5	65	54.2	16	13.3	120	100.0
	Total	741	32.6	1,236	54.3	299	13.1	2,276	100.0

(Source: Socio-economic survey, 02/2016, N = 2276)

62. Based on all income sources of the surveyed households, the proportion of poverty households are 32.6% (741 households), average households are 54.3% (1.236

¹ According to Decision No.59/2015/QĐ-TTg, dated 19/11/2015, promulgating multidimensional poverty levels application during 2016 – 2020.

households) and better-off households are 13.1% (299 households). The number of poverty households living in the surveyed localities is most of agriculture, forestry households that lack of arable land, fisheries households lack of investment capital for upgrading fishing means, purchasing fishing nets; underemployment, life is still difficult, houses are simple.

63. In term of household economy by gender, the percentage difference between male and female groups is pretty much, in particular: Female householder with poverty living standard rate account for 56.0%, while this rate in male householder is 18.1%.

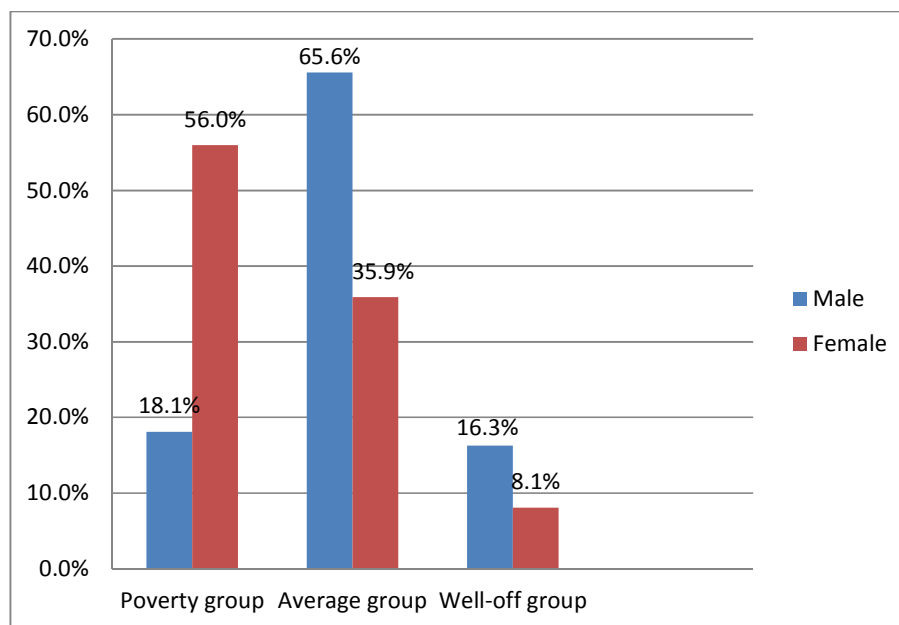


Figure 9: Occupation of householder by gender

(Source: Socio-economic survey, 02/2016, N = 2276)

Revues, expenses and income

64. With the economic development condition, the household economic model is often mixed economy (agriculture combined with some other professions), so revenues are also quite plentiful; some works are low stability such as seasonal employees, but they are still significant source of income in the household economy. The table below shows the income sources of households by household living standards.

Table 12: Sources of income by household living standards

No.	Sources of income	Poverty group		Average group		Well-off group		Total	Rate (%)
		Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)		
1	Cropping	149	20.1	193	15.6	36	12.0	378	16.6
2	Breeding (including aquaculture)	70	9.4	17	1.4	15	5.0	102	4.5
3	Employment	251	33.9	262	21.2	54	18.1	567	24.9
4	Salaries/pensions	139	18.8	608	49.2	74	24.7	822	36.1
5	Trading/services	128	17.3	281	22.8	89	29.8	498	21.9
6	Saving	0	0.0	18	1.5	27	9.1	46	2

No.	Sources of income	Poverty group		Average group		Well-off group		Total	Rate (%)
		Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)		
7	From children/relative	9	1.2	120	9.7	64	21.4	193	8.5
8	Others	0	0.0	85	6.9	85	28.5	171	7.5

(Source: Socio-economic survey, 02/2016, N = 2276)

65. In terms of the structure of expenditure and income as well as cumulative, based on figures collected from the community, there are differences among the groups. Detailed:

Table 13: Monthly average revenue, expenditure and saving of households

No.	Average revenue, expenditure and saving		Average	Amount (VND)		
				Poverty group	Average group	Well-off group
1	Revenue	Household/month	5,680,000	2,970,000	6,040,000	10,910,000
		Person/month	1,350,000	780,000	1,410,000	2,370,000
2	Expenditure	Household/month	4,390,000	2,750,000	4,630,000	7,490,000
		Person/month	1,050,000	720,000	1,080,000	1,630,000
3	Saving	Household/month	1,290,000	220,000	1,410,000	3,430,000

(Source: Socio-economic survey, 02/2016, N = 2276)

66. The below table of monthly average revenue and expenditure of households have been rounded.
- Monthly average income of households was 5.680.000 VND in which: poverty group is 2.970.000 VND; average group is 6.040.000 VND, well-off group is 10.910.000 VND. Similarly, if dividing income of person/month, the incomes are respectively 780.000 VND, 1.410.000 VND and 2.370.000 VND.
 - Average monthly expenditure of households was 4.390.000 VND, in which poverty households are 2.750.000 VND, average households are 4.630.000 VND and well-off households are 7.490.000 VND. The average expenditure / month / person of the poverty, average and well-off households respectively are as follows: 1.187.250 VND, 1.848.000 VND and 2.285.000 VND.
 - Average saving of households is 1.290.000 VND / month. This savings also differ between the groups, namely: poverty group is 220.000 VND, average group is 1.410.000VND, and well-off group is 3.430.000VND.

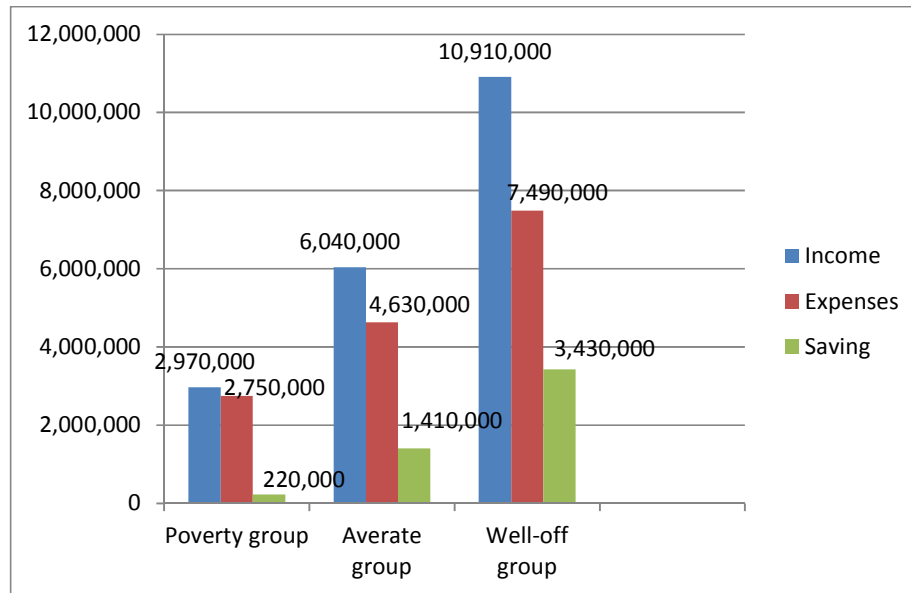


Figure 10: Monthly income and consumption of households (unit: VND/household/month)

(Source: Socio-economic survey, 02/2016, N = 2276)

67. Regarding the expenditure, total expenditure per household is 4.390.000 VND/ household/ month. In terms of household economy, this expenditure increases gradually by households with higher living standards, namely: 2.750.000 VND/month for poverty households; 4.630.000 VND/ month for average group; and well-off group with 7.490.000 VND/ month. In other words, the spending of poverty household is only about 37% of well-off households and 59% average households in the same month.

Table 14: Monthly expenditure by each item

No.	Household expenditure	Average expenditure of households		Poverty group		Average group		Well-off group	
		% of total revenue	Amount	% of total revenue	Amount	% of total revenue	Amount	% of total revenue	Amount
1	Food	28.0	1,588,400	30.3	901,000	37.7	2,279,100	19.7	2,146,800
2	Education	11.0	626,700	17.3	514,900	13.0	784,900	11.0	1,199,300
3	Health care	3.2	181,300	6.5	194,300	3.2	193,900	3.2	347,900
4	Electric	3.1	173,400	7.9	234,700	3.4	208,100	2.6	288,700
5	Water	0.4	23,600	0.4	12,600	0.5	28,400	0.3	29,600
6	Sewage, waste fee	0.5	26,700	0.7	21,000	0.5	33,200	0.2	23,300
7	Cost of production	3.9	220,700	5.6	166,600	4.8	288,400	4.3	473,800
8	Cost for travel	5.7	323,200	5.8	171,600	6.0	364,100	6.1	666,300
9	Helping relatives	3.3	185,300	0.0	0	2.9	175,000	2.9	318,300
10	Others:	18.3	1,041,300	18.0	533,400	4.6	274,900	18.3	1,996,000

			00						00
Average of expenditures	77.3	4,390,000	92.6	2,750,000	76.7	4,630,000	68.7	7,490,000	

(Source: Socio-economic survey, 02/2016, N = 2276)

68. Like other similar surveys, the monthly expenditure of poverty households typically accounts for a significant proportion of their limited income. The same with this survey, the average rate of 92.6% compared to the total monthly income of poverty households. In particular, spending on food accounts for a high proportion (30.3%), followed by others such as family business ... account for 18%. Meanwhile, with the average households, average expenditures account for 76.7% of total revenues, well-off households account for only about 68.7%. The table above also shows that most of the expenses for food of households accounts for the largest proportion of total income. The average of these households accounts for 28% of total revenue, followed by other investment costs (family business ...) accounts for 18.3%. Average expenditures for education accounted for 11%, expenditures for environmental fees are only 0.5% of the total revenue of the household.
69. When asked "Is the income source of your family stable or not? As many as 43.2% of households said that their income is not stable and focuses more on average households. According to the sharing of household, income is unstable mainly due to the following reasons: agriculture depends heavily on the weather; often sick; employed and small retail.

Vulnerable households

70. Vulnerable groups are Groups of people who might suffer disproportionately or face the risk of being further marginalized by the effects of resettlement and specifically include: (i) women headed household (single, widow, disabled husband) with dependents, (ii) disables (loss of working ability), the elderly alone, (iii) poor people according to the criteria issued by the MOLISA, (iv) the landless, and (v) ethnic minority people. In the survey programs, the identification of disadvantageous groups is an important work, which is the basis to develop a plan for compensation and resettlement (if any), especially in programs, livelihood recovery plan, the group has always been of particular interest. The survey results are shown in the table below:

Table 15: Household background

Household under which group	Poverty group		Average group		Well-off group		Total	Rate
	Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)		
Poverty ²	207	27.9	0	0.0	0	0.0	207	9.1
Family with minority ethnic	0	0.0	5	0.4	7	2.3	12	0.5
Female householder	138	18.6	341	27.7	33	11.0	512	22.5
Family with disable and elder	52	7.0	73	5.9	23	7.7	148	6.5
Not under above mentioned	344	46.4	810	65.9	243	81.3	1397	61.4

² Old poverty classification standard and confirmed by local authority

groups								
Total	741	100.0	1229	100.0	299	100.0	2,276	100.0

(Source: Socio-economic survey, 02/2016, N = 2276)

71. Through the survey, there are 61.9% of households that are not under disadvantageous/vulnerable groups. Considering the structure, family group with female householder accounts for highest rate with 22.5%, following by poor households with 9.1%, next is poverty households with elderly and disabled persons accounted for 6.5%, families of ethnic minorities (ethnic Chinese) is with just 0.5%. Ethnic Chinese has lived for a long time with the Kinh, so their habits, living habits are just like the Kinh. They even can use Vietnamese very proficiently. In their daily life, they immerse in the Vietnamese community, do not encounter any barriers whatsoever.
72. For poor group, the rate of female householder is up to 18.6%, 27.9% are poor and 7.0% of households have elderly and disabled people. We can say the proportion of households in groups of vulnerable, disadvantaged have relatively high, this requires the compensation to the affected families, a project need to reduce negative effects, disrupt life; on the other hand, it should have priority policies to reduce the difficulties, disadvantaged by the impact caused of Sub-project.

4.2.2 Land and housing

Housing

73. During the years, housing development demand of Phan Rang – Thap Cham city continuously increases highly; whereby shown the economic growth rate and income of the people has improved. Downgraded and old houses are upgraded or demobilized for new construction as spacious permanent houses as planned, contributing to improve the urban residential area, create beautiful modern residential compound.
74. The distribution of housing types directly influenced by the amount and degree of population divided components; in downtown building density is quite thick, mostly houses built by the people themselves; areas outside central wards have lower construction density. According to statistics, housing development situation in Phan Rang - Thap Cham is as follows:
 - Total number of households inner city : 42.164
 - Total number of households with permanent, pretty permanent, semi-permanent house : 40.071
 - Rate of permanent, pretty permanent, semi-permanent house : 95,04%
75. According the survey results, permanent houses gain the highest rate with 72.8% of the total surveyed households. Following is semi-permanent houses with 15.0%. Number of households still living in temporary houses are 216 households in total surveyed households, accounting for only 9.5% , concentrated mainly in poverty households (103 households) and average households (113 households) . The rate of high building apartment and garden housing respectively are 1.7% and 0.4%.

Table 16: House Types

No	Type of housing	Poverty group		Average group		Well-off group		Total	Rate
		Frequenc y	Rate (%)	Frequenc y	Rate (%)	Frequenc y	Rate (%)		
1	Permanent	540	72.9	893	72.2	224	74.9	1657	72.8
2	Semi-	95	12.8	183	14.8	63	21.1	341	15.0

	permanent								
3	Temporary	103	13.9	113	9.1	0	0.0	216	9.5
4	Apartment in high building	1	0.1	5	0.4	3	1.0	9	0.4
5	Garden housing	2	0.3	29	2.3	8	2.7	39	1.7
6	Others	0	0.0	13	1.1	1	0.3	14	0.6
	Total	741.0	100.0	1236.0	100.0	299.0	100.0	2276.0	100.0

(Source: Socio-economic survey, 02/2016, N = 2276)

76. The deep interview results of local leaders group show that: Over the years, the demand for housing development of Phan Rang - Thap Cham continued to rise; which shows the economic growth and people's income have improved. The old deteriorated houses are gradually be upgraded or dismantled permanent, spacious houses as planned, contributing to improvement of the urban residential areas, creating beautiful modern residential areas. The distribution of housing types is directly influenced by the amount and degree of population differentiation components; in downtown building density is quite thick, mostly houses built by the people themselves; areas outside central wards have lower construction density. Proportion of permanent housing, relatively permanent, semi-permanent according to the City statistics is 95.04% in 2014.

Residence time

77. The results showed that household economy do not dependent on, affect to the residence time of household.

Table 17: Residential duration in the area by living standard

No.	Residential duration	Poverty group		Average group		Well-off group		Total	Rate
		Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)		
1	Less than 1 year	3	0.4	67	5.4	12	4.8	82	3.6
2	From 1 - 5 years	34	4.6	207	16.7	69	27.7	310	13.6
3	From 5 - 10 years	55	7.4	70	5.6	78	31.3	203	8.9
4	From 10 - 20 years	234	31.6	293	23.7	42	16.9	569	25.0
5	More than 20	415	56.0	600	48.5	98	39.4	1113	48.9
	Toal	741	100.0	1236	100.0	299	120.1	2276.0	100.0

(Source: Socio-economic survey, 02/2016, N = 2276)

78. Up to 48.9% of households have lived in their current place for over 20 years, 25.0% have lived for 10 to 20 years, 8.9% of households have lived for 5-10 years and 13.6% have lived for 1 to 5 years. Less than 1 year only is 3.6%. It can be said that the population displacement in wards of project is not much; most of households have been living for long time in the area. Therefore they are very knowledgeable about the actual situation in the area; information provided by households is entirely realistic.

Land source

79. When finding out the land source of surveyed households, 52.9% of the households bought land or built a house by themselves, followed by 38.3% of households are inherited from parents, relatives, only 3.4% of households are granted for the agency, the state house.

Table 18: Land, housing source by living standards

No.	Land, housing source	Poverty group		Average group		Well-off group		Total	Rate
		Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)		
1	Inherited	196	26.5	599	48.5	76	25.4	871	38.3
2	Granted	0	0.0	66	5.3	11	3.7	77	3.4
3	Bought/built by himself	545	73.5	469	37.9	191	63.9	1205	52.9
4	Hire land/house	0	0.0	43	3.5	21	7.0	64	2.8
5	Others	0	0.0	59	4.8	0	0.0	59	2.6
	TOTAL	741	100.0	1236	100.0	299	100.0	2276	100.0

(Source: Socio-economic survey, 02/2016, N = 2276)

80. With households that are not poverty, their houses are mainly granted by their companies, they are state employees.

Land ownership paper

81. For households, the land and buildings are not only inhabited, but also a valuable asset, so the certificate of land use right and land ownership which is the legal basis to prove the legality of citizens for housing land is currently used. For households affected by the components of the project, it shall be the basis, an important legal basis to apply the compensation price as well as determine compensation allowance for households.

Table 19: Type of land use certificate by living standards

No.	Origin of land/housing	Poverty group		Average group		Well-off group		Total	Rate
		Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)		
1	certificate of land use right and land ownership	530	71.5	856	69.3	220	73.6	1606	70.6
2	Land/house certificate granted by agency	0	0.0	66	5.3	11	3.7	77	3.4
3	Certificate for temporary purchase of land/house	81	10.9	89	7.2	29	9.7	199	8.7
4	House hiring contract	3	0.4	26	2.1	13	4.3	42	1.8
5	No paper	121	16.3	176	14.2	21	7.0	318	14.0
6	Others	6	0.8	23	1.9	5	1.7	34	1.5

	Total	741	100. 0	1236	100. 0	299	100. 0	227 6	100. 0
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(Source: Socio-economic survey, 02/2016, N = 2276)

82. According to the survey results, there are 70.6% of households having certificate of land use right and land ownership, 3.4% have a certificate of land / house granted by state agencies, 8.7% of households have certificate for temporary purchase of land/house , 14.0% is without any certification papers.
83. Households do not have any papers because: (1) they built a house on agricultural land adjacent to residential land, this land has not change the purpose of use yet; (2) many households constructed their houses by encroaching public land including unoccupied land, roadways, sidewalks, canals / ditches; (3) a small number of households who are using too small land area, do not have enough conditions to do paperwork..

4.2.3 Traffic and participating in traffic

84. In 2276 surveyed households, 28.3% of families are living in the house on the street, which is also the highest rate; 12.2% is located on 5-meter wide lane; 18.22% in the 3-5 m wide lane; 21.4% in the 2-3 m wide lane, and 19.9% are located in the narrower lane.

Table 20: Width of land/street where households live

No.	House location	Poverty group		Average group		Well-off group		Total	Rate
		Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)		
1	On the street	11	1.5	484	39.2	149	49.8	644	28.3
2	In lane/alley wider than 5m	19	2.6	248	20.1	11	3.7	278	12.2
3	In lane/alley wide from 3-5m	32	4.3	264	21.4	118	39.5	414	18.2
4	In lane/alley wide from 2-3m	327	44.1	139	11.2	21	7.0	487	21.4
5	In lane/alley wide less than 2m	284	38.3	64	5.2	0	0.0	348	15.3
6	Others	68	9.2	37	3.0	0	0.0	105	4.6
	Total	741	100.0	1236	100.0	299	100.0	2276	100.0

(Source: Socio-economic survey, 02/2016, N = 2276)

85. Statistical results of lane/alley types leading to the people's houses are shown in the table below. Accordingly, more than half of the internal transport system or the roads and paths leading directly to the people's houses are the paved concrete road (26.1%) and asphalt concrete (28.7%), but still above 45% of the road/ lane are soil, gravel or stone only; it means that they are virtually pathway only, not yet upgraded, concentrate mainly in the coastal areas such as Phuoc My, Bao An, Thanh Hai, Dai Son.

Table 21: Type of land/alley where households live

N o.	Commune s	Asphalt concrete		Concrete		Paved by soil, gravel or cement		Pathway		Other		Total	
		Freq.	Rate %	Freq.	Rate %	Freq.	Rate %	Freq.	Rate %	Freq.	Rate %	Freq.	Rate %
1	Phuoc My	88	22.0	22	5.5	16	4.0	272	68.0	2	0.5	400	17.6
2	Bao An	54	27.0	48	24.0	10	5.0	88	44.0	0	0.0	200	8.8
3	My Binh	161	43.5	96	25.9	15	4.1	98	26.5	0	0.0	370	16.3
4	Dong Hai	70	35.0	34	17.0	7	3.5	88	44.0	1	0.5	200	8.8
5	Tan Tai	69	53.1	32	24.6	4	3.1	25	19.2	0	0.0	130	5.7
6	Thanh Son	38	31.7	32	26.7	5	4.2	45	37.5	0	0.0	120	5.3
7	Phu Ha	33	27.5	38	31.7	7	5.8	42	35.0	0	0.0	120	5.3
8	Kinh Dinh	60	50.0	31	25.8	3	2.5	25	20.8	1	0.8	120	5.3
9	My Dong	21	17.5	64	53.3	2	1.7	33	27.5	0	0.0	120	5.3
10	Van Hai	30	25.0	37	30.8	5	4.2	48	40.0	0	0.0	120	5.3
11	My Hai	15	5.8	129	50.4	11	4.3	100	39.1	1	0.4	256	11.2
12	Dai Son	14	11.5	31	25.8	20	16.4	56	46.3	0	0.0	120	5.3
	Total	653	28.7	594	26.1	105	4.6	920	40.4	5	0.2	2276	100.0

(Source: Socio-economic survey, 02/2016, N = 2276)

86. When asked about evaluating the system of road/lane/alley which led to their house, 46.5% of households said that the system is generally good. However, there are comments that the road is narrow (19.7%), uneven road surfaces so that it is difficult to travel (10.7%), road system is often flooding / muddy (7.9 %) and the road surface is low (7.7%).

Table 22: Evaluation of households on road/lane/alley systems

No.	Evaluation of road/lane/alley systems	Frequency	Rate (%)
1	Generally good	1058	46.5
2	Often flooding / muddy	180	7.9
3	Narrow	448	19.7
4	Low surface	175	7.7
5	Rough and difficult to travel	244	10.7
6	A lot of dust, muddy	264	11.6
7	Others	230	10.1
	Total	2599	114.2

(Source: Socio-economic survey, 02/2016, N = 2276)

87. Regarding vehicle means: The table below shows that people who are using motor vehicles to travel accounted for the highest proportion (60.9%), followed by bicycles (29.6%) and private car (2.8%).

Table 23: Vehicle means of households by living standards

No.	Assets in the family	Poverty group		Average group		Well-off group		Total	Rate (%)
		Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)		
1	Car	0	0.0	2	0.2	61	20.4	63	2.8
2	Motorbike	249	33.6	839	67.9	299	100.0	1387	60.9
3	Electrical bicycle/motorbike	1	0.1	121	9.8	113	37.8	235	10.3
4	Bicycle	221	29.8	354	28.6	98	32.8	673	29.6
5	Tricycle	0	0.0	2	0.2	61	20.4	63	2.8

(Source: Socio-economic survey, 02/2016, N = 2276)

88. However, with the economic development, the growth rate of personal motor vehicles is very fast, therefore, those who plan the transport system in a developing urban as the city of Phan Rang - Thap Cham, is unable subjective with figure of 2.8% used private cars to travel. The people mainly use private transport is definitely a concern for those who plan the development of urban transport network.

4.2.4 Power supply and using of households

89. According to the deep interview results of local leaders and group discussion, national network electricity has been covered 100% of city area. Power system is provided stably from the Da Nhim hydropower plants and 500KV national grid; supply power system network of the city has been invested and upgraded quite completely; National grid is ensured to distribute to all the residential , tourist, industrial areas..., provides enough electricity demand of life and production for the people of the city and investors. Regarding lighting system, around 106km of streets have streetlights, almost 100% of urban road are illuminated. The lighting system in the alleys reaches 60%.
90. The survey results show that 100% of households using electricity with a separate meter. Although grid systems are not under the investment component of the Sub-project but this is one of the urgent problems in the life of people, especially urban residents, and it is also one of the essential concerns for anyone who plan and develop the infrastructure. One indicator of the quality of the power system frequency of power cuts during the month.

Table 24: Frequency of cutting power in ward/commune

Ward/commune	Rarely cut		1 – 2 times/month		3 – 5 times/month		More than 5 times/month		Unknow		Total	Rate (%)
	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate		
Phuoc My	360	89.9	18	4.5	2	0.5	0	0.0	20	5.1	400	100.0
Bao An	184	92.0	3	1.5	6	3.0	1	0.5	6	3.0	200	100.0
My Binh	336	90.7	14	3.9	4	1.1	3	0.8	13	3.5	370	100.0
Dong Hai	180	90.0	8	4.0	1	0.5	0	0.0	11	5.5	200	100.0
Tan Tai	122	94.0	1	0.8	2	1.5	0	0.0	5	3.7	130	100.0
Thanh Son	106	88.0	9	7.5	2	1.7	0	0.0	3	2.8	120	100.0
Phu Ha	113	93.8	2	1.7	3	2.5	2	1.7	0	0.4	120	100.0
Kinh Dinh	106	88.7	9	7.5	3	2.5	1	0.8	1	0.5	120	100.0
My Dong	112	93.0	5	3.9	2	1.7	2	1.7	0	0.0	120	100.0
Van Hai	110	92.0	8	6.7	1	0.8	1	0.8	0	0.0	120	100.0

My Hai	234	91.3	8	3.1	3	1.2	3	1.2	8	3.2	256	100.0
Dai Son	112	93.7	2	1.7	2	1.7	1	0.8	3	2.1	120	100.0
Total	2074	91.1	87	3.8	31	1.4	14	0.6	70	3.1	2276	100.0

(Source: Socio-economic survey, 02/2016, N = 2276)

91. The above mentioned frequency table shows that 91.1% of surveyed households said that the electricity in their living area is rarely cut, and this rate is quite equitable among ward/commune.

Table 25: Electric intensity

No.	Ward/commune	Strong enough		Normal		Weak		Very weak		Unknown		Total	
		Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate
1	Phuoc My	301	75.3	88	22.0	2	0.5		0.0	9	2.3	400	100.0
2	Bao An	146	73.0	49	24.5	5	2.5		0.0	0	0.0	200	100.0
3	My Binh	289	78.1	77	20.8	4	1.1		0.0	0	0.0	370	100.0
4	Dong Hai	132	66.0	52	26.0	9	4.5	4	2.0	3	1.5	200	100.0
5	Tan Tai	87	66.9	41	31.5	2	1.5		0.0	0	0.0	130	100.0
6	Thanh Son	67	55.8	47	39.2	2	1.7	3	2.5	1	0.8	120	100.0
7	Phu Ha	93	77.5	24	20.0	3	2.5		0.0	0	0.0	120	100.0
8	Kinh Dinh	59	49.2	52	43.3	3	2.5	1	0.8	5	4.2	120	100.0
9	My Dong	91	75.8	11	9.2	12	10.0		0.0	6	5.0	120	100.0
10	Van Hai	95	79.2	23	19.2	1	0.8		0.0	1	0.8	120	100.0
11	My Hai	214	83.6	33	12.9	3	1.2		0.0	6	2.3	256	100.0
12	Dai Son	87	72.5	27	22.5	2	1.7	1	0.8	3	2.5	120	100.0
	Tổng	1661	73.0	524	23.0	48	2.1	9	0.4	34	1.5	2276	100.0

(Source: Socio-economic survey, 02/2016, N = 2276)

92. According to the survey data shown in the above table, the strength of the power source is not the immediate concern compared to the demand of the people when only less than 5% of surveyed people said that the power supply is weak or very weak; even over 73% said that electric intensity is strong enough for the demand. There is not much difference between the ward and commune in the assessment of the strength of the power source. Thus, the analysis results in both above tables show that the power supply for the ward / commune is relatively good, this is shown by the indicators: frequency of power cuts in that area not so much and the intensity of the power supply is strong enough. So in overall, the upgrade of power grid for the people might be not urgent needs.

4.2.5 Water supply and using of households

Water source

93. Clean water is one of the criteria for evaluating the development and civilization of the urban population. When searching for information of water use in the activities of households in sub-project areas, the survey results showed that households mainly use one water source, accounting for 81% of surveyed households. The number of households using two water sources accounted for 17.6% and 1.4% is the percentage of households using water from more than three sources. The water source which is being used in the province include: Tap-water, well-water, rainwater and water purchased/bottle. Among them, tap-water used is the main source, accounting for over 90%.

Table 26: Water sources currently used by households according to living standards

No.	No. Water sources	Poverty group		Average group		Well-off group		Total	Rate (%)
		Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)		
1	1 source	523	70.6	1057	85.5	264	88.3	1844	81.0
2	2 sources	215	29.0	158	12.7	28	9.4	401	17.6
3	More than 3 sources	3	0.4	22	1.8	7	2.3	32	1.4
	Total	741	100.0	1236	100.0	299	100.0	2276	100.0

(Source: Socio-economic survey, 02/2016, N = 2276)

Water consumption

94. Water consumption for basic needs such as eating, drinking, bathing, washing of household is relatively quantified and calculated, summarized in the table below. It was found that, average water consumption is 103 liters/person/day (equivalent to 430 liters/household /day).

Table 27: Daily water consumption of households for different purposes

N o.	Daily living purposes	Medium		Poverty		Average		Well-off	
		l/household/ day	l/household/ day	l/household/ day	l/household/ day	l/household/ day	l/household/ day	l/household/ day	l/household/ day
1	Eating, drinking	10.14	2.405	12.285	2.405	9.88	2.275	10.01	2.99
2	Cooking	84.955	20.28	97.305	19.045	87.555	19.89	74.295	22.295
3	Bathing, washing, ...	335.335	80.08	321.165	62.855	374.725	85.085	246.935	74.1
	Total/average (l)	430.43	102.765	430.755	84.305	472.16	107.25	331.24	99.385

(Source: Socio-economic survey, 02/2016, N = 2276)

95. When asked if daily water using has satisfied the needs of the household or not, 96.6% of households said that it's enough. The remaining 3.4% said that the water amount is not enough to meet demand. This result was considered interrelatedly with the living standard, household size and household profession which are shown in the table below.

Table 28: Daily water using satisfied the demand

According to	Daily water use has satisfied the demand or not?		Water amount	
			Enough	Not enough
Living standard	Poverty group	Frequency	723	18
		Rate (%)	97.6	2.4
	Average group	Frequency	1192	44
		Rate (%)	96.4	3.6
	Well-off group	Frequency	284	15
		Rate (%)	95	5
Scale of household	<4 person	Frequency	673	20
		Rate (%)	97.1	2.9

Profession	=4 person	Frequency	40	11
		Rate (%)	4.5	1.3
	5-6 person	Frequency	63	21
		Rate (%)	12.9	4.3
	>6-11 person	Frequency	1423	25
		Rate (%)	665	11.7
	Agriculture	Frequency	638	65
		Rate (%)	90.8	9.2
	Non-agriculture	Frequency	1463	12
		Rate (%)	99.2	0.8
Housework/not working	Frequency	98	0	
	Rate (%)	100	0	
Total		Frequency	2199	77
		Tỷ lệ (%)	96.6	3.4

(Source: Socio-economic survey, 02/2016, N = 2276)

96. Accordingly, these rate focus on well-off households (5%), households with more than 6 to 11 people (11%) and agricultural households (9.2%). And they said that the water amount needed to meet the demands of the household is: from 500 to 1000 liters / household / day accounting for 62.3%; from 300 to 500 liters / household / day, 31.2%; and from 1000 to 3000 liters / household / day accounted for 6.5% of households said that the current water amount is not enough.

Evaluation of water source

97. According to the evaluation of households on the quality of the water sources showed that the water is basically clean and clear except for water ponds / lakes / river / canal with the rate of 100% for rainwater, 99% for tap water, 85.5% for the purchase of water / bottled, 78.8% for drilled well-water, 65.2% for digged well-water. Here are the results of water sources evaluation being used households.

Table 29: Evaluation of water source quality

No.	Water sources	Evaluation	Frequency	Rate (%)
1	Tap-water	Water is clean and clear	2253	99
		Water is clean but have smell	11	0.5
		Water is not clean and have smell/color	0	0
		Other	11	0.5
2	Drilled well-water	Water is clean and clear	1793	78.8
		Water is clean but have smell	125	5.5
		Water is not clean and have smell/color	275	12.1
		Other	102	4.5
3	Digged well-water	Water is clean and clear	1484	65.2
		Water is clean but have smell	282	12.4

No.	Water sources	Evaluation	Frequency	Rate (%)
		Water is not clean and have smell/color	180	7.9
		Other	332	14.6
4	Rainwater	Water is clean and clear	2276	100
		Water is clean but have smell	0	0
		Water is not clean and have smell/color	0	0
		Other	0	0
5	ponds / lakes / river / canal water	Water is clean and clear	683	30
		Water is clean but have smell	910	40
		Water is not clean and have smell/color	683	30
		Other	0	0
6	Other: purchased/bottled	Water is clean and clear	1944	85.4
		Water is clean but have smell	0	0
		Water is not clean and have smell/color	332	14.6
		Other	0	0

(Source: Socio-economic survey, 02/2016, N = 2276)

98. According to the households surveyed, the water quality has not changed fundamentally by seasons but only changed in water reserves. The inspection of the water sources quality are being used only done by a small number of households (3.8%) through mainly by visual and folk experiences such as making tea...

Water treatment works in household scope

99. The percentage of households investing in water treatment in household scope is very small, only 4.1% of the surveyed households. The investment in water treatment facilities by household scope is mainly made by well-off/rich households and some households have average living standards. Poverty households are less interested in investing furthermore water treatment facilities.

Connecting to water system of the City

100. According to the survey results of current condition, the percentage of households that connected to city clean water system is 72.5%. The remaining 27.5% of households answered that they are not connected, they provide a lot of reasons for not connecting but almost concentrated in: the cost is too high; household has water wells and ensure sufficiently for current living...

Table 30: Connecting to water system of the City

No.	Actuality connection	Poverty group		Average group		Well-off group		Total	
		Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)
1	Connected	475	64.1	878	71.0	297	99.3	1,650	72.5
2	Not yet	266	35.9	358	29.0	2	0.7	626	27.5

	connected								
	Total	741	100.0	1236	100.0	299	100.0	2,276	100.0

(Source: Socio-economic survey, 02/2016, N = 2276)

101. Besides the above mentioned households investigation results, the Consultant had deeply interviewed the staffs of Urban Management Department of Phan Rang – Thap Cham city on current condition of water supply in the area and obtained the response: Surface water of Dinh River is used as water source for consumption and production. Phan Rang - Thap Cham city water supply systems is managed by Ninh Thuan Water Supply JSC with a capacity of 52.000m³ / day, including 3 different areas: raw water pumping station, treatment area and boost pumping station. The supply water pipeline network in Phan Rang - Thap Cham has a total length of about 428,3km. Average urban population is approximately 132.01 liters / person / day and over 90% of urban residents can use tap water.

4.2.6 Drainage and flooding

Drainage

102. Firstly, this survey wants to know about where the drainage system of households flows out. The results show that:

Table 31: Drainage system of households by living standards

No.	The waste water flow to	Poverty group		Average group		Well-off group		Total	Rate
		Frequen cy	Rate (%)	Frequen cy	Rate (%)	Frequen cy	Rate (%)		
1	Drainage from toilet to septic tank	99	13.4	1106	89.5	199	66.6	1404	61.7
2	Drainage from washing/cooking to septic tank	116	15.7	434	35.1	55	18.4	605	26.6
3	Flow to combined sewer/ditch (close/open)	56	7.6	296	24.0	12	4.0	364	16.0
4	Directly flow to river/lake/canal	399	53.8	322	26.0	19	6.4	740	32.5
5	Self-absorbed/overflow	55	7.4	386	31.2	12	4.0	453	19.9
6	Unknown	16	2.2	185	14.9	2	0.7	203	8.9

(Source: Socio-economic survey, 02/2016, N = 2276)

103. On the survey samples, only 16% of households connected their drainage system to combined sewer/ditch. Meanwhile, up to 32.5% of households have their drainage system flowing directly to river/lake/canal, 19.9% of households let their drainage self-absorbed or overflow. This is one of the significant reasons causing environmental pollution in residential areas.
104. If listed by the living standard, we can see, the percentage of poverty households let the drainage flow directly into river / lakes / ponds accounted highest percentage with 53.8%, this rate decrease by households with higher living standard, particularly for average households accounted for 26.0% and 6.4% of well-off households. This can be due to many reasons, but one of which related to financial issues when it comes to the initial construction investment.

105. During the study, the surveyors also combined in-depth interviews and field observation to have the most general assessment on the current situation of water drainage in residential areas. The survey result is recorded as follows:

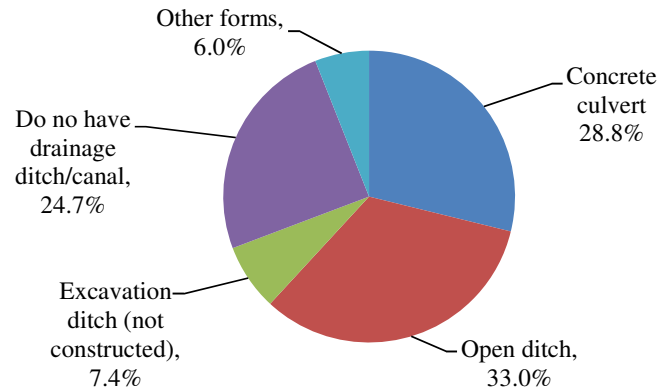


Figure 11: Description of the sewage system in the area

(Source: Socio-economic survey, 02/2016, N = 2276)

106. When assessing the combined sewage system where people are living, only 33.7% of the people said that this system is working well, and the rest, with 44.4% said that the drainage is not good in the heavy rains and 21.9% said this system to perform poorly in light rains less, even when it does not rain.

Flooding

107. When asked about the flooding, there are 175 interviewees answered that flooding occurred in the households living region last year (accounting for 7.7%). These respondents live in 21/8 road of the stadium area, Le Quy Don, Ha Huy Tap Street, Pham Ngu Lao street (near the Television station), Dong Dau outlet, Pham Ngu Lao Street, Ngo Thi Nham, Nguyen Du, Minh Mang- Tu Duc, the culture house of Children, Yesin- Thong Nhat, boost pumping station on Tran Phu, Phu Ha-Tran Phu cross road, Phan Rang market, Nguyen Thi minh Khai street. Flood frequency is from 1 to 2 times / year. Time flooded depends on location, usually from 20-30 minutes to 2-3 hours with a depth of 40-60 cm in about 90-120 minutes. Water flooded mix with dirty water, sludge from residential garbage, sewage spread on the pavement causing unhygienic, urban aesthetic, obstructing traffic, affect people's lives and cause irritant.
108. The discharging of flood points is due to lack of drainage system, incomplete connection points, sewage systems were not dredged regularly to maintain. Besides, the bottom height of Ong Co channel is high; the downstream size is narrow so the drainage capacity reduces. Outside of the dyke, tides combining with Dinh river water raised by flood discharged at the downstream also reduce the drainage capacity from city to the sea.
109. The status of the waste water collection system the city through common drainage system and combined sewer overflows. On the city area, there are four sewage pumping stations located in My Huong elementary schools (pump station Hung Vuong), Tan Tai Market (Tan Tai pumping stations), the park 16/4 (16/4 Pumping Station) and the intersection between 16/4 road and Cha La channel (Cha La pumping stations). In which 16/4 pumping stations and Hung Vuong sewage pumping stations are upgraded to the common drainage system, flow to Cha La and Tan Tai pumping station, after that, the two stations shall pump the waste water to waste water treatment plant with

capacity of 5,000 m³ / day and night, locating in the east of the city. In general, the wastewater collection system has not met the demand.

4.2.7 Waste collecting and processing

110. Results of the survey on the situation of waste collecting and treatment of the households shown that:

- Regarding containing household waste: 64.1% of households use garbage bags, 26.2% used the trash, and 9.7% of households use a combination of the garbage and trash bags to garbage before being disposed.
- Waste classification is only done by 35.7% surveyed households.
- Regarding household waste processing: Although the collection and disposal by the Nam Thanh Trading-Construction and Manufacture undertaken and implemented across the whole city. However, according to the survey, the results showed that only 60.1% households dispose the garbage with garbage collectors at home, and 8.6% households disposed at regulated place to the treatment plant. The rest (31.3%) flows directly into rivers / lakes, gardens or bury / burn.

Table 32: Collecting and processing the household waste according to living standards

Family waste collecting		By income						Total	Rate
		Poverty group		Average group		Well-off group			
		Freq.	Rate (%)	Freq.	Rate (%)	Freq.	Rate (%)		
1.Waste containing form	Garbage trash	231	31.2	245	19.8	120	40.1	596	26.2
	Garbage bag	411	55.5	901	72.9	147	49.2	1459	64.1
	Others	99	13.4	90	7.3	32	10.7	221	9.7
2. Waste classification	Yes	71	9.6	590	47.7	152	50.8	813	35.7
	No	670	90.4	646	52.3	147	49.2	1463	64.3
3.Waste processing form	Waste collector to the home	522	70.4	622	50.3	224	74.9	1368	60.1
	Disposed at regulated place	33	4.5	144	11.6	19	6.4	196	8.6
	Disposed to river, canal, pond, lake	22	3.0	30	2.4	7	2.3	59	2.6
	Disposed to empty yard	4	0.5	4	0.3	1	0.3	9	0.4
	Disposed to garden	11	1.5	62	5.0	7	2.3	80	3.5
	Burrry/burn	149	20.1	374	30.3	41	13.7	564	24.8

(Source: Socio-economic survey, 02/2016, N = 2276)

111. Considering the form of garbage disposal by the household living standards, it is shown that there was no significant difference between the groups with different living standards. This could understand financial issues are not factors that affect access to services for collection and treatment of household waste. Therefore, the propaganda, advocacy, raising awareness and changing the behavior of the community is very important in the work of environmental sanitation in general and waste collection/treatment in particular.

4.2.8 Environment, sanitation and health

Environment and sanitation of households

112. The survey results of ownership status of toilet shown that, most of households have their own toilet (95,0%).

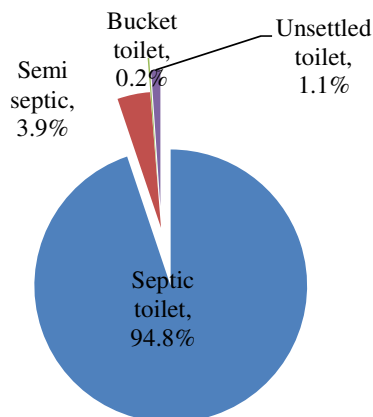


Figure 12: Type of household toilet

(Source: Socio-economic survey, 02/2016, N = 2276)

113. In the households having their own toilet, septic toilets account for highest rate (94.8%); semi-septic toilets account for 3.9%; only 0.2% of households using bucket toilets and 1.1% of households use unsettled toilet. The septic tanks are done periodically from 1 to 10 years, the cost is also from 100.000/time to 1.000.000/time.
114. That is why most of toilets of the people in the city are septic so 90.5% of comments repsonsed that their current sanitation work is clean and hygienic, 2.0% of households rated that the family's toilet is dirty / unsanitary due to not regularly sweep or near livestock.

Table 33: Self-evaluation of toilet condition according to living standards

	Self-evaluation of toilet quality	Poverty group		Average group		Well-off group		Total	Rate
		Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)		
1	Clean and hygienic	651	87.9	1114	90.1	295	98.7	2060	90.5
2	Dirty and unsanitary	12	1.6	32	2.6	2	0.7	46	2.0
3	Unknown	78	10.5	91	7.3	2	0.7	171	7.5
	Total	741	100.0	1236	100.0	299	100.0	2276	100.0

(Source: Socio-economic survey, 02/2016, N = 2276)

115. However, the assessment of the toilet quality in the assessment here is more "sense" of the respondents. Through discussions with the leaders of the ward / commune and group discussions with households, whether the household use any type of toilet, waste water from toilets still mostly is self-absorbed or direct to canals. This seriously affects the surrounding environment.

The habitat of households in the project area

116. The survey results showed that 40.7% of households responded that the surrounding environment is polluted, focusing primarily on the households living along the two banks of the canal Ong Co, Nhi Phuoc, Tan Tai and Cha La. And it is in these areas,

especially the opening canals and passes through residential area and downstream of the canal/ditch, pollution levels are rated at the most. The table below shows the results of a survey to assess the residential habitat.

Table 34: Assessment about the residential habitat

	The residential habitat is polluted or not?		Total	
			Frequency	Rate
1	Yes		926	40.7
	Reasons	Noisy	206	22.3
		Dust	241	26.0
		Flooded by rainwater	206	22.3
		Waste water from sewers	157	17.0
		Waste water from manufacture, trading facilities	184	19.9
		Waste water is stagnant from rivers, lakes	287	31.0
		The stink from discharged ditches, canals	267	28.8
		The stink by waste	0	0.0
2	No		1350	59.3
	Total		2276	100

(Source: Socio-economic survey, 02/2016, N = 2276)

117. When learning about the causes of pollution, there are many different opinions, and “waste water is stagnant from rivers and lakes” is the answer most selected (31.0%) and stink from the sewer, drain waste (28.8%). The cause relating to stink caused by waste is not selected by any household, which means that garbage collection work in the province is still being implemented frequently, regularly and efficiently.

4.2.9 Knowledge and practices of the people on health, sanitation and environment

118. Drinking boiled water is the habit of the majority of households, accounting for 71.8%; 13.2% of households answered that the family usually drink water directly through the RO machine. Most of households "never" drink water directly from dug wells as water source that has not been boiled. But with the rain water, the habits is contrary, 15.0% of households regularly and occasionally drink this water directly. The fact is all the households have rainwater tanks. Together, in case of thirsty when going home from the field, other places by habit ... many members of the family just drink water directly from the tank without boiling. And in the minds of some people, rainwater is natural and very clean. But the fact that when rain is down, a certain amount of dusts are under rain water into the tank as well, if the water tank of the households are not covered carefully from dust and dead animals ... not cleaning the tank often can make the rainwater have dust, bacteria. This causes significantly impact on the health of the communities that they do not recognize the disease can happen not only in a day or two.

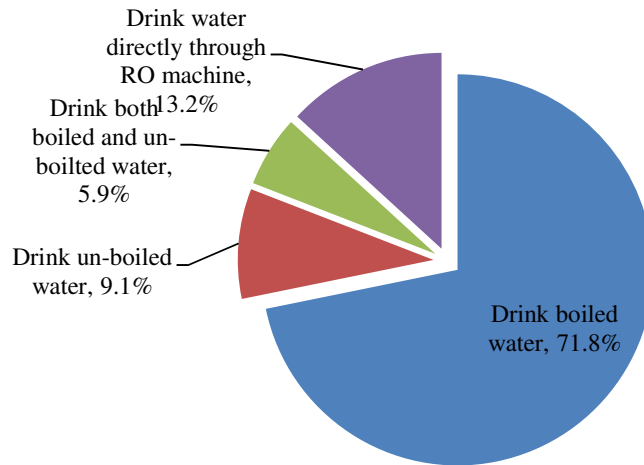


Figure 13: Drinking habit

(Source: Socio-economic survey, 02/2016, N = 2276)

119. The habit of hand washing and, especially after using the toilet is most frequently performed by households, accounting for over 86.2% of the surveyed households. Besides, there are still cases of not washing or washing not often after going to the toilet (12.7%). The remaining 1.2% did not share the habit of washing their hands, this group usually do not have the good personal habit of hygiene and they themselves have noticed it, but for some reasons, still cannot overcome due to the living and working conditions or facilities serving for hygiene issues are not convenient ...

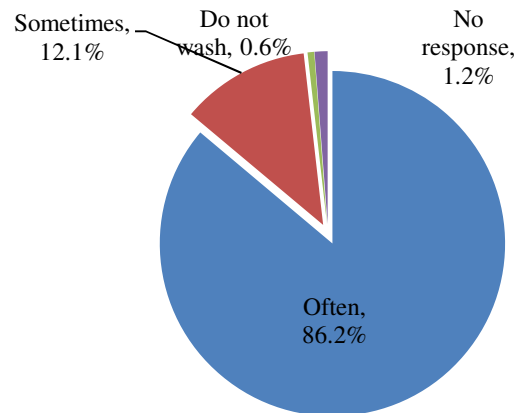


Figure 14: Hand washing habit

(Source: Socio-economic survey, 02/2016, N = 2276)

120. Through the survey results of awareness, habits and hygiene behavior of people, we can find that changing a bad habit of hygiene practices not only depends on the living conditions, but the facilities used for hygiene issues.

4.2.10 Communication and reviewing information from the project residential communities

121. Televisions are audiovisual media appearing in most houses, thus the information about water and sanitation is accounted for the highest proportion of households with 89.7%, followed by speaker / radio in the commune also broadcast the related bulletins, the proportion accounted for 42.1%. Information channel through press accounts for 37.4%. Informed by medical personnel / woman association staff account for 31.8%. Ranging from 14% to 25% is the information received from the panels/ pictures/ slogans, through meetings and from children. Considering the source of this information by sex, the rate is not much difference between men and women. Such sources received information from television, answer "women" and "men" is 89.0% and 90.4% respectively. Similarly with information from speaker/ radio in the commune is 44.3%, and 39.3%.

Table 35: The propagandized information of water and sanitation by living standard and gender

No.	Propagandized information source of water and sanitation	By living standard						Total	Rate (%)	By gender			
		Poverty group		Average group		Well-off group				Male		Female	
		Freq.	Rate (%)	Freq.	Rate (%)	Freq.	Rate (%)			Freq.	Rate (%)	Freq.	Rate (%)
1	Commune speaker/ radio	156	21.1	476	38.5	145	48.4	958	42.1	623	44.3	342	39.3
2	medical personnel / woman association staff	273	36.8	392	31.7	94	31.3	724	31.8	437	31.1	284	32.6
3	Panels, pictures, slogans	78	10.5	260	21	21	7.1	325	14.3	173	12.3	147	16.9
4	Television	663	89.5	1121	90.7	265	88.5	2042	89.7	1251	89	786	90.4
5	Press	195	26.3	488	39.5	109	36.3	851	37.4	494	35.1	303	34.8
6	Meeting	351	47.4	362	29.3	51	17	560	24.6	339	24.1	220	25.3
7	Children (information from school)	273	36.8	308	24.9	72	24.2	571	25.1	357	25.4	215	24.7
	Total	741	32.6	1236	54.3	299	13.1	2276	100	1406	61.8	870	38.2

(Source: Socio-economic survey, 02/2016, N = 2276)

122. The coordination with local authorities, media units in the ward/commune can help people gain access to all information about programs/projects. Messages from

implemented communication programs were clear, easy to understand and easy to remember, such as environmental protection, hygiene, energy saving.... From the above, it can be found that in the next phase of the project, communication has an important role and brings extensive media properties to each community.

4.3 Gender issues in the area

123. The issue of gender in the province has improved since the Law on Gender Equality, for instance in the ward / commune almost there is no occurrence of severe domestic violence, women were more involved in resolve family issues, as well as participate in social activities, there is no gender discrimination in education and health care ... To indicate the results of the analysis of gender issues in the province, the consultant has obtained and summarized advice from the relevant data compiled from the staff of ward / commune project area to analyze gender issues in the decision making process of local and quantitative research results and other qualitative progress analysis of gender issues in the province.

Gender in the political participation

124. Gender in the politics participation is evaluated based on summarized tables of the staffs to be in charge or not in charge of commune/ward in the project area.
125. Overall, the percentage of women participating in the system of civil servants, person in charge, not in charge are relatively high: 18.2% in charge; 57.1% of civil servants; 47.8% not in charge. Most of them were trained well from intermediate level to university. However, looking at the detailed duty assignment, it shows that women can not get the position to make decisions, both economic and local political, namely: the position as Chairman and Deputy Ward Chairman in charge of economic wards were male. Local land cadastral officials do not have any female staff.
126. In addition, those involved in positions of local authority decision-making are the Kinh (Secretary of the Party Committee, Chairman / Vice Chairman of the ward/commune). In general, the local government officials (both women and men) who participate in political organizations, civil society and people have said that the current situation of women in politics has improved. However, according to the analysis above, we can see that the improvement in recent years is only in terms of quantity, in fact, women still hold lower positions than men in important positions anonymous local decision and it affects the participation in the decision-making process as well as the opportunity to benefit of local women. This issue should be included in the media content presented in an action plan to improve the status of women in political participation.

Participation in the family and community activities

127. The survey results of labor division in the families showed that women still have a major role in "a householder and a housewife". This rate may vary between household groups by living standards, however, are achieved from 75.5% or more. The share of labor in areas has no difference with the study, analysis of the gender division of labor in Vietnam today: Women's participation in the activities of production, reproduction and care while men are mainly engaged in manufacturing activities.

Table 36: Main labor division in the family

Works	Labor division	Poverty group		Average group		Well-off group		Total	
		Frequenc y	Rate (%)	Frequenc y	Rate (%)	Frequenc y	Rate (%)	Frequenc y	Rate (%)

1	Keep the money	Female	593	80.0	933	75.5	245	81.8	1771	77.8
		Male	148	20.0	47	3.8	27	9.1	222	9.8
		Both	0	0.0	256	20.7	27	9.1	283	12.4
2	House work	Female	667	90.0	1213	98.1	275	92.0	2154	94.7
		Male	74	10.0	23	1.9	20	6.8	118	5.2
		Both	0	0.0	0	0.0	4	1.2	4	0.2

(Source: Socio-economic survey, 02/2016, N = 2276)

128. A number of problems in the family are determined by both men and women. Percentage answer of both husband and wife work together to decide on is more than the answers by someone (wife / husband) decision, namely:

Table 37: Decision in the main issues of the family

	Works	Labor division	Poverty group		Average group		Well-off group		Total	
			Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)
1	Decision on financial issues	Female	371	50.0	257	20.8	109	36.4	736	32.4
		Male	148	20.0	489	39.6	99	33.0	736	32.4
		Both	222	30.0	489	39.6	91	30.6	803	35.2
2	Decision on education and work of children	Female	371	50.0	326	26.4	78	26.1	775	34.0
		Male	148	20.0	279	22.6	68	22.7	495	21.8
		Both	222	30.0	630	51.0	153	51.2	1006	44.2
3	Decision of connection and pay for relating fees	Female	371	50.0	257	20.8	71	23.9	699	30.7
		Male	74	10.0	397	32.1	99	33.0	570	25.0
		Both	296	40.0	582	47.1	129	43.1	1007	44.3
4	Bank loans	Female	296	40.0	234	18.9	82	27.3	612	26.9
		Male	74	10.0	210	17.0	68	22.7	352	15.5
		Both	371	50.0	792	64.1	150	50.0	1312	57.7

(Source: Socio-economic survey, 02/2016, N = 2276)

- To the question who decides the issues related to financing, the proportion of answers "husband and wife" accounted for 35.2%, while the answer "women" and "men" is 32.4% and 32.4 respectively;
- To the question who is to decide on the education and the work of the children, the percentage of responses "husband and wife" accounted for 44.2%, while the answer "women" and "men" is respectively 34.0% and 21.8%;
- To the question who decides the connection and pay related expenses, rate answers "husband and wife" accounted for 44.3%, while the answer "women" and "men" is respectively 30.7% and 25.0%;
- To the question who decides the issues related to the bank loans, the rate of answers "husband and wife" accounted for 57.7%, while the answer "women" and "men" is respectively 26.9% and 15.5%.

129. However, property ownership issues have a gender imbalance, especially in poor and middle-income groups. Specific:

- With poverty group: 60.0% of respondents said the current status of property in the name of land use rights and property of the family were male, 10.0% at present to express an opinion on ownership assets belonging to both men and women / couples, and women who undersigned are 30%;
- The average group: 55.8% of respondents said the current status of property in the name of land use rights and property of the family were male, and 26.9% at present to express an opinion on possession of property belonging to both men and women / couples, and women undersigned are 17.3%;
- With well-off households: 50.0% of respondents said the current status of property in the name of land use rights and property of the family were male, and 27.3% at present to express an opinion on head possession of property belonging to both men and women / couples, and undersigned are 22.7%.

Table 38: Property ownership in the family

	Works	Labor divisio n	Poverty group		Average group		Well-off group		Total	
			Frequenc y	Rat e (%)	Frequenc y	Rat e (%)	Frequenc y	Rat e (%)	Frequenc y	Rat e (%)
Property ownership issues										
1	Undersigne d land and property using rights	Female	222	30. 0	214	17. 3	82	27. 3	518	22. 7
		Male	445	60. 0	690	55. 8	68	22. 7	1202	52. 8
		Both	74	10. 0	332	26. 9	150	50. 0	556	24. 4

(Source: Socio-economic survey, 02/2016, N = 2276)

130. The participation in community activities, in local organizations shows that there is little more than the share of women participating in these activities. Survey results in the table below shows:

- There are 49.4% of respondents say that both (men and women) to participate in the community activities. While this rate in males is 22.1% Private and women is 28.4%;
- Similar content □ participation in local organizations, participation rates of both, of women and men, respectively 51.3%, 32.0% and 16.7%.

Table 39: Participating in community and social organization activities

	Works	Labor division	Poverty group		Average group		Well-off group		Total	
			Frequenc y	Rat e (%)	Frequenc y	Rat e (%)	Frequenc y	Rat e (%)	Frequenc y	Rat e (%)
Join local extracurricular activities/ organizations										
1	Participatin g in meeting community	Female	222	30. 0	332	26. 9	92	30. 7	647	28. 4
		Male	222	30. 0	214	17. 3	68	22. 7	504	22. 1
		Both	296	40.	690	55.	139	46.	1125	49.

				0		8		6		4
2	Participatin g in local organizatio ns	Female	222	30. 0	404	32. 7	102	34. 1	728	32. 0
		Male	148	20. 0	167	13. 5	65	21. 6	380	16. 7
		Both	371	50. 0	665	53. 8	132	44. 3	1168	51. 3

(Source: Socio-economic survey, 02/2016, N = 2276)

131. Overall, the project area has the equality between women and men in deciding the major problems of the family and participates in activities in the local community; the position and role of women are more and more advanced and respected.

4.4 Ethnic Minority

132. The work of investigation of ethnic minorities for the Sustainable Environment Phan Rang-Thap Cham Sub-project was implemented by Implementation Unit for Capacity Development and ODA Water Resources coordination with Ninh Thuan province Bureau of Statistics and reported the results to the World Bank's Task Team in Document No. 03/BXDNL-DT&TTCD dated 2/17/2016. The document is clearly stated: According to the Statistical Yearbook of Phan Rang - Thap Cham in 2014, in the city area, beside of kinh peoples, there are also cham ethnic (2,200 people, gathered at rural area of Thanh Y, Thanh Hai) and Chinese ethnic (1,110 people, lived many years and scattered throughout the city).
133. Results of the socio-economic survey shown that: 99.5% of people answered the questionnaire are Kinh, the remaining 0.5% are Chinese ethnic. The project area is inhabited mainly by Kinh ethnic. Although there are Chinese ethnic but not many, they are scattered, intermingled with the Kinh, they are economic migrants. Because they have a long life with the Kinh, so their customs and living habits are like Kinh. All ethnic minority households in the subproject area are learning to read and write Vietnamese and used as their main language. In their daily life, they immerse in the Vietnamese community, do not encounter any barriers whatsoever.
134. Thus, the minorities screening results as well as socio-economic survey in the project area show that, none of ethnic minority households and ethnic minority communities are affected disadvantageously due to the project implementation.

5 EXPECTATION AND AFFORDABILITY

5.1 Prioritizing fields for developing purpose in the area

135. The below table shows the surveyed results of 3 priority fields for the local infrastructure development purpose according to living standard of households.

Table 40: **Priority fields** for developing purpose in the area according to living standards of households

No.	Priority fields	Poverty group		Average group		Well-off group		Total	Rate
		Frequency	Rate (%)	Frequency	Rate (%)	Frequency	Rate (%)		
1	Upgrade the road	281	36.4	158	12.8	118	39.5	557	24.5

2	Upgrade electric network	118	15.3	260	21.0	80	26.8	458	20.1
3	Construct and upgrade water supply system	167	21.7	297	24.0	73	24.4	537	23.6
4	Waste water and rain water drainage system	177	23.0	491	39.7	85	28.4	775	34.1
5	Public hygiene works	129	16.7	236	19.1	50	16.7	415	18.2
6	Private hygiene works	136	17.6	129	10.4	17	5.7	281	12.3
7	Collecting waste	111	14.4	332	26.9	80	26.8	524	23.0
8	Cultural houses	134	17.4	154	12.5	54	18.1	342	15.0
9	Hospital/dispensary	120	15.6	283	22.9	73	24.4	476	20.9
10	Schools	103	13.4	258	20.9	67	22.4	428	18.8
11	Markets	96	12.5	220	17.8	30	10.0	345	15.2

136. Accordingly, the three top priority fields in the opinion of people by groups are little different, however, results summarized as follows: Priority No.1 - Waste water and rain water drainage system (34.1 Priority No.2 - Upgrading of roads (24.5%); Priority 3 - Construction and upgrading of water supply systems (23.6%). Survey results reflect fairly accurately the actual situation in the City because priorities are focused on three key issues which are local flooding after each heavy rain, dry season water shortages and road systems in many places still remain the only gravel roads or rocky soil, i.e. virtually ground only, not upgraded.

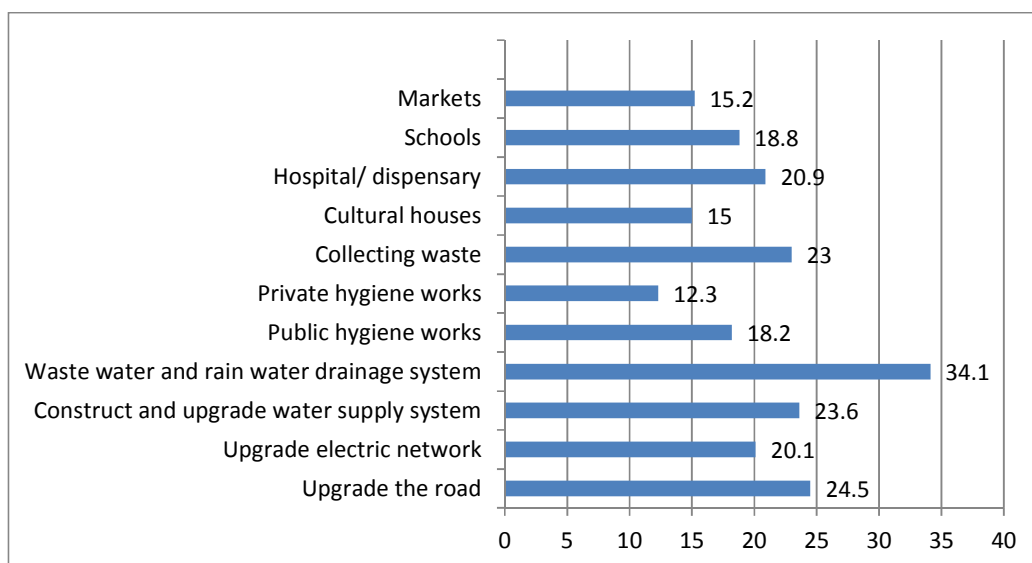


Figure 15: Priority fields for the investment

(Source: Socio-economic survey, 02/2016, N = 2276)

137. Considering this 3 investigation priority fields according to the gender, the differences are not much between male and female groups. For example, with rain-water drainage system, male group accounts for 34.7%, and female group is 33.0%. The same with roads upgraded field, the rate are 24.9% and 23.8%; construction and upgrade water supply system are 23.8% and 23.2%.

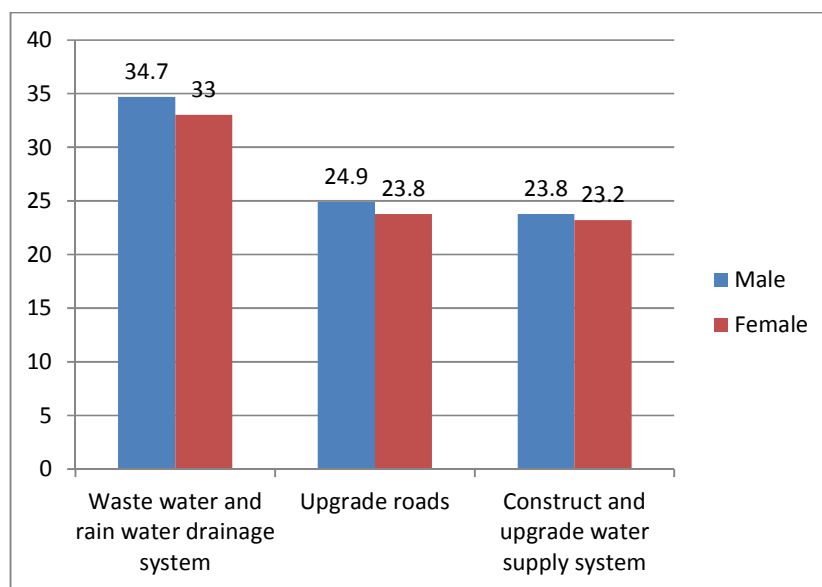


Figure 16: Investment priority fields by gender

(Source: Socio-economic survey, 02/2016, N = 2276)

5.2 Willing to contribute ideas and supervise during the project implementation

138. Through the meetings with local leaders within the project scope, the local authorities also expressed the desire for investment in rainwater drainage system and waste water, improving canals / ditches ... in the area, to minimize environmental pollution problems

in hot spots in the province, namely: along the canal Ong Co, Cha La, Tan Tai; or frequent flooding spots as 21/8 Road area, Stadium area, Le Quy Don road, Ha Huy Tap Street, Pham Ngu Lao street (near the Television station), Dong Dau outlet, Pham Ngu Lao Street, Ngo Thi Nham, Nguyen Du, Minh Mang- Tu Duc, Children's cultural house, Yesin- Thong Nhat, booster pumping station area on Tran Phu, Phu Ha-Tran Phu cross-road, Phan Rang market and Nguyen Thi Minh Khai street... At the meeting with the organizations, management authorities or with the advised households, the project policy receives high concurrence.

139. The household survey results showed that 81.5% of surveyed households said they are willing to join providing comments, such as participating in meetings, group discussions, to build project. The percentage of participants contributing to the project is quite high and there is a difference between male and female. The percentage of male (85.4%) are willing to contribute to the project is higher than females (75.2%).

Table 41: Rate of interviewees willing to providing comments by gender

Join providing comments	Male		Female		Total	
	Frequency	Rate %	Frequency	Rate %	Frequency	Rate %
Join	1201	85.4	654	75.2	1855	81.5
No join	205	14.6	216	24.8	421	18.5
Total	1406	100.0	870	100.0	2276	100.0

(Source: Socio-economic survey, 02/2016, N = 2276)

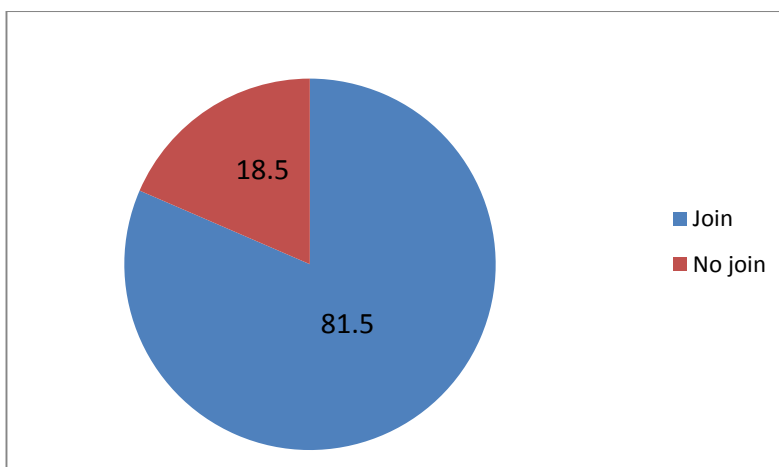


Figure 17: The rate of households ready for providing comments

(Source: Socio-economic survey, 02/2016, N = 2276)

140. Participation in monitoring the project implementation process, up to 60.3% of households answered always willing participants and 21.6% of households said they would consider. 13.6% of households said they would not participate in monitoring with the main reason is having no time. Considering this problem by gender shows that:
- There are 58.5% of male responding that are always ready for join the monitoring. This rate in female group is 63.2%;
 - The female rate selects the answer that will consider to join if appropriate, is 25.1%, more than female rate (15.9%).

Table 42: Rate of households ready to join the monitoring by gender

Join the monitoring	Male		Female		Total	
	Frequency	Rate %	Frequency	Rate %	Frequency	Rate %
Always ready	822	58.5	550	63.2	1372	60.3
Will consider	354	25.1	138	15.9	492	21.6
No join	230	16.4	182	20.9	412	18.1
Total	1406	100.0	870	100.0	2276	100.0

(Source: Socio-economic survey, 02/2016, N = 2276)

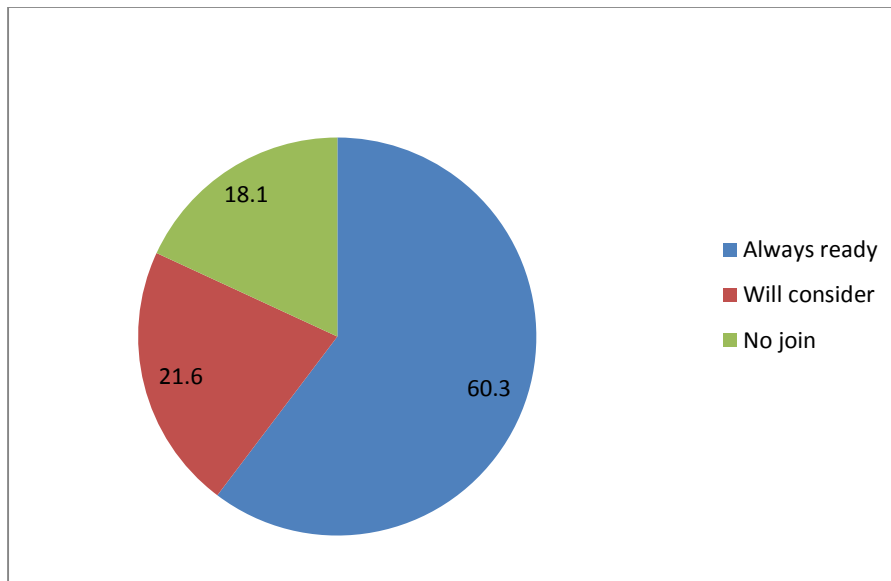


Figure 18: Rate of households ready for monitoring the project implementation process

(Source: Socio-economic survey, 02/2016, N = 2276)

141. Experience shows that the community is people that live and activities daily next to the project site, use and operate when the project complete, bear a direct influence on the life and long-term life, landscape and environment, and they are the most closely factor in the process of project implementation. Therefore monitoring based on community shall be the necessary activities to monitor and supervise the observance of legal regulations, findings and recommendations of the competent authorities to handle activities that violate Law and regulations on environment in the area of communes / wards, thereby contributing to prevention of harm public interest, causing environmental pollution in the process of investment and operation of the project. Therefore, with the willing participation of the people in the project area as mentioned above is one of the factors that help the project successful.

5.3 Demand to be connected with drainage system

142. When asked, "If there are programs to upgrade infrastructure for the region, you may wish to connect to the sewage system of the program?", Up to 78% of households replied that "yes and are willing to pay by themselves for sewage pipe connection to the combined ditch/sewer.

- This percentage is difference between the household groups by living standards, namely: poverty group rates the answer is "no" highest (accounting for 56.5%), followed by the average group (5.8%), and well-off group (3.3%).
- Considering the interviewers gender, this rate also has the difference, detailed: male group with the answer "yes and pay connection fees by themselves" accounting for 81.1%, higher than female group (accounts for 73%).

Table 43: Desire to be connected with drainage system of the project

No.	Desire	By living standard						Total	Rate	By gender			
		Poverty group		Average group		Well-off group				Male		Female	
		F.cy	Rate (%)	F.cy	Rate (%)	F.cy	Rate (%)			F.cy	Rate (%)	F.c y	Rate (%)
1	Yes and pay connection fees by themselves	322	43.5	1164	94.2	289	96.7	1775	78.0	1140	81.1	635	73.0
2	No	419	56.5	72	5.8	10	3.3	501	22.0	266	18.9	235	27.0

(Source: Socio-economic survey, 02/2016, N = 2276)

143. The reason for not connecting mainly because households want to take advantage of the waste water to the family garden for watering purpose; households were connected to the sewerage system of the city; no funding or have no idea about the project are the reasons why households answered "no".

5.4 Demand of improving toilets

144. The table below shows the survey results of needs improvement / new construction family toilet in the next 3 years of the surveyed households.

Table 44: Demand of improving/new construction toilet in the next 3 years

		By living standard								By gender			
N o.	Dem and of improvi ng/new constru ction toilet	Poverty group		Average group		Well-off group		Total	Rat e	Male		Female	
		Freq uenc y	Rate (%)	Fre que ncy	Rate (%)	Freq uenc y	Rate (%)			Freq uenc y	Rate (%)	Fre que ncy	Rate (%)
1	Yes and pay by themsel f	147	19.8	548	44.3	168	56.2	863	37. 9	513	36.5	350	40.2
2	Yes and propose for loan	115	15.5	54	4.4	11	3.7	180	7.9	89	6.3	91	10.5
3	No	480	64.7	634	51.3	120	40.1	1234	54. 2	804	57.2	430	49.4

(Source: Socio-economic survey, 02/2016, N = 2276)

145. Accordingly, the question of households improving toilet demand gains the following results:

- 45.8% answered "yes," while 7.9% is proposed for investment loans / renovation family toilets focused on poverty households. 54.2% of them answered "have no" needs improvement / new construction toilet. This result is entirely consistent with the fact that the number of responded households with its own septic tank up to 94.8%, but the majority of septic tanks are self-absorbed.
- Considering the interviewer's gender, the rate of female households with the answer of having demand to improve toilet is higher than male. Details: the rate of household" want to improve toilet and pay by themselves" in male groups is 36.5% while this rate in female group is 40.2%. The same with rate of household" want to improve and propose to borrow money" in male groups is 6.3% and female groups is 10.5%.

5.5 Desire receiving information from the project

146. When asked which information that Mr/Ms wants to receive from the project: most of them want to know more about the implementation plan of the project (account for 65.4%), next is the project activities accounts for 53.2%, project implementation duration is 44.1%, scope of affection is 35.3% and finally is project implementation expenses with 35.1%. Considering this issue by gender, there is not much difference about the desired receiving information from the project between male and female.

Table 45: Desired information received from the project by gender

Join the monitoring	Male		Female		Total	
	Frequency	Rate %	Frequency	Frequency	Rate %	Frequency
Action	761	54.1	450	51.7	1211	53.2
Implementation plan	929	66.1	560	64.4	1489	65.4
Expenses	595	42.3	204	23.4	799	35.1
Implementation duration	571	40.6	433	49.8	1004	44.1
Scope of affection	494	35.1	309	35.5	803	35.3
Total	1406	61.8	870	38.2	2276	100.0

(Source: Socio-economic survey, 02/2016, N = 2276)

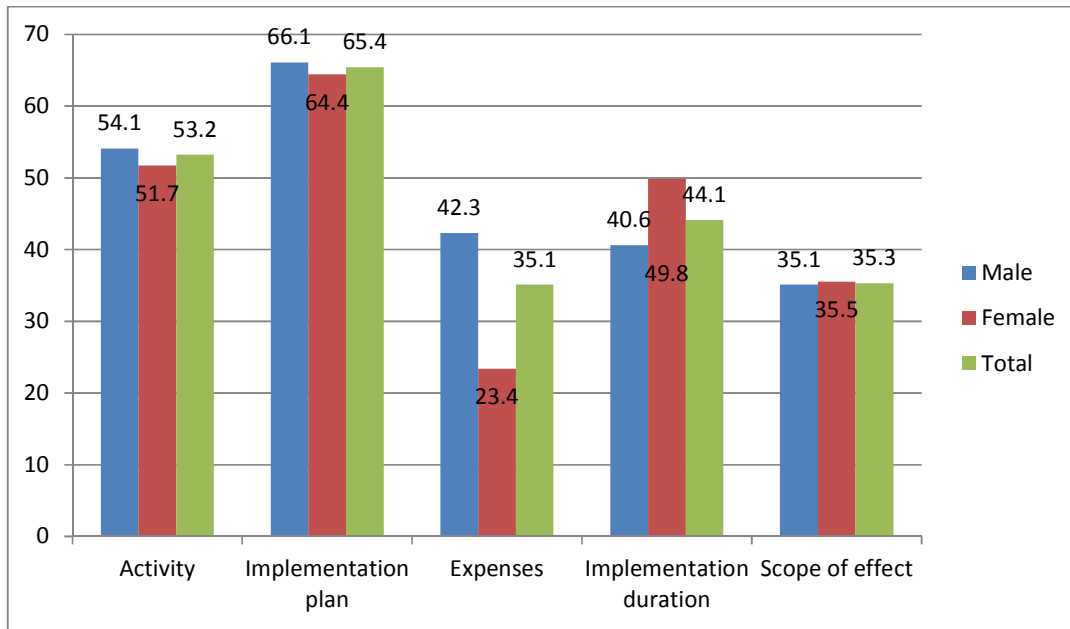


Figure 19: Information wanted to receive from the project

(Source: Socio-economic survey, 02/2016, N = 2276)

147. *Regarding the form of receiving information:* During the form of project dissemination information survey: most of people said that they select meeting form with the rate of 52.8%, next is local speaker/radio with 29.8%, leaflets form is selected fewest with 17.5%.

Table 46: Forms of receiving information by gender

Form	Male		Female		Total	
	Frequency	Rate %	Frequency	Frequency	Rate %	Frequency
Speaker/radio	406	28.9	295	33.9	701	30.8
Leaflets	252	17.9	167	19.2	419	18.4
Meetings	748	53.2	408	46.9	1156	50.8
Total	1406	61.8	870	38.2	2276	100.0

(Source: Socio-economic survey, 02/2016, N = 2276)

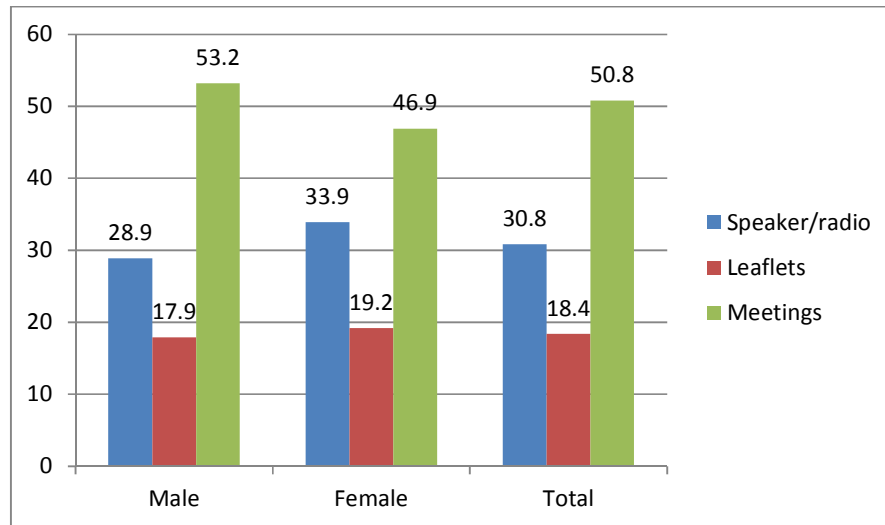


Figure 20: Forms of dissemination information

(Source: Socio-economic survey, 02/2016, N = 843)

148. *Regarding the frequency of receiving information:* When asked about the frequency of receiving information from the project: there are 80.6% of people answered that they want to know about the project information every month; 18,2% answered that quarterly, and 1,2% selected annually. Considering this issue by gender, there is not much difference.

Table 47: Frequency of receiving information by gender

Frequency	Male		Female		Total	
	Frequency	Rate %	Frequency	Rate %	Frequency	Rate %
Monthly	1152	81.9	682	78.4	1834	80.6
Quarterly	246	17.5	168	19.3	414	18.2
Annually	8	0.6	19	2.2	27	1.2
Total	1406	61.8	870	38.2	2276	100

(Source: Socio-economic survey, 02/2016, N = 2276))

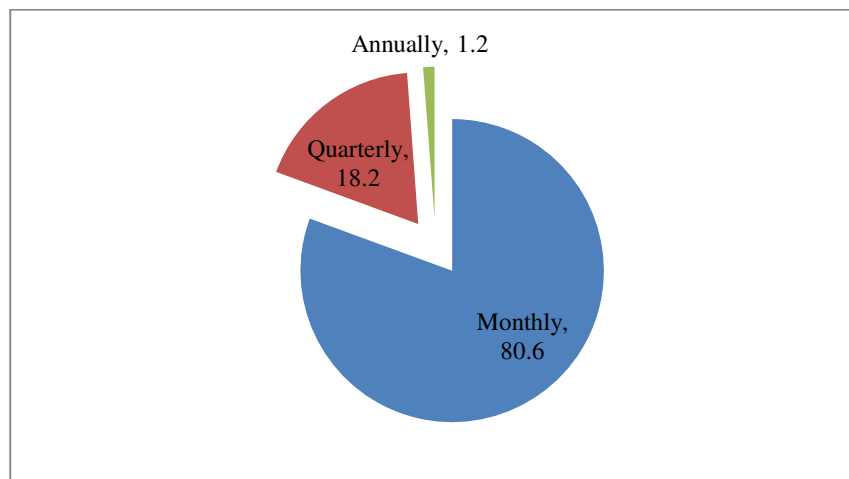


Figure 21: Frequency of receiving information

(Source: Socio-economic survey, 02/2016, N = 2276)

6 PROJECT IMPACT ASSESSMENT

6.1 Positive impact

149. Basically, this is a project with a multidisciplinary characteristic and most of impact on socio - environment in the operation phase is the positive effects, contribute to improve the sanitation and stimulate the socio-economic development of the City such as:

(i) *Improving the drainage capacity and reduce flooding points*

Putting component 1 into operation will solve the flooding issues of the city, limit and control the flooding points can newly arise. The green ring road along the canals, and lakes were built and renovated.

Besides, the improvement of the channel / trench also helps to ensure the ability to regulate water resources to promote agricultural production. Contributing to improve the lives of people in the benefited region: Ninh Thuan is the driest region in Vietnam, therefore, water is the urgent need of the people in the region. Lack of water has led to the exploitation of land also limited, many lands were abandoned by prolonged drought.

(ii) *Increasing the collection and treatment capacity of wastewater contribute to improve water, soil and air*

Component 1 also solves basically the wastewater collection for the South East of the city, expanding the scope of collection and treatment of wastewater. Ensure wastewater treatment for the project area.

(S=5,2ha)

At the same time, the renovation and new construction and rehabilitation of regulation lakes will contribute to microclimate lake, restore landscape and environment, and increase humidity areas, creating favorable conditions for formation and development vegetation, positive impact on ecosystems around the lake conditioning.

(iii) *Increase the capacity and effectiveness of waste collection*

Apart from these infrastructure investments, the content equipment procurement served of collecting, transporting solid waste in the whole city is also focusing on improving capacity in the solid waste collection in the city area. Along with that are the communication programs, raising community capacity in order to enhance the awareness of environmental protection of the people.

(iv) *Improving the sanitation of schools and public areas*

Improving sanitary conditions in some schools have missing or degraded toilets, the public park area, creating the comfort and convenience to local residents and tourists to the city.

(v) *Improving inner urban traffic and developing infrastructure for drainage system*

Component 2 with investment items expanding and lengthening of alley 150, 21/8 road (L = 980 m, B = 11-15 m) and Huynh Thuc Khang Street (L = 920, B = 11-15 m) with paved roads 4.5-7.5 m in wide and complete infrastructure such as rainwater drainage, wastewater collection, green trees system, sidewalks, lighting, technical culver box and safety traffic systems ... After putting into operation, it will reduce the traffic jam in 21/8 road due to sharing the traffic flow on Phan

Dang Luu street. It creates space for the construction of drainage and infrastructure as well as favorable conditions for development of urban land along the route of this connection.

- (vi) *Improving the operation, management capacity for Project Management Unit, departments, public agencies and companies involved in the project*

The impact is achieved through workshops, learning experiences, preparing management process; deploying of community communications program to raise awareness of environmental protection for the people in the project area.

- (vii) *To ensure the sustainability of technical and financial issues after completing the project*

With the support for project implementation through international tender package of management consulting, construction supervision, auditing, independent consultant for technical assistance under the provisions of the World Bank and consulting packages and management according to the regulations of the Government. Support for institutional reform to promote efficiency sector during the operation and ensure the sustainability of the projects, and share experiences with other localities on ODA project management of drainage field, environmental sanitation.

- (viii) *Minimizing environmental and social impact on the people affected by the project, improving and enhancing the quality of life for local people and tourists*

The impact is achieved through independent consultancy packages on social safeguard and resettlement; environmental monitoring under the provisions of the World Bank and consultancy/management packages as regulated by the Government.

- (ix) *Impact on gender issue in the project area*

The lack of water in the production creates a lot of unprofitable effects to the people in the locality. In many areas, due to the lack of water, both men and women often must spend certain periods of the day to carry water serving for family and production, for the single women's families or elderly people, this problem is more difficult than other families.

6.2 Negative impact

6.2.1 Negative impact on obligatory resettlement

150. Involuntary resettlement is resettlement impacts unable to avoid in during project implementation, in which affected people (APs) who have to rebuild their homes, property and income restoration. APs include those who have land acquired by the project financed by the World Bank and led to: Must displaced or loss of shelter; Property loss or loss of access to those assets; Loss of income sources or means of livelihood, whether the person affected or not to move to another place; and restricted access to the areas that are required by law or protected areas detrimental to the livelihood of the affected people.
151. According to the survey and initial assessment, the implementation of the 03 components of the project is expected to have 947 affected households, of which 118 households resettled and 479 households to be severely affected due to more than 20% acquisition of productive land (10% for poor households and vulnerable households).

152. Other risks from involuntary resettlement:

(i) Lack of employment and income of some famers suffered from land acquisition

Lack of employment and income of some famers who have land acquired by the project is one of the most concerned problems in the project area. With the region's population depending on agricultural activities to make life, employment opportunities depending on natural crop and the lack of skills and low educational attainment will limit more and more the ability of the people in obtaining non-farm employment to generate income. Most of the respondents expressed their desire for "land for land" for agricultural land lost. However, in the absence of compensation of land for land under option, the person is asked for new employment opportunities and expressed a willingness to participate in skills training to get another job. While the respondents choose compensation under land for land, they also feel that they can have a more stable source of income if they are trained the appropriate skills to have a job outside of the agricultural sector.

For workers with low levels of education, overall trend is the percentage of workers unemployed (unemployment) increased. This is the most pressing social problems and difficulties in the labor market because their education level is not eligible to participate in vocational Trainings; they are missing business ideas, are not involved in labor export market ... Meanwhile, the majority of workers with low education levels fall into the low-income households, belonging to agricultural households and difficult economic conditions. Therefore, to help these labor subjects to meet labor market needs, we should focus on support issues raise education levels under various forms when acquiring the agricultural land.

The special groups are likely to be disproportionately affected or at risk of further impoverishment due to the resettlement impact, including: (i) female householder (no married, widowed or their husband is incapable of working) with dependents, (ii) the disabled (unable to work), helpless old people, (iii) the poor according to the criteria of MOLISA, (iv) who do not have land, and (v) ethnic minority. The compensation and recovery support for the affected people should consider applying exceptions to those who are vulnerable, because they may need more time before being affected in terms of livelihood or relocate. The other support as the economic recovery support, training and other forms of assistance will be provided to the affected people who lose income, especially vulnerable groups to increase recovery ability and improve future income.

(ii) Relocation of graves

Results of the survey showed that, in the project area, there are still some graves scattered, spontaneous acres located between the crowded residential area. The technical plans are carefully studied in order to minimize the impact to move the graves. However, in cases in cases where these impacts are unavoidable, Household and individual have to move the graves will be arranged land and excavation, relocation, reburial and other related costs which are necessary to satisfy customary requirements. (Reference resettlement Plan prepared for subproject, the resettlement policy framework of the project).

(iii) Poverty

In the case of project area has a large numbers of people easy back into poverty when undergo external shocks, the potential disruption of production operations as well as loss of productive land for construction time there are a huge negative impact on the lives of people. Through consultation with local authorities, livelihood issues are recognized as powerful factors influencing the situation on poverty and the difficulties in creating income in the project area, and the restoration in income, as part of the social assessment or resettlement plan of the project is necessary.

(iv) Limited approaching

The proposed investment items of project will pass through agricultural lands and residential land in many places; interrupt the assessment to productive land, workplaces and public buildings, utilities. The project is also easy to disrupt daily life and social networks of people.

153. Therefore, the impact level shall include land acquisition, occupation, livelihood affected; thus, the resettlement plan (RP) need to be prepared for the project, comply with the World Bank policy for the forced resettlement as well as Vietnam law in order to minimize the unexpected impacts on the effected households.

6.2.2 Impact on safety, health of the community

154. During the construction phase, there are more construction workers and migrants to participate freely construction / other services ...so medical and health care work for community of the clinics will be more difficult in case of disease; During this period, labor accidents can occur, if do not comply with the regulations on labor safety, because materials can be spilled, transportation equipment can be guaranteed, everyone can be drive fast and overtake dangerous ... Most of them are local labors because they have not mastered the technical process, when workers were too tired to work overtime, or because of a problem when operating machinery.
155. The activities which arise waste and waste water, development of services, animal feedings of households, workers and residents to participate in the current service activity in the construction process ... will create dirty holes, puddles that unhygienic water sources, air pollution, creating conditions for the flies, mosquitoes thrive and can cause disease outbreaks appear as diarrhea, dengue fever , malaria without the prevention, treatment and maintain good hygiene.

Issues arising social evils

156. According to the Statistic Office of Phan Rang - Thap Cham 2014, the number of HIV infections in the Phan Rang - Thap Cham city in 2013 and 2014 were 5 people and AIDS patients were 6 people (in 2013) and 4 people (in 2014).
157. Many respondents expressed the concern that external labor serving for construction can affect the social order at the local project site, causing social insecure. When construction workers entered on the project area, they will be there in the time of construction and communicate with local people. The movement of groups of construction workers may involve people, who want to do business with them, which may also include prostitutes that local people see it as the "social evils", including prostitution, drug abuse and other vices such as theft because most construction workers are men living away from home. The people of the project area also hope that the project will be done by a good management system for the construction workers to be

well managed to ensure no conflict between the workers and the people in the area project area.

HIV/AIDS and other overlapped infectious diseases through sexual behavior

158. The Project impact relates to the increasing of HIV/AIDS infected risks. The women are under of HIV/AIDS infected risks, traffic safety more than men.
159. The increase of HIV / AIDS and sexually transmitted infection, particularly through prostitution is often the risks associated with large scale construction projects. These effects become more serious when the project has a large number of construction workers travel to and temporary residence in the project area. .
160. In the case of this proposed construction project, it is expected the majority of construction workers come from rural areas and the need for large numbers of workers camps. These include risks associated with human trading and drug using.

6.2.3 Other environment-social impacts

The temporary impact on economic activities of the project area

161. The construction activities in general related to the project implementation process are also capable of disrupting economic activities in the project area. Especially construction of roads, canals ... easily disrupted production activities in the project area by:
 - Require traffic through other routes or reducing the number of lanes that can be used;
 - Limiting trading activities of stores, restaurants and other businesses along the route due to land acquisition;
 - Obstructing external resources in the project area; and
 - Obstructing the product stream from the project area to the outside for trading;
 - Construction phase can have many indirect negative impacts to the economic activity of the region related to the direct effects mentioned above.

Dust and Noise Pollution

162. It is expected that the construction phase and operation of the proposed project will increase air and noise pollution, affect to local residents.

7 MITIGATION MEASURES AND INTERVENTION

163. Coastal Cities Sustainable Environment Project, such as assessment surveys and public consultations show that it will bring great benefits, both immediate and long-term for the residents and communities in the project area in particular and Ninh Thuan province in general. Specifically the project will maintain effective environmental investments and strengthen the institutional reform programs related to the field of environmental sanitation of the city in the project. However, during construction and after the project completion, it may appear some negative factors affecting the life of people and communities in the project area. These negative factors are essentially from problems such as land acquisition and resettlement, social evils...
164. The positive impact of this project is outstanding and mainly, the negative impact is minor and can be overcome by compliance with the policy frameworks, regulations, guidelines, and plans of the project, the donor and the Government. In addition, negative impact mitigation measures and intervention will include the following activities:

7.1 Preparation and implementation of communication plan, Community and Participants

165. During the preparation phase, the project implemented public community several times to minimize the risks related to the negative effects that may arise and to establish communication channels. Due to the foreign loans project, compensation level for a place with coexist types of investment to support compensation policy inconsistency will generate complaints so the province will have to issue the direction guide document for the implementation of the inventory, payment, replacement price of the project based on the resettlement policy framework of the project, approved by the Prime Minister. Project Management Board coordinates with local authorities in propagating widely in the community about the project investment objectives and policies of the project to the community for clearly understanding.
166. Based on the survey results of actual communication condition and the community desire in receiving the information from the project with project target, and action plan of media and public consultancy have been prepared and shall be combined in the project activities.

Table 48: Community-based participatory and communication plan

COMMUNITY-BASED PARTICIPATORY & COMMUNICATION PLAN	
1. Objectives	
<ul style="list-style-type: none"> ▪ Enhancement of information access to the local residents in project area; ▪ Local residents are informed, updated with the plan of project construction in order to arrange the plan for their production and daily life activities; ▪ Information for development: increase possibility to access the information used for local people's life, contributing to improve life quality; ▪ Enhancement of participation of the local residents. 	
2. Subjects to be communication and consultation	

- The local residents in wards/commune, especially in the area of construction projects and villages/hamlets having the means transporting the building materials through
- Local authorities, village officials/neighbors
- Workers and staffs involved in works construction
- For the community, encourage the participation of both male and female, ethnic people (if any)

3. Contents for communication and consultation

- Contents, main items of sub-project, financial sources for implementation;
- The effect brought about by the sub-project;
- Organization of sub-project construction in locality: information about investors, contractor, monitoring to be conducted;
- Plan, schedule for constructing main works items;
- Impacts might be happened in the construction process which affect environment and society of the area and local people in project area;
- Participatory mechanism of local people, community monitoring mechanism, grievance and complaints redress mechanism;
- Issues found during the implementation of the project: reveal, conflicts, flammable materials, contractor's and investor's violations to the commitment ...
- Announcement of recruitment of unskilled labor of the locality participating in construction activities

4. Time:

- Before and during the construction of sub-project.
1 month before the construction, contractor will collaborate with local authority to inform construction plan as well as potential impacts related to the community health.

5. Location:

- In wards/communes belonging to the sub-project construction area

6. Methods of communication and consultation

Communication and consultation through the following methods:

- Communication through ward/communal radio. Currently, in whole area of the city, there are radio systems in all villages. Most of other communication activities of the locality to community have been conducted through this method. Therefore, radio will be used to disseminate the related issues during the period of sub-project construction to local people in communes.
- Community meeting/public consultation: This method will be conducted with the participation of village officials in whole communes of project area; local people in the communes belonging to the project areas, sub-project construction site and households along the construction material

transportation route or in the area of waste disposal site.

- Communication combined with the activities of unions or local authority: Every month, local authority often has the meeting with communal official and unions in villages, therefore, the communication contents can be combined in these activities.

7. Implementer:

- Before the implementation of the project: Safety policy consultant will be the unit to implement communication and public consultation activities in terms of issues about safety policy in general.
- During the implementation of the project: Project management unit, contractor will collaborate with local authority and social unions, villages' unions to conduct the formulation and implementation of communication activities by the above-mentioned methods.

Stakeholders will receive the support from domestic and international institutional experts as well as domestic and international social and gender experts

8. Monitoring of the implementation

Communication and public consultation plan related to the participation and monitoring of the following units:

- Project management unit.
Project management unit will be responsible for monitoring in general all activities of the project, in which there are communication plan, consultation with the community involvement. Issues related directly to residents on environment, social, compensation for affected property are also the contents reflected in the grievance redress mechanism of the project.
- Local authority of the communes belonging to sub-project area.
Communal authority is responsible for all issues in the commune. Communal authority can assign Community monitoring board to observe communication and consultation activities in their locality.
- Contractor.
Leader of construction works will be the person on behalf of contractor to collaborate with local authority to implement communication activities, consultation with the involvement of community and workers in the construction site.

7.2 Preparation and implementation of Resettlement Plan

167. Despite every effort has been made to avoid land acquisition and resettlement of local residence but land acquisition and other properties of the people are inevitable. At the request of World Bank, the project will establish resettlement plan for this subproject. This plan reflects how the project will minimize the loss of the project affected people and restore their livelihoods by compensation, support, and / or subsidize them. The overall objective of the Action Plan for resettlement to ensure that all affected people are compensated according to the replacement cost of their losses and provide supportive measures for their rehabilitation so that they can restore their livelihood - at least as pre-project levels.

168. When asked about the idea of compensation / resettlement assistance, most of people are keen to be adequately compensated and supported to take shelter and a new life more stable, and proposal to be compensated at market rates. On the other hand, people are also worried about the problems of project progress, want the project to be promoted rapidly, the compensation, supporting and land clearance works are done fast, completed, fairly so that the people can have a stable new life quickly. These opinions also need to be considered and handled in the Resettlement Plan of the subproject as well as compliance Resettlement Policy Framework of the Project, Resettlement Policy Required - OP 4.12 of the World Bank and the current regulations of Vietnam.
169. For more information, please reference the **Resettlement Plan of the Subproject** which was made in Feasibility Study / Design details stages. This report will be evaluated and appraised by Vietnam and the World Bank sides before approving the project.

7.3 Preparation and implementation of Environment and Social Impact Assessment (ESIA)/ Environment and Social Management Plan (ESMP)

170. Social and environmental impacts caused in the sub-project implementation and mentioned in the negative impacts of the project have been identified, evaluated and recommended measures to minimize the negative impact of the Report on environmental impact assessment of the sub-project. Accordingly, during the entire process of sub-project activities, the employer has committed:
- Strictly comply with regulations of Vietnam Environment Protection Law as well as the Policy of World Bank in environmental safety.
 - Implementing the environment protection measures, minimize environmental impact mentioned in Chapter 4 and implement Environment Management, Monitoring Program for the project mentioned in Chapter 5 of this Report, implement the commitments with the communities as mentioned in Chapter 6. The employer also commits to compensate and overcome the environmental pollution when environmental incidents, risks happen during them project implementation, to recover the environment according to the regulations of environmental protection law when the project operation finishes
171. For more information, please refer to the **Resettlement Plan of the Subproject** which was made in Feasibility Study / Design details stages. This report will be evaluated and appraised by Vietnam and the World Bank sides before approving the project.

7.4 Prepare and implement well the community health care plan

172. Good control the unprofitable effects and the risk to community; Prevent proactively diseases arising in the construction phase. While effectively responding to the epidemic cases arise. Strengthen communication and health education to the people, the local authorities about the risk of disease potential arising in the course of subproject construction.
173. These below are Action plan of Community health:

Table 49: Community Health Action Plan

COMMUNITY HEALTH ACTION PLAN

1. Objective

1.1. Overall objective

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

- Enhancement of communication and education on health for workers, residents and local authority on risks of potential disease outbreaks during the implementation of sub-project;
- Control negative impacts and risks to public health during the implementation of sub-project;
- Actively prevent the diseases emerged during the implementation of sub-project, simultaneously respond effectively in case of diseases emerged;
- Control tightly occupational safety issues inside and outside of implementation places, prevention of the factors causing occupational unsafety.

2. Responsible for implementation

2.1. Responsible person/agencies

- Project management unit (PMU);
- Social safeguard consultants;
- Contractor;
- Local authority of the project area;
- Communal medical station;
- Workers;
- Local authorities.

2.2. Detail responsibilities

- PMU: in charge of overall monitoring of all project activities, in which there are communication plan and consultation of public health. Issues related to public health is also one of the contents reflected in project's grievance redress mechanism;
- Social safeguard consultants:
 - Supports the local government to prepare the contents of mass media propaganda program about the preventing the diseases; preventing the labour accidents; the contents of mass media propaganda in order to provide the knowledge, increase the awareness of community (including worker, the local residents, the local organizations, PMU);
 - Monitoring of the complaint and resolve complaints related to health issues impacted by the subproject;
- Contractor:
 - Assign the leaders of works or a worker responsible for the labour

safety and the health of workers to observe and support related issues;

- Collaborate with communal medical station, medical staff of villages to timely update the situation of diseases in the area or issues of workers' health which can be spreaded;
 - Collaborate with local authority, medical station to inform issues related to the safety of the residents in construction site or construction materials/waste transportation route;
 - Collaborate with communal people's committee/medical stations to have collaboration mechanism in dealing with accidents or disease when those happen;
 - Leader of works will be the person on behalf of contractor to collaborate with local authority and implement the communication activities, consultation related to community health and workers.
- Local authority of the project area:
 - Responsible in overall for all issues in the communal area. Communal authority can assign Community monitoring board to observe the communication and consultation activities in the locality;
 - Communal people's committee/medical station actively checks the sanitation and occupational safety in construction site and workers' camps.
 - Communal medical station:
 - Has function on management, monitoring and first aid and report about issues on public health in communal areas. Therefore, issues related community health can be observed, monitored and support from this unit.
 - Workers:
 - Participate in communication events on health issues in the area;
 - Comply with regulations on occupational safety and sanitation.
 - Local people:
 - Participate in communication events on health issues in the area;
 - Comply with regulation on occupational safety and sanitation;
 - Have awareness to prevent impacts during the implementation of the sub-project from themselves, their family and community.

3. Location to implement

Planning community health management will be implemented in areas where the activities related to the project such as: the construction area of the subproject; workers' camps; commune/wards in the project area.

4. Time to implement: Before and during the implementation of the sub-project.

5. Indicators for monitoring and management

- Document to guide first aid/response to diseases and accidents used by

contractor and provided to workers;

- Communication documents on public health of the sub-project;
- Direct communication events to workers, residents and public;
- Number of workers instructed/trained about community health related issues;
- Number of residents instructed/trained about community health related issues;
- Number of occupational accidents due to implementation of the sub-project;
- Number of traffic accidents due to means for implementation of the sub-project;
- Times/number of workers to be sick, especially affected by infectious diseases;
- Availability of medicine for workers in the camp;
- Number of residents having health problems related to the implementation of the sub-project, especially infectious diseases.

6. Implementation budget

- For contractor: Budget source for contractor include in contract for implementation and construction.
- For medical station: No budget for this activity because it is responsibility of medical units in community health management.

7. Contents of the community health action plan

7.1. Control the sub-project construction areas

In order to protect the environment and human health, construction area must be tightly controlled in order to reduce the access of residents. Before the construction activities, contractors will apply the measure to maintain security and control the access of those areas. Contractors will zone the construction areas; put the flag to the tree, bush and fixed points in the construction areas which are not allowed to be touched; and boundary areas to prevent coming in and out of the areas. The risks inside the construction areas include excavation and embankment of the land and moving the machines, hence, only construction workers are allowed to get in those areas. This information will be informed in the meetings and reminded again and again in the communal radio system.

7.2. Prevention of construction waste discharge to outside

Construction waste must be collected and transported to the disposal sites which were identified before the construction. The waste transportation containers must be covered in order to prevent dropping and scattering, which may affect the environment and local people's activities and lead to health problems.

7.3. Risk of outbreak and spread of epidemics

- Diseases, especially the infectious diseases are usually present in the project area
- Risks of the spread of infectious diseases or risks to public health

caused by workers from elsewhere coming to temporarily stay in the locality, and vice versa

7.4. Avoid individual injuries

- Workers who directly participate in construction must be equipped with workwear, mask, gloves, hard hat, etc. following the current regulations on occupational safety. Disseminate the knowledge on sanitation and occupational safety to all workers.
- Local people need to be controlled the access to construction areas as same as part 7.1.

7.5. Respond to urgent situations

Provision of contact address: The contractor and locality must provide local people with address and contact telephone number in case of emergency. Provide the map to the closest medical agencies.

Incidents can be occurred during the construction of the sub-project include: vehicle or construction machine accidents, fire or environmental incidents.

When incidents occur, related people at the site must contact the above address.

In case of accidents, need to provide first aid to the victims before bringing them to the medical facilities. In case of fire or environmental incidents, need to zone incidents' area and contact related agencies for solution.

In case of natural disasters, such as earthquake, flood or dangerous weather condition, the contractor will stop all activities of the works and bring workers to the safe areas. Working areas will be covered in order to avoid the situation of leaking chemicals to outside and machines are not tied, which can be affect the community.

7.5 Prepare and implement well the gender action plan

174. The questionnaire survey for households and public consultancy show that employment opportunities and the ability to adapt to changing careers is an obstacle for women, particularly women in agricultural field at the age of over 40. In fact, women are now engaged mainly in agricultural production, the project will affect agricultural land and thus increase the risk of unemployment for women. This can be minimized if local women, especially women in the affected households are given the opportunity to participate in vocational training programs, strengthen capacity and communication campaigns raising awareness of hygiene, traffic safety or the prevention of social evils, etc.; prioritize the allocation of suitable jobs for women when implementing the categories of projects will also reduce unemployment for women and create incremental revenue opportunities for affected households. In the process of project preparation, the consultants ensure the participation of women in community consultation sessions, in-depth interviews as well as surveyed households at the rate of 30%.
175. The income of households in general and women to have income through unskilled jobs during the construction of project. But job arrangement are both employment opportunities as well as potential threats to themselves by facing the problems not just safety but also risks of abuse. Some other issues are also potential risks such as problems of traffic safety; recruitment discrimination in jobs not requiring skills from

contractors of the project ... should be noted. Gender issues need to be considered as a risk and shall be combined in Gender Action Plan (GAP), which is mentioned in details as below:

Table 50: Gender action plan (GAP)

GENDER ACTION PLAN			
1. Principles of gender action plan			
<ul style="list-style-type: none"> ▪ Opportunity of the project and sharing benefits and equality between men and women; ▪ Systematic measures in order to reduce gender inequality in the project area of the activities related to repairing and enhancement of safety of dams, reservoirs; ▪ Targets approaching method applied to poor women; ▪ Collect the analysis data on gender including monitoring and evaluation activities designed by stakeholders; ▪ Create favorable environment to support the capacity building and participation of women in all stages of the project on gender; ▪ Enhance the presence of women in the decision-making agencies in all level. 			
2. Bases to develop gender action plan			
<ul style="list-style-type: none"> ▪ The legal documents of Vietnam and the donor's policies; ▪ Results of gender analysis in the locality of the project; ▪ Specific activities in the implementation of project components 			
3. Outputs			
<ul style="list-style-type: none"> ▪ Raise awareness on gender for managers in local authority and local residents; ▪ Raise awareness of local residents including both men and women on positive and negative impacts of the project; ▪ Ensure the women participation rate (at least 30%) in community monitoring board; ▪ Ensure the women participation rate (at least 30%) in consultation activities of the project; ▪ Ensure the participation of women and men in the area in communication activities in order to reduce negative impacts of the project; ▪ Ensure the equality on approach opportunity and benefits of women and men in the public in the programs with the purpose of reducing negative impact on health during the implementation of the project; ▪ Ensure the equality on approach opportunity and benefits of women and men in livelihood support program, especially single women, poor women and women in ethnic minorities. 			
4. Gender action plan			
Result of the project	Activities and indicators	Responsibility	Time

Output 1. Implementation of investment items of the subproject				
Improvement of possibility for rain water drainage and reduction of flooding points.	Contractor must prioritize to use unskilled labor (through sub-contract); at least	PMU/project coordinator will have responsibility to ensure those terms to be written in the contract; communal officials will	During construction period	the
Enhancement of ability for wastewater collection and treatment, contributing to improving water, soil and air environment.	30% of total labor are unskilled labor in locality; Among 30% of local labor, prioritize unskilled female labor; female and male labor will	submit contractor the list of people who want to work for the project; Communal officials have the responsibility to ensure the achievements of objectives. Communal women union		
Enhancement of possibility and effectiveness of waste collection.	receive the same amount of salary for the same type of work;	has the responsibility to ensure that women in the communes will be hired for the project.		
Improvement of sanitation conditions of schools and public areas.	Contractors must not hire children labor; The residents who want to work for the project need to write their names in the list of the village. Village leaders and communal officials will provide this list to contractor and contractor will select based on priority order of poor households, vulnerable households;			
Improvement of traffic condition of inner urban areas and development of infrastructure for drainage system.	Enhancement of awareness on HIV/AIDS and STD ³ prevention for workers of the project; Directly consult poor women/women who are heads of households during the implementation and planning process of wastewater			

³ Sex Transmitted Diseases

	collection system; 30% of representative of Community Monitoring Council is women and trained about planning and technical monitoring; The toilet of women and men in construction fields must be separated.			
Output 2. Enhancement of institutional capacity to manage investment items				
Targeting the representative of women in the field of decision making and training	Training on awareness on gender for project officials to increase the knowhow on sensitive gender issues Achieve target of hiring 30% of women officials in PMU and companies/ enterprises operating investment items, especially in the technical position. Ensure 50% female official to participate in training on management and operation. Collaborate with Women Union to formulate the plan and disseminate the information, education and communication (IEC) to male, female and local authority's representative targets IEC documents on gender integrating the issues and demands of women will be disseminated	PMU and companies/ enterprises operate investment items Women's Union Local authority	During the stage/ implementation throughout project implementation	design initial and the

	through channels that women can access. Ensure that 50% trainees of IEC are female.			
Output 3. Raise public awareness on project activities and improvement of environmental sustainability				
Enhancement of communication and participatory public consultation	Reference Communication plan, participatory public consultation; Ensure the participation of women (at least 30%) in the consultation activities of the project; Raise awareness of local people including both male and female on negative and positive impacts of the project; Ensure the participation of women (at least 30%) in community monitoring board.	Project management unit; Communal authority; Contractor	During the implementation of the project	
Raise awareness of potential social evils for easy-to-be-vulnerable targets, especially women and ethnic minorities	Reference Action plan for public health; Information on risk reduction will be disseminated to project affected communes and villages because the project use participatory approach with the focus on poor households and vulnerable households Documents and information must be consistent and suitable in terms of	Project management unit; Contractor Local medical center Communal officials Women's union will coordinate to create bigger strength in HIV prevention activities	During the construction stage	

	language, culture and gender, especially, it is necessary to translate too many ethnic minorities' languages depending on each area.			
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7.6 Disclosure of information, social accountability and supervision

176. In order to ensure the participation of affected communities, families, local governments and organizations involved in sharing information on projects, advising on selection of technical options expected impacts on land, income and assets on the land ... the disclosure is an important contribution to promoting the progress of the project during implementation, preparation, and when the project went into operation with the consensus of the community, the government, and the project management unit. This will minimize the possibility of conflicts arising and other risks, increase investment efficiency and social significance of the project.

Table 51: Disclosure, Accountability and Monitoring

<p style="text-align: center;">DISCLOSURE, ACCOUNTABILITY AND MONITORING</p> <p>1. Consultation and disclosure</p> <p>The main objective of the disclosure and the public consultation is to ensure the participation of the affected community, family households, local governments, relevant organizations to share information about the project, to consult for selection of technical options, expected impacts on land, income and assets on the land ... The disclosure is an important contribution to promoting the progress of the project during implementation, preparation, and when the project goes into operation with the agreement of the community, the project management unit. This will minimize the possibility of conflicts arising and other risks, increasing the efficiency of investment and social significance of the project.</p> <p>The program of disclosure of information and the public consultation must ensure:</p> <ul style="list-style-type: none"> ▪ The local authorities as well as representatives of the affected local residents will be involved in the preparation of the project and the process of decision-making. The project management unit will work closely with the communes/districts in the process of an implementation of the project. The involvement of the affected local residents in the implementation process will be continued by asking the communes/districts for inviting the representatives of the affected local resident to participate in members of the committees of compensation and land clearance and resettlement and to partially participate in the resettlement activities. ▪ Share all information on items and activities of the project as planned to the affected people. ▪ Collect information about the needs and priorities of the impacted people as well as receive their feedback on the proposed policy and activities. ▪ Ensure that the affected people can be fully informed decisions affecting

directly to their income and life and they have the chance/opportunities to participate in the social activities and decision-making on issues affecting directly to them.

- Ensure the transparency in all activities relating to land acquisition, compensation, resettlement and restoration.

For the World Bank, the people impacted by the project need to be fully informed and must be consulted about resettlement and compensation plans. Consultation is the starting point for all activities relating to resettlement. The people affected by the resettlement may worry that they could be affected their livelihoods and relations with community, or they fear that their benefits are not ensure. Being participated in planning and management of their resettlement helps them ease fears and bring the impacted people the chances to be participated in decision-making for what will affect directly to their lives. The implementation of the resettlement without consultation may lead to an inappropriate strategy and ultimately ineffectiveness. Without the consultation, the impacted people may react negatively to the project, causing the social difficulties, significantly slowing the completion of the target, or even ignored, and the cost will increase. Therefore, when there is consultation, the initial opposition of the project can be translated into constructive participation.

For Vietnam, the next important step in strengthening democracy at the levels is Instruction No. 30-CT/TW of the Central Committee of the Communist Party of Vietnam "Construction and implementation of grassroot democracy", Decree 79/2003/ND-CP of the Government promulgating the Regulation on the exercise of democracy in communes, wards, towns and then the Ordinance on the exercise of democracy in communes, wards and townships also regarding this issue. The crux of this legislation is the famous slogan "people know, people discuss, people do and people check"; Ordinance 34/2007/PL-UBTVQH11 points out what problems that the local government and community consult before the authorities make the decision; including setting the plan to compensate, supporting for resettlement related to the project, the works on the areas of ward/commune; Article 67, paragraph 4, 2013 Land Act publicly request Compensation, Supporting Policies Of Resettlement Plan to the affected people.

Thus, consultation and involvement are innovations in the implementation of the project in Vietnam. This policy will recorrect the shortcomings in the process of deployment and implementation of the project because both, the local residents and people implementing the project are inexperienced in this field.

The following points should be noted in order to encourage the relevant sides to join the consultation process and in the project:

- Identify and attract all the relevant sides the, especially the local resident living in the project areas, the impacted people (men, women, the poor, ethnic minorities ...), to participate in the public consultation;
- Develop strategies of participating in planning, implementation, monitoring and evaluation of the project.
- Set up the contents, subjects needing for the strategies to promote and announce the information, set up the procedure that the impacted people can negotiate about the their rights and interests.
- Attracting the relevant sides in decision making in all processes of

implementation of the project (eg the design plans, compensation methods, impacted person consultation, way of compensation, the schedule of implementation, etc. ..).

- Establish a schedule to complete the activities for example the campaign to provide information, the level and form of compensation, benefits, location and plan to relocate.
- Develop a schedule to complete the activities for example campaign to provide information, degree and methods to compensate, benefit, location, plan to relocate.
- Develop the procedure to resolve the complaint.

The public consultation also often needs to be made with the unit setting up and designing the details of categories of the project This ensures the proposed design has the participation of the community and limits the negative impact to community. This also helps the project be friendly to the community and person using.

Consultations also should be carried out with the relevant sides, including the units responsible for managing, operating the works, ensuring that they are consulted and they has their comments about designs.

In the process of the construction, the owner of the project should announce on the means of mass media about the activities of construction and expected schedule, the measures to support the local resident affected and processes to acquire and feedback information from the all sides of the community. Affected people (APs) will be informed about the policies and procedures of the project to ensure their later life did not change much. Affected people will be notified if they have any questions about the project, the project management unit can help solve.

Content and form of consultation/information disclosure

Consultation content	Mode of consultation and disclosure	Time	Implemented by
Information on Design plan and technical plan of sections	Meeting with the local government of ward/commune, relevant departments, unions, representatives of the impacted households.	The process of survey and design of the project.	Consultant, PMU
Information on Land acquisition, land clearance and compensation.	Officials of ward/commune and PMU consult the impacted households to have the initial assessment. Develop the plans to revoke, compensate and negotiate with APs before submitting the authorities to make decision. Disclose the policy and answer questions through meeting with APs.	Before of the implementation of the project	PC of commune, PMU
Information on	Meeting with the	When starting	PMU, PC of

schedule of implementation, mechanism of supervision and responsibility to report and explain.	population group, leaflet, and poster placing in the public.	the implementation and in the process of implementation	commune
Information on crecruiting and paying for the local labours	Three-party meeting with contractor, the local government/the supervision committee of ward and the local residents.	Before the construction	Contractor, the community supervision committee
Information on the potential negative impacts and measures to minimize.	Combine with activity 2 and activity 3 mentioned above	Before and in the process of implementation.	PMU, Contractor, PC of commune

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 publicize information during project implementation in the process of project implementation. Moreover, as has been requested at all community meetings, those affected people all 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 receives regular information about the 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 unit. The best way to make a tight connection is to provide phone numbers and addresses of the PMU is responsible at all construction locations of the project categories and the headquarters of all the communes of both components of the project .

3. Participatory monitoring

For the components of the project to ensure the effectiveness, necessity 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 ... the agency/unit, who directly manages or operate 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 Community supervision department, 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 ... Based on indicators of social safety, Community supervision department co-

operates with independent monitoring unit to supervise 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.

Note the application of Resolution No. 80/CP on community supervision for the constructions in the local areas.

8 COST ESTIMATION AND BUDGET

177. Total cost for implementation of SA is shown in the following table:

Table 52: Total cost for implementation of SA

No	Activities	Unit	Quantity	Price (USD)	Total payment
1	01 Social-Gender expert	Person - month	3	2,000	6,000
	01 Information, Education and Communication (IEC) expert	Person - month	3	2,000	6,000
2	Workshop and training	Ward/commune	16	5,000	60,000
3	Communication campaign and behavior change	Lump-sum	1	50,000	50,000
Total					122,000

178. Estimation of cost for implementation of this SA is 122,000 USD, has been put into investment item of Component 4 of this subproject. This estimation does not include the costs of implementing the EMP and RP, which has been prepared separately.

9 THE ROLE OF STAKEHOLDERS

9.1 Overall of participating agencies

179. In the preparation and implementation period of the project, PPC is the in charge agency responsible for overall supervision and direction of the project under the supervision and guidance of the relevant departments. Project Management Unit will represent the in charge agency to manage all activities of the project.

180. Participation in implementing the project, there are departments in CPC, the ward / commune, and communities in the area of the project, the consultant...

181. The below figure is structure of relevant participants involved in the project:

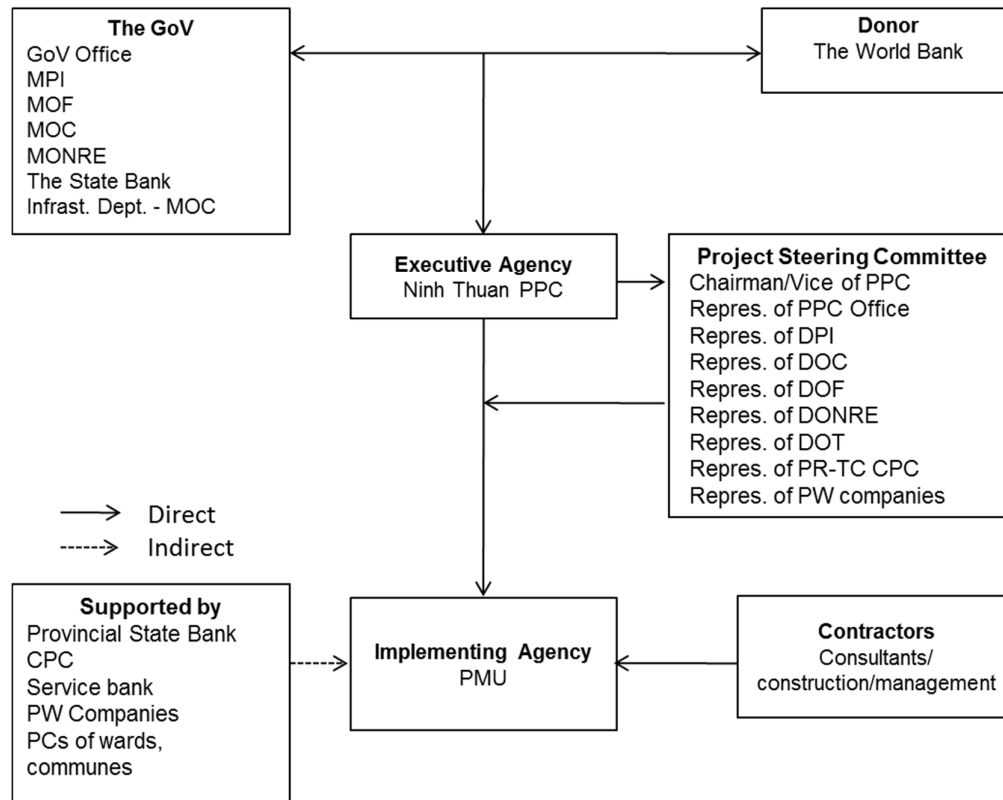


Figure 22: Organization and management model

9.2 Role of management and implementation agencies

Relevant Ministries, departments...

182. **The Ministry of Planning and Investment:** Guide the in charge agency to prepare and summarize list of ODA projects, preside over the preparation of content, organize and mobilize and coordinate ODA fit; preside and coordinate with the Ministry of Finance to review the detailed allocation of investment capital to support ministries, sectors and localities to prepare the content and track the process of negotiating international agreements on ODA with specific Donors; monitoring, periodic inspection, synthesis and evaluation of ODA projects in accordance with law; focal treatment according to their competence or propose the Prime Minister to handle the relevant issues.
183. **The Ministry of Finance:** shall coordinate with the Ministry of Planning and Investment, the managing agency and the agencies concerned the Prime Minister for approval of the financial mechanism of the water applied to the sub-project before signing financing agreement. Perform test applications for withdrawal and disbursement of IDA / IBRD for subprojects under the current regulations. At the same time, implement of financial management for the use of the sub-project funds and the state budget plan for this fund.
184. **The Ministry of Natural Resources and Environment:** Guide, inspect and coordinate the ministries to consider environmental issues, waste management project.
185. **The Ministry of Construction:** Considering the technical issues of the project components; guide and supervise the implementation of the provisions of the law on preparation of investment construction projects, examine the implementation of the

preparing and management of investment costs; guide and examine the technical evaluation of design, construction drawing design and cost estimates of the components; guide, inspect the quality management of construction works; guide testing activities, evaluation and certification of quality conformity of construction works; coordinate with the Ministry of Finance to guide principles, valuation methods sewer service price and inspection and supervision of the implementation.

186. **Infrastructure Department - MOC:** the Infrastructure Department of MOC has an important role in supporting the implementation of the project, strengthen capacity and institutional reform. Accordingly, the Department of Infrastructure will participate in the review and support the conclusion and implementation of a service contract between local authorities and service providers, to review and assist in the preparation and approval the cost norms, unit prices sewer service, review and recommendations on reform, shares of public companies, restructuring, business reorganization; Review and propose public-private management model, revolving fund to households connected to the system; Support the design and implementation of Information- Education- Communication program.
187. **The State Bank:** Lead and coordinate with the Ministry of Finance, Ministry of Planning and Investment and the concerned agencies to prepare content, negotiate and conclude international agreements with donors and is the official representative of the borrower stipulated in international treaties as assigned or authorized by the President or the Government

Ninh Thuan PPC

188. Once the loan agreement is approved and the loan is provided, the Government will be allocated to the People's Committee of Ninh Thuan Province to the loan and provide counterpart funds for the project, ensuring that agencies comply with the the obligations specified in the Loan agreement.
189. The departments, branches of the province based on the functions and tasks assigned will assist the investor on the content of the project as well as the problems arising to help the project comply with the schedule as committed to the donor.

Project Steering Committee

190. Project Steering Committee of the province will support the investor on the contents of the project as well as the problems arising, help the projects follow the investment progress, the project investor addressing issues in the course of preparation, project implementation, especially the work related to site clearance and resettlement, distribution of local funds and disbursements for the project.

Project Management Unit

191. PMU directly manages the investment project according to regulations, treaties and agreements signed under the tasks assigned to the project managing; implementation of the overall planning and detailed annual plan implementation of programs and projects; implementation of procurement activities and contract management; disbursement, financial management and project assets; implementation of monitoring and evaluating the implementation of the project; conducting of commissioning and handover of the outputs of the project upon completion; audit completed work, handed over the assets of the project; prepare final report and project final statement.
192. Ninh Thuan PPC has established Implementation Unit for Capacity Development and ODA Water Resources Projects under the PPC to be Project Investors. Capacity

Construction Committee with a composition of the specialized staff with extensive experience in the receipt, management and direct operating ODA projects with funding from the Government of Belgium and the Netherlands on water, climate change, the media ... and have the capacity to perform the tasks of the project investor according to current regulations.

City level

193. City People's Committee has following responsibilities:

- Notice land acquisition if authorized by PPC
- Approve the compensation, support and resettlement prepared by the Agency in charge and submit to PPC for review and comment;
- Decide on land acquisition of individuals and households;
- Settle the complaints and grievances of APs in the jurisdiction.
- Notice land acquisition if authorized by the PPC.

194. Implementing the compensation, support and resettlement agency in the city (called the City Compensation Council) is responsible for the implementation of the compensation and land clearance in the city area, including:

- Plan and carry out resettlement activities within the city.
- Responsible for inventory the land acquired, complete the compensation rate, preparation of synthetic compensation tables to be submitted to the competent authorities for approval and pay directly the compensation amount to each AP after receive compensation funds;
- Prepare the land for the resettlement procedures for displacing households;
- To appoint a mediator to resolve the complaints of APs by the project on compensation policy and compensation rights;
- Establish, if necessary, The Damages compensation council ward / commune and direct their activities in the implementation of resettlement activities;
- Take special attention to the needs and aspirations of particular groups (ethnic minorities) and vulnerable people (children, the elderly, female/single-householders);
- Coordinate closely with the independent monitoring organization.

Ward/commune level

195. Ward/Commune People's Committee has responsible for:

- Establish commune / ward working groups and manage their functions, officers assigned to the commune / ward to support the district council and the PMU established compensation Detailed measurement survey, preparing documents recovered land for the project, preparing the resettlement action plan and implementation of resettlement activities;
- To authenticate the legal documents or the use, transfer of land to the APs in order to meet the requirements of the compensation plan for them;

- Support units and other organizations including the PMU, published the information dissemination, and held community meetings to meet and consult those affected;
- Support for other organizational units, including the PMU, in demographic surveys of households, survey costs / replacement costs, the survey measured in detail, and other resettlement activities;
- Participate in all activities and the allocation of land recovery, resettlement, rehabilitation and other support activities in support of social development;
- Support to APs in all resettlement activities and living standards restoration.
- Inform affected people the compensation schedule and monitoring the implementation of compensation. Also signing the compensation documents with the APs;
- Ensure proper implementation of resolving complaint mechanism for the APs. Record all complaints and keep a record of all complaints. Support and counseling the Aps, quickly resolve the complaint.

Donor

196. World Bank monitors the periodical checking during project implementation, provides recommendations to remedy pending issues to implement the best projects. The Bank also checks actual site, reviews the reports, documents, procurement, project bidding. The Banks will always maintain close contact with the relevant units.

9.3 Role of associations and community organizations

197. The Social organizations, associations, community organizations, and people who use the work items of the project will have a very important role in the process of project implementation.

Social-Political organizations

198. The social-political organizations such as: the Fatherland Front, Women's Union, Farmers Union, the Youth Union, the Elderly Union ... are large forces and structures to the villages. The social organizations are closely monitoring the project implementation process, especially the period of land acquisition, compensation, and resettlement to ensure conformity with the safety policy of the Bank and the current regulations Vietnam law. Social organizations and mass organizations in the community in which capture and feedback problems of the people related to the activities of the project in the process of preparation, construction and put into use. The supervision of the organization of collaboration with the population groups in the community have important implications in helping PMU, contractor promptly adjust the design, construction activities to minimize the undesirable effects the lives of the people in the affected areas.

Ward/commune, villages

199. As a direct level to work with people, reflect the issues arisen in the process of preparing, implementing, and putting into use of project items. Villages are the last places where will be project implementation of activities to provide information to residents of the project and is the first place to get the feedback of the people related to the project. The role of village officials / very important neighbor, bringing objectivity

and timely reflect the aspirations and legitimate petitions of citizens to monitor the project implementation process to minimize the impact unwanted project to people's lives. In addition, the comments reflected from village officials, neighbors also makes construction project categories more relevant, bring economic – socio benefits to the community direct beneficiary area of the project

9.4 Coordination between related parties

200. In the process of preparing and implementing the project, the involvement of the stakeholders has particularly important implications. First of all, with the participation in the design process of work items, it will contribute important in regulating the design, meet the technical requirements and increase economic efficiency - as well as effective social 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. A bad coordination between stakeholders shall waste the potential 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.
201. One of the criteria for the success of the project is to ensure that the stakeholders involved in all phases of the project. This goal requires preparing Participation Plan. Roles and responsibilities to achieve the participation allocated to related parties are as follows:

Table 53: Role of relevant agencies during the project preparation and implementation

Agency	Phase		
	Project preparation	Project implementation	Management, operation, maintenance
Community	Participation in the project development process (discussed and unified to select the appropriate technical options for the planned construction works at ward / commune)	Join the monitoring through Community monitoring committee	Self-management, operation and maintenance the project works
Ward/commune local authorities	Coordinate with PMU in implementing duties requested by PMU in accordance with their function	Join the monitoring	Manage some items in the ward/ commune area
City People's Committee	Following the instruction of PPC; Coordinate with PMU in deploying duties requested by PMU in accordance with their function	Notice land acquisition if authorized by PPC Approve the compensation, support and resettlement	Manage some items in the ward/ commune area

Agency	Phase		
	Project preparation	Project implementation	Management, operation, maintenance
		prepared by the Agency in charge and submit PPC for review and comment;	
PPC	Support for project coordination and implementation through DPI of province / PMU; Approve FS report, Basic design, Total investment cost	Supported by PMU to coordinate, implement the project; Approve bidding documents and contractor selection results	
DPI	In charge of appraisal		
DOC	Join the appraisal of FS report, Basic design, Detailed design, Total investment cost, Cost estimation		
DONRE	Appraise land acquisition procedures Appraisal EIA	Coordinate with relevant parties to monitor EIA implementation	Coordinate with relevant parties to monitor EIA implementation
DOF	Appraise expenses, unit cost		
Province treasury	Capital allocation according to the investment period and allocation management		
Consultant contractor	Prepare Construction survey document, FS report, Basic design, detailed design, Cost estimation...	Join construction supervision	
Civil contractor		Construct, comply with commitment of Environmental social safety	

9.5 The need for training to improve the capacity of stakeholders

202. Although PMU has experience in the implementation of ODA projects, but has no experience in project management. Therefore, training needs to enhance the capacity in projects are identified focusing in charge groups and a number of officials of the departments, branches of the province.

203. Enhance capacity content is defined as: strengthening capacity of Investor, the management agency through workshops, learning experiences, building management process.
204. In addition, the Project will also deploy community communications program to raise awareness of environmental protection for the people in the project area. Support for institutional reform to promote efficiency sector during the operation and ensure the sustainability of the projects, and share experiences with other localities on ODA project management in drainage field, protection environment.

10 CONCLUSION AND RECOMMENDATION

10.1 Conclusion

205. Coastal Cities Sustainable Environment Project, Phan Rang – Thap Cham city subproject funded from by World Bank is a high feasibility project. Basically, this is a project of a multidisciplinary nature and most of the environmental - social impact in the operation phase is the positive effects contributing to improved sanitation and stimulate socio-economic development of the City.
206. However, during project implementation, it is expected to have negative impacts affecting social security. These effects primarily arise in the site preparation phase for the project and construction phase of the project:
- Clearance phase: The most significant impact is disturbing people's lives through the works of clearance and resettlement, land acquisition. The impact is relatively large, will cost a budget to carry out the removal and resettlement the people. Currently, the City remains dedicated land budget to solve land resettlement work, so that these impacts can be minimized and be overcome. There is no negative impact on the cultural, historical, natural habitats and ecosystems.
 - Construction phase: The environmental impact is mainly due to the temporary requisition order and social security. These effects are only temporary during the construction works and can minimize through strict implementation of the construction process management and social management.
 - In the pre-appraisal stage of the World Bank, a resettlement policy framework - RPF has been prepared by the investor, will direct all land acquisition activities and is a basis for the preparation of Action Plans resettlement - next RAP for the projects before the implementation. In the implementation phase of the project, it requires the organization / individual independent monitoring implementation of the Resettlement Plan. These reports will fulfill the requirements of the Government of Vietnam and the World Bank's policy on compensation, support and resettlement; and it is also a document for project owners to properly implement social safeguards.

10.2 Recommendation

207. Need to ensure the policy objectives of OP 4.12 on obligatory resettlement of the World Bank, which is: "The livelihoods and income sources of APs is restored at least equal to or better than the rate before project" with the preparation of an proper resettlement action plan, building rehabilitation income program consistent with the actual needs of each target affected group.
208. Recommend that the project should apply the content related to social security mentioned below:
- Gender Action Plan
 - Community Health Action Plan
 - Communication plan, public consultancy with the participants
 - Complaint mechanism and monitoring of complaints and
 - Publication of information, social accountability and supervision

209. The plans / mitigation measures outlined above will be implemented during the implementation and operation of this subproject. Estimated cost of about \$ 122,000 has been put into investment item of Component 4 of the subproject.

APPENDIX 2 – INVESTIGATION OF ETHNIC MINORITIES

**NINH THUAN PPC
IMPLEMENTATION UNIT FOR
CAPACITY DEVELOPMENT AND
ODA WATER RESOURCES
PROJECTS**

SOCIALIST REPUBLIC OF VIETNAM
Independence – Freedom – Happiness

Ninh Thuan, February 17th 20.

No.: 03 /BXDNL-ĐT&TTCD
Re.: Investigation of ethnic minorities
for the CCESP2 – Phan Rang –Thap
Cham subproject.

To: World Bank (WB).

In order to have an overview of ethnic minorities for review of social and environment impact assessment and resettlement arrangements under the World Bank-financed “Coastal Cities Sustainable Environment Project, Phan Rang – Thap Cham subproject”;

As instructed by WB’s Social safeguards expert, we, MCDU, have taken an investigation of this issue and would like to report our findings as follow:

- Cham people: 2,200 people (mostly living at Thanh Y village, Thanh Hai commune, which is out of project area);
- Hoa people: 1,110 people (having lived for a long time and scattered all over the city).

(According to 2014 Statistics Year Book – Bureau of Statistics).

Accordingly, the ethnic people are not affected by the project. We would like to inform you of our findings./.

Distribution:

- As above;
- VIWASE (Ms.Nguyet);
- Board of Director;
- Filing.HTTT

**PP. DIRECTOR
VICE DIRECTOR**

Pham Thi Minh Thu

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UBND TỈNH NINH THUẬN
BAN XÂY DỰNG NĂNG LỰC VÀ
THỰC HIỆN CÁC DỰ ÁN ODA NGÀNH NƯỚC

CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM
Độc lập - Tự do - Hạnh phúc

Số: 03 /BXDNL-ĐT&TTCD
V/v rà soát dân tộc thiểu số - Tiểu dự án
Môi trường bền vững thành phố Phan
Rang - Tháp Chàm.

Ninh Thuận, ngày 18 tháng 02 năm 2016

Kính gửi: Ngân hàng Thế giới.

Nhằm rà soát thành phần dân tộc thiểu số phục vụ công tác đánh giá tác động môi trường - xã hội và tái định cư cho dự án “Môi trường bền vững các thành phố duyên hải, tiểu dự án Thành phố Phan Rang – Tháp Chàm” do Ngân hàng thế giới (WB) tài trợ;

Được sự hướng dẫn của Chuyên gia Xã hội của WB, Ban Xây dựng năng lực đã rà soát và báo cáo số liệu như sau:

- Dân tộc Chăm: 2.200 người (tập trung tại thôn Thành Ý, xã Thành Hải, không thuộc vùng dự án);
 - Dân tộc Hoa: 1.110 người (sinh sống lâu đời và rải rác toàn thành phố).
- (Số liệu tại Niên giám thống kê – Cục thống kê năm 2014).

Theo số liệu trên, người dân tộc thiểu số không bị ảnh hưởng bởi tác động của dự án. Ban Xây dựng năng lực kính báo cáo Ngân hàng Thế giới được biết./.

Nơi nhận: Ủ
- Như trên;
- VIWASE (Chị Nguyệt);
- Ban Giám đốc;
- Lưu VT, ĐT-TT&CD-HTTT

KT.GIÁM ĐỐC
PHÓ GIÁM ĐỐC



Phạm Thị Minh Thư

Ban Xây dựng năng lực và thực hiện các dự án ODA ngành nước
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