SOCIALIST REPUBLIC OF VIETNAM KHANH HOA PROVINCE PEOPLE'S COMMITTEE

## SFG2531 v1 REV

## COASTAL CITIES SUSTAINABLE ENVIROMENT PROJECT NHA TRANG CITY SUB-PROJECT

# SOCIAL ASSESSMENT REPORT

Nha Trang, October 2016

THE SOCIALIST REPUBLIC OF VIET NAM **KHANH HOA PROVINCIAL PEOPLE'S COMMITTEE** 

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THE COASTAL CITIES SUSTAINABLE ENVIRONMENT PROJECT NHA TRANG CITY SUB-PROJECT

## SOCIAL ASSESSMENT REPORT

**EMPLOYER** DEVELOPMENT PROJECT MANAGEMENT VIETNAM WATER, SANITATION UNIT OF KHANH HOA PROVINCE

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NHA TRANG, OCTOBER 2016

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## ANNEX

Annex 1: Socio-economic Survey Form

|     | ABBREVIATIONS                |
|-----|------------------------------|
| AP  | Affected People              |
| DMS | Detailed Measurement Survey  |
| GOV | Government of Vietnam        |
| HH  | Household                    |
| IOL | Inventory of Losses          |
| OP  | Operational Policy           |
| PPC | Provicial People's Committee |
| PMU | Project Management Unit`     |
| RP  | Resettlement Plan            |
| TOR | Terms of Reference           |
| USD | U.S. dollar                  |
| VNÐ | Vietnam Dong                 |
| WB  | World Bank                   |
| EM  | Ethic Minority               |
| PC  | People's Committee           |

## 

## **1 PROJECT DESCRIPTION**

## 1.1 Background

1. Vietnam has made remarkable progress in economic growth and poverty 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).

2. 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.

3. 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, Phang 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.

4. 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):

5. Coastal Cities Sustainable Environment Project - Nha Trang City Sub-project has been proposed the implementation in area scope consisting of 18 wards/communes (Vinh Hai, Vinh Hoa, Vinh Tho, Vinh Phuoc, Vinh Ngoc, Ngoc Hiep, Loc Tho; Phuoc Long; Phuoc Hoa; Xuong Huan; Van Thanh; Phuoc Tien; Phuoc Tan; Phuong Sai - Van Thang; Phuong Son; Vinh Nguyen; Tan Lap). The funding for the Nha Trang City Sub-project is estimated 72 million USD, including 60.6 million US\$ of ODA loan, 0.3 million US\$; and 11.1 US\$ from counterpart fund.

## 1.2 Objectives Of Sub-Project

## **1.2.1** Overall Objectives

6. To sustain the efficiency of environment investment and strengthen the institutional reform agenda concerning sanitation sector in the project cities.

## **1.2.2** Specific Objectives

7. Sub-project implementation meets the following specific objectives:

- Enhancing capacity of WWTP in the South by additional investments to perfect the network of tertiary sewers and odor prevention manholes in the city center and in the South.
- Resolving flooding and environmental pollution on the North by investments in combined sewers and wastewater collection sewers, odor prevention manholes, pumping stations, balancing lakes and WWTP on the North.
- Improving environmental sanitation, enhancing flood control and preventing landslide along both banks of Cai River as well as upgrading transportation infrastructure to meet development needs of the city in accordance with the planning.

 Providing support for project implementation through consulting services for supervision, management of construction, finance, environment, society and resettlement, etc.
 Providing technical assistance for the Employer, related departments and institutional reforms with an aim at satisfying intended objectives in the implementation stage, archiving effectiveness in the operational stage and promoting project sustainability.

#### **1.3 Project Components**

8. There are 4 components in Nha Trang sub–project, consisting of many investment activities with various technical requirements. Summary of proposed investment items is described in the table following.

| No Item |                                                             | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
|---------|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1       | Component 1 – Sanitation Infrastructure                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| 1.1     | Tertiary sewer at the<br>Central and the<br>Southern (uPVC) | Construction of tertiary sewers for 12 wards (Loc Tho; Phuoc Long; Phuoc Hoa; Xuong Huan; Van Thanh; Phuoc Tien; Phuoc Tan; Phuong Sai - Van Thang; Phuong Son; Vinh Nguyen; Tan Lap) which have not been invested under Nha Trang City Environmental Sanitation Project, to help increase connection rate of households, governmental agencies, businesses: total D200mm about 14km of length, D300mm - about 12,7kmof length, D150mm – about 16,8km of length, which connected to collecting system. Each manhole shall allow common connection of $2 - 3$ HHs. Improvement brought about by this supplementary connection volume is clear: increased WW amount coming to the treatment plant, ensuring a total operational amount capacity of $Q = 40,000$ m3/day.                                                                                                                                                                                                             |  |
| 1.2     | Sewerage, flood<br>protection and<br>wastewater collection  | Construction of tertiary sewers for North area, with D200 mm,<br>about 10,2 km of length, D300 mm about 7,6km of length and<br>D150 about 33,2 km of length, which connected to collecting<br>system. Replacement of 509 odor prevention manholes.<br>Construction of sewer lines on 2/4 Road to drain stormwater<br>(BxH=1.0x1.0m; BxH=1.2x1.2m BxH=2.0x1.5m;<br>B1xB2xH=2x2.0x1.5, B1xB2xH=2x2.5x1.5, D600, D800) for two<br>roadside areas, especially the SOS village area regularly subject<br>to flooding upon raining.<br>Construction of Bau Market sewer line (D600mm, D1000m,<br>L=375m to solve flooding issues for Bau Market area which is<br>also regularly flooded upon raining.<br>Construct a sewer system next to Son Thuy ditch (BxH=1.5x1.5,<br>L=148m)<br>Construct a box culvert system parallel with railway<br>(B1xB2xH=2x2.5x2.0, B1xB2xH=2x2.5x2.5,<br>B1xB2xH=3x3.0x2.5, L=1.339m)<br>Construct a sewer system on Dien Bien Phu road, D1000,<br>L=900m |  |

Table 1 Summary description of the sub-project's investments and land acquisition

| No  | Item                                                                            | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----|---------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |                                                                                 | Construct the ditch/sewer connecting from T1 ditch to West<br>regulating lake (B1xB2xH=4x2.0x2,5, B = 15m, L = 692)<br>Construction of 1.05ha reservoir; inlet/outlet culverts of the<br>reservoir; open ditch BxH=15x4m; L=687m; stormwater PS<br>with Q = 40m3/s to drain water to Cai River.<br>Construction of wastewater PSs, collection sewer lines, WW<br>CSOs, the tertiary sewer network for the entire northern area to<br>collect wastewater of households, businesses, governmental<br>agencies, etc. to help address environmental pollution. |
| 1.3 | Northern wastewater<br>Treatment Plant                                          | Construction of wastewater treatment plant with capacity of 15.000m3/day in the north which shall meet A Standard requirements as per Vietnam domestic WW standards QCVN40: 2011 to ensure sufficient wastewater treatment capacity for the entire northern area of the city till 2025.                                                                                                                                                                                                                                                                    |
| 1.4 | School sanitation program                                                       | Rehabilitation or construction of new toilet houses for 4 schools<br>sanitary enough for the teachers and students and to help raise<br>awareness about environmental sanitation of the schools,<br>contributing to improvement of community awareness about<br>environmental sanitation.                                                                                                                                                                                                                                                                  |
| 1.5 | Supervision and project<br>assistance consultancy<br>for Component 1's<br>items | Supervision, project implementation assistance consultancy<br>services, via bidding packages of international construction<br>supervision and management consultancy, independent<br>consultancy about social safeguard – resettlement,<br>environmental safeguard supervision, independent financial<br>auditing, independent project assistance consultancy to assist<br>implementation of need-to-do tasks in accordance with WB<br>regulations.                                                                                                        |
| 2   | Component 2 - Enviro                                                            | nment infrastructure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 2.1 | Cai River dyke and<br>embankment system                                         | Construction of embankment and starts vegetation of Cai River<br>North<br>Construction of dyke, embankment and road in the south of Cai<br>River, L=1.986m from the railway bridge to Ha Ra Bridge. The<br>road has 2 vehicle lanes, 16m wide roadbed with 2m of<br>reservation in the middle, sidewalk on residential house side 5m<br>and sidewalk on river bank side 7m wide; ROW: 28m.                                                                                                                                                                 |
| 2.2 | Road                                                                            | Construction of Chu Dong Tu Road L=365m from the beginning point being intersection with QH Road along Cai River and the ending point being intersection with Dinh Cong Tru Road. The road has 2 vehicle lanes, 8m wide roadbed, 3m wide sidewalks, ROW: 14m (including the stormwater drainage sewer lines (D1000 - D1500) beneath to solve flooding issues for Bau Market area and Son Thuy area. These areas are regularly flooded upon raining.                                                                                                        |

| No  | Item Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                |  |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Construction of Road No. 4 L=1828m from the beginning point<br>being intersection with 2/4 Road and the ending point being<br>intersection with Nguyen Khuyen Road. The road should have 2<br>vehicle lanes, 12m wide roadbed, 4m wide sidewalks, ROW:<br>20m. |  |
| 2.3 | Supervision and project                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | assistance services for Component 2's items                                                                                                                                                                                                                    |  |
| 3   | Component 3 – Compensation and Site Clearance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                |  |
|     | Compensation, displacement of affected households, site clearance serving the project and assurance of the residents' livelihood.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                |  |
| 4   | Component 4 – Capacity development and institutional reform                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                |  |
|     | Technical assistance for Project owner, management agencies via independent consultants, workshops, experience learning, periodical sum-up meetings during implementation and development of management processes. Assistance for sector institution renovation in order to help improve efficiency during operation course and ensure the project's sustainability, and sharing of experience with other localities about management of drainage, sanitation ODA projects. Component 4 shall also consists of Project owner's management work and the implementation control activities in accordance with related governmental regulations and community-based communication programs in order to provide information and raise awareness about environmental protection for the residents in the project areas. |                                                                                                                                                                                                                                                                |  |

9. The Map of overall investment components of –The Nha Trang City Sub-project is shown as in the figure below:

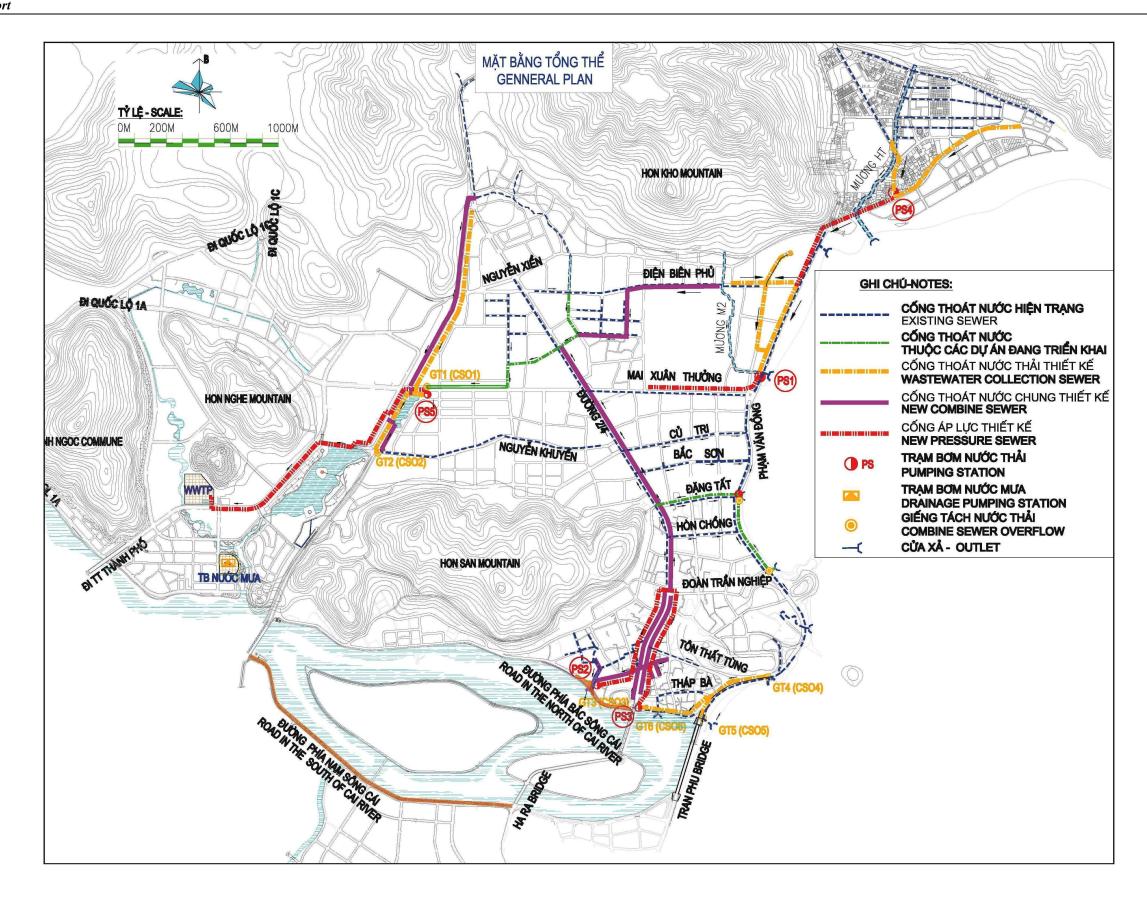


Figure 1. The Map of Overall Investment Components

## 2 OBJECTIVES AND METHODOLOGY OF SOCIAL ASSESSMENT

#### 2.1 Objectives

10. The Social Assessment is implemented simultaneously with the environmental assessment of the sub-project with two objectives. First, it examined the potential impacts of the subproject positive and adverse impact on the basis of planned project activities. Second, 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.

11. During the assessment process if there are any negative impacts occurring as a result of the sub-project, the appropriate measures must be taken immediately (before the subproject 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

12. 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

13. The Social Assessment (SA) is a process to ensure that the project activities will (i) cover the involved 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.

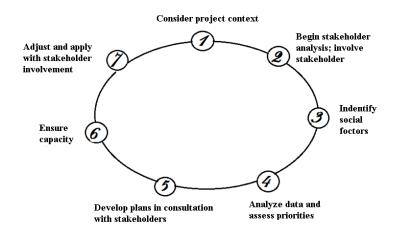


Figure 2. The Process of Social Assessment

#### 2.2.1 General Principles:

- 14. The following principles are used to ensure the quality of research.
  - Bottom-up approach principle: Principle of bottom-up approach is to increase and ensure the wide participation of different communities, including poor household in the community. Therefore, the project managers could hear their voices, understand the wishes and recommendations of many different social groups.
  - *Principle combining qualitative and quantitative data.*
  - *Cross check:* The collected information is always cross-checked from different sources to ensure the reasonableness and accuracy.
  - *Field check:* Field check is used to ensure the reasonableness and accuracy of information.

15. The following methods and techniques will be used in order to collect information and assess:

#### 2.2.2 Desk Study

16. The review and analysis of documents related to the project will provide basic information about the project and help to explain why there are or arenot ongoing changes. On the other hand, this also helps to identify gaps in data needing to be collected and further evaluated. Information and data related to the project were collected from the Project Management Unit and from the local socio-economic analysis sources as the Khanh Hoa Statistic Yearbook, the Socio-economic Reports of the province/district/communes and the Socio-economic Researches - social of relevant projects, etc.

#### 2.2.3 Quantitative Method

17. After studying the project documents and performing reconnaissance work, a survey frame and methodology were discussed to determine the appropriated sample size, and data collection technique/ method. Two main survey techniques selected, included the following:

- Using templates/forms among authorities of the project wards/communes;
- Surveying socio-economic information of the households by interviewing with the tool as structured questionnaire (please see Questionnaire Form in Appendix 1 for more details). This method requires a sampling strategy to conduct evaluation criteria before and after the project implementation.

18. As mentioned in the TOR, the survey was conducted for affected potential households and/or beneficiaries. This survey helped to provide documents about the affected area by the project and the existing social situation and trend, including:

- Local authorities: Representatives of departments and sectors 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.

19. A stratified sampling survey was conducted to collect data from the affected communities and beneficiaries with 843 samples. The Consultant will conduct random sampling from two lists of households as following:

- The one is a list 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 representative 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) make 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 is a list of households affected by each investment item: Based on the basic design, the 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.

20. The socio-economic survey was carried out within 3 weeks from 18 February to 29 February with 843 households who are consulted through a questionnaire covering 18 wards/communes of Nha Trang City. The number of households participating in the survey are shown in the table below:

| Ward/      | Investment items                                                                           | No. of surveyed HHs |             |       |
|------------|--------------------------------------------------------------------------------------------|---------------------|-------------|-------|
| Commune    |                                                                                            | Beneficiary HH      | Affected HH | Total |
| Vinh Hai   | Road No.4                                                                                  | 370                 | 80          | 450   |
| Vinh Phuoc | Constructing<br>embankments and<br>roads in the North of<br>Cai River.<br>Chu Dong Tu road | 31                  | 29          | 60    |
| Ngoc Hiep  | Constructing<br>embankments and<br>roads in the South of<br>Cai River                      | 70                  | 130         | 200   |
| Van Thang  | Constructing<br>embankments and<br>roads in the South of<br>Cai River                      | 34                  | 46          | 80    |
| Vinh Ngoc  | Wastwater treatment plant in the North                                                     | 20                  | 11          | 31    |

Table 2 - Number of Surveyed Households

| Ward/                                                   | Investment items | No. of surveyed HHs |             |       |
|---------------------------------------------------------|------------------|---------------------|-------------|-------|
| Commune                                                 |                  | Beneficiary HH      | Affected HH | Total |
| Ward,<br>Commune<br>constructing<br>drainage<br>network | Drainage network | 22                  |             | 22    |

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

## 2.2.4 Qualitative Method

22. 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 discover deeply into explaining the occurring phenomenon/behavior. Besides, the qualitative information can be exploited deeperly than the thoughts, feelings, attitudes and aspirations of the audiences 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.

23. Qualitative research was conducted through in-depth interviews with 54 key informants including leaders of the Provincial/City/wards, communes; officers of sectoral economic/construction planning/land use planning departments at the Provincial level; officers of Infrastructure department 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).

24. In addition, 12 discussion groups were also conducted with the objects including 105 households of Vinh Hai, Vinh Tho, Vinh Phuoc, Ngoc Hiep, Van Thang and Vinh Ngoc commune (about 6-10 people for a discussion group).

25. Besides researching qualitative information, the in-depth interviews and focused group discussions also pay attention to the public participation technique. Developing and implementing an effective participation plan to involve all interested and affected stakeholders is vital for the project, including the identification of 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 investment items, throughout the implementation and monitoring are required. During this preparation phase, 18 public consultation meetings in 18 communes/wards of the project area were held with the participation of the following stakeholders:

• Representatives of local autorhities of 18 selected communes/wards.

- Mass organizations: Fatherland Front, Women's Union, Youth Union, Farmers' Union, Veterans' Union of 18 selected communes/wards.
- Representatives of HHs in the project area included households with potential land to be acquired, beneficiary households, especially vulnerable affected households. The participants of meetings were paid attention to the male/female rate to ensure gender balance.

26. The issues discussed during public consultation include: (i) Introduction of the 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 project area.

## 2.2.5 Direct Observation

27. This method helped to obtain timely and useful information complementing to the collected data, better understand the background of the collected information and data and explain the survey results.

## 2.2.6 Data Processing and Analysis

28. The answers from the questionnaire (structured interview) was processed by SPSS (Statistical Package for Social Sciences).

29. The qualitative information was processed in two ways: (i) Using the techniques directly in the field if applicable: (ii) The quotes and case studies are used to make clearer quantitative information.

## 2.3 Process Of Socio-Economic Survey

30. The process of socio-economic survey serving the formulation of Social Assessment Report is shown in Figure 3 below.

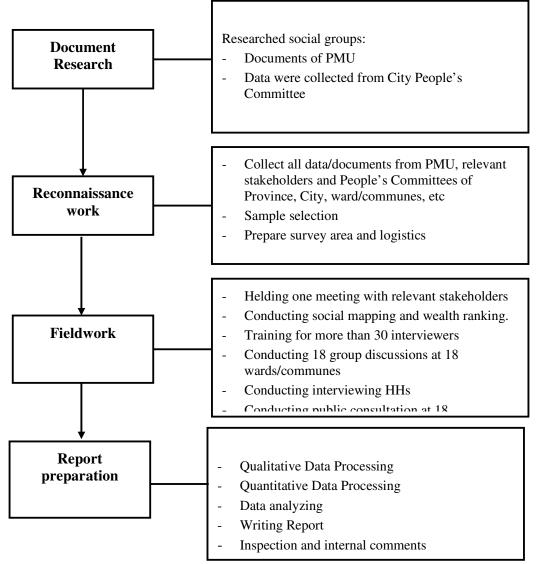


Figure 3. The Process of Socio-economic Survey

## 3 NATURAL, SOCIO-ECONOMIC CONDITIONS OF THE PROJECT AREA

## 3.1 Natural Characteristic

## 🚽 🛛 Geographical Location

31. Nha Trang City is located in shoreline of South China Sea with coordinates of 12015 N latitude and 109012 E longitude. It is about 220 km far away from Dalat in the West, about 450 km from Ho Chi Minh City in the South, about 1,280 km from Hanoi City in the North. Nha Trang City is in easternmost point of Vietnam, near international water, and has a convenient transportation relationship with not only but also domestic and international regions. Nha Trang City is bordered by:

- In the North: borders on Ninh Hoa Commune
- In the South: borders on Cam Lam Commune
- In the East: borders on East Sea
- In the West: borders on Dien Khanh Commune



Figure 4. Loation of Nha Trang City

## 🔸 Topography

32. The topography of Nha Trang City is quite complicated with a range of elevation from 0 to 900 m above sea level and divided into 03 topographic regions. Coastal plains and Cai River plains have an area of about  $81.3 \text{ km}^2$ , accouning for 32.33% the whole city; transition zone and low hills have a slope of  $3^0$  to  $15^0$  mainly in the west and southeast or in small islands comprising 36.24%, mountainous terrain with slope over  $15^0$  distributed in the North-South of the City, Hon Tre Island and some rock islands account for 31.43% of the total City area.

## 🔶 Climate

33. Nha Trang City has savanna tropical climate and influenced by oceanic climate. Nha Trang climate is relatively mild, the annual average temperature is  $27^{0}$ C. There are less cold winters and long dry season. Rainy season starts from September and ends in December under solar calendar, amount of rainfall accounts for nearly 80% of annual rainfall amount. Approximately 10 to 20% of the rainy season starts in July, August and ends early on November. Nha Trang City is a region which has quite favorable climatic conditions to develop tourism almost all year compared to other provinces in the South Center Coast. The main characteristics of Nha Trang climate are: an annually moderate temperature ( $25^{0}$ C -  $26^{0}$ C), seasonal division is relatively intense (dry season and rainy season) and less affected by the storm.

#### Hydrology

34. The City has a plenty of streams and rivers concentrated in 02 main river systems, which are Cai Nha Trang River and Quan Truong River.

35. Cai Nha Trang River (also called Phu Loc River, Cu River) is 75km long, is derived from Chu Tgo Moutain Peak with the height of 1,475 m, flowing through Khanh Vinh district, Dien Khanh district and Nha Trang city, then going to the sea at Cua Lon (Dai Cu Huan). Downstream section belonging to Nha Trang is approximately 10 km long. The river is a main water supply to agro-industrial production, tourism-services and daily life activities for residents in the city and surrounding districts.

36. Quan Truong River (or Quan Tuong River) is a small river system with a length of up to 15 km , flowing through communes consisting of Vinh Trung, Vinh Hiep, Vinh Thai, Phuoc Dong and 03 wards including Phuoc Long, Phuoc Hai, Vinh Truong, then pouring into the sea at Cua Be. The River is divided into 02 branches: eastern branch (main branch) has the length of 9 km and western branch (another name is Tac River) has a 6 km length.

37. In Nha Trang sea zone, the tidal is irregularly diurnal, the highest average amplitude of 1.4 - 3.4 m. Salt concentration changes from season to season and to be in range of 1 - 3.6%

## 3.2 Scale of land and population

## Land Resource

38. Nha Trang City has 27 administrative units including 19 wards (Loc Tho, Ngoc Hiep, Phuoc Hai, Phuoc Hoa, Phuoc Long, Phuoc Tan, Phuoc Tien, Phuong Sai, Phuong Son, Tan Lap, Van Thang, Van Thanh, Vinh Hai, Vinh Hoa, Vinh Nguyen, Vinh Phuoc, Vinh Tho, Vinh Truong, Xuong Huan) và 8 communes (Phuoc Dong, Vinh Hiep, Vinh Luong, Vinh Ngoc, Vinh Phuong, Vinh Thai, Vinh Thanh, Vinh Trung). The total natural land area is 25,259.60 (ha), in which 8,020.12 (ha) is agricultural land (occupy 31.75%), non-agricultural land is 6,320.80 ha (25.02%) and 10,918.68 (ha) is unused land (accounted for 42.23%).

## 🔸 Population

39. According to The Statistical Yearbook of Nha Trang City in 2014: Total population in 2014 is: 412,112 people, an average density is: 1,632 people/km2, in which: 200,842 man (accounted for 48.7%), 211,270 woman (accounted for 52.3%); urban population is 303,140 people (accounted for 73.6%), rural population is 108,972 people (accounted for 36.4%). The natural population growth rate of the city is 8.84 ‰, this rate in urban area is 8.83 ‰; and in rural area is 8.88‰.

## Residential Distribution

40. Residential distribution in 03 consecutive years (2012 - 2014) according to administrative units is presented by a below table.

Table 3 - Residential Distribution of Nha Trang City

| No Name Area | Population (people) | Population Number of |
|--------------|---------------------|----------------------|
|--------------|---------------------|----------------------|

|    |                             | ( <b>km</b> <sup>2</sup> ) | Year<br>2012 | Year<br>2013 | Year<br>2014 | Density<br>2014 | household |
|----|-----------------------------|----------------------------|--------------|--------------|--------------|-----------------|-----------|
| Ι  | Inner area (ward)           |                            |              |              |              |                 |           |
| 1  | Vinh Hoa Ward               | 11.9277                    | 16,284       | 16,912       | 17,112       | 1,435           | 4,052     |
| 2  | Vinh Hai Ward               | 4.4876                     | 24,131       | 23,062       | 22,100       | 4,925           | 4,434     |
| 3  | Vinh Phuoc Ward             | 1.4444                     | 26,795       | 26,513       | 26,163       | 18,113          | 5,072     |
| 4  | Ngoc Hiep Ward              | 3.4686                     | 19,969       | 20,319       | 20,579       | 5,933           | 4,559     |
| 5  | Vinh Tho Ward               | 0.6205                     | 7,702        | 7,946        | 7,747        | 12,485          | 1,321     |
| 6  | Xuong Huan Ward             | 0.5918                     | 10,139       | 10,018       | 9,971        | 16,849          | 1,516     |
| 7  | Van Thang Ward              | 0.3500                     | 10,595       | 10,601       | 10,660       | 30,457          | 2,053     |
| 8  | Van Thanh Ward              | 0.3701                     | 13,226       | 13,242       | 13,077       | 35,334          | 2,520     |
| 9  | Phuong Sai Ward             | 0.3830                     | 10,581       | 11,128       | 11,511       | 30,055          | 2,063     |
| 10 | Phuong Son Ward             | 0.4601                     | 10,671       | 11,010       | 11,162       | 24,260          | 1,861     |
| 11 | Phuoc Hai Ward              | 2.5614                     | 19,955       | 20,076       | 20,220       | 7,894           | 3,880     |
| 12 | Phuoc Tan Ward              | 0.4839                     | 15,961       | 15,218       | 14,809       | 30,603          | 2,888     |
| 13 | Loc Tho Ward                | 1.3783                     | 12,650       | 12,483       | 12,134       | 8,804           | 2,950     |
| 14 | Phuoc Tien Ward             | 0.2800                     | 8,979        | 9,032        | 9,098        | 32,493          | 1,952     |
| 15 | Tan Lap Ward                | 0.6100                     | 14,855       | 14,948       | 15,098       | 24,751          | 2,738     |
| 16 | Phuoc Hoa Ward              | 0.9450                     | 11,900       | 11,872       | 11,908       | 12,601          | 2,697     |
| 17 | Vinh Nguyen Ward            | 42.6187                    | 20,985       | 21,187       | 21,379       | 502             | 4,095     |
| 18 | Phuoc Long Ward             | 4.3578                     | 30,597       | 31,186       | 31,572       | 7,245           | 5,665     |
| 19 | Vinh Truong Ward            | 2.3719                     | 16,393       | 16,650       | 16,844       | 7,101           | 3,833     |
| Π  | Suburban area<br>(communes) |                            |              |              |              |                 |           |
| 1  | Vinh Luong Commune          | 46.1718                    | 14,688       | 14,698       | 14,769       | 320             | 3,127     |
| 2  | Vinh Phuong Commune         | 32.5025                    | 12,927       | 12,932       | 13,079       | 402             | 3,026     |
| 3  | Vinh Ngoc Commune           | 8.7815                     | 14,974       | 15,066       | 15,180       | 1,729           | 3,533     |
| 4  | Vinh Thanh Commune          | 3.5031                     | 11,015       | 11,532       | 11,968       | 3,416           | 2,441     |
| 5  | Vinh Trung Commune          | 7.9298                     | 8,236        | 8,248        | 8,327        | 1,050           | 1,939     |
| 6  | Vinh Hiep Commune           | 2.6244                     | 7,974        | 8,148        | 8,271        | 3,152           | 2,127     |
| 7  | Vinh Thai Commune           | 14.4105                    | 9,714        | 10,271       | 10,809       | 750             | 2,820     |
| 8  | Phuoc Dong Commune          | 46.1718                    | 20951        | 23684        | 14,769       | 466             | 5,359     |
|    | Total                       | 252.596                    | 402,847      | 407,982      | 412,112      | 1,632           | 84,521    |

Source: The Statistical Yearbook of Nha Trang City, 2015

41. The average population density of Nha Trang City is 1,632 people/km2, in which the most populated ward is Van Thanh Ward with density of 35,334 people/km2.

## 4 SOCIO-ECONOMIC FEATURES OF PEOPLE IN THE PROJECT AREA

## 4.1 General Features

42. Consultation unit conducted a socio-economic survey in 18 communes/area where has investment items of sub-project in Nha Trang city with the participant of a total of 843 surveyed households, in which there were 589 beneficiary households and 254 affected households. Based on investment content in each communes, ratio of questionaire forms in each communes is different (look at the Table 1 – the number of scio-economic surveyed households)

## Gender of Respondents:

43. According to the result of the socio-economic survey, the participant percentage of man was higher than the participant percentage of women, specifically: among 843 participants interviewed, 562 respondents were male, accounting for 66.6%; whereas 281 respondents were female, accounting for 33.4%.

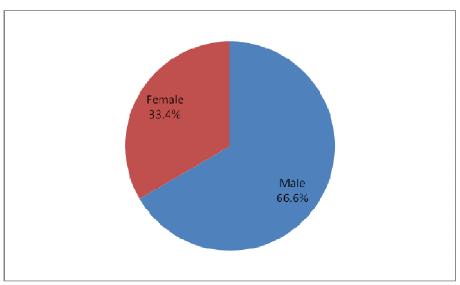


Figure 5. Gender of Respondents (Source: Socio-economic survey, 02/2016, N=843)

44. In addition, the survey result of household members showed that a small difference in gender rate in surveyed communes, on the other hand the female rate was a little bit higher than male rate. In particular, the percentage of women occupied 51.6% and the percentage of man occupied 48.4%.

## Age of Respondents:

45. Age group is one of variables representing opinions of all generations about one issue. The age of respondents is also a critical factor to illustrate the accuracy, the reliability of the survey result. The age result of surveyed participants are showed as a following table:

Table 4 - Age Group of Respondents

| N  | commune    | 20 - 30 years<br>old |      | 31 - 50 years old |      | 51 - 60 years old |      | > 60 years old |      | Tota | Rat |
|----|------------|----------------------|------|-------------------|------|-------------------|------|----------------|------|------|-----|
| No | commune    | Frequ-               | Rate | Frequ-            | Rate | Frequ-            | Rate | Frequ-         | Rate | 1    | e   |
|    |            | ency                 | (%)  | ency              | (%)  | ency              | (%)  | ency           | (%)  |      |     |
| 1  | Vinh Hai   | 19                   | 4.2  | 206               | 45.8 | 111               | 24.7 | 114            | 25.3 | 450  | 100 |
| 2  | Vinh Phuoc | 0                    | 0.0  | 18                | 30.4 | 8                 | 13.0 | 34             | 56.5 | 60   | 100 |
| 3  | Ngoc Hiep  | 2                    | 1.1  | 75                | 37.6 | 37                | 18.3 | 86             | 43.0 | 200  | 100 |
| 4  | Van Thang  | 0                    | 0.0  | 9                 | 11.1 | 31                | 38.9 | 40             | 50.0 | 80   | 100 |
| 5  | Vinh Ngoc  | 0                    | 0.0  | 14                | 45.5 | 8                 | 27.3 | 8              | 27.3 | 31   | 100 |
| 6  | Others     | 1                    | 2.4  | 8                 | 38.6 | 5                 | 23.7 | 8              | 35.3 | 22   | 100 |
|    | Total      | 22                   | 2.6  | 331               | 39.3 | 200               | 23.8 | 290            | 34.4 | 843  | 100 |

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

46. The age group of respondentswas most aged between from 31 - 50 years old (accounting for 39.3%), followed by > 60 year-old group (comprising 35.3%), the 51 - 60 age group occupies 23.8%, 20 -30 year-old group accountsedfor only a small proportion (2.6%). Therefore, participants almost are household heads or the elders in the family. These are mainly the people who have a voice in the family, therefore, this is an advantage of recognition, assessment of socio-economic issues in the family and the local. They are also the people who are decision makers in the family about key issues of the family, the capability and willingness to join project activities in the locality.

## **4** Relationship of Respondents with Household Head :

47. The majority of respondents were the household heads of 731 people (accounting for 86.7%), followed by wife or husband of the household heads, accounting for 7.1%, the rest were parents or children of the household heads with the rate of 6.2%. That the interviewed participants were the household heads ensures the accuracy and the reliability of information in questionaires.

| No | /Commune   | Household | l Head      | Wife/Husb<br>Household |     | Parents/<br>children of<br>Household<br>Head |             |  |
|----|------------|-----------|-------------|------------------------|-----|----------------------------------------------|-------------|--|
|    |            | Frequency | Rate<br>(%) | Frequency Rate (%)     |     | Frequency                                    | Rate<br>(%) |  |
| 1  | Vinh Hai   | 373       | 82.9        | 41                     | 9.2 | 36                                           | 7.9         |  |
| 2  | Vinh Phuoc | 55        | 91.7        | 3                      | 5.3 | 2                                            | 3.0         |  |
| 3  | Ngoc Hiep  | 175       | 87.7        | 13                     | 6.5 | 12                                           | 5.8         |  |
| 4  | Van Thang  | 75        | 94.4        | 3                      | 3.5 | 2                                            | 2.1         |  |
| 5  | Vinh Ngoc  | 31        | 100.0       | -                      | -   | -                                            | -           |  |
| 6  | /Others    | 22        | 100.0       | -                      | -   | -                                            | -           |  |

Table 5 - Relationship of Respondents with Household Head

| Total | 731 | 86.7 | 60 | 7.1 | 52 | 6.2 |  |
|-------|-----|------|----|-----|----|-----|--|

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

#### **Ethnic Component of Respondents:**

48. There is one Hoa person per 843 surveyed people living in Van Thang commune (occupied 0.1%), 842 Kinh people (99.9%).

49. Most of Kinh people live in the project area. Although Hoa people also live there. they live seperately and also stay with Kinh people. Because they have stayed with Kinh people in a long time. their habits and custom are similar with Kinh people. All ethnic minority households in the sub-project area can read and write Vietnamese and they also use as their own language. In their daily activities. They work and stay with Vietnamese community without having any difficulties. Therefore, their economic growth does not meet any difficulties more than Kinh people.

50. Thus, the result screening ethnic minorities as well as the economical and social surveys in the project area showed there were not ethnic minority households and ethnic minority community groups impacted negatively by the project implementation.

#### **Education:**

51. Any public development programs improves and enhances directly or indirectly people's life, also encourage people to take part in all steps from planning the project to finishing the project. In particular, people play an essential role in a process related to monitoring the project's activities. The purpose is to let households not only understand objective of the project but also monitor the project's activities, therefore, finding educational level of respondents is one of critical factors.

| N  | Ward/commune · | Primary level |             | Secondary level |             | > H<br>leve | ligh<br>el  | T-4-1 | Rate  |
|----|----------------|---------------|-------------|-----------------|-------------|-------------|-------------|-------|-------|
| No | ward/commune   | Frequency     | Rate<br>(%) | Frequency       | Rate<br>(%) | Frequency   | Rate<br>(%) | Total | Kate  |
| 1  | Vinh Hai       | 81            | 9.6         | 129             | 15.3        | 240         | 28.5        | 450   | 100.0 |
| 2  | Vinh Phuoc     | 33            | 3.9         | 21              | 2.5         | 6           | 0.7         | 60    | 100.0 |
| 3  | Ngoc Hiep      | 66            | 7.8         | 66              | 7.8         | 68          | 8.1         | 200   | 100.0 |
| 4  | Van Thang      | 29            | 3.4         | 33              | 3.9         | 18          | 2.1         | 80    | 100.0 |
| 5  | Vinh Ngoc      | 11            | 1.3         | 9               | 1.1         | 11          | 1.3         | 31    | 100.0 |
| 6  | /Others        | 7             | 0.8         | 6               | 0.7         | 9           | 1.1         | 22    | 100.0 |
|    | Total          | 227           | 26.9        | 264             | 31.3        | 352         | 41.8        | 843   | 100.0 |

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

52. The above table showed the people having primary school level comprised the lowest percentage of 26.9%, followed by secondary school level people (31.3%), and people having high shool level and higher level accounted for the highest proportion (41.8%). Therefore, the

educational level of respondents was quite high, the people graduating the sencondary, high school level and higher level accounted for major percentage. This is one of factors that further confirm the understanding, the reliability in the process of providing information, this is also an extremely favorable condition for mobilizing people to participate in the project activities.

53. In terms of educational level of the respondents by gender structure, in general, the male respondents' education level is a bit higher than the female respondents' one. Specifically, the educational level of male respondents is mainly from high school or higher level accounted for 42.9% while only 39.5% of female respondents having the education level was from high school or higher level. The percentage of male respondents having secondary school level accounted for 33.1%, while this rate was 27.8% for female respondents. The rate of male respondents having primary school level only accounted 24.0%, while this rate of female accounted for 32.7%.

|    |        | Primary level |          | Seconda   | ry level | > High le |             |       |       |
|----|--------|---------------|----------|-----------|----------|-----------|-------------|-------|-------|
| No | Gender | Frequency     | Rate (%) | Frequency | Rate (%) | Frequency | Rate<br>(%) | Total | Rate  |
| 1  | Male   | 135           | 24.0     | 186       | 33.1     | 241       | 42.9        | 562   | 100.0 |
| 2  | Female | 92            | 32.7     | 78        | 27.8     | 111       | 39.5        | 60    | 100.0 |
|    | Total  | 227           | 26.9     | 264       | 31.3     | 352       | 41.8        | 281   | 100.0 |

Table 7: Education Level of Respondents by Gender

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

## **With the set of the s**

54. The selection of family life according to the traditional model having three, four generations or a modern family-style including couples with children depends on life circumstances and social-economic conditions of each family line, each region or locality, territory. There are no standards prescribed family model for all. However, today the nuclear family model having only one generation is growing trend for families. Nha Trang city is not out of this trend, particularly the number of households live together in a house at communes in the project area as following:

|    |            | One H         | IH          | Two H         | IH          | > 2 H         | Н           |       |       |
|----|------------|---------------|-------------|---------------|-------------|---------------|-------------|-------|-------|
| No | /commune   | Frequenc<br>y | Rate<br>(%) | Frequenc<br>y | Rate<br>(%) | Frequenc<br>y | Rate<br>(%) | Total | Rate  |
| 1  | Vinh Hai   | 434           | 96.4        | 16            | 3.6         | -             | -           | 450   | 100.0 |
| 2  | Vinh Phuoc | 52            | 86.7        | 8             | 11.3        | -             | -           | 60    | 100.0 |
| 3  | Ngoc Hiep  | 188           | 93.8        | 12            | 6.2         | -             | -           | 200   | 100.0 |
| 4  | Van Thang  | 44            | 55.6        | 16            | 19.4        | 20            | 25.0        | 80    | 100.0 |
| 5  | Vinh Ngoc  | 31            | 100.0       | _             | _           | -             | -           | 31    | 100.0 |

Table 8 - The number of households living together in a house

|   | Total   | 771 | 91.5  | 52 | 6.2 | 20 | 2.4 | 843 | 100.0 |
|---|---------|-----|-------|----|-----|----|-----|-----|-------|
| 6 | /Others | 22  | 100.0 | -  | -   | -  | -   | 22  | 100.0 |

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

55. The result represented that nuclear family, 01 generation living together in one family accounted for the highest percentage of 91.5%; followed by the 02-generation family with the percentage of 6.2% and the family with more 02 generations accounted for 2.4%.

#### **Household Size:**

56. According to the survey result, the total number of surveyed households was 843 households, with 3,686 inhabitants, the average number of inhabitants per household was 4.38 persons. Therefore, the number of houdeholds having less than 4 persons occupied the highest proportion of 288 households(34.1%), followed by 4 person households with 250 households accounted for 29.7%, there were 203 households having 5 – 6 persons accounted for 24.1%, there were 93 households containing 6 – 11 persons with percentage of 11.1% and the households having more than 11 persons took the lowest percentage of 11.1%. The majority of households having more than 6 persons are households which have many families living together under one house roof. Van Thang commune has the highest household size is in Vinh Ngoc commune with 3.4 persons/household.

|        |               | <4 pe          | rsons       | =4 pe          | =4 persons  |                | rsons       |                            | -11<br>rsons | >11 persons    |                 |       | Average<br>number                   |
|--------|---------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------------------|--------------|----------------|-----------------|-------|-------------------------------------|
| N<br>o | commune       | Frequ<br>-ency | Rate<br>(%) | Frequ<br>-ency | Rate<br>(%) | Frequ<br>-ency | Rate<br>(%) | Fre<br>qu<br>-<br>enc<br>y | Rate<br>(%)  | Frequ<br>-ency | Rat<br>e<br>(%) | Total | of<br>inhabitant<br>s<br>/household |
| 1      | Vinh Hai      | 154            | 34.1        | 146            | 32.3        | 116            | 25.7        | 35                         | 7.8          | -              | -               | 1,892 | 4.2                                 |
| 2      | Vinh<br>Phuoc | 13             | 20.8        | 20             | 33.3        | 15             | 25.0        | 13                         | 20.8         | -              | -               | 300   | 5.0                                 |
| 3      | Ngoc<br>Hiep  | 85             | 42.3        | 56             | 27.8        | 43             | 21.6        | 16                         | 8.2          | -              | -               | 748   | 3.74                                |
| 4      | Van<br>Thang  | 16             | 19.4        | 11             | 13.9        | 18             | 22.2        | 27                         | 33.3         | 9              | 11.1            | 549   | 6.8                                 |
| 5      | Vinh<br>Ngoc  | 14             | 45.5        | 11             | 36.4        | 6              | 18.2        | -                          | -            | -              | -               | 104   | 3.4                                 |
| 6      | /Others       | 8              | 34.3        | 6              | 29.3        | 5              | 23.9        | 2                          | 11.3         | -              | -               | 92    | 4.2                                 |
|        | Total         | Total          | 34.1        | 250            | 29.7        | 203            | 24.1        | 93                         | 11.1         | 9              | 1.1             | 3,686 | 4.38                                |

Table 9 - Household Size and The Average Number of Inhabitants per Household

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

#### 4.2 Current situation

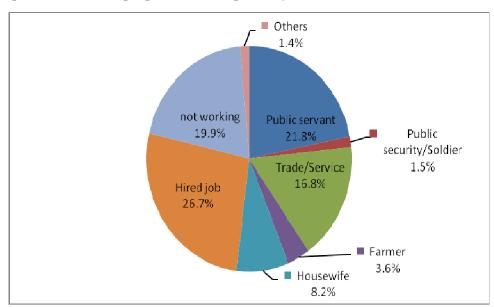
## 4.2.1 Occupation and Economic in the family

## **Gold Head** Occupation of Household Head

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57. Occupation is one important factor deciding the stabality of household life. Therefore, identifying occupation of household head is significantly essential for identifying the stabality in people's daily life.

58. According to the following figure, the main job of respondents was hired job of 224 people (accounted for 26.7%), followed by public servants comprised 183 people (21.8%), the elder people and people do not work accounted for a relative high rate with 168 people (19.9%). The public security and soldier and others accounted for a smallest proportion with the number of 13 people (1.5%) and 12 people (1.4%), respectively.



*Figure 6. Occupation of Respondents* ((Source: Socio-economic survey, 02/2016, N= 843)

## **4** Assets in the family

59. Nowaday, with economic development the income and demand of people also are improved, the number of comfortable equipment serving dailylife and entertainment activities are becoming abundant and diverse. And means and amenities are also one of indices evaluating living level, the stability of household. The following table describe means, amenities of households collected from the survey

| No  | Types of assets | Poor household |             |           | Medium<br>household |           | Well-off<br>household |         | Rate |  |
|-----|-----------------|----------------|-------------|-----------|---------------------|-----------|-----------------------|---------|------|--|
| INU | Types of assets | Frequency      | Rate<br>(%) | Frequency | Rate<br>(%)         | Frequency | Rate<br>(%)           | - Total | (%)  |  |
| 1   | Car             | 0              | 0.0         | 12        | 3.4                 | 38        | 9.3                   | 50      | 5.9  |  |
| 2   | Motorbike       | 73             | 85.2        | 343       | 99.1                | 401       | 97.7                  | 818     | 97.0 |  |
| 3   | Air conditioner | 10             | 11.1        | 84        | 24.1                | 185       | 45.0                  | 279     | 33.1 |  |

Table 10 - Assests in The Family Classified by Living Level of Households

| Na  | Types of assets             | Poor hous | Poor household |           | Medium<br>household |           | Well-off<br>household |         | Rate |
|-----|-----------------------------|-----------|----------------|-----------|---------------------|-----------|-----------------------|---------|------|
| INO | Types of assets             | Frequency | Rate<br>(%)    | Frequency | Rate<br>(%)         | Frequency | Rate<br>(%)           | - Total | (%)  |
| 4   | Luxurious wood<br>furniture | 13        | 14.8           | 75        | 21.6                | 194       | 47.3                  | 282     | 33.5 |
| 5   | Sound system                | 32        | 37.0           | 143       | 41.4                | 268       | 65.1                  | 443     | 52.6 |
| 6   | Phone                       | 57        | 66.7           | 316       | 91.4                | 373       | 90.7                  | 746     | 88.5 |
| 7   | Color television            | 83        | 96.3           | 334       | 96.5                | 392       | 95.3                  | 809     | 96.0 |
| 8   | Fridge                      | 73        | 85.2           | 322       | 93.1                | 389       | 94.5                  | 784     | 93.0 |
| 9   | Washing machine             | 29        | 33.3           | 200       | 57.8                | 280       | 68.2                  | 509     | 60.4 |
| 10  | Heater                      | 16        | 18.5           | 89        | 25.9                | 140       | 34.1                  | 245     | 29.1 |
| 11  | Bike                        | 54        | 63.0           | 191       | 55.2                | 105       | 25.6                  | 350     | 41.5 |

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

60. It can be seen clearly that the majority of households owned basic means such as motorbikes (95.9%), the highest motorbike belonged to the medium household accounted for 99.1%, followed by the well-off household accounted for 97.7% and the poor household accounted for 85.2%. Today, households using bicycles was becoming less than in the past, particularly only 41.1% of households answered that they have bicycles, in which the highest proportion of households having bicycles was the poor household with 63%, followed by the medium household of 55.2% and the well-off household owned the smallest number of bicycles with the percentage of 25.6%. In case of car, only 5.9% households responded that they owned cars, in which 9.3% of well-off household and 3.4% of medium household owing the cars as means.

61. The survey result showed that in case of assesst items serving purpose of entertainment, audiovisual media, television were owned with the highest rate of 96% by households, followed by the phone with percentage of 88.5%, the percentage of households having the sound system accounted for a ralatively high number of 52.6%.

62. Following to amenities group serving the purpose of daily activities: fridge, washing machine, heater, air conditioner. The households owned the fridge accounted for the significantly high rate of 93%, followed by group having the washing machine with 60.4%, the households owned the heaters and air conditioners comprised a small percentage of 29.1% and 33.1%, respectively.

63. In case of the amenities group related to interior: the households owned luxurious wood furniture accounted for 33.5%.

64. Therefore, almost surveyed households owned enought traffic means, amenities serving basic demand of urban life: movement, entertainment, contact, daliy activities, interior decoration, etc.

#### **4** The Number of Income Sources, Expenditure, and Income

65. In the economic development situations as today, economic model of households is normally mixed (agriculture sector associated with other sectors), therefore, income sources also are diverse. Some jobs like hired jobs characterized with a low stability but are main income sources in household's economy. The following table represents income source classified by living level of households.

| No  | The source of income                | Poor hous | sehold      | Mediu<br>househ |          | Well-o<br>househ |                    | - Total | Rate |
|-----|-------------------------------------|-----------|-------------|-----------------|----------|------------------|--------------------|---------|------|
| INU | The source of meome                 | Frequency | Rate<br>(%) | Frequency       | Rate (%) | Frequency        | Frequency Rate (%) |         | (%)  |
| 1   | Cultivation                         | 21        | 24.1        | 74              | 21.4     | 40               | 9.7                | 135     | 16.1 |
| 2   | Livestock (including aquaculture)   | 6         | 6.9         | 21              | 6.0      | 15               | 3.7                | 42      | 5.0  |
| 3   | Hired jobs                          | 36        | 41.4        | 130             | 37.6     | 95               | 23.1               | 262     | 31.1 |
| 4   | Salary/ pension                     | 33        | 37.9        | 169             | 48.7     | 245              | 59.7               | 446     | 52.9 |
| 5   | Trade / Service                     | 18        | 20.7        | 127             | 36.8     | 147              | 35.8               | 292     | 34.6 |
| 6   | Saving                              | 3         | 3.4         | 27              | 7.7      | 37               | 9.0                | 66      | 7.9  |
| 7   | Recieved from<br>children/Relatives | 15        | 17.2        | 56              | 16.2     | 74               | 17.9               | 145     | 17.1 |
| 8   | Others                              | 3         | 3.4         | 35              | 10.3     | 28               | 6.7                | 66      | 7.9  |

Table 11 - Income Sources Classified by Living Level of Household

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

66. The result showed that the main income source of surveyed was salary/pension (accounted for 52.9%), income source from salary/pension of middle and well-off household accounted for the highest percentage of 48.7%, and 59.7%, respectively. The second highest income source was trade/service, in which 36.8% medium household got income from trade/service and 35.8% of well-off household, 20.7% poor household. Income source from hired jobs comprised 31.1%, and poor household accounted for the highest percentage of 41.1% of households got income from hired jobs.

67. Considering about structure of expenditure, income as well as accumulation, based on statistics collected from the community, there is a difference between households. In detailed:

|    | The ex | verage income,  | Total of average<br>income,<br>expenditure and | The average income and expenditure of household/month (VND) |                     |                       |  |  |
|----|--------|-----------------|------------------------------------------------|-------------------------------------------------------------|---------------------|-----------------------|--|--|
| No |        | ture and saving | saving of<br>household per<br>month            | Poor<br>household                                           | Medium<br>household | Well-off<br>household |  |  |
| 1  | Income | Household/month | 8,450,000                                      | 2,838,000                                                   | 7,072,000           | 10,923,000            |  |  |

Table 12 - The Average Income, Expenditure, Saving Classified by Living Level

|    | The eve       | erage income,   | Total of average<br>income,<br>expenditure and | The average income and expenditus of household/month (VND) |                       |           |
|----|---------------|-----------------|------------------------------------------------|------------------------------------------------------------|-----------------------|-----------|
| No |               | ure and saving  | saving of<br>household per<br>month            | Poor<br>household                                          | Well-off<br>household |           |
|    |               | People/month    | 2,264,000                                      | 885,000                                                    | 1,329,000             | 2,264,000 |
| 2  | 2 Expenditure | Household/month | 6,590,000                                      | 2,392,000                                                  | 6,041,000             | 7,353,000 |
| Z  |               | People/month    | 1,696,000                                      | 737,000                                                    | 1,172,000             | 1,696,000 |
| 3  | Saving        | Household/month | 1,860,000                                      | 446,000                                                    | 1,030,000             | 3,569,000 |

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

68. The above table showing the average monthly income and expenditure of households was rounded.

- The average monthly income of households was 8,450,000 VND, in which: poor household's income was 2,838,000 VND; medium household's income was 7,072,000 VND, well-off household's income was 10,923,000 VND. Similarly, by dividing the average income by month, the average income/month/person was 885,000 VND, 1,329,000 VND and 2,264,000 VND, respectively.
- The average monthly expenditure of households was 6,590,000 VND, in which: poor household's expenditure amount was 2,392,000 VND, medium household's expenditure amount was 6,041,000 VND and well-off household's expenditure amount was 7,353,000 VND. The average expenditure per month per person of poor, middle and well-off household were: 737,000 VND, 1,172,000 VND and 1,696,000 VND, respectively.
- The average saving of households was 1,860,000 VND/month. This saving also was different between household group, in detailed: the poor household's saving amout was 446,000 VND, the medium household's saving amout was 1,030,000 VND, the well-off household's saving amout was 3,569,000 VND.

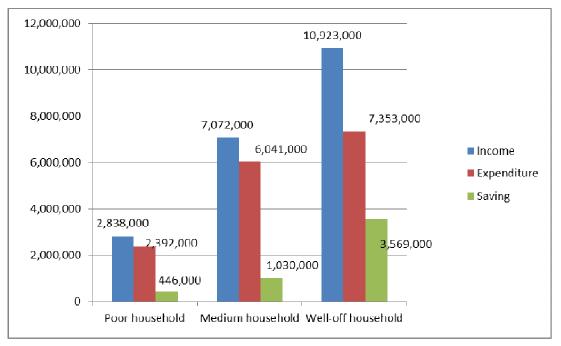


Figure 7. Monthly Income and Expenditure of Households (unit: VND/household/month) (Source: Socio-economic survey, 02/2016, N= 843)

69. Expenditure level: a total avearge expenditure of households was 6,590,365 VND/household/month. Considering about economic groups, this expenditure level was increasing gradually associated with higher living level, in detailed: 2,391,613 VND/month in the poor household, 6,041,119 VND/month in the medium household, 7,353,706 VND/month in the well-off household. In other words, the expenditure level of the poor household only was about 32.5% compared to the expenditure level of well-off household and 39.6% of expenditure level of medium household in the same month.

| No | Expenditure<br>items              | The average<br>expenditure/<br>household/month |           | Poor h                | Poor household Medium household |                       | Well-off household |                       |           |
|----|-----------------------------------|------------------------------------------------|-----------|-----------------------|---------------------------------|-----------------------|--------------------|-----------------------|-----------|
|    |                                   | %/<br>total<br>income                          | Total     | %/<br>total<br>income | Total                           | %/<br>total<br>income | Total              | %/<br>total<br>income | Total     |
| 1  | Food                              | 37.3                                           | 3,149,659 | 60.8                  | 1,725,000                       | 46.7                  | 3,304,231          | 28.0                  | 3,056,197 |
| 2  | Electricity                       | 4.5                                            | 378,444   | 7.6                   | 216,000                         | 5.9                   | 415,413            | 3.0                   | 325,205   |
| 3  | Water                             | 2.3                                            | 193,333   | 3.3                   | 94,000                          | 3.0                   | 211,923            | 1.6                   | 175,681   |
| 4  | Tipping fee<br>for solid<br>waste | 0.4                                            | 32,388    | 0.9                   | 25,000                          | 0.5                   | 34,222             | 0.3                   | 30,500    |
| 5  | Tipping fee<br>for<br>wastewater  | -                                              | -         | -                     | -                               | -                     | -                  | -                     | -         |

Table 13 - The Monthly Expenditure of Households

| 6  | Travel              | 9.4  | 793,785   | 13.8 | 391,634   | 11.2 | 793,785   | 12.6 | 1,376,357 |
|----|---------------------|------|-----------|------|-----------|------|-----------|------|-----------|
| 7  | House rental<br>fee | -    | -         | -    | -         | -    | -         | -    | -         |
| 8  | Studying            | 23.5 | 1,988,151 | 15.6 | 442,717   | 25.3 | 1,786,885 | 24.5 | 2,673,646 |
| 9  | Health care         | 13.3 | 1,127,880 | 17.5 | 496,638   | 14.8 | 1,044,768 | 9.2  | 1,000,000 |
| 10 | Entertainment       | 9.0  | 757,143   | 1.2  | 34,055    | 10.7 | 757,143   | 5.6  | 611,714   |
| 11 | Others              | 15.9 | 1,342,498 | 29.4 | 833,333   | 19.7 | 1,394,144 | 11.8 | 1,293,630 |
|    | Total               | 78.0 | 6,590,365 | 84.3 | 2,391,613 | 85.4 | 6,041,119 | 67.3 | 7,353,706 |

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

70. In general, expenditure items of households are quitely abundant, apart from essential expenditure items such as: food, electricity, water, waste, there are expenditure items of studying, health care, travel, entertainment, etc. The expenditure item accounted for the highest percentage was food spending of 37.3% of total income, followed by studying spending of 23.5% total income, and followed by equivalent items such as: health care of 13.3%, travel of 9.4%, entertainment of 9.0% and others of 15.9%. Therefore, the average expenditure of household accounted for 78.0% of total income.

71. If we consider about each household group, the medium household group had the highest expenditure level with percentage of 85.4% of total income, equivalent to the expenditure level of the poor household accounted for 84.3% of total income, the expenditure level of well-off household accounted for a lowest percentage of 67.3% of total income. This is also a reason that these households were classified in well-off household group, not only they have high income but also they manage household finance better than the middle and poor household.

72. When people were asked that "Are your income sources stable or not?" 16.8% of responded households said that these sources were not stable and focused mainly on the medium household. The unstability of income shared from households were caused by some reasons as: hired jobs are not stable, in case of bussiness/trade households, their income depend on tourism season.

#### **Classification of household by Investigator:**

73. Because the economic development of each project's area is different, household economic viewpoint also is different. Maybe economy of one household is considered as well-off economy but this household might be considered as middle economy in other area. Therefore, the role of investigator in classifying households' economy is significantly essential. The investigator would use the following bases to classify household's economy:

 Based on the proportion of poor household under standards of MOLISA<sup>1</sup> applied in period of 2016 – 2020 to urban area: The income level of poor household was ≤

<sup>&</sup>lt;sup>1</sup> According to Decision No: 59/2015/QD-TTg, dated on  $19^{th}$  of December, 2015 issuing on the poverty standards approaching multidimension in period of 2016 - 2020.

900,000 VND/person/month; The income level of marginally poor household > 900,000 VND to 1,300.000 VND/person/month; The income level of medium household was > 1,300,000 VND to 1,950,000 VND/person/month; the well-off household (including well-off and rich households) have the income level > 1,950,000 VND/person/month.

- Based on viewpoint of local authorities on life, economy of households (income, expenditure/household/month, assests, amenities in households, occupations, children, etc.). At the survey time, an approach method to multidimensional poverty standards applied from 2016 was conducted in the city area, so all data and opinions of local authorities are applied under national poverty standards in period of 2011 2015, to be in detailed: The income level of poor household was ≤ 500,000 VND/person/month, the income level of marginally poor household in urban area was in rage of 501,000 650,000 VND/person/month.
- In a process interviewing households, the investigator were needed to observe economic condition of households such as houses, amenities in the family.

74. The consultants proposed application of income level of  $\leq$  900,000 VND/person/month for the poor household (including poor and marginally poor household), the income level of > 900,000 to 1,950,000 VND/person/month for the medium household group and > 1,950,000 VND/person/month for the well-off household.

| No |            | Poor household |             | Medium household |          | Well-off household |             |       |       |
|----|------------|----------------|-------------|------------------|----------|--------------------|-------------|-------|-------|
|    | /commune   | Frequenc<br>y  | Rate<br>(%) | Frequenc<br>y    | Rate (%) | Frequenc<br>y      | Rate<br>(%) | Total | Rate  |
| 1  | Vinh Hai   | 30             | 6.6         | 157              | 34.9     | 263                | 58.6        | 450   | 100.0 |
| 2  | Vinh Phuoc | 12             | 20.0        | 24               | 40.0     | 24                 | 40.0        | 60    | 100.0 |
| 3  | Ngoc Hiep  | 21             | 10.3        | 97               | 48.7     | 82                 | 41.0        | 200   | 100.0 |
| 4  | Van Thang  | 18             | 22.9        | 46               | 57.1     | 16                 | 20.0        | 80    | 100.0 |
| 5  | Vinh Ngoc  | 3              | 10.4        | 13               | 41.8     | 15                 | 47.9        | 31    | 100.0 |
| 6  | /Others    | 2              | 10.4        | 9                | 41.8     | 11                 | 47.9        | 22    | 100.0 |
|    | Total      | 86             | 10.2        | 346              | 41.1     | 411                | 48.7        | 843   | 100.0 |

Table 14 - Economic Household Group Classified y The Average Income Per PersonPer month

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

75. Therefore, all samples there were 86 poor household (accounted for 10.2%) with the average income of 885,458 VND/person/month, 346 medium household (41.1%) with the average income of 1,329,690 VND/person/month and 411 well-off household (48.7%) with the average income of 2,464,590 VND/person/month. This report will use the living level classification of the investigators during the analysis process.

#### 4.2.2 Vulnerable Households:

76. Vulnerable social group is used as a definition for publicity/people group who have lower politic, economic or social level than other publicity/people group, which makes them

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easily neglected or violated rights. Therefore, they shall be protected carefully more than other people. In the survey program, determining the vulnerable social group is an important task because it is a base so as to develop compensation plan, resettlement (if any), especially in the program and plan of livelihood restoration, these groups are always cared carefully. The result is shown in the following table:

| No | Vulnerable                                      | Poor household |             | Medium<br>household |             | Well-off<br>household |             | Total   | Data  |
|----|-------------------------------------------------|----------------|-------------|---------------------|-------------|-----------------------|-------------|---------|-------|
| No | group                                           | Frequenc<br>y  | Rate<br>(%) | Frequenc<br>y       | Rate<br>(%) | Frequenc<br>y         | Rate<br>(%) | - Total | Rate  |
| 1  | Poor<br>household <sup>2</sup>                  | 11             | 12.8        | -                   | -           | -                     | -           | 11      | 1.3   |
| 2  | Women-<br>headed<br>households                  | 38             | 44.2        | 79                  | 22.8        | 103                   | 23.4        | 220     | 26.1  |
| 3  | Elderly and<br>disabled<br>people<br>households | 5              | 5.8         | 15                  | 4.3         | 13                    | 3.2         | 33      | 3.9   |
| 4  | Others not<br>belonging<br>above<br>groups      | 32             | 37.2        | 251                 | 72.5        | 295                   | 73.4        | 578     | 68.6  |
| 5  | Total                                           | 86             | 100         | 346                 | 100.0       | 411                   | 100         | 843     | 100.0 |

Table 15 - Family Circumstances of Household

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

77. According to the survey result, 68.6% of surveyed households was a group not belonging to mentioned vulnerable household group. Considering about structure, the vulnerable households having female household head accounted for the highest percentage of 26.2%, followed by households having the elder and disabled people of 3.9%, Poor household of 1.3%.

78. Poor household group had the highest percentage of female household head with 38 households (accounted for 44.2%), 79 households having female households head in the medium household group (accounted for 22.8%), and 103 households in the well-off household (accounted for 23.4%).

79. Poor household only appeared in the poor household group with 11 hộ (chiếm12,8%). The evaluation criteria for poor household are based on an old poverty classification by the investigator and confirmed by the local.

## 4.2.3 Land and housing

Housing:

<sup>&</sup>lt;sup>2</sup> Classification by old poverty standard and confirmed by the local.

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80. Most of the residents have permanent houses about 541 households (64%). The habitants living in semi-permanent houses are 221 households (26.3%), people living in the condominium comprised a smallest rate about 9 households (1.1%). 12 households (1.4%) living in gardening houses are the poor household, 60 households (7.2%) living in temporary houses. The model of housing reflects the model of economic layer in the project.

| No | Types of<br>house           | Poor household |             | Mediu<br>househe |             | Well-o<br>househo |             | Total | Rate<br>(%) |
|----|-----------------------------|----------------|-------------|------------------|-------------|-------------------|-------------|-------|-------------|
|    |                             | Frequency      | Rate<br>(%) | Frequency        | Rate<br>(%) | Frequency         | Rate<br>(%) |       |             |
| 1  | Permanent<br>house          | 33             | 37.9        | 216              | 62.4        | 293               | 71.2        | 541   | 64.0        |
| 2  | Semi-<br>permanent<br>house | 36             | 41.4        | 95               | 27.4        | 90                | 22.0        | 221   | 26.3        |
| 3  | Temporary<br>house          | 9              | 10.3        | 30               | 8.5         | 22                | 5.3         | 60    | 7.2         |
| 4  | Condominium                 | -              | -           | 6                | 1.7         | 3                 | 0.8         | 9     | 1.1         |
| 5  | Garden house                | 9              | 10.3        | -                | -           | 3                 | 0.8         | 12    | 1.4         |
|    | Total                       | 86             | 100.0       | 346              | 100.0       | 411               | 100.0       | 843   | 100.0       |

Table 16 - Current Houses Classified by Living Level of Household

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

# The Period of Residence:

81. Finding the period of residence of the households in the project area is one of the neccessary elements. It is the base to consider if the provided information of households is objective, or does it reflect the current conditions? Normally, the longer the period of residence of households is, the more they will understand about the current conditions around their living environment. And then we can give the comments and assessments close to the actual conditions.

| ТТ | Number of            | Poor household |             | Mediu<br>househ |             | Well-<br>househ |             | - Total | Rate |
|----|----------------------|----------------|-------------|-----------------|-------------|-----------------|-------------|---------|------|
| 11 | years                | Frequenc<br>y  | Rate<br>(%) | Frequenc<br>y   | Rate<br>(%) | Frequenc<br>y   | Rate<br>(%) | Total   | Kate |
| 1  | Less than 1<br>year  | 0              | 0.0         | 0               | 0.0         | 6               | 1.5         | 6       | 0.7  |
| 2  | From 1 - 5<br>years  | 0              | 0.0         | 9               | 2.6         | 13              | 3.1         | 22      | 2.6  |
| 3  | From 5 - 10<br>years | 0              | 0.0         | 6               | 1.7         | 35              | 8.4         | 41      | 4.9  |
| 4  | From 10 - 20         | 18             | 20.7        | 93              | 27.0        | 166             | 40.5        | 277     | 32.9 |

Table 17 - The Number of Living Year in The Local Classified by Living Level

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|   | Total              | 86 | 100.<br>0 | 346 | 100.<br>0 | 411 | 100.0 | 843 | 100.0 |
|---|--------------------|----|-----------|-----|-----------|-----|-------|-----|-------|
| 5 | More than 20 years | 68 | 79.3      | 238 | 68.7      | 191 | 46.6  | 497 | 59.0  |
|   | years              |    |           |     |           |     |       |     |       |

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

82. According to the statistical data, most of the households live in the locality over 20 years (59 %), 32.9 % of households live in the locality from 10 years to 20 years; 4.9 % of households and 2.6 % of households live there about 5 - 10 years and 1 - 5 years respectively, and it only focuses on medium household and well-off household, households living there less than one year are 0.7% the smallest rate and focus on the well-off household. Therefore, households in the survey are people living there in a long time. Immigrants do not happen frequently in the communes of the project area, and if there is a immigrant, it only happens with the medium household and well-off household. Because of that, most of the surveyed households understood the current condition of the locality clearly, the provided information are extremely realistic.

# Source of land:

83. Most of the land/housing are self-bought/constructed (61.3%), and 35% is inherited. The rate of provided house/land is 1.5%, rented house/land is 1.1% and 1.1% is other source.

| No | Source of<br>land/house     | Poor household |             | Mediu<br>househo |             | Well-o<br>househo | Total       | Rate<br>(%) |      |
|----|-----------------------------|----------------|-------------|------------------|-------------|-------------------|-------------|-------------|------|
|    |                             | Frequency      | Rate<br>(%) | Frequency        | Rate<br>(%) | Frequency         | Rate<br>(%) |             |      |
| 1  | Inherited                   | 34             | 39.3        | 146              | 42.2        | 114               | 27.7        | 294         | 35.0 |
| 2  | Provided                    | 3              | 3.6         | 9                | 2.6         | -                 | -           | 12          | 1.5  |
| 3  | Self-<br>bought/constructed | 49             | 57.1        | 182              | 52.6        | 288               | 70.0        | 519         | 61.3 |
| 4  | Rented                      | -              | -           | 3                | 0.9         | 6                 | 1.5         | 9           | 1.1  |
| 5  | Others                      | -              | -           | 6                | 1.7         | 3                 | 0.8         | 9           | 1.1  |
|    | Total                       | 86             | 100         | 346              | 100         | 411               | 100         | 843         | 100  |

Table 18 - Source of Land/House

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

84. The rate of land/housing self-bought/constructed for the well-off HH group is 70%, followed by 57.1% for the poor HH group and 52.6% for the medium HH group. The rate of inherited land/housing focused in the medium HH group with 42.2%, followed by 39.3% for the poor HH group and only 27.7% for the well-off HH group.

# Land ownership documents:

85. For households, land and housing are not only to inhabit but high value property as well, therefore, the certificate of land-use is the legal base to prove the legality of citizen to using land.

For affected households, certificate of land-use is important base and legal basis so as to make a price for compension as well as indentify allowance for households

| N | Content                                           | Poor hous     | sehold      | Mediu<br>househ |             | Well-<br>househ |             | Tổn  | Tỷ lệ  |
|---|---------------------------------------------------|---------------|-------------|-----------------|-------------|-----------------|-------------|------|--------|
| 0 | Content                                           | Frequenc<br>y | Rate<br>(%) | Frequenc<br>y   | Rate<br>(%) | Frequenc<br>y   | Rate<br>(%) | g số | ı y iç |
| 1 | Land use<br>right<br>certificate                  | 40            | 46.5        | 208             | 60.1        | 349             | 84.9        | 597  | 70.8   |
| 2 |                                                   | 3             | 3.6         | 9               | 2.6         | -               | -           | 12   | 1.5%   |
| 3 | Land/house<br>certificate<br>granted by<br>agency | 11            | 12.5        | 33              | 9.6         | 25              | 6.2         | 69   | 8.2    |
| 4 | Rental house certificate                          | 0             | 0.0         | 8               | 2.4         | 0               | 0.0         | 8    | 0.9    |
| 5 | No paper                                          | 18            | 20.8        | 38              | 10.8        | 29              | 7.1         | 85   | 10.1   |
| 6 | Others                                            | 14            | 16.7        | 50              | 14.5        | 8               | 1.8         | 72   | 8.5    |
|   | Total                                             | 86            | 100.0       | 346             | 100.0       | 411             | 100.0       | 843  | 100.0  |

Table 19 - Types of Land Ownership Documents Classified by Living Level

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

86. Most of the surveyed households have certificates of land-use as legal bases to prove their own lands/housing with a rate of 70.8%. 10.1% households do not have any certificates of land-use; 20.8% poor household are the highest rate having no any certificates of land-use, and then 14.5% medium household, 7.1% well-off household;

87. When households are asked about the reason why they do not have any certificates of land-use, 48 households (56.5%) answered that it is because the cost is too expensive, 20 households (23.5%) do not have legal dossiers (land sale documents are written by hand, the lands belongs to their family ...), 17 households (20%) answered it is because of other reasons (they are not provided; because the land belongs to the planned areas, the Commune People's Committee does not give them any certificates of land-use).

88. 8.2% households do not have any temporary land ownership documents; 0.9% households have a contract of renting house and 8.5% households have other documents (inheritance, housing tax statements, land sale documents are certificated by the local government).

# 4.2.4 The Current Status of Traffic and Participating in Traffic

89. An evaluation of the road surface situation where households are living. Most of the surveyed households live near the street (38.9%) and are higher than poor, medium and well-off

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household with the rate of 43.4 %, 37.2% and 35.5%, respectively. 28.8% of households live in the alleys/hamlmets' width of 2-3m, 23.6% households live in the alleys/hamlmets's width of less than 2m, 6.2% of households live in the alleys/hamlmets's width of more than 5m and 2.5% of households live in the alleys/hamlmets of about 3-5m wide.

| N | Position of house                               | Poor household |           | Medi<br>housel |           | Well-<br>housel |           | Tot | Rate |
|---|-------------------------------------------------|----------------|-----------|----------------|-----------|-----------------|-----------|-----|------|
| 0 | r osition of nouse                              | Frequen<br>cy  | Rate<br>% | Frequen<br>cy  | Rate<br>% | Frequen<br>cy   | Rate<br>% | al  | %    |
| 1 | On the road/street side                         | 32             | 37.2      | 150            | 43.4      | 146             | 35.5      | 328 | 38.9 |
| 2 | Alleys/hamlets<br>with width of more<br>than 5m | 3              | 3.5       | 12             | 3.5       | 37              | 9.0       | 52  | 6.2  |
| 3 | Alleys/hamlets<br>with width of 3-5m            | 0              | 0.0       | 12             | 3.5       | 9               | 2.2       | 21  | 2.5  |
| 4 | Alleys/hamlets<br>with width of 2-3m            | 15             | 17.4      | 77             | 22.3      | 151             | 36.7      | 243 | 28.8 |
| 5 | Alleys/hamlets<br>with width of less<br>than 2m | 36             | 41.9      | 95             | 27.5      | 68              | 16.5      | 199 | 23.6 |
| 6 | Others                                          | 0              | 0.0       | 0              | 0.0       | 0               | 0.0       | 0   | 0.0  |
|   | Total                                           | 86             | 100.0     | 346            | 100.0     | 411             | 100.0     | 843 | 100  |

Table 20 - Road surface in residential area

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

90. The statistic data of types of alley/street leading to the house of households was shown in the following table. According to the data, more than a half of inner traffic system or alley/street to the households was concrete and asphalt; however, above 39% the alley/street was covered by soil or rock.

| No | Road surface features | Frequency | Rate (%) |
|----|-----------------------|-----------|----------|
| 1  | Asphalt               | 263       | 31.5%    |
| 2  | Concrete              | 244       | 29.2%    |
| 3  | Stone/brick/gravel    | 98        | 11.8%    |
| 4  | Soil                  | 224       | 26.9%    |
| 5  | Others                | 5         | 0.6%     |
|    | Total                 | 843       | 100%     |

Table 21 - Types of roads/alleys in residential area

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

91. When the residents are asked about the alley/street system assessment to their house, 76% of households said that the road system is good. However, many habitants (15%) thought

that the road is narrow, 11.1% people said the road is often flooded, 10.8% people supposed the surface of the road is low, 6.6% people said it is rough, 5.4% residents said it is too dust,dirty.

| No | Road system evaluation        | Frequency | Rate (%) |
|----|-------------------------------|-----------|----------|
| 1  | Good in general               | 640       | 76.0%    |
| 2  | Often flooded                 | 94        | 11.1%    |
| 3  | Narrow                        | 127       | 15.0%    |
| 4  | Low road surface              | 91        | 10.8%    |
| 5  | Rough and difficult to travel | 56        | 6.6%     |
| 6  | So much dirty                 | 46        | 5.4%     |
| 7  | Others                        | 0         | 0.0%     |
|    | Total                         | 1054      | 124.9%   |

Table 22 - Evalution of households on alley/hamlet system

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

92. An evaluation of the current situation of the transport system in the area by gender showed that the rate of male respondents satisfied with the quality of road system was higher this rate of female respondents, in particular, 77.9 % of male respondents evaluated the road quality is good in general. Whereas this rate for femal respondents accounted for only 71.9%.

|    |                               | Male      | e           | Fema      | le          | Total     |          |  |
|----|-------------------------------|-----------|-------------|-----------|-------------|-----------|----------|--|
| No | Road System Evaluation        | Frequency | Rate<br>(%) | Frequency | Rate<br>(%) | Frequency | Rate (%) |  |
| 1  | Good in general               | 438       | 77.9        | 202       | 71.9        | 640       | 76.0     |  |
| 2  | Often flooded/muddy           | 51        | 9.1         | 43        | 15.3        | 94        | 11.1     |  |
| 3  | Narrow                        | 78        | 13.9        | 49        | 17.1        | 127       | 15.0     |  |
| 4  | Low road surface              | 61        | 10.9        | 30        | 10.7        | 91        | 10.8     |  |
| 5  | Rough and difficult to travel | 36        | 6.4         | 20        | 7.1         | 56        | 6.6      |  |
| 6  | So much dirty                 | 28        | 5.0         | 18        | 6.4         | 46        | 5.4      |  |

 Table 23: Evaluation of Households on Road/Alley System Classified by Gender

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

93. Regarding transportation means: The following table showed that people use motor vehicles accounted for the highest rate (97%), followed by bicycles (41.5%), electric bicycle/motorcycle (13.6%) and private car (5.9%). The rate of households using car accounted for the low rate, and concentrated in the well-off HH group with 9.3% and the medium HH group with 3.4%. The rate of households still using bicycle was relatively large and concentrated mainly in the poor HH group with 63.3%, followed by the medium HH group with 55.2%, and the well-off HH group with 25.5 %. In these vehicles, the bicycle is the most environmentally

friendly transport mean, however, with the development of Socio-economic, transport infrastructure, this rate will have upheaval and change drastically.

| No | All assests in the family    | Poor ho  | ousehold   |          | lium<br>ehold | Well<br>house |        |     | Rate |
|----|------------------------------|----------|------------|----------|---------------|---------------|--------|-----|------|
|    | Tanniy                       | Frequenc | y Rate % I | Frequenc | y Rate % I    | Frequency     | Rate % |     | (%)  |
| 1  | Car                          | 0        | 0.0        | 12       | 3.4           | 38            | 9.3    | 50  | 5.9  |
| 2  | Motorbike                    | 73       | 85.2       | 343      | 99.1          | 401           | 97.7   | 818 | 97.0 |
| 3  | Bicycle/Electric-<br>bicycle | 21       | 24.1%      | 41       | 12.0%         | 53            | 12.8%  | 115 | 13.6 |
| 4  | Bicycle                      | 54       | 63.0       | 191      | 55.2          | 105           | 25.6   | 350 | 41.5 |
| 5  | Tricycle                     | 0        | 0.0%       | 6        | 1.7%          | 0             | 0.0%   | 6   | 0.7  |

Table 24 - Transportation means of households classified by living level

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

#### 4.2.5 Current situation of power supply and power using

94. In the whole Nha Trang city, the national power grid was covered 100%. The power supply network system of the City has been invested in upgrading relatively completedly; the national grid power is ensured to transmit to the residential areas, tourism areas, industrial zones, etc that provided sufficiently demand of using residential and production electricity for the City people and investors.

95. The survey result showed that 100% of households using grid power with private meter.

96. Although power grid system does not belong to investment parts of Sub-project, this is one of urgent matters in residents' life, particularly for urban people, and this is also one of essential concern to anybody who make planning and infrastructure development. One of indicators measuring quality of electricity system is the Frequency of cutting power in the month.

|    |                       |                |             |                      | 1           |                |             | 0              |             |                |             |                |             |
|----|-----------------------|----------------|-------------|----------------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|
| NT | com-mune <sup>-</sup> | Rarely cut     |             | 1 – 2<br>times/month |             | 3 -<br>times/r |             | >:<br>times/r  |             | Not k          | nown        | Total          |             |
| No |                       | Freq-<br>uency | Rate<br>(%) | Freq-<br>uency       | Rate<br>(%) | Freq-<br>uency | Rate<br>(%) | Freq-<br>uency | Rate<br>(%) | Freq-<br>uency | Rate<br>(%) | Freq-<br>uency | Rate<br>(%) |
| 1  | Vinh Hai              | 349            | 77.6        | 14                   | 3.1         | 5              | 1.1         | 0              | 0.0         | 82             | 18.2        | 450            | 100         |
| 2  | Vinh Phuoc            | 27             | 100         | -                    | -           | -              | -           | -              | -           | -              | -           | 27             | 100         |
| 3  | Ngoc Hiep             | 194            | 97          | 4                    | 2.0         | -              | -           | -              | -           | 2              | 1.0         | 200            | 100         |
| 4  | Van Thang             | 36             | 100         | -                    | -           | -              | -           | -              | -           | -              | -           | 36             | 100         |
| 5  | Vinh Ngoc             | 31             | 100         | -                    | -           | -              | -           | -              | -           | -              | -           | 31             | 100         |
| 6  | Others                | 22             | 100         | -                    | -           | -              | -           | -              | -           | -              | -           | 22             | 100         |
|    | Total                 | 736            | 87.3        | 18                   | 2.1         | 5              | 0.6         | 0              | 0.0         | 84             | 10.0        | 843            | 100         |
|    |                       |                |             |                      |             |                |             |                |             |                |             |                |             |

Table 25 - The Frequency of Cutting Power in Communes

97. The above table illustrated that 84.7% of interviewed households said that residential electricity is rarely cut in area they live. In coummunes: Vinh Phuoc, Van Thang, Vinh Ngoc and others showed 100% of households said that the residential electricity is rarely cut. In Vinh Hai commune, the proportion of households said that the electricity rarely cut was 77.6%, cut with the frequency of 1 -2 times/month was 3.1%, and 18.2% of households did not know clearly about the frequency of cutting power. Therefore, the resultrepresented that power grid in surveyes communes are significently good.

98. For the amperage: There were 383 surveyed households evaluating the amperage is sufficiently strong (55%), this percentage is quite equal in communes: Van Thang (97.2%), Vinh Ngoc (90.0%) and others (100%); this percentage is a little bit lower in Vinh Hai (63.4%), and 25.3% of households in Ngoc Hiep. 434 households evaluating the amperage is normal (38.5%), this rate is mainly concentrated in Ngoc Hiep commune of 74.7%, Vinh Hai commune of 24.4%. The rest said that they did not know clearly with 26 households (6.5%), concentrated on Vinh Hai commune with the rate of 12.2%. Therefore, basically the amperage is sufficient to meet demand of households in surveyed communes.

| No  | Com-          | Suffic-<br>iently strong |             | Normal         |             | We             | ak          | Very           | weak        | Not c          | lear        | Total          |             |
|-----|---------------|--------------------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|
| INO | mune          | Freq-<br>uency           | Rate<br>(%) | Freq-<br>uency | Rate<br>(%) | Freq-<br>uency | Rate<br>(%) | Freq-<br>uency | Rate<br>(%) | Freq-<br>uency | Rate<br>(%) | Freq-<br>uency | Rate<br>(%) |
| 1   | Vinh<br>Hai   | 285                      | 63.4        | 110            | 24.4        | -              | -           | -              | -           | 55             | 12.2        | 450            | 100         |
| 2   | Vinh<br>Phuoc | -                        | -           | 60             | 100         | -              | -           | -              | -           | -              | -           | 60             | 100         |
| 3   | Ngoc<br>Hiep  | 51                       | 25.3        | 149            | 74.7        | -              | -           | -              | -           | -              | -           | 200            | 100         |
| 4   | Van<br>Thang  | 78                       | 97.2        | 2              | 2.8         | -              | -           | -              | -           | -              | -           | 80             | 100         |
| 5   | Vinh<br>Ngoc  | 28                       | 90.9        | 3              | 9.1         | -              | -           | -              | -           | -              | -           | 31             | 100         |
| 6   | /Others       | 22                       | 100.0       | 0              | 0.0         | -              | -           | -              | -           | -              | -           | 22             | 100         |
|     | Total         | 464                      | 55.0        | 324            | 38.5        | -              | -           | -              | -           | 55             | 6.5         | 843            | 100         |

Table 26 - The amperage

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

99. The result from both above tables represented that supplying power to communes is relatively good, expressed by indicators: the frequency of cutting power in the locality is not so much and the amperage is strong enough. Therefore, generally, may be upgrading residential power to habitants is not considered as a urgent demand that needed to be concerned and solved.

# 4.2.6 Current situation of water supply and using of households

#### **Water sources**

100. Clean water is one of criteria evaluating the development, civilization of urban residents. On the water source survey, the majority of surveyed households are using tap water with 827 households

101. (accounted for 98.1%), there are 16 households using 2 water sources including: tap water and well water accounted for 1.9%.

| No | Number<br>of water     | Poor household |             | Medium<br>household |             | Well-off<br>household |             | Total | Rate<br>(%) |
|----|------------------------|----------------|-------------|---------------------|-------------|-----------------------|-------------|-------|-------------|
|    | source<br>for<br>using | Frequency      | Rate<br>(%) | Frequency           | Rate<br>(%) | Frequency             | Rate<br>(%) |       |             |
| 1  | 1 source               | 83             | 96.5        | 345                 | 99.7        | 399                   | 97.1        | 827   | 98.1        |
| 2  | 2 sources              | 3              | 3.5         | 1                   | 0.3         | 12                    | 2.9         | 16    | 1.9         |
|    | Total                  | 86             | 100         | 346                 | 100         | 411                   | 100         | 843   | 100         |

Table 27 - Water Source for Using

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

102. Using only 01 source of water might be high risky when this water source is broken or get trouble stopping supplying water leading to difficulties for daily life activities. However, with the speed of urbanization, water security, supplying and ensuring water so clean always are issues needed to be a priority at first, so the trend of using only one source of water in urban area is becoming larger.

103. The rate of female respondents answered their households using only 01 source of water was higher this rate of male respondents, particularly the female respondents answered their households using only 01 source of water (99.3%) and 02 water sources (0.7%). The male respondents answered their households using only 01 source of water (97.5%) and 02 water sources (2.5%).

| No | Number of    | Ma        | ale       | Fen       | nale     | Total | <b>Rate</b> (%) |
|----|--------------|-----------|-----------|-----------|----------|-------|-----------------|
|    | water source | Frequency | Rate (%)  | Frequency | Rate (%) |       |                 |
| 1  | 01 source    | 548       | 97.5      | 279       | 99.3     | 827   | 98.1            |
| 2  | 02 sources   | 14        | 2.5       | 2         | 0.7      | 16    | 1.9             |
|    | Total        | 562       | 562 100.0 |           | 100.0    | 843   | 100.0           |

Table 28: The Water Sources are Used by Gender

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

**4** Amount of water consumption:

104. Amount of water used for essential demands such as drinking, eating, washing, bathing in households was quantified relatively and calculated, synthesized in the below table. It can be seen clearly that the average amount of consumed water is 39.4 litter/person/day (equivalent to

149.7 litter/household/person). In which, amount of water used in the medium household group is largest, it is 174.9 litter/household/day (32.9 litter/person/day), followed by the well-off group with the average amount of used water is 136.3 litter/household/day (48.6 litter/person/day), this amount used in the poor household is lowest with 85.1 litter/household/day (20.4 litter/person/day). The main amount of water is used for daliy activities: drinking and eating, cooking, washing, bathing; a little amount of water is used for purpose of watering trees and washing vehicles.

|    | The average                                  | Average<br>amount of<br>water    |                               | Poor household                   |                               | Medium<br>household              |                           | Well-off<br>household            |                               |
|----|----------------------------------------------|----------------------------------|-------------------------------|----------------------------------|-------------------------------|----------------------------------|---------------------------|----------------------------------|-------------------------------|
| No | amount of<br>used water                      | Litter/<br>househ<br>old/<br>day | Litter/<br>person<br>/<br>day | Litter/<br>househ<br>old/<br>day | Litter/<br>person<br>/<br>day | Litter/<br>househ<br>old/<br>day | Litter/pe<br>rson/<br>day | Litter/<br>househ<br>old/<br>day | Litter/<br>person<br>/<br>day |
| 1  | Drinking and eating                          | 28.3                             | 13.9                          | 12.6                             | 3.1                           | 31.2                             | 13.5                      | 23.3                             | 19.9                          |
| 2  | Cooking                                      | 18.5                             | 11.8                          | 5.6                              | 3.7                           | 19.1                             | 9.5                       | 24.0                             | 16.5                          |
| 3  | Washing                                      | 17.7                             | 11.3                          | 5.9                              | 3.7                           | 15.6                             | 7.3                       | 26.6                             | 18.5                          |
| 4  | Watering<br>trees and<br>washing<br>vehicles | 2.1                              | 0.8                           | 0.2                              | 0.7                           | 3.1                              | 0.8                       | 1.6                              | 1                             |
|    | Total                                        | 149.7                            | 39.5                          | 85.1                             | 20.4                          | 174.9                            | 32.9                      | 136.3                            | 48.6                          |

Table 29 - Amount of water for daily life in different purposes

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

105. To be asked that is amount of water to be using enough for the family or not? There were 840 households answered that it was enough (99.6%), only 3 households said that it was not enough to use (accounted for 0.4%). Therefore, basically amount of current tap water is sufficient to supply for households.

| Table 30 - | Desires of Amount of Wate | r Using |
|------------|---------------------------|---------|
|------------|---------------------------|---------|

| Classified | Satisfy or not?  |           | Amount of water |            |  |  |
|------------|------------------|-----------|-----------------|------------|--|--|
| by         | Satisfy of not.  | -         | Enough          | Not enough |  |  |
|            | Poor household   | Frequency | 86              | -          |  |  |
|            | Poor nousenoid   | Rate (%)  | 100.0           | -          |  |  |
| Living     |                  | Frequency | 346             | -          |  |  |
| level      | Medium household | Rate (%)  | 100.0           | -          |  |  |
|            | Well-off         | Frequency | 408             | 3          |  |  |
|            | household        | Rate (%)  | 99.2            | 0.8        |  |  |

|                   | 4                | Frequency                                                 | 22        | -   |
|-------------------|------------------|-----------------------------------------------------------|-----------|-----|
|                   | <4 people        | Rate (%)                                                  | 100       | -   |
|                   | 4                | Frequency                                                 | 328       | 3   |
| Household<br>size | =4 people        | Rate (%)                                                  | 99.1      | 0.9 |
|                   | 5 ( magnla       | Frequency                                                 | 200       | -   |
|                   | 5-6 people       | Rate (%)                                                  | 100.0     | -   |
|                   | . ( 11 1         | Frequency                                                 | 290       | -   |
|                   | >6-11people      | Rate (%)                                                  | 100.0     | -   |
|                   |                  | Frequency                                                 | 30        | -   |
|                   | Argriculture     | Rate (%)                                                  | 100       | -   |
| Occuration        | Non a mi aultura | rgriculture Frequency 30<br>Rate (%) 100<br>Frequency 573 | 573       | 3   |
| Occupation        | Non-agriculture  | Rate (%)                                                  | 99.5      | 0.5 |
|                   | Housework/don't  | Frequency                                                 | 237       | -   |
|                   | work             | Rate (%)                                                  | 100       | -   |
|                   | Total            | Frequency                                                 | Frequency | 3   |
|                   | Total            | Rate (%)                                                  | Rate (%)  | 0.4 |

106. According to the evaluation of Khanh Hoa Water Supply and Sewerage Company, currently 03 main water using areas are "urban area", "rural area" and "island area". In particular, the water supply management and exploitation units had a capacity of approximately 92,600 m3 total/day, provided for about 470,000 people and 152ha industrial park land with the water supply standard of  $60 \sim 180$  liters/person/day.

#### **Estimation of quality of water source**

107. When households were asked about the quality of water types in summer and winter, 94% households said that the quality is clean in all seasons, 2.3% households said that water is clean but having odor, and 3.8% households said water is not clean and having odor/color.

| No | Source of water | Evaluation                       | Frequency | Rate (%) |
|----|-----------------|----------------------------------|-----------|----------|
|    |                 | Clear and clean                  | 793       | 94       |
|    |                 | Clean but smelly                 | 19        | 2.3      |
| 1  | Tap water       | Not clean and smelly and colored | 31        | 3.7      |
|    |                 | Others                           | -         | -        |
| 2  | Drilled well    | Clear and clean                  | 820       | 97.3     |
| 2  | water           | Clean but smelly                 | 23        | 2.7      |

Table 31 - Evaluation of Water Source

| No | Source of water        | Evaluation                       | Frequency | Rate (%) |
|----|------------------------|----------------------------------|-----------|----------|
|    |                        | Not clean and smelly and colored | -         | -        |
|    |                        | Others                           | -         | -        |
|    |                        | Clear and clean                  | 835       | 99.1     |
|    |                        | Clean but smelly                 | 3         | 0.3      |
| 3  | Dug well water         | Not clean and smelly and colored | 5         | 0.6      |
|    |                        | Others                           | -         | -        |
|    |                        | Clear and clean                  | 843       | 100.0    |
|    |                        | Clean but smelly                 | -         | -        |
| 4  | Rain water             | Not clean and smelly and colored | -         | -        |
|    |                        | Others                           | -         | -        |
|    |                        | Clear and clean                  | 169       | 20.0     |
|    | Pond/lake/stream       | Clean but smelly                 | 169       | 20.0     |
| 5  | water                  | Not clean and smelly and colored | 506       | 60.0     |
|    |                        | Others                           | -         | -        |
|    |                        | Clear and clean                  | 713       | 84.6     |
|    | Others: hought         | Clean but smelly                 | 130       | 15.4     |
| 6  | Others: bought bottles | Not clean and smelly and colored | -         | -        |
|    |                        | Others                           | -         | -        |

108. Regarding water quality check: the result showed that 96.3% households responded that they have never checked the water quality, 3.7% households said they checked the water quality, but checking method is only at level of sensory evaluation.

# **Household-scale water treatment construction:**

109. For household-scale water treatment construction: Most of the surveyed households have used tap water and there is no other water treatment works attached 1.7% households said that they invested for household-scale water treatment system, mainly using sand tank to filter water, the initial cost was about 500,000 VND/tank, cost of repair/upgrade/replacement was about 100,000 VND/month.

# **4** For clean water system in the city:

110. According to the survey result, the rate of households connecting household clean water to the clean water system of the city is 97.5% of surveyed households. The rest of 2.5%

households said that they have not yet connected, they raise many reasons why they have not yet done that but focused on: high cost, far pipeline, the unnecessary, etc.

| N | Connection staus  | Poor household |             | Medium<br>household |             | Well-<br>housel |             | Frequen<br>cy | Rate<br>(%) |
|---|-------------------|----------------|-------------|---------------------|-------------|-----------------|-------------|---------------|-------------|
| 0 |                   | Frequen<br>cy  | Rate<br>(%) | Frequen<br>cy       | Rate<br>(%) | Frequen<br>cy   | Rate<br>(%) |               |             |
| 1 | Already connected | 80             | 92.6<br>%   | 337                 | 97.3<br>%   | 405             | 98.6<br>%   | 822           | 97.5%       |
| 2 | Not yet connected | 6              | 7.4%        | 9                   | 2.7%        | 6               | 1.4%        | 21            | 2.5%        |
|   | Total             | 86             | 11.0<br>%   | 346                 | 45.0<br>%   | 92              | 44.0<br>%   | 209           | 100.0<br>%  |

Table 32 - Connection to The Clean Water System of The City

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

111. When households asked about the cost of connection to water supply system, households raise a lot of different price levels but the average price is in rage of 1,000,000 - 3,000,000 VND. About water price unit bill, depending on accumulated numbers of water in the meter, in which the water price of surveyed households is in range of 4,300 - 9,000 VND/m3.

112. Evaluating on the quality of water supply service, most of households said that the time of supplying water is to be continued with 803 households (97.7%), 19 households said that somtimes water supply is cut (2.3%), the time of running out of water is about 2 - 3 hour/time.

113. For demand of improving domestic water quality, there were 35 households answered that they hoped to improve the water quality at the clean water supply stations (4.3%), 21 households said they will install some equipment for filtering water (2.6%) and the majority of householdss did not need to improve the water quality (93.1%). The reasons why households almost do not need improve the water quality are: they evaluated the water quality is good, meet sufficiently demands for the families and a small number of households cared about the financial problems in water improving process.

# 4.2.7 Drainage and Flooding

# **L** Drainage status

114. The majority of wastewater from toilet was discharged into septic tank (83.5%). There were 155 households said that their wastewater from washing/cooking discharged into septic tank (accounted for 12.2%). 103 households discharged wastewater into common sewer system (18.3%), 42 households said that they discharged wastewater directly into lakes, rivers (accounted for 5.0%). 57 households responded that hộ trả lời nước thải từ hộ gia đình tự thấm, chảy tràn (chiếm 6.8%).

115. If based on living level, the poor household discharged wastewater directly into lake/pond/river accounted for the highest rate of 13.8%, this rate is declined to groups with higher living level, in detailed the medium household accounted for 6% and the well-off

household accounted for 3.8%. This is caused by some reasons, one of them is related to the financial problems because of investment for original construction.

| No | Situation                                                       | Poor house | Poor household |           | Medium<br>household |           | ff<br>old   | Total | Rate (%) |
|----|-----------------------------------------------------------------|------------|----------------|-----------|---------------------|-----------|-------------|-------|----------|
|    |                                                                 | Frequency  | Rate<br>(%)    | Frequency | Rate<br>(%)         | Frequency | Rate<br>(%) | -     |          |
| 1  | Wastewater from<br>toilet drained to<br>septic tank             | 68         | 79.3           | 292       | 84.5                | 343       | 83.5        | 704   | 83.5     |
| 2  | Wastewater from<br>washing/cooking<br>drained to septic<br>tank | 15         | 10.3           | 63        | 18.1                | 77        | 18.8        | 155   | 12.2     |
| 3  | Drained to combined sewer                                       | 9          | 10.3           | 42        | 12.1                | 53        | 12.8        | 103   | 18.3     |
| 4  | Drained directly<br>to<br>rivers/ponds/lakes                    | 12         | 13.8           | 21        | 6.0                 | 15        | 3.8         | 42    | 5.0      |
| 5  | Self-absorbed into the earth                                    | 6          | 6.1            | 21        | 6.0                 | 31        | 7.5         | 57    | 6.8      |

Table 33 - Drainge Status of Households

116. Current situation of drainage system: 56.4% households said that the area they live already have had a concrete sewer pipe. 36.1% households said that there was not sewer pipe or drainage ditch in their area. Therefore, that area in the project area which not yet had sewer pipe or drainage ditch accounted for a great percentage. Almost these areas just had rainfall drainage line, common pipe line under the main road such as 26/4. Nguyen Xien Street. Nguyen Khuyen Street in Vinh Hai.

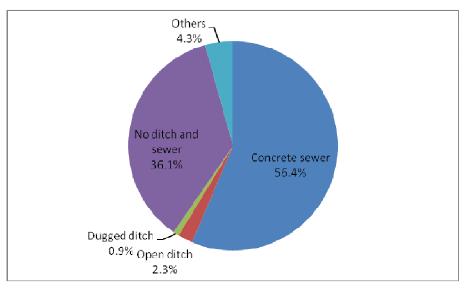


Figure 8. Drainage System in The Project Area

117. In the meetings, the result of local discussion groups showed that: Drainage system located at North area is common sewer system, however, volume of wastewater is not much because in the previouse time, Nha Trang city has forbidden contributing drainage system into common sewer system. Therefore, almost households have use absorbent septic tank thereby increasing pollution of groundwater environment. Common drainage system at North area has not had culvert system for collecting wastewater as well as urban water treatment plant. Most of households use septic tank with habit hardly cleaning septic tank . Additionally, The construction of toilet in households was incorrect with design and didn't ensure environmental hygiene. Most of households (86.9%) dischared their wastewater into ground and absorbing well

#### **Flooding:**

118. When households asked about the situation of flooding in recent years, 105 people said that there existed flooding statement occcuring their location (12.4%), they are people living in Vinh Hai. Ngoc Hiep and Van Thang. The average time of flooding lasted from 33 - 35 hours/time, the deepest flooding was about 67 cm.

| ward       | To be flooded in recent years? |          |               | Time/year |        | Time of<br>flooding<br>(hour/time) |        | The deepest<br>flooding<br>(cm) |                |             |
|------------|--------------------------------|----------|---------------|-----------|--------|------------------------------------|--------|---------------------------------|----------------|-------------|
| /commune   | Yes                            |          | No            |           | Inside | Outsid                             | Inside | Outsi                           | Insid          | Outsi       |
|            | Frequ<br>ency                  | Rate (%) | Freque<br>ncy | Rate (%)  | house  | e house                            | house  | de<br>house                     | e<br>hous<br>e | de<br>house |
| Vinh Hai   | 39                             | 8.6      | 411           | 91.4      | 1      | 1                                  | 30     | 14                              | 64             | 27          |
| Vinh Phuoc | -                              | -        | 60            | 100.0     | -      | -                                  | -      | -                               | -              | -           |
| Ngoc Hiep  | 35                             | 17.7     | 165           | 82.3      | 2      | 2                                  | 23     | 33                              | 63             | 108         |
| Van Thang  | 31                             | 38.6     | 29            | 36.4      | 1      | 1                                  | 44     | 44                              | 68             | 69          |
| Vinh Ngoc  | -                              | -        | 31            | 100.0     | -      | -                                  | -      | -                               | -              | -           |
| /others    | -                              |          |               | 100.0     | -      | -                                  | -      | -                               | -              | -           |
| Total      | 105                            | 12.4     | 718           | 85.2      | 1      | 1                                  | 35     | 33                              | 66             | 67          |

 Table 34
 - Flooding statement

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

119. Almost surveyed households said that cause of flooding is a heavy rainfall (85.7%), some households said that because the floor is lower than road (28.6%), 2.4% households said that the sewer is small, 7.1% ones said the sewer is stuck, and 23.8% ones respond that do not have the sewer.

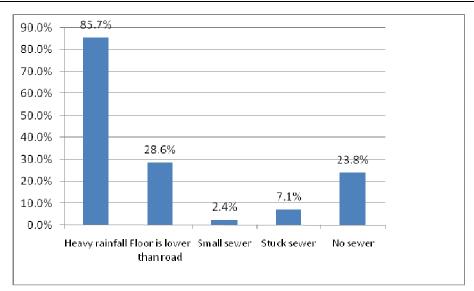


Figure 9. Reasons of Flooding (Source: Socio-economic survey, 02/2016, N= 843)

120. Expense for reinforcing house before and after flooding: Only have 13 households said that they spent money for reinforcing house before flooding (12.1%), 29 households said that they spent money for reinforcing house after flooding (27.3%). The average cost for reinforcing house before flooding was 3,000,000 VND/household and that after flooding was 5,600,000 VND/household.

| Ward/commune | Frequency of<br>flooding |             | Expense for<br>house before<br>flooding |             | Expense for<br>house after<br>flooding |          | Cost for<br>house<br>before | Cost for<br>house<br>after |
|--------------|--------------------------|-------------|-----------------------------------------|-------------|----------------------------------------|----------|-----------------------------|----------------------------|
|              | Frequency                | Rate<br>(%) | Frequency                               | Rate<br>(%) | Frequency                              | Rate (%) | flooding                    | flooding                   |
| Vinh Hai     | 39                       | 8.6%        | -                                       | -           | 22                                     | 57.1%    | -                           | 5,800,000                  |
| Vinh Phuoc   | -                        | -           | -                                       | -           | -                                      | -        | -                           | -                          |
| Ngoc Hiep    | 35                       | 17.7%       | 10                                      | 28.6%       | 10                                     | 28.6%    | 4,500,000                   | 6,500,000                  |
| Van Thang    | 31                       | 38.6%       | -                                       | -           | 3                                      | 11.1%    | -                           | 1,000,000                  |
| Vinh Ngoc    | -                        | -           | -                                       | -           | -                                      | -        | -                           | -                          |
| /others      | -                        | -           | -                                       | -           | -                                      | -        | -                           | -                          |
| Total        | 105                      | 12.4        | 13                                      | 12.1        | 29                                     | 27.3     | 3,000,000                   | 5,600,000                  |

Table 35 - Expense for reinforcing house in flooding season

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

121. Demand of renovating the drainage system in the project area: 298 households said that it is neccessary to renovate the drainage system in coming time (35.4%), 264 households said that the drainage system is needed to renovate better (31.3%), 108 ones said that do not need to renovate, priority for other items (12.8%) and 173 households said that they do not know

(20.5%). Therefore, renovating the drainage system in the project area is one of demands and desires of most of residents.

| Ward/commune | Necessar<br>renovat<br>coming | e in        | If condi      | If conditions Not yet nee<br>renova |               |             | Not kno       | )wn         |
|--------------|-------------------------------|-------------|---------------|-------------------------------------|---------------|-------------|---------------|-------------|
|              | Frequenc<br>y                 | Rate<br>(%) | Frequenc<br>y | Rate<br>(%)                         | Frequenc<br>y | Rate<br>(%) | Frequenc<br>y | Rate<br>(%) |
| Vinh Hai     | 195                           | 43.3        | 115           | 25.6                                | 96            | 21.3        | 44            | 9.8         |
| Vinh Phuoc   | 53                            | 88.3        | 4             | 6.7                                 | -             | -           | 2             | 3.7         |
| Ngoc Hiep    | 36                            | 17.9        | 91            | 45.3                                | 2             | 1.1         | 72            | 35.8        |
| Van Thang    | 7                             | 8.8         | 16            | 20.0                                | 7             | 8.6         | 50            | 62.9        |
| Vinh Ngoc    | -                             | -           | 31            | 100.0                               | -             | -           | -             | -           |
| /others      | 8                             | 36.4        | 7             | 31.6                                | 3             | 11.7        | 5             | 22.0        |
| Total        | 298                           | 35.4        | 264           | 31.3                                | 108           | 12.8        | 173           | 20.5        |

Table 36 - People's desire to renovate drainage system

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

122. Regarding the question "According to your idea whether the drainage system where you live is needed to renovate?" the rate of respondents said "it is necessary to renovate, upgrade drainage system in the coming time" was high and this rate in male respondents was higher (with 40%). For female respondents, the level of interest in the local drainage system was less than in male respondents, the majority of female respondents answered "if possible, should be better renovated" accounted for 30.6%, followed by the answer "do not know" accounted for 28.5%, the answer "it is necessary to renovate, upgrade drainage system in comming time" accounted for 26.3% and the answer "renovation is not needed yet, give priority for other items" accounted for 14.6%.

|                                                                        | Male          |             | Female        |             | Total         |             |
|------------------------------------------------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|
| Renovation of drainage system                                          | Freque<br>ncy | Rate<br>(%) | Freque<br>ncy | Rate<br>(%) | Freque<br>ncy | Rate<br>(%) |
| Needing to renovate, upgrate the drainage system<br>in the coming time | 225           | 40.0        | 74            | 26.3        | 298           | 35.4        |
| If possible, should be better renovated                                | 178           | 31.7        | 86            | 30.6        | 264           | 31.3        |
| Renovation is not needed yet, give priority for<br>other items         | 66            | 11.7        | 41            | 14.6        | 108           | 12.8        |
| Do not know                                                            | 92            | 16.4        | 80            | 28.5        | 173           | 20.5        |

Table 37: Desire to Renovate Drainage System Classified by Gender

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

123. Discussion with the staff in charge of Khanh Hoa Water Supply and Sewerage Company, was known: "Currently, the work of connecting wastewater of administrative agencies, nonbusiness agencies under the City to the city's wastewater drainage system has completed 141/145 agencies gained the rate of 97.24%; However, this connecting work for the central and provincial government agencies, manufacturing/business facilities and households was at low rate corresponding with only 77/239 the central and provincial government agencies, 211/591 manufacturing/business facilities and 538/10,500 households".

# 4.2.8 Waste collection and treatment situation

124. Solid waste containing method: When asked "How do your family contain solid waste?" 41.9% of respondents said their solid waste is contained by bins/containers, 55.4% of respondents said their solid waste is contained by bags and 2.7% of respondents said their solid waste is contained by bags and 2.7% of respondents said their solid waste is contained by bags and then self-treating by burying and burning, throwing solid waste in dumping pits, or throwing into rivers.

125. Solid waste separation: When asked: "Do your household carry out solid waste separation at home?", the respondents answered "Yes" with 33.1%, and "No" with 66.9%. When asked about the reasons that their families do not carry out solid waste separation at source, most answers are "not necessary to separate solid waste as no solid waste collection methods are corresponding to separated solid waste and currently solid waste is discharged and collected mixedly in one place, no time to separate, unknown to separate, and solid waste is treated by burying and burning.

126. Waste: The majority of asked people said that solid waste was collected at their houses (47.0%) and households themselves brought waste to regulated dumping points (43.0%). The rest themselves treated waste at their house by landfilling (8.6%) or dugging holes/dumping waste in their garden (0.4%), and there still existed situations of discharging waste into rivers, ponds, lakes (0.7%); discharing into space land area (04%).

| No | Waste<br>treatment                              | Poor house | ehold       | Medium<br>household |             | Well-off<br>household |             | Total | Rate<br>(%) |
|----|-------------------------------------------------|------------|-------------|---------------------|-------------|-----------------------|-------------|-------|-------------|
|    | method                                          | Frequency  | Rate<br>(%) | Frequency           | Rate<br>(%) | Frequency             | Rate<br>(%) | -     |             |
| 1  | Waste is collected by collectors                | 41         | 48.3        | 136                 | 39.3        | 219                   | 53.4        | 396   | 47.0        |
| 2  | Waste is<br>discharged into<br>regulated points | 33         | 37.9        | 172                 | 49.6        | 158                   | 38.3        | 363   | 43.0        |
| 3  | Discharging<br>into rivers.<br>lakes. ponds     | 3          | 3.4         | 3                   | 0.9         | -                     | -           | 6     | 0.7         |
| 4  | Discharing into space land area                 | -          | -           | 3                   | 0.9         | -                     | -           | 3     | 0.4         |

Table 38 - Waste treatment classified by living level of households

| No | Waste<br>treatment                                 | Poor household |             | ent household |             | Well-off<br>household |             | Total | Rate<br>(%) |
|----|----------------------------------------------------|----------------|-------------|---------------|-------------|-----------------------|-------------|-------|-------------|
|    | method                                             | Frequency      | Rate<br>(%) | Frequency     | Rate<br>(%) | Frequency             | Rate<br>(%) | -     |             |
| 5  | Dugging<br>holes/pumping<br>waste in the<br>garden | -              | -           | 3             | 0.9         | -                     | -           | 3     | 0.4         |
| 6  | Landffing                                          | 9              | 10.3        | 30            | 8.5         | 34                    | 8.3         | 73    | 8.6         |

127. Through discussions with Nha Trang Urban Environment JSC was known: Since 2011, the province has implemented solid waste collection activities for 100% urban areas. A collection team of Nha Trang Urban Environment Company went every household to collect domestic solid waste. In the Nha Trang City's area, the volume of collected and treated ordinary solid waste is about 120,000 tons (2015). Starting from 2014, the province has invested 3 landfills constructed in accordance with the standards of sanitary landfill as Luong Hoa sanitary landfill, Cam Thinh Dong landfill, Hon Ro landfill serving for 03 the largest urban areas of the province.

# 4.2.9 Current situation of environmental sanitation and health

# **Environmental sanitation of the household**

128. Toilets: 830 households in the survey form have their own toilets in their house (accounted for 98.5%). In which, most of households use septic tank (accounted for 93.8%), 5.5% use semi-septic tank and 0.7% use temporary toilet. Period of septic tank cleaning ranges from 1 to 10 years depending on volume of the tank based on households' answers, cost for septic tank cleaning ranges from 180,000 VND to 2,000,000 VND for each time of cleaning.

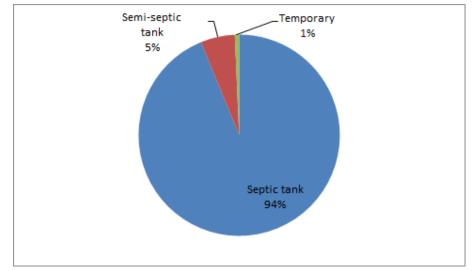


Figure 10.Types of Toilets of Households (Source: Socio-economic survey, February 2016, N=843)

#### Social Assessment Report

129. Most of households use septic tank, so 96.8% households self-assess their toilets clean and hygienic, 1.8% assess their toilets dirty and unhygienic; 1.4% is not sure about the conditions of their toilets.

| No. | Self-assessment of<br>toilet quality | Poor ho        | usehold    | Med<br>house   |            |                | l-off<br>ehold | Total | Ratio |
|-----|--------------------------------------|----------------|------------|----------------|------------|----------------|----------------|-------|-------|
|     | tonet quanty                         | Freq-<br>uency | Ratio<br>% | Freq-<br>uency | Ratio<br>% | Freq-<br>uency | Ratio<br>%     | -     |       |
| 1   | Clean and hygienic                   | 80             | 92.9       | 337            | 97.4       | 399            | 97.0           | 816   | 96.8  |
| 2   | Dirty and unhygienic                 | 3              | 3.6        | 3              | 0.9        | 9              | 2.3            | 15    | 1.8   |
| 3   | Do not know                          | 3              | 3.6        | 6              | 1.7        | 3              | 0.8            | 12    | 1.4   |
|     | Total                                | 86             | 100.0      | 346            | 100.0      | 411            | 100.0          | 843   | 100   |

| Table 39 - | Self-assessment or | n Toilets Condition b   | v Living Standard | of Household                                             |
|------------|--------------------|-------------------------|-------------------|----------------------------------------------------------|
| 100000     |                    | 1 1011010 00110111011 0 |                   | <i>oj</i> 110 <i>mb</i> 0 <i>m</i> 0 <i>m</i> 0 <i>m</i> |

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

130. However, the assessment on toilets quality mentioned above has nature of "sense" of respondents. Through discussing with managers of ward/commune and group discussion with households, it shows that disregard of toilet types that households use, wastewater from toilets is still mostly self-absorbed or directly discharged into canals/ ditches, seriously affecting the surrounding environment.

Living environment of residents in project area

131. Environmental pollution: Assessment of the living environment here whether it is polluted or not, 124 households stated that the living environment is polluted (account for 14.7%), 719 households state that the living environment is not polluted (account for 85.3%). Most of the households state that polluted living environment is caused by popular reasons such as: noise 70.6%, dust 66.7%. It is followed by pollution source from rain water, wastewater, waste: pollution from stagnant wastewater (29.4%), from wastewater from production (19.6%), bad smell from cannals/ditches (15.7%), wastewater from domestic wastewater drainage (13.7%) and flooding water due to rain (11.8%).

| No. | Pollution source                             | Frequency | Ratio (%) |
|-----|----------------------------------------------|-----------|-----------|
| 1   | Noise                                        | 88        | 70.6      |
| 2   | Dust                                         | 83        | 66.7      |
| 3   | Flooding due to rain water                   | 15        | 11.8      |
| 4   | Wastewater from domestic wastewater drainage | 17        | 13.7      |
| 5   | Wastewater from production                   | 24        | 19.6      |

| 6 | Stagnant wastewater from lakes/rivers | 36 | 29.4 |
|---|---------------------------------------|----|------|
| 7 | Bad smell from cannals, ditches       | 19 | 15.7 |
| 8 | Bad smell from waste                  | 24 | 19.6 |

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

132. An assessment of the living environment of residents, the rate of female respondents evaluated "the living environment is polluted" with 16.4% was higher than this rate of male respondents 13.9%.

|                                    | Male      |          | Female    |          |       |       |
|------------------------------------|-----------|----------|-----------|----------|-------|-------|
| Is the living environment polluted |           |          |           |          | Total | Rate  |
|                                    | Frequency | Rate (%) | Frequency | Rate (%) |       |       |
| Yes                                | 78        | 13.9     | 46        | 16.4     | 124   | 14.7  |
| No                                 | 484       | 86.1     | 235       | 83.6     | 719   | 85.3  |
| Total                              | 562       | 100,0    | 281       | 100,0    | 843   | 100,0 |

Table 41: Assessment of the Living Environment Classified by Gender

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

#### **Understanding and practice of residents on health and environmental sanitation**

133. When being asked about water drinking habit, 84.9% households answered that they drink boiled water, 0.6% households said that they have the habit to drink unboiled water, 4.9% answered that sometimes drink boiled water, sometimes unboiled water and 9.5% household drink water from water purifier. There still some households having the habit of drinking unboiled water, however, these households only account for a very small ratio of respondents.

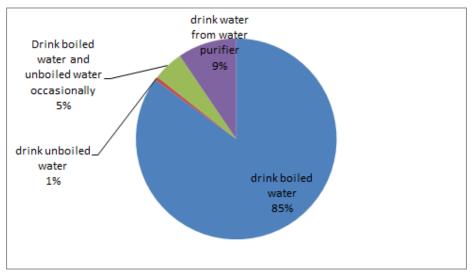


Figure 11.Water Drinking Habit (Source: Socio-economic survey, February 2016, N=843)

134. The habit of drinking boiled water, sanitary water is more paid attention by female respondents, in particular 91.9% female respondents answered that they have the habit of drinking boiled water, whereas only 81.4% male respondents had this habit.

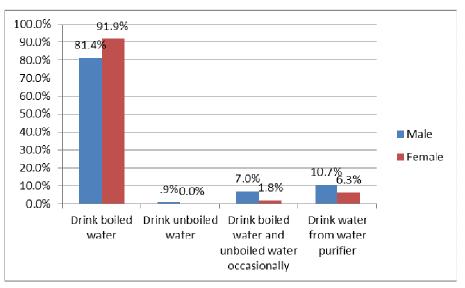


Figure 12: Water Drinking Habit Classified by Gender (Source: Socio-economic survey, February 2016, N=843)

135. Regarding the habit of washing hand after going to the toilet: 95.6% responded that they wash their hand after toilet, 3.8% household said sometimes and 0.6% households do not wash their hand after toilets. Habit of washing hand after toilet is a good habit, which helps the body prevent infectious diseases and awareness on staying healthy of respondents is quite high.

136. When being asked at which time should wash hand, 87.5% responded that should wash hand frequently, 11.6% household said that should sometimes wash hand only and 0.6% did not give the answer.

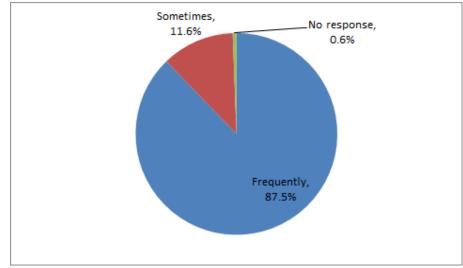


Figure 13.Washing Hand Habit (Source: Socio-economic survey, February 2016, N=843)

137. The rate of female respondents having the habit of washing hands after going to the toilet is higher than this rate of male respondents. There was 98.2% female respondents answered frequently washing, while this rate was 94% for male respondents. Therefore, in terms of awareness of health and environmental sanitation, the female respondents were a bit better aware than male respondents.

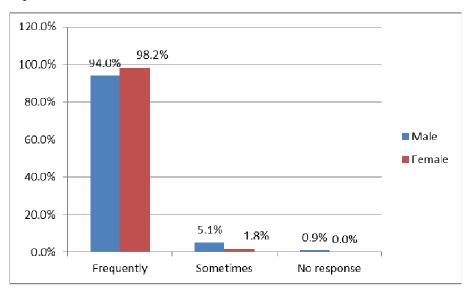


Figure 14: Hand Washing Habit After Going to the Toilet (Source: Socio-economic survey, February 2016, N=843)

138. When being asked about the common diseases in locality, the most popular diseases are cold (76.4%) and headache (44.8%), these are popular diseases in households. Besides, diseases such as cholera, dysentery, allergy, diarrhea are mentioned with relatively similar ratio, the reasons to cause those diseases are partly due to environmental pollution from wastewater and waste source.

| No. | Common disease         | Frequency | Ratio (%) |
|-----|------------------------|-----------|-----------|
| 1   | Cold                   | 644       | 76.4%     |
| 2   | Headache               | 378       | 44.8%     |
| 3   | Diarrhea               | 91        | 10.8%     |
| 4   | Cholera                | 60        | 7.1%      |
| 5   | Dysentery              | 60        | 7.1%      |
| 6   | Itchy/allergy, rash    | 88        | 10.5%     |
| 7   | Gynecological diseases | 49        | 5.9%      |
| 8   | Helminths              | 31        | 3.7%      |
| 9   | Hepatitis A            | 34        | 4.0%      |

Table 42 - Common Diseases in Locality

| 10 | Stomache    | 47 | 5.6% |
|----|-------------|----|------|
| 11 | Do not know | 44 | 5.2% |
| 12 | Other       | 17 | 2.0% |

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

139. Results of teamwork in each ward/commune of the project area showed that the dissemination work of disease prevention is carried out periodically and regularly. The localities often coordinated with the Health Department, Health Center of the City and together with wards/communes to implement all methods strengthening the dissemination work of disease prevention, spraying organization, sanitation movement to kill larvae as planned.

# 4.2.10 Current situation of communication and information-receiving of community in the project area

140. When surveyed about the communication channels on environmental sanitation at the local level: 64.9% of respondents said hearing disseminated information from the television, 43% of respondents hearing from the loudspeakers of wards and 15.8% of respondents hearing disseminated information from the community meetings. The information from posters/pictures/slogans, the children and the healthcare station's staffs/Women union's staffs has the lower percentage corresponding to 6.5%, 6.1% and 5.4%.

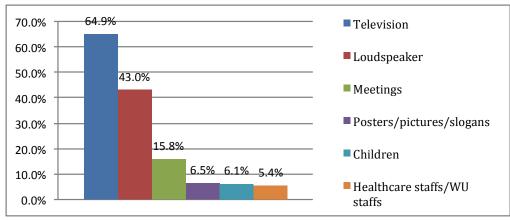


Figure 15. Dissemination Information of Clean Water and Environmental Sanitation (Source: Socio-economic survey, 02/2016, N= 843)

141. The rate of the impacts of communication forms on male and female respondents was equivalent, however every communication form had different impacts on male and female. Particularly, for the television - the most popular media, the male received information more than the female, and next for the form of local loudspeaker, the female received information more effectively than the male.

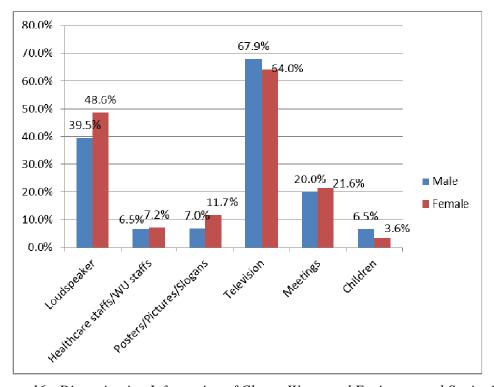


Figure 16: Dissemination Information of Cleaan Water and Environmental Sanitation Classified by Gender

142. The most effective communication channels at locality through media such as television, loadspeakers. Thus, the project should be coordinated with local authorities, cooperated with the agencies in charge of media in areas of the wards/communes to people to be able to access to all information about the project. In addition, the surveyed households said that one very important communication channel is through residential group leaders/vice-leaders who are trusted by the community through various activities having been carried out in the area. The households thought that the message from the communications programs be implemented locally was clear, easy to understand and easy to remember, such as environmental protection, sanitation keeping, energy saving, etc. The foregoing points can be seen that in the next phase of the project, the communication work has an extremely important role and had extensive media to each community.

#### 4.3 Gender issues in the area

143. Gender issues in the area have been improved since The Law on gender equality has been issued. The proof is in ward/commune almost no serious family violence, women participate more in solving family issues as well as in social activities, no gender discrimination in education and health... In order to show the analysis resulton gender issues in the area, consultant collected related data from ward/commune officials of the project area to analyse gender issues in the decision-making process of locality and other quantitative and qualitative research resultto analyse the gender issues in the area.

# **4** Gender in political participation issue

144. Gender in political participation issue is assessed based on integration table of situation of specialized and not specialized officials of commune/ward in the project area.

145. In general, ratio of women participated in specialized and not specialized officials system is relatively high. Most of them have been trained from intermediate level to university level. Through working in 18 wards and communes of the project, 8 out of 18 wards/communes have female managers (account for 44.4%). It means women gradually show their roles in the government apparatus and in the issues impacting socio-economic situation in locality. However, there are almost no female cadastral bureaucrats.

146. In general, local authority officials (both male and female), people involved in political and social unions, and residents state that women involving in political participation have been improved. However, based on analysis of the above data, it shows that the improvement is just in terms of frequency. In reality, women still keep lower position than men in important and decisive position and it affects the participation in decision-making process as well as opportunity to benefit of women in the locality. This issue needs to be considered in the communication contents of gender action plan in order to raise the position of women in political participation.

# Participation in activities of the family and community

147. Result of survey on labor division in the family showed that women still play the main role as housewife and keeping money. 91% households responded that women mainly do the housework,57.6% households answered that women is house cleaner. Regarding labor division in the area, there is no difference from study and analysis on labor division by gender in Vietnam: Women participate in production, re-production and taking care activities while men mostly participate in production activities.

| No | Task             | Labor    | Poor household |             | Medium<br>household |             | Well-off<br>household |             | Total         |             |
|----|------------------|----------|----------------|-------------|---------------------|-------------|-----------------------|-------------|---------------|-------------|
|    |                  | division | Frequen<br>cy  | Rati<br>o % | Frequen<br>cy       | Rati<br>o % | Frequen<br>cy         | Rati<br>o % | Frequen<br>cy | Rati<br>o % |
|    |                  | Women    | 59             | 69.0        | 269                 | 77.8        | 312                   | 75.9        | 640           | 75.9        |
| 1  | Keeping<br>money | Men      | 15             | 17.2        | 27                  | 7.7         | 43                    | 10.5        | 85            | 10.1        |
|    |                  | Both     | 12             | 13.8        | 50                  | 14.5        | 56                    | 13.5        | 118           | 14.0        |
|    |                  | Women    | 74             | 86.2        | 328                 | 94.9        | 365                   | 88.8        | 767           | 91.0        |
| 2  | Housewo<br>rk    | Men      | 9              | 10.3        | 6                   | 1.7         | 28                    | 6.8         | 43            | 5.1         |
|    |                  | Both     | 3              | 3.4         | 12                  | 3.4         | 18                    | 4.4         | 33            | 3.9         |

Table 43: Demand for Renovation/Newly Built Toilets in The Next 3 Years

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

148. Some issues in the family are decided by both men and women. Ratio of answer that both husband and wife make decision is higher than the ratio of answer that one person (husband/wife) makes decision, specifically:

- With the question of who decide the issue related to finance, ratio of answer "both husband and wife" accounts for 51.8% while ratio of answer "women" and "men" is 23.4% and 24.8% respectively;
- With the question of who decide the issue related to studying and working of children, ratio of answer "both husband and wife" accounts for 60.1% while ratio of answer "women" and "men" is 23.1% and 16.7% respectively;
- With the question of who decide the issue related to loan from bank, ratio of answer "both husband and wife" accounts for 65.1% while ratio of answer "women" and "men" is 19.1% and 15.8% respectively.

|          |                         |          | -                 |            |                     |            |                | -          |                |            |  |
|----------|-------------------------|----------|-------------------|------------|---------------------|------------|----------------|------------|----------------|------------|--|
| No       | Issue                   | Labor    | Poor<br>household |            | Medium<br>household |            | Well<br>house  |            | Total          |            |  |
| No.      | Issue                   | division | Freq-<br>uency    | Ratio<br>% | Freq-<br>uency      | Ratio<br>% | Freq-<br>uency | Ratio<br>% | Freq-<br>uency | Ratio<br>% |  |
|          | Decision                | Women    | 33                | 38.4       | 47                  | 13.6       | 117            | 28.6       | 197            | 23.4       |  |
| 1        | related to              | Men      | 15                | 17.4       | 89                  | 25.7       | 105            | 25.6       | 209            | 24.8       |  |
|          | finance                 | Both     | 38                | 44.2       | 210                 | 60.7       | 189            | 45.9       | 437            | 51.8       |  |
| Decision |                         | Women    | 36                | 41.9       | 62                  | 17.9       | 102            | 24.8       | 200            | 23.7       |  |
| 2        | related to study and    | Men      | 15                | 17.4       | 50                  | 14.5       | 71             | 17.3       | 136            | 16.1       |  |
| 2        | work of<br>children     | Both     | 35                | 40.7       | 234                 | 67.6       | 238            | 57.9       | 507            | 60.1       |  |
|          | Decision                | Women    | 36                | 41.9       | 56                  | 16.2       | 99             | 24.1       | 191            | 22.7       |  |
| 3        | related to connecting   | Men      | 12                | 14.0       | 71                  | 20.5       | 102            | 24.8       | 185            | 21.9       |  |
| 5        | and paying related cost | Both     | 38                | 44.2       | 219                 | 63.3       | 210            | 51.1       | 467            | 55.4       |  |
|          |                         | Women    | 30                | 34.5       | 41                  | 11.8       | 90             | 21.8       | 161            | 19.1       |  |
| 4        | Loan from<br>bank       | Men      | 12                | 13.8       | 44                  | 12.7       | 77             | 18.8       | 133            | 15.8       |  |
|          | Ualik                   | Both     | 44                | 51.7       | 261                 | 75.4       | 244            | 59.4       | 549            | 65.1       |  |
|          |                         |          |                   |            |                     |            |                |            |                |            |  |

Table 44 - Decision of Main Issues in The Family

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

149. With the question of who decide the connecting and paying related cost, ratio of answer "both husband and wife" accounts for 55.4% while ratio of answer "women" and "men" is 22.7% and 21.9% respectively; With the medium household and well-off household, ratio of "both husband and wife" highter than the poor household accounts for 63,3% with the medium household, 51,1% with well –off househod. Thus for important decisions in the family, the more the contributions of both sexes, this shows the position and importance of women in deciding the costs, the investments increasingly respected and relatively balanced against men. Thus The decision related impotand in family.

150. Regarding property ownership: Ratio of female as the name of owning property and land is lower than male. Specifically:

- Poor household: 37.9% households respond that men are in the name of owning property and land, 27.6% said that the ownership belong to both genders/husband and wife, and women are in the name of owning property and land accounts for 34.5%;
- Medium household: 32.8% households respond that men are in the name of owning property and land, 41.4% said that the ownership belong to both genders/husband and wife, and women are in the name of owning property and land accounts for 25.9%;
- Well-off household: 34.6% households respond that men are in the name of owning property and land, 48.9% said that the ownership belong to both genders/husband and wife, and women are in the name of owning property and land accounts for 16.5%.

| No. | Item              | Labor    | Poor household |            | Medium<br>household |            | Well-off<br>household |            | Total         |            |
|-----|-------------------|----------|----------------|------------|---------------------|------------|-----------------------|------------|---------------|------------|
|     | Item              | division | Frequen<br>cy  | Ratio<br>% | Frequen<br>cy       | Ratio<br>% | Frequen<br>cy         | Ratio<br>% | Frequen<br>cy | Ratio<br>% |
|     | In the name of    | Women    | 30             | 34.5<br>%  | 89                  | 25.9<br>%  | 68                    | 16.5<br>%  | 187           | 22.2<br>%  |
| 1   | property and land | Men      | 33             | 37.9<br>%  | 113                 | 32.8<br>%  | 142                   | 34.6<br>%  | 288           | 34.2<br>%  |
|     | ownersh<br>ip     | Both     | 24             | 27.6<br>%  | 143                 | 41.4<br>%  | 201                   | 48.9<br>%  | 359           | 42.6<br>%  |

Table 45 - Property Ownership in the Family

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

151. The participation in community activities, join in organization in locality shows that more women join in those activities. Resultof survey show:

- 38.9% answer that both (men and women) participate mainly in community activities, while this ratio of men is 17.3% and women is 43.8%;
- Similarly for contents of participating in organization in locality, ratio of participation of both, of women and of men are 37.4%, 46.4% and 16.2% respectively.

| No.  | Item           | Labor    | Poor<br>household |            | Medium<br>household |            | Well-off<br>household |            | Total          |            |
|------|----------------|----------|-------------------|------------|---------------------|------------|-----------------------|------------|----------------|------------|
| 110. |                | division | Freq-<br>uency    | Ratio<br>% | Freq-<br>uency      | Ratio<br>% | Freq-<br>uency        | Ratio<br>% | Freq-<br>uency | Ratio<br>% |
|      | Participate in | Women    | 47                | 55.2       | 167                 | 48.3       | 155                   | 37.6       | 369            | 43.8       |
| 1    | community      | Men      | 18                | 20.7       | 54                  | 15.5       | 74                    | 18.0       | 146            | 17.3       |
|      | meeting        | Both     | 21                | 24.1       | 125                 | 36.2       | 182                   | 44.4       | 328            | 38.9       |
| -    | Participate in | Women    | 47                | 55.2       | 176                 | 50.9       | 167                   | 40.6       | 390            | 46.4       |
| 2    | local          | Men      | 15                | 17.2       | 51                  | 14.7       | 71                    | 17.3       | 137            | 16.2       |
|      | organization   | Both     | 24                | 27.6       | 119                 | 34.5       | 173                   | 42.1       | 316            | 37.4       |
|      |                |          |                   |            |                     |            |                       |            |                |            |

Table 46 - Participate in Community and Organization Activities

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

152. In general, in the project area has the equality between men and women in the deciding the main issues in the family and participating community activities in the locality, position and role of the women is improved and appriciated.

# 5 DESIRE AND PARTICIPATION CAPACTITY

#### 5.1 The Priority Items For The Purpose Of Local Development

153. The priority fields: According to the survey of the selected households, the selection frequency of priority items is relatively uniform, in which the infrastructure item selected the most is household sanitation work with 44.0%, the infrastructure works selected much are school facilities, markets, entertainment points, cultural house, stormwater/wastewater drainage system, upgrading roads, etc.

|    |                                                 | 1              |             |                 |             |                   |             |               |       |  |  |
|----|-------------------------------------------------|----------------|-------------|-----------------|-------------|-------------------|-------------|---------------|-------|--|--|
| NL | Idama                                           | Poor household |             | Mediu<br>househ |             | Well-o<br>househo |             | <b>T</b> -4-1 | Rate  |  |  |
| No | Items                                           | Frequecny      | Rate<br>(%) | Frequecny       | Rate<br>(%) | Frequecny         | Rate<br>(%) | Total         | (%)   |  |  |
| 1  | Upgrade roads                                   | 11             | 12.6        | 160             | 46.3        | 169               | 41.1        | 340           | 40.3  |  |  |
| 2  | Upgrade power<br>grid                           | 12             | 14.5        | 164             | 47.3        | 157               | 38.2        | 333           | 39.5  |  |  |
| 3  | Construct and<br>upgrade water<br>supply system | 14             | 15.9        | 132             | 38.1        | 189               | 46.0        | 335           | 39.7  |  |  |
| 4  | Stormwater and<br>wastewater<br>drainage system | 7              | 8.5         | 154             | 44.3        | 194               | 47.2        | 355           | 42.1  |  |  |
| 5  | Public sanitation facilities                    | 8              | 9.1         | 171             | 49.4        | 171               | 41.6        | 349           | 41.5  |  |  |
| 6  | Household sanitation facilities                 | 5              | 5.6         | 115             | 33.3        | 251               | 61.1        | 371           | 44.0  |  |  |
| 7  | Solid waste collection                          | 6              | 7.4         | 154             | 44.4        | 198               | 48.1        | 358           | 42.5  |  |  |
| 8  | Cutural house                                   | 8              | 9.8         | 93              | 26.8        | 261               | 63.4        | 362           | 42.9  |  |  |
| 9  | Hospital/Medical station                        | 14             | 16.4        | 114             | 32.8        | 209               | 50.7        | 336           | 39.9  |  |  |
| 10 | Shool facilities                                | 5              | 6.3         | 137             | 39.6        | 223               | 54.2        | 365           | 43.3  |  |  |
| 11 | Entertainment points                            | 7              | 8.2         | 134             | 38.8        | 218               | 53.1        | 359           | 42.6  |  |  |
| 12 | Market                                          | 6              | 6.9         | 131             | 37.9        | 227               | 55.2        | 364           | 43.2  |  |  |
|    |                                                 |                |             | (G              | a .         |                   | 0/          | 0.0016        | 17 04 |  |  |

Table 47 - The Priority Items of Investment for the Purpose of Local InfrastructureDevelopment

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

154. Regarding gender issues, when asking about opinion of people surveyed on "how environmental issues affected women and women's health?", 20.2% of answers said that the environmental issues much affected women and women's health; 64.1% of respondents said that these issues affected normaly, 11.6% of respondents said that these issues less affected women, and 4% for answers that no affected. They said that The project maybe contribute to reducing environmental impacts on women in general and community in particular through investing in sanitational infrastructure with 77.7% of surveyed households; and 22.3% of answers said that communication and awaness raising can help to reduce environmental impacts.

# 5.2 Willingness To Contribute Opinions And Monitoring The Project Implementtion Process

155. By working with local leaders in the project's scope, the local government also gave wishes of infracstructure investment on drainage in purpose of reduction of environmental issues at hot points, particularly: Bau market area (Vinh Tho Ward), Cai river embankment area where often occurs floods in Group No. 22 in Vinh Hai Ward, hot point of environment in Quan Tran area, Tran Phu Street (The segment connected to Le Thanh Tong street) Loc Tho Ward, etc. In meeting with orgnizations, management agencies, or households, they all agreed highly with the project's policy.

156. At the same time, the results of questionnaire survey on the willingness of households participating and contributing to the development of the project showed that 86.4% of households were willing to contribute their opinions, There were 13,6% number of surveyed households answer "No". The highest rate of surveyed households answer "Yes" is at Vinh Ngoc commune (100%); the next is Van Thang ward(97.5%), Ngoc Hiep ward (97%), Vinh Phuoc ward (88.3%), Vinh Hai ward(79,1%) and the lowest rate of surveyed households answer "Yes" is at other communes/wards (72.7%).

| No. | Contribute their<br>opinions | Yes       |          | No        |          |  |
|-----|------------------------------|-----------|----------|-----------|----------|--|
|     | Ward/                        | Frequecny | Rate (%) | Frequecny | Rate (%) |  |
|     | commune                      |           |          |           |          |  |
| 1   | Vinh Hai                     | 356       | 79,1     | 94        | 20,9     |  |
| 2   | Vinh Phuoc                   | 53        | 88,3     | 7         | 11,7     |  |
| 3   | Ngoc Hiep                    | 194       | 97,0     | 6         | 3,0      |  |
| 4   | Van Thang                    | 78        | 97,5     | 2         | 2,5      |  |
| 5   | Vinh Ngoc                    | 31        | 100,0    | 0         | 0,0      |  |
| 6   | Other                        | 16        | 72,7     | 6         | 27,3     |  |
|     | Total                        | 728       | 86,4     | 115       | 13,6     |  |

Table 48: The Rate of Households Willing to Contribute Their Opinions to The Project

157. For the participation in monitoring the project implementation process, 64.8% of the households answered "willingness to participate"; 30.2% of the households answered "will consider"; and 5.1% of the households answered "will not participate" mainly due to no time. The highest rate of surveyed households willing to supervise project activities is at Vinh Phuoc ward (88.3%), Vinh Ngoc commune (80.6%), Ngoc Hiep ward (72.0%), Vinh Hai ward (64.9%) and other communes/wards (50%). The lowest rate of surveyed households willing to supervise project activities is at Van Thang ward (26.3%). With the answer "No", the highest rate is at other communes/ward (27.1%), Vinh Hai and Van Thang ward (6%), Ngoc Hiep ward (4%) and the lowest rate is at Vinh Phuoc ward and Vinh Ngoc commune (0%).

| No. | Participate in monitoring | Alway willing |             | Considerati | on          | No participation |             |  |
|-----|---------------------------|---------------|-------------|-------------|-------------|------------------|-------------|--|
|     | Ward<br>/Commue           | Frequecny     | Rate<br>(%) | Frequecny   | Rate<br>(%) | Frequecny        | Rate<br>(%) |  |
| 1   | Vinh Hai                  | 292           | 64,9        | 131         | 29,1        | 27               | 6,0         |  |
| 2   | Vinh Phuoc                | 53            | 88,3        | 7           | 11,7        | -                | -           |  |
| 3   | Ngoc Hiep                 | 144           | 72,0        | 48          | 24,0        | 8                | 4,0         |  |
| 4   | Van Thang                 | 21            | 26,3        | 57          | 71,3        | 27               | 6,0         |  |
| 5   | Vinh Ngoc                 | 25            | 80,6        | 6           | 19,4        | -                | -           |  |
| 6   | Other                     | 11            | 50,0        | 5           | 22,7        | 6                | 27,3        |  |
|     | Total                     | 546           | 64,8        | 254         | 30,2        | 43               | 5,1         |  |

| Table 49: The rate | of households are | willing to | norticinata in | monitoring the p | roject |
|--------------------|-------------------|------------|----------------|------------------|--------|
| Table 49. The fale | of nousenoids are | winning to | participate in | monitoring the p |        |

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

158. The rate of participants contributing their opinions to the project is quite high and there are a difference between male and female. The percentage of male (88.3%) willing to contribute their opinions to the project was higher than the percentage of female do (86.5)

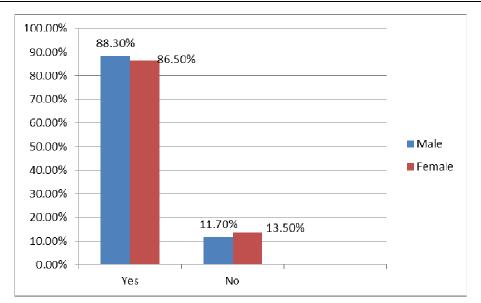


Figure 17: The Rate of Households Willing to Contribute Their Opinions to The Project Classified by Gender

159. In participation of the project monitoring, the rate of male also was higher than the rate of female. 66.8% was male said that they were willing to do monitoring, only 60.4% was female said that they were willing to join. The rate of women (35.1%) said that they would consider to join in case it was proper was greater than the rate of man did (28.5%). This result shows that man is still dominant compared to women for contributing opinions or monitoring a project of basic technical infrastructure improvement.

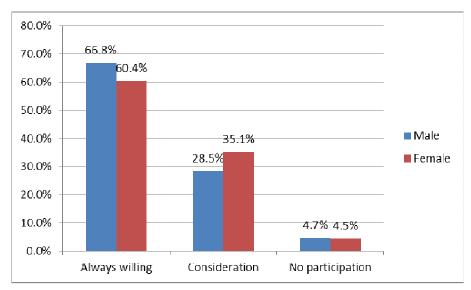


Figure 18: The Rate of Households Willing to Participate the Project's Monitoring Classified by Gender

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

160. Experience pointed that, the residential community in the project area live and act daily living next to the project area, will use and operate when completed project, bear direct and long-

term impacts on their life, environmental landscape, and are themselves the most closely factors in the project implementation process. Therefore, monitoring of community-based activities will be necessary to monitor and supervise the observance of legal regulations, findings and recommendations to the competent authorities for handling violations of environmental laws/regulations in the communes/wards, thereby this will contribute to prevention of public interest compromises, prevention of causing environmental pollution in the investment and operation process of the Project. Therefore, the willingness to participation and contribution of residents in the project area as mentioned above is one of the factors that helped make the project successfully.

# 5.3 Demand For Connecting

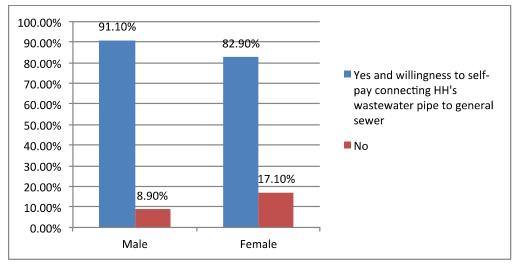
161. When asked "If there are programs to upgrade infrastructure in their area, he/she desires to connect to the sewage system of the program or not?", there was 89.5% of households replied that " they desire and are willing to self pay their sewage pipe connection to the general sewers". This rate is different between the household groups by living standards, namely: the poor household having the rate of answering "no" is the highest (accounting for 13.0%), following by the medium household (12.4%), and the fair group (8.4%).

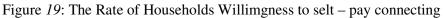
Table 50 - Desiring to be Connected to The Sewage System of the Project by HouseholdLiving Standards

| No | Desire to be<br>connected to              | Poor<br>household |           | Medium<br>household |           |     | ll-off<br>sehold | Tatal   | Rate  |
|----|-------------------------------------------|-------------------|-----------|---------------------|-----------|-----|------------------|---------|-------|
|    | sewage<br>system                          | F                 | Rate<br>% | F                   | Rate<br>% | F   | Rate<br>%        | - Total | Kate  |
| 1  | Yes and self-<br>payment of<br>connection | 75                | 87.0%     | 303                 | 87.6%     | 377 | 91.6%            | 754     | 89.5% |
| 2  | No                                        | 11                | 13.0%     | 43                  | 12.4%     | 34  | 8.4%             | 89      | 10.5% |

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

162. Regarding the issue connecting household's wastewater pipes to general sewer system, the rate of male respondents answered agreeing connection was higher than this rate of female respondents. There was 91.1% of male and 82.9% of female respondents agreeing connections and willing to self-pay the connection cost.





- 163. Reasons "not connection" are mainly as:
  - Current housing has got water supply and sewerage system
  - Household's wastewater used for the other purposes such as watering, washing vehicles...
  - People do not known exactly about distribution cost and affraid that they have not got enough money for the distribution
  - o Household lives in small alley, far from main streets

#### 5.4 Needs For Renovating Toilets

164. The table below shows the survey resulton needs for renovating/newly building household toilets of the surveyed households within 3 coming years:

| No  | Needs for renovating/newly _  | Poor<br>household |        | Medium<br>household |           |     | ell-off<br>sehold | - Total | Rate  |
|-----|-------------------------------|-------------------|--------|---------------------|-----------|-----|-------------------|---------|-------|
| INU | building<br>household toilets | F                 | Rate % | F                   | Rate<br>% | F   | Rate<br>%         | i otai  | Kate  |
| 1   | Yes and self-<br>payment      | 44                | 51.7%  | 207                 | 59.8%     | 240 | 58.3%             | 491     | 58.2% |
| 2   | Yes and proposing a loan      | 6                 | 6.9%   | 9                   | 2.6%      | 12  | 3.0%              | 27      | 3.2%  |
| 3   | No                            | 36                | 41.4%  | 130                 | 37.6%     | 159 | 38.6%             | 325     | 38.6% |

Table 51: Needs for renovating/newly building household toilets within 3 coming years

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

165. Accordingly, the question of the need for renovating the household toilets obtained the following results:

58.2% of respondents answered "yes" while 3.2% proposed for loans to invest/renovate toilets focusing on the poor household.

38.6% of respondents answered "no" needs for renovating/newly building household toilets.

# 5.5 Desire for receiving information from the project

166. When asked "which information do you want to receive from the project": most of all wanted to know about the implementation plan of the project (accounting for 61.7%), followed by the activities of the project (53.3%), the project schedule (43.3%), the affected scope of the project (39.2%) and finally the implementation fund of the project (36.2%).

167. Regarding the information wanted to be provided: The project information that male and female wanting to know has the relatively equal rate. The priority order of the information wanted to be provided by male was the plan implementation – the project activities - the implementation schedule - funding – affected scope, while the priority order of the information wanted to be provided by female was the plan implementation – the project activities – affected scope – the implementation schedule - funding.

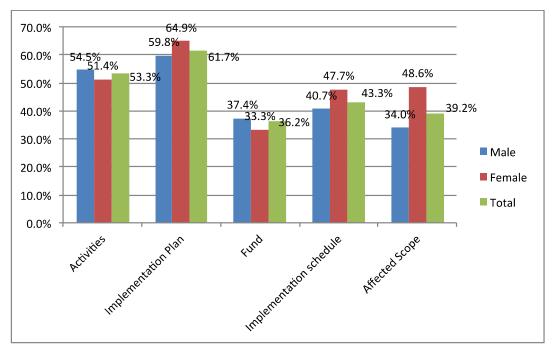


Figure 20: Information from the Project (Source: Socio-economic survey, 02/2016, N= 843)

168. Regarding Information Receiving Forms: When surveyed about the forms to disseminate the project information: the majority of respondents selected the form of residential meeting accounting for 52.8%, followed by the form of local loaudspeaker with 29.8% and the form of leaflets selected at least with 17.5%.

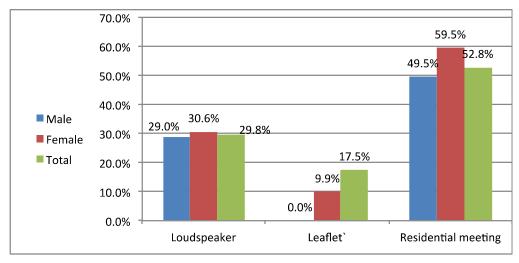


Figure 21: Forms of Information Dissemination (Source: Socio-economic survey, 02/2016, N= 843)

169. Regarding Information Receiving Frequency: When asked about "how often do you want to receive information from the project?", the respondents desired knowing the project information monthly (85.5%), quarterly (12.9%) and yearly (5%).

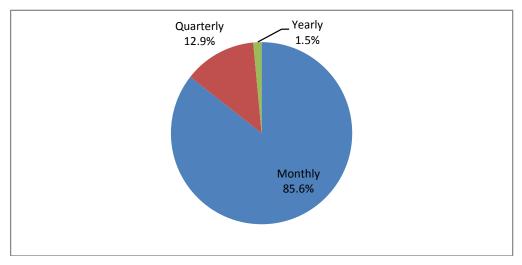


Figure 22: Information Receiving Frequency (Source: Socio-economic survey, 02/2016, N= 843)

# 6 IMPACT ASSESSMENT OF THE PROJECT

# 6.1 **Positive Impacts**

170. Basically, This project is multidisciplinary and almost environmental and social impacts in the project operation are positive which contribute to improve environmental sanitation and promote socio-economic deveopment of the City such as:

# (i) Strenthening the Wastewater Collection and Treatment Capacity Contributes to Improve Flooding and Environmental Pollution

Component 1 put into operation will enhance the operation capacity of the wastewater treatment plant in the South through additional investment of completing tertiary sewage

collection network and odor preventing manholes in the Central and the South to basically solve the collection and treatment of wastewater for the Central and Southern areas.

Tackling flooding and environmental pollution in the North of the City through the investment in general sewage line and wastewater collection sewers, odor preventing manholes, pumping stations, regulation reservoirs and treatment plant wastewater in the North will basically solve the flooding and environmental pollution in the Northern area of the City.

At the same time, the newly building of regulation reservoirs will contribute to reservoir bed microclimate, restoring environmental landscape, increasing the area's humidity, creating favorable conditions for the formation and development of vegetation, positive impacts on ecosystems around the regulation reservoirs.

#### (ii) Improving Flood Drainage and Erosion Control in Both Sides of the Cai River

Building dikes and embankments in Southern Cai River with 1,986m length and building embankments and vegetable cover to create views in Northern Cai River, associated with transport infrastructure upgrade to meet the development demands of the city as planned which help to increase the capacity of flood drainage and erosion prevention in both sides of Cai River when starting operation of constructions.

#### (iii)Ensuring the Sustainability of Technic and Finance after the Project Completion

With the supports of the project implementation through types of monitoring consultancy and management in the fields of construction, finance, environment, society, resettlement, etc as prescribed by the Government and the WB. Technical assistance to the Client, the management agencies and sectorally institutional reform is to meet the objectives set out in the implementation stage, bring efficiency in the operation and promote the sustainability of the project.

# (iv) Minimizing Environmental and Social Impacts of the Project to the People Affected by the Project, Improving and Enhancing the Quality of Life for Local People and Visitors

With the supports of the project implementation through packages of independent consultancy on social security - resettlement, environmental monitoring under the regulations of the World Bank and packages of consultancy and management under the regulations of the Government.

#### 6.2 Negative Impacts

#### 6.2.1 Negative Impacts of Involuntary Resettlement

171. Involuntary Resettlement is the inevitable relocation affects in the project implementation process, including affected people (APs) rebuilding their homes, property and income restoration. APs include those subjects of compulsory land acquisition by the projects financed by the World Bank and lead to: Have to relocate or homeless; Assest loss or loss of access to those assets; Loss of income sources or means of livelihood whether the affected pepple have/have not to relocate to another place; and restricted access to the areas that are required by law or the protected areas detrimental to the livelihood of those affected people.

172. The project will be permanent land acquisition of 166,091.3 m2 including 75,570.2 m2 of residential land; 61,354 m2 of agricultural land; and 29,167.1 m2 of transport and irrigation land. Sub-project implementation will affect the land and assets of 452 households (1,560 people) and

05 affected organizations, of which there are 54 severely affected households, 141 relocated or resettled households, 20 affected business entities.

173. Risks caused by involuntary resettlement are:

#### (i) Lack of employment and income of a part of the farmers acquired land

Lack of employment and income of a part of the farmers acquired land is one of the problems most interested in the project area. The areas' population depending on agricultural activities make life, employment opportunities having highly seasonal and are the lack of skills and low educational attainment increasingly limiting their ability in obtaining non-agricultural employment to generate income. Most of the respondents expressed their desire for the plan "land for land" of lost agricultural land. However, in the option of compensation absence for "land for land", the respondents asked for new employment opportunities and expressed a willingness to participate in skill training courses to get another job. While the respondents choose the compensation under the plan of "land for land", they also feel that they could have a more stable source of income if they have been trained the appropriate skills to apply a job outside the agricultural sector.

For workers with low eduction level, the overall trend is the increasing of the unemployment rate. This is the most pressing social problem and difficulty in the labor market, due to low education levels, they are not eligible to participate in job transition training, lack of business ideas, not involved in labor export market, etc. Meanwhile, the majority of workers with low education level fall into the low-income households, belonging to agricultural households and difficult economic conditions. Therefore, to help these labor audience rising to meet labor market needs, it should focus on support issues to raise education level under various forms during the recovery of agricultural land.

Special groups are likely to be disproportionately affected or at risk of further impoverishment due to the relocation, including: (i) female-headed households (with no husband, widow, incapable working husband) with dependents, (ii) the disable (unable to work), the helpless old people, (iii) the poor according to the criteria of Ministry of Labour – Invalids and Social Affairs, (iv) landless people, and (v) ethnic minority. The compensation and recovery support for the affected people should consider applying exceptions to vulnerable audiences, because they may need more time before being affected on livelihood or relocation. The other supports as economic recovery support, training and other forms of assistance will be provided to the affected people lossing income, especially vulnerable groups to enhance the resilience and income improvement in the future.

#### (ii) Relocation of graves

Survey resultshowed that, in the project area, there are still some graves buried scatteredly, spontaneously, located in densely populated areas (there are 2 graves in a residential land plots affected by the construction of Road No.4 item in the residential group No.22 of Vinh Hai ward). The technical plans were carefully studied in order to minimize the impacts to relocate the graves. However, in case of these unavoidable impacts, the owners of relocated graves were arranged land and compensated the costs of excavation, loading, relocation, new construction and other directly related reasonable expenses (referring the Resettlement Plan prepared for Subproject, the resettlement policy framework of the Project).

#### (iii)The poverty

In the case of the project areas with large numbers of people easily back into poverty as been undergone external shocks, the potential disruption of production acitivites as well as loss of productive land during construction could have severely negative impacts on the lives of people. Through consultation with local authorities, the livelihood issues are recognized as factors powerfully affecting the situation on poverty and the difficulties in creating income in the project area, and the income restoration as part of the social assessment or the resettlement plan of the project is needed.

#### (iv) Restricted Assess

The proposed project investment items will pass through agricultural land and residential land in many places, this caused interruption to access to productive land, workplaces and public buildings, utilities. The project is also easy to disrupt daily life and social network of people.

#### (v) Impacting on Gender Issues in the Area

Most people understood the positive impacts of the project, agreed and supported the project. However, during the project implementation process, the problems of land acquisition and resettlement are inevitable causing significant impacts on the life of people in the project area, especially for the female-headed households. The policies of compensation and resettlement support of the project will particularly pay attention to the female-headed households, there will be policies to mitigate the effects and reimburse the stable life to audiences affected as women.

In the implementation process, the project will particularly pay attention to women and the female-headed households as the beneficiaries of the project. There will be an equal participation of women in the entire process of project activities in order to increase the sustainability of the project. The active participation of women will be guaranteed in the process of designing the appropriate measures with the specific needs or concerns of vulnerable groups such as landless groups, poor households, and female-headed household groups, household groups with the disable, children and elderly households with no means of support.

174. Thus, the degree of impact will include land acquisition, affecting employment, livelihood, so the resettlement plan (RP) should be fourmulated for the overall project in compliance with the World Bank policy for involuntary resettlement and the Vietnamese regulations in order to minimize unwanted impacts on affected households.

#### 6.2.2 Impacts on public health and safety

175. During the construction stage, there are more construction workers and free migrants to participate construction/other services, etc. Thus, the medical work and healthcare of community at local heathcare station will more difficult in case of disease; During this period, labor accidents can occur if non-compliance of regulations on labor safety due to the spilled materials, non-guaranteed transportation equipment, vehicle speeding, dangerous overtaking, etc. These accidents occured for a majority of local labors because they have not mastered the technical process, workers are too tired to work overtime, or incidents when operating machinery.

176. The activities rising to domestic solid waste and wastewater such as development of services, animal husbandry of households, workers and visitors participating in service activities in the construction process, etc will create the dirty water holes, pondings causing unhygienic water sources, air pollution, creating conditions for the flies, mosquitoes thriving and this can

cause appearing disease outbreaks as diarrhea, dengue fever, malaria if without good prevention, treatment and sanitation

#### Arising Social Evils

177. Many respondents expressed their concern that outside laborer associated with the construction stage can affect the social order at the local project area, causing social unrest. When construction workers in the project area, they will be there in the construction time and communicate with local people. The movement of construction worker groups may involve people wanting to do business with them, which may consist of prostitutes considered by local people as the "social evils", including prostitution, drug abuse and other evils such as theft because most construction workers are men living away from family. The people in the Project Area hope that the Project will be implemented with a good management system, thus project workers be managed well to ensure that no conflict between the project workers and the residents in the Project Area.

#### HIV/AIDS and other sexually transmitted diseases. Trafficking issues

178. The impact of the Project related to increasing risk of HIV/AIDS during and after construction stage. The increase of HIV/AIDS infection and other sexually transmitted diseases, particularly through prostitution is often the risks associated with large-scale construction projects. These impacts become more seriously when the projects have a large number of construction workers temporarily residing in the project area.

179. In the case of this proposed project construction, it was scheduled that the majority of construction workers come from rural areas and the large numbers of worker camps are required. The relevant risks included human trafficking and drug use.

#### 6.2.3 The Temporary Impacts

#### (i) The temporary operation of economic activities in the project area

- The general construction activities related to the project implementation process are also capable of disrupting economic activities in the Project area. Especially road construction, installation of sewerage pipelines, dikes and embankments of Cai river easily caused disruption of production activities in the project area:
- Requesting 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 roads due to land acquisition;
- Obstructing external resources into the project area; and
- Obstructing the product flow from the project area to the outside to trade;
- Construction stage could have many indirect negative impacts to the economic activities of the areas related to the direct effects mentioned above.

#### (ii) Dust and Noise Polution

It is also anticipated that the construction phase, as well as operation, of the proposed project will result in increased dust and noise pollution for the local people.

#### 7 MITIGATION MEASURES AND INTERVENTIONS

180. The Coastal Cities Sustainable Environment Project as shown in assessment surveys and public consultation will contribute great benefits for both long-term and short-term to residents and the public belonging to the project area in general and Khanh Hoa province in particular. In particular, the project will maintain effectiveness of investment on environment and strengthen the institutional reform programs related to the field of environmental sanitation of the cities in the project. However, during construction work process and after project completion, there maybe appear some negative factors causing impacts on residents and community in the project area. Basic negative factors are originated from the following problems: land acquisition and resettlement, social evils, etc. The project's positive impacts are outstanding and predominating, the negative impacts are subsidiary and can be solved by complying with policy framework, regulations, guides, plans from the project, the sponsor and the Government. Moreover, the solution direction for overcoming and mitigation of negative impacts caused by the project included the following activities:

# 7.1 Good Preparation and Implemtation of Communication, Public Consultation and Participation Plan

181. In the process of project preparation, the public consultation was carried out many times to reduce risks related to negative impacts that maybe be generated and create a communication channel. Due to the project feature of foreign loan, compensation level coexisting with types of investment capital as well as inconsistency policies will generate complaints. Therefore, the province will have specific guidelines for the implementation of the inventory, payment, replacement price level of the project based on the resettlement policy framework of the project approved by the Prime Minister. Project Management Board coordinated with local authorities to popularize widely in the community about the project investment objectives and the project's policies for the community's understanding.

182. Based on results of survey on communication situations and the desire of community in receiving information from the project associated with project's objectives, a action plan on communication and public consultation was prepared and will be integrated in activities of the project.

Table 52: Communication Plan And Participatory Public Consultation

# COMMUNICATION PLAN AND PARTICIPATORY PUBLIC CONSULTATION

#### 1. Purpose

- Enhancement of information access to the local people in project area;
- Local people 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 posibility to access the information used for local people's life, contributing to improve life quality;
- Enhancement of participation of the local people.

#### 2. Targets to be disseminated and consulted

- Residents in communes, especially in the project construction areas and in villages where construction material transportation vehicle and means pass by
- Local authority, village officials
- Workers, 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;
- Các hiệu quả mang lại của tiểu dự án;
- 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 committment
- Annoucement 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 the communes belonging to the sub-project construction area

#### 6. Methodology for 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 system 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 have the meeting with communal official and unions in villages, therefore, the communication contents can be combined in

these activities.

#### 7. Implementor:

- 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 methodology.

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.
- 9. Necessary resource: Refer Item 6. Action Plan No. 2 Gender.

#### 7.2 Preparation of Resettlement Plan

183. Despite the efforts to avoid land acquisition and resettlement for local people, the request for land acquisition and other properties of the people is inevitable. At the request of the World Bank, the project will prepare the resettlement plan for this Subproject. This plan reflected how the project will minimize the loss of people affected by the project and will restore their livelihoods by compensation, support, and/or subsidise for them. The overall objective of the Resettlement Action Plan is to ensure that all affected people are compensated according to the replacement cost of their losses and provide the supportive measures for their livehood rehabilitation - at least the same level as before the project.

184. When asked about the idea of compensation/resettlement support, the majority of people are keen to be satisfactorily compensated and supported to take shelter and a new life more stable, and suggest be compensated at market prices. On the other hand, people are also

worried about the project progress and desired that the project is promoted rapidly, the support, compensation and land clearance are done fast, compact, fairly to the people rapidly stabilizing new life. In addition to complying with the Resettlement Policy Framework of the Project, Involuntary Resetlement Policy– OP 4.12 of World Bank and current regulations in Vietnam, these opinions need to be concerned, considered and solved in RP of Sub-project,.

185. Please refer to **Resettlement Plan of Sub-project** is developed at the stage of Feasibility study/Detailed design. This report is appraised and approved by Vietnam side and World Bank before approval of the Project.

#### 7.3 Develop and implement Environmental Impact Assessment Report (EIA)

186. Environmental and social impacts caused during the operation process of the Subproject and mentioned in a part of negative impacts of the project were identified, evaluated and proposed solutions to mitigate negative impacts in the Environmental Impact Assessment of the Sub-project . Therefore, the whole implementation process of Sub-project, the investor committed:

- Seriously implement provisions of Vietnam Law on Environmental Protection, as well as comply legally with the Policy from Work Bank on environmental safety.
- Conduct solutions for environmental protection, reduce environmental impacts as mentioned in Chapter 4 and implement program on environmental management, environmental monitoring as mentioned in Chapter 5 of this project, implement committment with the community as mentioned in Chapter 6. Investor also commit to compensate and treat environmental pollution when happening environmental incidents, risks in the process of project implementation, commit to overcome the environment as regulations of law on environmental protection when completing the project's operation.

187. Please refer to **Report on environmental impact assessment** developed at the stage of Feasibility study. This report will be appraised and approved from Vietnamese side and Work Bank before approval of the project.

#### 7.4 Good Preparation and Implemtation of Community Health Management Plan

188. Better control the adverse impacts and the risks to public health during the construction time of the sub-project. The prevention of diseases arising needed be proactive in the construction stage of the sub-project, while the responding methods are effective in case of arising the epidemic. Strengthening communication and health education to the people, the local authorities about the risks of potential disease arising in the construction stage of the sub-project.

189. The below is a Action Plan on Public Health:

 Table 53: Community Health Action Plan

#### COMMUNITY HEALTH ACTION PLAN

| 1. Objective          |
|-----------------------|
| 1.1. Overal objective |

Reduce the negative impacts of the project to local people's health and workers from other areas to implement the activities of sub-project.

#### 1.2. Specific objective

- 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 subproject;
- 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;
- Consultants for safety policy;
- Contractor;
- Local authority of the project area;
- Commual medical station;
- Workers;
- Local authorities.

#### 2.2. Detail responsibilities

- Project management board: 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;
- Consultants for safety policy:
  - Support locality to formulate the dissemination contents to prevent diseases and occupational accidents; and dissemination contents to provide knowledge and raise public awareness (including workers, local people, local authorities at different levels and Project management unit);
  - Monitor the grievance issues and deal with grievance related to health issues impacted by sub-project.
- Contractor:
  - Will assign leader of the works or a worker to be responsible for occupational safety and 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 project area:
  - Be responsible in overall for all issues in the communal area. Communal authority can assign Community monitoring board to obsserve the communication and consultation activities in the locality;
  - Communal people's committee/medical station actively check the sanitation and occupational safety in construction site and camps of the workers.
- Communal medical station:
  - Have function on management, monitor 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 regulation 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 sub-project from themselves, their family and public.

#### 3. Implementation area

Community health management plan will be implemented in the areas of activities related to the project such as: sub-project area of No.4 road; Chu Dong Tu road, Treatment plant in the north, dyke, embankment and road in the north and south of Cai River,... the areas where workers stay; Vinh Hai, Vinh Hoa, Vinh Phuoc, Van Thang, Ngoc Hiep, Vinh Tho ward, Vinh Ngoc commune.

4. Implementation period: Before and during the implementation of sub-project.

#### 5. Indicators to monitor and manage

- Document to guide first aid/response to diseases and accidents used by contractor and provided to workers;
- Communication documents on public health of 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 sub-project;
- Number of traffic accidents due to means for implementation of 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 subproject, 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 community health management plan

#### 7.1. Control the sub-project construction areas

In order to protect the environment and human health, construction area must be tightly controled 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. Contractor 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 embarkement 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 scatering, which may affect the environment and local people's activities and lead to health problems.

#### 7.3. Risk of outbreak and spread of epidemics

- Disease, especially infectious diseases often occur in the project area
- Risk of spreading infectious diseases or risks of affecting community health due to labors from other areas staying in the locality or vice versa.

#### 7.4. Avoide individual injure

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

#### 7.5. Respond to urgent situations

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

Incidents can be occured during the construction of 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 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, 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 community.

#### 7.5 Good Preparation and Implementation Gender Action Plan

190. The result of questionnaire survey for households and community consultation show that working opportunity and adaptability to the change of job are the obstacles to women, especially the women work in agriculture at the age of more than 40. In reality, nowadays women mainly participate in agricultural production, the implementation of the project will affect agricultural land, therefore, it will increase risks of insufficient work for women. This can be avoided if the local women, especially women in affected households have opportunity to participate in occupational training, capacity building and communication campaign in raising awareness on sanitation, traffic or prevention of social evils, etc; give priority to allocate suitable work to women and give chances to increase the income of affected households. During the preparation of the project, consultant always ensures the participation of women in community consultation, in-depth interview as well as households survey with the ratio of 30-40%.

191. The income of households in general and women in particular from agricultural production will be affected during the construction works of the project. Therefore, it is necessary to make appropriate arrangements for local women's groups especially women affected by the project. This will help women through income unskilled workers during the construction of project. But arranged are both employment opportunities as well as potential threats to themselves by facing the problem is not just safety that are at risk 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

192. A gender action plan is necessary to create conditions for maximum participatation of women at the construction stage of project, to provide new chances for women to increase their income, but do not increase their life's burdens, and help to raise up the role and position of women in the project area.

Table 54: Gender Action Plan (GAP)

#### GENDER ACTION PLAN

#### 1. Principles to formulate gender action plan

- Opportunity of the project and sharing benefits and equality between man and women;
- Systematic measures in order to reduce gender inequality in project area of the activities related to repair and enhancement of safety of damp, reservoirs;
- Targets approaching method applied to poor women;
- Collect the analysis data on gender including monitoring and evaluation activities designed by stakeholders;
- Create favourable 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. Basis to develop gender action plan

- Legal documents of Vietnam and policies of sponsors;
- Resultof gender assessment in the project areas;
- Specific activities in the implementation of components of the project.

#### 3. Output of the plan

- Raise awareness on gender for managers in local authority and local residents;
- Raise awareness of local residents including both man 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 reduce negative impact to 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 |
|----|--------|--------|------|
| •• | Genuer | action | pium |

| Result of the project                                                                                                                                                                                                                                                                                        | Activities and<br>indicators                                                                                                                                                                                                                                                                                                                                                                                                                                 | Responsibility     | Time                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------------------|
| Output 1. Implement                                                                                                                                                                                                                                                                                          | tation of investment ite                                                                                                                                                                                                                                                                                                                                                                                                                                     | ems of the project |                                |
| Improvementofpossibilityforrainwaterdrainageandreducefloodingpoints.Enhancementofabilityforwastewatercollectioncollectionandtreatment,contributingtoimprovingwater,soilsoilandenvironment.Enhancementofpossibilityandeffectivenessofwastecollection.Improvementofsanitationconditionofschoolsandpublicareas. | Contractor must<br>prioritize to use<br>unskilled labor<br>(through sub-<br>contract); at least<br>30% total labor are<br>unskilled labor in<br>locality;<br>Among 30% local<br>labor, prioritize<br>unskilled female<br>labor; female and<br>male labor will<br>receive the same<br>amount of salary for<br>the same type of<br>work;<br>Contractors must not<br>hire children labor;<br>The residents who<br>want to work for the<br>project need to write | contract; communal | During the construction period |

#### **Coastal Cities Sustainable Environment Project**

| Improvement of<br>traffic condition of<br>inner urban areas<br>and development of<br>infrastructure for<br>drainage system. | their names in the<br>list of the village.<br>Village leaders and<br>communal officials<br>will provide this list<br>to contractor and<br>contractor will select<br>based on priority<br>order of poor<br>household,<br>vulnerable<br>households;<br>Enhancement of<br>awareness on<br>HIV/AIDS and STD<br>prevention for<br>workers of the<br>project;<br>Consult directly poor<br>women/women who<br>are heads of<br>households during<br>the implementation<br>and planning process<br>of wastewater<br>collection system;<br>30% representative<br>of Community<br>Monitoring Council<br>is women and<br>trained about<br>planning and<br>technical<br>monitoring;<br>The toilet of women<br>and men in<br>construction fields<br>must be separated. | project.                                                                                             |                                                                                                          |
|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Ouput 2. Enhanceme                                                                                                          | nt of institutional capa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | acity to manage invest                                                                               | ment items                                                                                               |
| Targeting the<br>representative of<br>women in the field<br>of decision making<br>and training                              | Train on awareness<br>on gender for project<br>officials to increase<br>the knowhow on<br>sensitive gender<br>issues<br>Achieve target of<br>hiring 30% officials                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | PMU and<br>companies/<br>enterprises operate<br>investment items<br>Women's Union<br>Local authority | During the design<br>stage/ initial<br>implementation and<br>throughout the<br>project<br>implementation |

|                                              | ara woman in DMII                       |                         |             |     |
|----------------------------------------------|-----------------------------------------|-------------------------|-------------|-----|
|                                              | are women in PMU<br>and companies/      |                         |             |     |
|                                              | and companies/<br>enterprises operating |                         |             |     |
|                                              | investment items,                       |                         |             |     |
|                                              | ,                                       |                         |             |     |
|                                              | 1 2                                     |                         |             |     |
|                                              | 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 integrate the                    |                         |             |     |
|                                              | issues and demands                      |                         |             |     |
|                                              | of women, which is                      |                         |             |     |
|                                              | disseminated                            |                         |             |     |
|                                              | through channels                        |                         |             |     |
|                                              | that women can                          |                         |             |     |
|                                              | access.                                 |                         |             |     |
|                                              | Ensure 50% trainees                     |                         |             |     |
|                                              | of IEC is female.                       |                         |             |     |
| Output 3. Raise publ<br>environmental sustai | ic awareness on projec<br>nability      | ct activities and impro | vement of   |     |
| Enhancement of                               | Reference                               | Project management      | During t    | the |
| communication and                            | Communication                           | unit;                   | e           | of  |
| participatory public                         | plan, participatory                     | ,                       | the project | 01  |
| consultation                                 | public consultation;                    | Communal                | the project |     |
| consultation                                 | -                                       | authority;              |             |     |
|                                              | Ensure the                              | Contractor              |             |     |
|                                              | participation of                        |                         |             |     |
|                                              | women (at least $20\%$ ) in the         |                         |             |     |
|                                              | 30%) in the                             |                         |             |     |
|                                              | acherican                               |                         |             |     |
|                                              | consultation                            |                         |             |     |
|                                              | activities of the                       |                         |             |     |
|                                              |                                         |                         |             |     |

|                                                                                                                                     | localpeopleincludingbothmaleandfemaleonnegativeand positiveimpactsoftheproject;Ensuretheparticipationofwomen(atleast30%)incommunitymonitoringboard.                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                             |                               |
|-------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Raise awareness on<br>potential social evils<br>for easy-to-be-<br>vulnerable targets,<br>especially women<br>and ethnic minorities | Reference Action<br>plan for public<br>health;<br>Information on risk<br>reduction will be<br>disseminated to<br>project affected<br>communes and<br>villages because the<br>project use<br>participatory<br>approach with the<br>focus of poor<br>household and<br>vulnerable<br>households<br>Documents and<br>information must be<br>consistent and<br>suitable in terms of<br>language, culture<br>and gender,<br>especially, it is<br>necessary to<br>translate to many<br>ethnic minorities'<br>languages depending<br>on each area. | Project management<br>unit;<br>Contractor<br>Local medical center<br>Communal officials<br>Women's union will<br>coordinate to create<br>bigger strength in<br>HIV prevention<br>activities | During the construction stage |

#### 7.6 Disclosure of Information, Social Accountability and Monitoring

193. To ensure the participation of affected communities, households, local governments and relevant organizations in sharing information on projects, advising on the selection of technical solutions, projecting the impacts on land, income and property on the land, etc, the disclosure of information is an important contribution in promoting the project progress during preparation, implementation with the consensus of the community, the government,

the project management unit. This will minimize the possibility of arising conflicts and other risks, increase investment efficiency and social significance of the project.

Table 55: Disclosure, Accountability And Monitoring

#### DISCLOSURE, ACCOUNTABILITY AND MONITORING

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

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, Consultant for selection of technical options, expected impacts on land, income and assets on the land ... the disclosure is an important contribution in 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.

The program of disclosure of information and the public consultation must ensure:

- 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 of an 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 participate in part in the resettlement activities.
- Share all information on items and activities of the project as planned to the affected persons.
- Collect information about the needs and priorities of the impacted persons as well as receive their feedback on the proposed policy and activities.
- Ensure that the affected persons can be fully informed decisions affecting directly to their income and life and they have the chacne/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 persons 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 persons affected the resettlemtn may worry that they could be affected to their livelihoods and relations with community, or fear of not ensuring their interests. Being participated in planning and management of their resettlement helps them ease fears and bring the impacted persons the chaces to be participated in decision-making affecting 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 persons 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 participatin.

For Vietnam, the next important step in strengthening democracy at the grassroots level is Instruction No. 30-CT/TW of the Central Committee of the Communist Party of Vietnam "Construction and implementation of grassroots 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 issue present. 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 the what problems that the local government and community consult before the authorities make the decision; including setting the plan to compensate, to support for resettlement relating to the project, the works on the areas of ward/commune; Article 67, paragraph 4, 2013 Land Act requires the disclosure the plans to compensate, support and resettle to the affected persons.

Thus, consultation and involvement is an innovation in the implementation of the project in Vietnam. This policy will recorrect the shortcomings in the process of deployment and implementation of the project, by both the local government, the local residents and persons implementing the project inexperienced in this field.

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

- Identify and attract all the relevant sides the, Especially the local resident living in the project areas, the impacted persons (men, women, the poor, ethnic minorities ...), to participate in the public constation;
- 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 persons can negociate 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 need 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 persons (APs) will be informed about the policies and procedures of the project to ensure their later life did not change much. Affected persons will be notified if they have any questions about the project, the project management unit can help solve.

| Consultation content                                                                              | Mode of consultation and disclosure                                                                                                                                                                                                                                                                                         | Time                                                                                    | Implemented<br>by                                           |
|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------|
| Information on<br>Design plan and<br>technical plan of<br>sections                                | Meeting with the local<br>government of<br>ward/commune, relevant<br>departments, unions,<br>representatives of the<br>impacted households.                                                                                                                                                                                 | The process of<br>survy and<br>design of the<br>project.                                | Consultant,<br>PMU                                          |
| Information on<br>Land acquision,<br>land clearance and<br>compensation.                          | Officials of ward/commune<br>and PMU consult the<br>impacted households to<br>have the initial assessment.<br>Develop the plans to<br>revoke, compensate and<br>negociate with APs before<br>submitting the authorites to<br>make desicion.<br>Disclose the policy and and<br>answer questions through<br>meeting with APs. | Before of the<br>implementation<br>of the project                                       | PC of<br>commune,<br>PMU                                    |
| Informationonscheduleofimplementation,mechanismofsupervisonandresponsibilitytoreport and explain. | Meeting with the<br>population group, leaflet,<br>and poster placing in the<br>public.                                                                                                                                                                                                                                      | When starting<br>the<br>implementation<br>and and in the<br>process of<br>implemenation | PMU, PC of commune                                          |
| Information on<br>crecruiting and<br>paying for the local<br>labours                              | Three-party meeting with<br>contractor, the local<br>government/the supervision<br>committee of ward and the<br>local residents.                                                                                                                                                                                            | Before the construction                                                                 | Contractor,<br>the<br>community<br>supervision<br>committee |

| potential negative | Combine with activity 2<br>and activity 3 mentioned<br>above |  | Contractor, |
|--------------------|--------------------------------------------------------------|--|-------------|
|--------------------|--------------------------------------------------------------|--|-------------|

#### 2. Social accountability

The disclosure about the proposed methodology of the project to the affected people and stakeholders during the public consultation and field surveys of the social assessment consultant is to give a paradigm for public information a way to continue in the process of project implementation. Moreover, as has been requested at all community meetings, those affected will want to have meetings to exchange information regularly with the project manager at the headquarters of the CPC with communities affected during the project implementation. Therefore, the report on the resettlement plan and environmental management plan needs to be shown the responsibility of the project.

In addition to regular meetings between the PMU and the affected community in CPC offices, community meetings in all communes where made community consultation has identified the need to establish a connection to facilitate close contact maintained easily and quickly with the project management committee. The best way to make a tight connection is provided phone numbers and addresses of the PMU is responsible at all performance venues construction of the project categories and the headquarters of all the communes both components of the project.

#### **3.** Participatory monitoring

For the components of the project to ensure the effective, necessary to have a monitoring plan with the participation of relevant stakeholders such as the Department of Natural Resources and Environment, Department of Construction, Department of 78 Planning and Investment, Department of Transportation information ... The agency/direct management unit, operation of the project categories after completion directors also need to be involved in the design process and construction.

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

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

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

#### 8 COST ESTIMATION AND BUDGET

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

| No | Content                                                                   | Unit          | Quantity | Unit<br>price<br>(USD) | Total<br>amount<br>(USD) |
|----|---------------------------------------------------------------------------|---------------|----------|------------------------|--------------------------|
| 1  | 01 expert for<br>Society and Gender                                       | Person- month | 3        | 2,000                  | 6,000                    |
|    | 01 expert for<br>information,<br>education, and<br>communication<br>(IEC) | Person- month | 3        | 2,000                  | 6,000                    |
| 2  | Workshop, training,                                                       | Ward/commune  | 16       | 5,000                  | 60,000                   |
| 3  | Campaign of<br>communication and<br>behaviour change                      | Package       | 1        | 100,000                | 100,000                  |
|    | Total                                                                     |               |          |                        |                          |

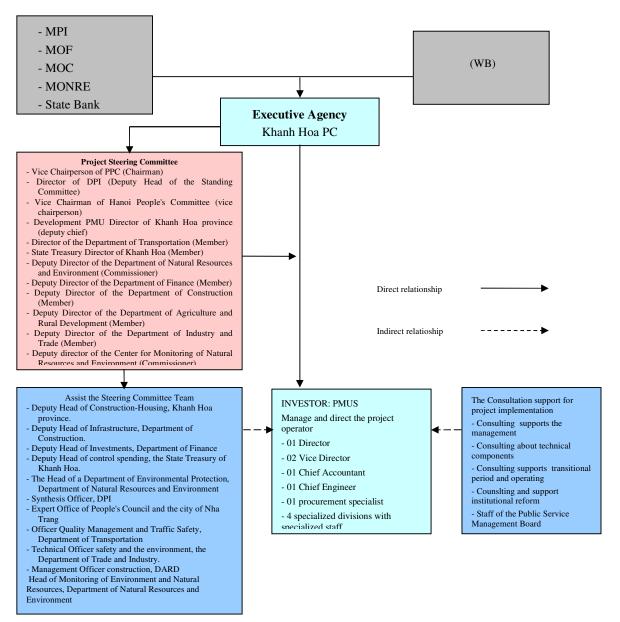
 Table 56: Total cost for implementation of SA

195. Estimation of cost for implementation of this SA is 172,000 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 ROLES OF STAKEHOLDERS

#### 9.1 Overview of Stakeholders

196. Executive Agency: Khanh Hoa Provincial People's Committee; Supervisory Agency: Khanh Hoa Department of Planning and Investment; the Client: Project Management Unit of Khanh Hoa Province Development (formerly known as Project Management Unit of Environmental Sanitation Improvement of Nha Trang City). Implementation Agency: Project Management Unit of Khanh Hoa Province Development; the Sponsor: World Bank (WB).



Fiugre 23. Organization and Management Model

# 9.2 Roles of the Stakeholders Participating in the Project Management and Implementation

#### 🚽 🛛 Relevant bodies

197. Ministry of Planning and Investment (MPI): Guide the Executive Agency to build the list of project, integrate the list of ODA projects, host the preparation of contents, organize mobilization and coordination of the appropriate ODA sources; preside and coordinate with the Ministry of Finance (MOF) to integrate and allocate detailedly investment capital; support Ministries, sectors and localities to prepare the content and track the process of negotiating international treaties on ODA with donors; track, monitoring and evaluate investment periodically, be focal point of handling according to their competence or propose the Prime Minister to handle the relevant issues.

198. Ministry of Finance (MOF): Chair and coordinate with the Ministry of Planning and Investment, the executive agency and the relevant agencies to submit to Prime Minister approving the domestic financial mechanism applicable to the sub-projects before signing the Loan Agreement. Perform checking the applications for withdrawal and disbursement of IDA/IBRD loan for subprojects under the current regulations. Simultaneously, implement financial management for the use of funds of sub-projects and account the state budget plan for this fund.

199. Ministry of Natural Resources and Environment (MONRE): Guide, inspect and coordinate the ministries to consider environmental issues, waste management of the projects.

200. Ministry of Construction (MOC): implement the provisions of the law on guidinng and controlling the fourmulation of construction investment projects, conduct the evaluation of designs prescribed or examine the technical design evaluation work, design of construction drawings and cost estimates of the components, the cost of project management; guide, inspect the quality management of construction works, the testing activities, evaluation and certification of quality conformity of construction works; coordinate with the Ministry of Finance guiding principles, methods determining the unit price of sewer services and inspec & supervise the implementation.

201. Technical Infrastructure Administration - MOC: plays an important role in supporting the implementation of the project, capacity building and institutional reform. Accordingly, the Technical Infrastructure Administration will participate in the review, preparation of documentation and support the signing, tracking implementation of service contracts between local governments and service providers, review and support the preparation, approve cost norms, unit prices of sewer services, review and propose institutional reform and equitization of public companies, restructure, reorganize businesses; consider and propose public-private management model, revolving funds to households connected to the system; support the design and implementation of Information-Education-Communication Programs.

202. State Bank: Chair and coordinate with the Ministry of Finance, Ministry of Planning and Investment and relevant agencies to prepare the content, negotiate and conclude international agreements with the Sponsor and be the official representative of the borrowers defined in international treaties as be assigned or authorized by the President or the Government.

### 🔸 🛛 Khanh Hoa Provincial People's Committee

203. Khanh Hoa Provincial People's Committee plays a role as Executive agency of the sub-project of Nha Trang City, assign to Project Management Unit of Environmental Sanitation Improvement of Nha Trang City (now known as the Project Management Unit of Khanh Hoa Province Development) as Project Owner. Khanh Hoa Provincial People's Committee built project proposal, submitted and explained to the relevant ministries and the Donor; coordinate with the Ministry of Finance and the State Bank to submit to the Prime Minister on signing International Treaties on ODA and preferential loans for the project, collaborate with the Ministry of Planning and Investment on ODA, negotiate loan agreements with the Ministry of Finance; direct the Client project implementation of signed agreements, perform the function of state management of ODA capital and preferential loans of the project and approve project documents authorized by the Prime Minister; implement land acquisition, compensation and site clearance for the project under the approved Resettlement Policy Framework; allocate capital to repay the central budget to repay foreign loans for onlending capital.

#### Project magement unit and implementing organization

204. Project magement unit and implementing organization including members of Provincial Committee's leader, representative of Nha Trang CPC and relevant Departments/agencies' leader established according to Decision no.1539/QD-UBND dated 2 June, 2016. PMU has responsible for supporting Khanh Hoa PPCs to address quickly the outstanding issues during project implementation, meets requirements of project progress, which has been committed with Donor. PMU must arrange the preriodic meeting one time/month and sudden meeting as required by Khanh Hoa PPCs to resolve specialized issues relating to Departments thereby pushing up Project's progress

#### 🔸 🔹 Project Management Unit

205. PMU directly manages investment project according to regulations, treaties and signed agreements under the tasks assigned by the project executive agency; develop the overall planning and detailed annual plan to implement programs and projects; implement procurement activities and contract management; disbursement, financial management and project assets; implement monitoring and evaluating the implementation of the project; conduct checking&accepting and handovering the outputs of the project upon completion; complete audit work, handover the assets of the project; make the completion report and project settlement report.

#### 🔸 🦳 City Level

- 206. City People's Committee has the following responsibilities:
  - Notice land acquisition if to be authorized by PPC
  - Approve the plan of compensation, support and resettlement formulated by the implementation unit of compensation, support and resettlement at city level and submit to the Provincial People's Committee to consider comments;
  - Issue decisions of land acquisition of individuals, households;
  - Settle the complaints and grievances of affected people in the jurisdiction.

207. Implementer of compensation, support and resettlement in the city level (called the city compensation committee) is responsible for the implementation of compensation and land clearance for works in the city's areas, including:

- Plan and carry out the routine resettlement activities within the city's cope.
- Responsible for inventory and land acquisition, complete the compensation, prepare compensation tables to be submitted to the competent authorities for approval and pay direct compensation to each affected person after receiving compensation funds;
- Prepare land and the land procedures for the resettlement for relocated households;
- Appoint a mediator to resolve the complaints of people affected by the project on compensation policy and compensation rights;
- C Establish (if necessary) the damage compensation committee at ward/commune level 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-headed households/ single individuals);
- Work closely with the independent monitoring consultants.

#### 

- 208. Warrd/Commune People's Committees have the following responsibilities:
  - Establish working teams at commune/ward level and manage their functions, assign officers of communes/wards to support the district compensation committee and PMU formulating the detailed measurement surveys, preparing dossiers of land aquisition for the project, preparing the resettlement action plan and implementing resettlement activities;
  - Authenticate the legal documents or the use, transfer of land to the affected people in order to meet the requirements of the compensation plan;
  - Support other units and organizations including the PMU conducting information dissemination, and holding community meetings and consult the affected people;
  - Support other units and organizations including the PMU in demographic surveys of households, Replacement cost/price survey, the detailed measurement surveys and other resettlement activities;
  - Participate in all activities of the land aquisition and allocation, resettlement, support rehabilitation and other support activities of social development;
  - Support affected people in all resettlement activities and living standard restoration.

 Notify the affected people on compensation schedule and monitoring the implementation of compensation. Also, signing the documents of compensation together with the affected people;

209. Ensure the full implementation of mechanisms to settle complaints for the affected people. Record all complaints and keep records of all complaints. Support and consult the affected people and quickly resolve complaints.

#### Hesponsor

210. World Bank supervises and inspects periodically during the project implementation. Give recommendations to remedy shortcomings to implement the project in the best way. The Bank inspects actually at the field sites, considers the reports, documents, procurement, bidding of the project.

#### 9.3 Roles of Associations and Community Organizations

211. The social associations, community organizations and the users of work items of the project play a very important role in the process of project implementation.

#### Folitical - social organizations

212. The political - social organizations, such as the Fatherland Front, Women's Union, Farmer Union, the Youth Union, the elderly union, etc to be associations with large member forces and structured to the village/hamlet level. The social organizations conduct 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 of Vietnam. The mass organizations in the community capture problems and feedbacks of the people related to the project activities in the process of preparation, work construction and putting into use. The supervision of the mass organizations in collaboration with the residential groups in the community have important implications in helping the PMU, the contractors promptly adjusting the design, construction activities to minimize the undesirable impacts on the lives of the people in the affected area.

#### **Ward/Commune**, Village/Hamlet Level

213. Work directly with people, reflect the issues raised during the preparation, construction and putting into use of the project items. Villages, hamlets are final places been the implementation of activities to provide the project information to residents and are also the first places to get the feedback of the people related to the project. The roles of village/hamlet officials are very important as bringing objectivity and timely reflecting the aspirations and justifiable recommendations of residents for monitoring the project implementation process to minimize the undesirable impacts on the lives of the people. In addition, the comments reflected from village/hamlet officials also help the construction of project investment items more relevant, more socio-economic efficient to residential communities in the directly benefit areas.

#### 9.4 Coordination among Stakeholders

214. In the process of the project preparation and implementation, the involvement of the stakeholders has particularly important implications. First of all, the participation in the design process of work items will contribute importantly to adjusting the design, meeting the technical requirements and increasing socio-economic efficiency as well as investment performance, reduce to a minimum level the undesirable effects caused by the construction work items to the lives of people in the community, especially the impacts on society and environment during the construction and operation process of construction works. Coordination among stakeholders is not good, will lead to waste the potential of resources causing delays in project implementation, having negative impacts on society and environment as well as the investment efficiency, etc. In the project implementation process, the good coordination among stakeholders will ensure the project implemented on schedule.

215. One of the criteria for the success of the project is to ensure that the stakeholders involve in all stages of the project. This objective requires developing the Participation Plan. Roles and responsibilities achieve the participation allocated to stakeholders are as follows:

|                                                 | Stage                                                                                                                                                         |                                                                                                                                          |                                                               |
|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| Stakehoder                                      | Project Preparation                                                                                                                                           | Project<br>Implementation                                                                                                                | Management,<br>operation,<br>maintenance                      |
| Community                                       | Participate in the project<br>preparation (discuss and<br>agree with suitable<br>technical options for the<br>project works to be built<br>at wards/communes) | Participate in<br>monitoring through<br>Community<br>Monitoring<br>Committee                                                             | Self-manage,<br>operate and<br>maintain the project<br>works; |
| Local<br>government at<br>ward/commune<br>level | Coordinate with the<br>PMU in implementing<br>tasks suitably with<br>functions at request of<br>the PMU                                                       | Participate in monitoring                                                                                                                | Manage some work<br>items in the<br>ward/commune.             |
|                                                 | Follow the direction of the PPC;                                                                                                                              | Land acquisition<br>notification if<br>authorized by PPC                                                                                 |                                                               |
| City People's<br>Committee                      | Coordinate with the<br>PMU in implementing<br>tasks suitably with<br>functions at request of<br>the PMU                                                       | Approval of the<br>compensation,<br>support and<br>resettlement plan,<br>submit to Provincial<br>People's Committee<br>for consideration | Manage some work items in the area                            |

 Table 57 - The Role of Stakeholders in the Project Preparation and Implementation

 Process

|                              | Stage                                                                                                                                     |                                                                                                                                              |                                                                                                                |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Stakehoder                   | Project Preparation                                                                                                                       | Project<br>Implementation                                                                                                                    | Management,<br>operation,<br>maintenance                                                                       |
|                              |                                                                                                                                           | and comment;                                                                                                                                 |                                                                                                                |
| Provicial PC                 | Through Department of<br>Planning and<br>Investment/PMU<br>coordinate and support<br>the project<br>implementation;<br>Approve FS report, | Through the<br>Department of<br>Planning and<br>Investment/PMU to<br>coordinate and<br>support the project<br>implementation;<br>Approve the |                                                                                                                |
|                              | Basic Design and Total investment;                                                                                                        | Bidding documents<br>and resultof<br>selecting Bidder                                                                                        |                                                                                                                |
| DPI                          | Chair Appraisal                                                                                                                           |                                                                                                                                              |                                                                                                                |
| DOC                          | Participate in appraising<br>FS, Basic Design report,<br>Detailed Design report,<br>Total investment                                      |                                                                                                                                              |                                                                                                                |
| DONRE                        | Appraise procedures for<br>land acquisition<br>Appraise the<br>environmental impact<br>assessment                                         | In coordination<br>with stakeholder to<br>monitor the<br>implementation of<br>Environment<br>Impact Assessment                               | In coordination<br>with stakeholder to<br>monitor the<br>implementation of<br>Environment<br>Impact Assessment |
| DOF                          | Appraise costs and unit prices                                                                                                            |                                                                                                                                              |                                                                                                                |
| Provincial<br>State Treasury | Allocate fund according<br>to investment stages and<br>Manage allocation                                                                  |                                                                                                                                              |                                                                                                                |
| Contractors,<br>Consultants  | Prepare construction<br>survey report, FS, Basic<br>design reports,<br>construction engineering<br>design and cost<br>estimate, etc       | Participate in the construction supervision                                                                                                  |                                                                                                                |
| Construction<br>Contractors  |                                                                                                                                           | Carry out the<br>construction<br>complying with the<br>commitment to<br>social and<br>environmental                                          |                                                                                                                |

|            | Stage               |                           |                                          |
|------------|---------------------|---------------------------|------------------------------------------|
| Stakehoder | Project Preparation | Project<br>Implementation | Management,<br>operation,<br>maintenance |
|            |                     | safety                    |                                          |

#### 9.5 Demands for Training to Improve the Capacity of Stakeholders

From the practical experience of implementing the Nha Trang City Environmental 216. Sanitation Project funded by World Bank in last 10 years, and with Adimistration/Management Apparatus trained practically, Khanh Hoa Provincial People's Committee ensures the sufficient capacity for receiving, organizing and implementing successfully the complementary project. Simultaneously, the Khanh Hoa Provincial People's Committee committed to ensure arranging the adequate counterpart fund, human resources and other necessary conditions to implement well the Coastal Cities Sustainable Environment Project. Project Management Unit of Khanh Hoa Province Development (formerly known as Project Management Unit of Environmental Sanitation Improvement Project of Nha Trang City) with fully completed apparatus, including the Board of Directors (03 people) certified the Project Management Professional (PMP) by the Management Project Institute\_PMI (USA) and a lot of experience in project management and construction investment, the professional departments with high qualification trained specializedly by international experts, understanding the routine procedure of the Government of Vietnam and the sponsor, the available and experienced staffs will facilitate the project achieved progress and effectiveness. The capacity building programs for the Client through workshops, learning experience, building management process will help to better manage and implement the project and adherence with the latest requirements of the safety policy of the sponsor.

217. Besides, the Project will develop the community communication programs to raise awareness of environmental protection for the people in the project area. Support sectoral institutional reform to promote efficiency during the operation process and ensure the sustainability of the project, and share experience with other localities on ODA project management in the field of drainage and environmental sanitation.

#### 10 CONCLUSIONS AND RECOMMENDATIONS

#### 10.1 Conclusions

218. Coastal Cities Sustainable Environment Project - Nha Trang City Subproject funded by the World Bank is a highly feasible project. Basically, this is a multidisciplinary project and most of the environmental - social impacts in the operation stage are positive and contribute to improve the environmental sanitation and stimulate socio-economic development of the City. However, in the process of the project implementation, negative impacts could be expected to occur and affect social security. These impacts are primarily arised in the land clearance preparation stage for the project and the construction stage:

- Land clearance stage: The most significant impacts caused disturbing people's lives through the work of clearance and resettlement, land acquisition. These impacts are relatively huge and the project wil consume an expensive budget to carry out the relocation and resettlement for the people' lives. Currently, the City still dedicates land to solve resettlement work, therefore, these impacts can be minimized and be overcome. There are not negative impacts on the cultural works, historical sites, natural habitats and ecosystems.
- Construction Stage: The environmental impacts are mainly due to the temporary land requisition and social security order. These impacts are only temporary during the construction process of work items and can be minimized through strict implementation of the construction management and social management process.
- In the pre-appraisal stage of the World Bank, the Resettlement Policy Framework -RPF was prepared by the Client to direct all land acquisition activities and to be a basis for the next preparation of the Resettlement Plan - RP before the project implementation. In the implementation stage of the project, the independent monitoring organizations/individuals are required to implement the Resettlement Plan. These reports will fulfill the requirements of the Government of Vietnam and the World Bank on the policy of compensation, support and resettlement; and as well as be documents for the project owners to properly implement the social safety measures.

#### **10.2 Recommendations**

219. The objective defined in the policy\_OP 4.12 of the World Bank on involuntary resettlement should be ensured, which is "The livelihoods and income sources of the affected people are restored at least equal to or better than before the project" by preparing a full resettlement action plan, building a program of income restoration consistent with the actual needs of each target group affected by the project.

220. Recommend the Project to apply the contents related to social security mentioned below during the process of project implementation and operation:

- Communication plan, partiporary consultation, participartory public consultation;
- Resettlement Plan (RP);
- Environmental and Social Impact Assessment (ESIA) and Environemntal and Social Management Plan (ESMP);
- Action Plan on Public Health;
- Gender Action Plan (GAP);
- Publication of information, social accountability and monitoring.

(Detailed activities are mentioned in Part " Solutions for reduction and intervention" of this Report)

| ANNEX 1 – SOCIO-ECONOMIC SURVEY FORM                                          |  |  |  |  |  |  |
|-------------------------------------------------------------------------------|--|--|--|--|--|--|
| KHANH HOA PROVINCE PEOPLE'S COMMITTEE<br>ନ୍ଦରଙ୍କ                              |  |  |  |  |  |  |
|                                                                               |  |  |  |  |  |  |
| QUESTIONNAIRE FOR SOCIO-ECONOMIC SURVEY<br>HOUSEHOLD WASTEWATER CONNECTION    |  |  |  |  |  |  |
| HOUSEHOLD WASTEWATER CONNECTION                                               |  |  |  |  |  |  |
| COASTAL CITIES ENVIRONMENTAL SANITATION PROJECT NHA TRANG CITY<br>SUB-PROJECT |  |  |  |  |  |  |
| KHANH HOA PROVINCE                                                            |  |  |  |  |  |  |
|                                                                               |  |  |  |  |  |  |
| TABLE NO                                                                      |  |  |  |  |  |  |
| DATE OF INTERVIEW                                                             |  |  |  |  |  |  |
| HOUSEHOLD HEAD                                                                |  |  |  |  |  |  |
| NHA TRANG CITY                                                                |  |  |  |  |  |  |
| WARD/COMMUNE                                                                  |  |  |  |  |  |  |
| VILLAGE/HAMLET                                                                |  |  |  |  |  |  |
|                                                                               |  |  |  |  |  |  |
|                                                                               |  |  |  |  |  |  |
|                                                                               |  |  |  |  |  |  |
|                                                                               |  |  |  |  |  |  |
|                                                                               |  |  |  |  |  |  |
|                                                                               |  |  |  |  |  |  |
|                                                                               |  |  |  |  |  |  |

KHANH HOA, 2016

### QUESTIONNAIRE FOR SOCIO-ECONOMIC SURVEY AND HOUSEHOLD WASTEWATER CONNECTION

#### 1. Introduction

With the aim of developing the project - maintaining the effectiveness of environmental investment and strengthening the institutional reforms related to the environmental protection for socioeconomic development in the long term of Nha Trang City, *Nha Trang CCESP* is assessing the socio-economic situation of residents in the project area where you are living. Your opinions are essential to the project. They help the project developed more closely to the needs of citizens and contribute to speeding up the project implementation.

You are expected to provide the following information, by ticking (x) in the box and fill in blanks. The information about your household individuals will be kept confidential!

Sincerely thank for your cooperation!

2. How many people live and eat in your household? \_\_\_\_\_ people

**3.** Could you please tell something about these household members? *Circle the respondent in the box in the No. column* 

| NO. | Members        | Gen<br>der | Relations<br>hip with<br>the<br>household<br>head | Age | Educa<br>tion<br>backg<br>round | Occupa<br>tion | Ethnic<br>group | Reside<br>nce |
|-----|----------------|------------|---------------------------------------------------|-----|---------------------------------|----------------|-----------------|---------------|
| 1.  | Household head |            | 1                                                 |     |                                 |                |                 |               |
| 2.  |                |            |                                                   |     |                                 |                |                 |               |
| 3.  |                |            |                                                   |     |                                 |                |                 |               |
| 4.  |                |            |                                                   |     |                                 |                |                 |               |
| 5.  |                |            |                                                   |     |                                 |                |                 |               |
| 6.  |                |            |                                                   |     |                                 |                |                 |               |
| 7.  |                |            |                                                   |     |                                 |                |                 |               |
| 8.  |                |            |                                                   |     |                                 |                |                 |               |
| 9.  |                |            |                                                   |     |                                 |                |                 |               |
| 10. |                |            |                                                   |     |                                 |                |                 |               |

| Gender code: | 1. Year | 2. Female |
|--------------|---------|-----------|
|              |         |           |

#### COASTAL CITIES ENVIRONMENTAL SANITATION PROJECT NHA TRANG CITY SUB-PROJECT (NHA TRANG CCESP)

| <b>Relationship with the household head:</b> 1. Household head 2. Spouse 3. C Other:                                       | Child 4. Parent 5. Grandparent 6.                                        |
|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| Education background code:1. Illiteracy.(Grades 1-5).3. Completed primary education (level 1).                             | 2. Not completed primary education yet                                   |
| 4. Completed secondary education (Grades 6-9). (Grades 10-12).                                                             | 5. Completed high school education<br>6. Higher education. 7. No answer. |
| Leave blank the education box for children under school age.                                                               |                                                                          |
| Occupation code:       1. Government officials and civil servants(Officials, Workers, T         .       2. Soldier/Police, | Teachers,) 6. Employed/unstable jobs.<br>7. Other, specify:              |
| 3. Business/services                                                                                                       | 8. Do not work (including disabled                                       |
| 4. Farmers (including fisher/salter).                                                                                      | people, old people without salary, children,<br>long-term                |
| 5. Housewife.                                                                                                              | ill people)                                                              |
| Folk music 1. Kinh 2. Champa 3. Ragley 4. Co Ho 5                                                                          | 5. Tho                                                                   |
| 6. Chinese 7.Chu Ru 8. Nung 9. Tay                                                                                         | 10. Other ethnic minorities                                              |
| <b>Residence:</b> 1. Live and have permanent residence in commune (KT1); 2. Live in province (KT1);                        | n ward, have permanent residence in other places in                      |
| 3. Live in commune, have permanent residence outside province (KT3) commune (KT4)                                          | 4. Have temporary residence in                                           |
| 4. Which of the following living items does your househ                                                                    | old have?                                                                |
|                                                                                                                            | Color TV10 Washing                                                       |
| machine.                                                                                                                   |                                                                          |
| 2 Motorbike. 5 Sound system 8 Expensive bed                                                                                | and cabinet $\Box_{11}$ Water heater                                     |
| $\square_3$ Air-conditioner. $\square_6$ Telephone $\square_9$ Fridg                                                       | ge $\Box_{12}$ Bike                                                      |

**5.** Which income sources from and how much did your family make in 2015? (total revenues, without deducting costs. It is necessary to convert to self-sufficiency sources for household meals such as vegetables, chickens, pig, fish, ducks ... into money for calculation into the total revenues)

Unit: VND

| NO. | Income sources                   | Revenues calculated by<br>month | Revenues calculated only by crop/year |
|-----|----------------------------------|---------------------------------|---------------------------------------|
| 1.  | Cultivation                      |                                 |                                       |
| 2.  | Breeding (including aquaculture) |                                 |                                       |
| 3.  | Employed                         |                                 |                                       |
| 4.  | Salary/pension                   |                                 |                                       |
| 5.  | Trade/service                    |                                 |                                       |
| 6.  | Saving                           |                                 |                                       |
| 7.  | Given by children/relatives      |                                 |                                       |
| 8.  | Other (specify)                  |                                 |                                       |
|     | Total income                     |                                 |                                       |

Note:

<sup>•</sup> Yearly earnings will be recalculated monthly to have average income of households (by month).

| NO. | Expenditure           | Calculated by month | Calculated by year only |
|-----|-----------------------|---------------------|-------------------------|
| 1.  | Eating                |                     |                         |
| 2.  | Electricity           |                     |                         |
| 3.  | Water                 |                     |                         |
| 4.  | Garbage fee           |                     |                         |
| 5.  | Sewage fee            |                     |                         |
| 6.  | Travel expenses       |                     |                         |
| 7.  | House rental (if any) |                     |                         |
| 8.  | Cost for studying     |                     |                         |
| 9.  | Health care           |                     |                         |
| 10. | Entertainment         |                     |                         |
| 11. | Other costs           |                     |                         |
|     | Total expenditure     |                     |                         |

6. What and how much are the monthly expenditures of the family?

Note:

- Some costs for producing/garment/health/family business .... calculated by events/time or year, then evenly divided the number of months.
- 7. Is your family's income stable?
  - $\Box_1$  Yes

2 No. Reason:

#### 8. To you, does your family fall in vulnerable groups?

1 Poor

 $\square_3$  Family headed by women

- $\square_2$  Families of ethnic minorities
- 4 Families with elderly and disabled

#### II. LAND - HOUSE

#### 9. How long has been your family living here?

| $\square_1$ Less than 1 year  | $\square_4$ From 10 to 20 years |
|-------------------------------|---------------------------------|
| $\square_2$ From 1 to 5 years | 5 20 years or more              |

3 From 5 to 10 years

#### **10. What kind is your family's house?** (together with observed by surveyor)

| <sup>1</sup> Fixed house      | 3 Temporary house         | 5 Garden house |
|-------------------------------|---------------------------|----------------|
| <sup>2</sup> Semi-fixed house | 4 High-rise apartment blo | ck 6 Other     |

11. How many m<sup>2</sup> of land is your family using? \_\_\_\_\_m<sup>2</sup>

| 1           | 12. Total        | floor            | area of<br>_m²/person   | your       | house:      |                     |           | m²,       | equivalo | ent to:  |
|-------------|------------------|------------------|-------------------------|------------|-------------|---------------------|-----------|-----------|----------|----------|
| 1           | 13. Origin       | of land          | /housing?               |            |             |                     |           |           |          |          |
|             | 1 Inh            | erited           |                         | 3 Bough    | t/self-cons | tructed             | 5 Ot      | her       |          |          |
|             | 2 Gra            | nted             |                         | 4 Rentee   | l house/lan | ıd                  |           |           |          |          |
| 1           | 14. What k       | inds of          | real estate pa          | pers do g  | you have?   | ?                   |           |           |          |          |
|             | $\square_1$ Rec  | l book/p         | ink paper               |            |             |                     |           |           |          |          |
|             | $\square_2$ Hou  | ise gran         | ting paper issued       | l by gover | ming ageno  | су                  |           |           |          |          |
|             | 3 Cer            | tificate of      | of temporary hor        | ne/land    |             |                     |           |           |          |          |
|             | 4 Lan            | d lease          |                         |            |             |                     |           |           |          |          |
|             | 5 No             | certifica        | te is available         |            |             |                     |           |           |          |          |
|             | 14.1             | . <u>If not,</u> | please specify re       | easons:    |             |                     |           |           |          |          |
|             |                  | [                | $\square_1$ Too expense | sive       |             |                     |           |           |          |          |
|             |                  | [                | 2 No legal pa           | apers      |             |                     |           |           |          |          |
|             |                  | [                | 3 Rented hou            | se/land    |             |                     |           |           |          |          |
|             |                  | [                | 4 Other                 |            |             |                     |           |           |          |          |
|             | 6 Oth            | er (plea         | se specify)             |            |             |                     |           |           |          |          |
|             |                  |                  |                         |            |             |                     |           |           |          |          |
| 1           | 15. What k       | ind of o         | ownership doe           | s your h   | ouse fall i | in?                 |           |           |          |          |
|             | 1 Pri            | vate hou         | use                     |            | 4           | House of            | f the col | lective/a | agency   |          |
|             | $\square_2$ Rep  | nted/bo          | rrowed from in          | dividuals  | 5           | Unknow              | n         |           |          |          |
|             | 3 Ren            | ted from         | m the State             |            |             | 6                   |           | Other     | (please  | specify) |
|             |                  |                  |                         |            |             |                     |           |           |          |          |
| Ш. <u>Р</u> | OWER SU          | PPLY, T          | FRAFFIC AND             | TRANS      | PORTATI     | ION PAR             | TICIPA    | TION      |          |          |
| 1           | 16. Which        | power            | source is your          | family u   | ising?      |                     |           |           |          |          |
|             | $\Box_1$ Gric    | l with its       | s own electric me       | eter       |             | <sub>3</sub> No pow | ver used  |           |          |          |
|             | 2 Con            | nected t         | hough another fa        | mily       |             |                     |           |           |          |          |
| ]           | 17. Freque       | ncy of j         | power cuts?             |            |             |                     |           |           |          |          |
|             | $\square_1$ Hare | ily cut          |                         | <b>3</b> 3 | – 5 times/1 | month               |           | 5 Un      | known    |          |
|             | 2 1-2            | times/m          | onth                    | <b>4</b> N | Iore than   | 5 times/m           | nonth     |           |          |          |
| 1           | 18. How is       | the am           | perage of you           | · familv?  | •           |                     |           |           |          |          |
|             |                  | ong enou         |                         |            | Veak        |                     |           | ∏5 Un     | known    |          |
|             | $\square_2$ Nor  | -                | -                       | _          | ery weak    |                     |           |           |          |          |

#### COASTAL CITIES ENVIRONMENTAL SANITATION PROJECT NHA TRANG CITY SUB-PROJECT (NHA TRANG CCESP)

| 19. How is your house located?                           |                                         |                              |
|----------------------------------------------------------|-----------------------------------------|------------------------------|
| $\square_1$ Road, street side                            | $\square_4$ In land/alley of 2 to 3 m w | vide                         |
| $\square_2$ In land/alley of more than 5                 | m wide 5 In land/alley of less than 2   | m                            |
| $\square_3$ In land/alley of 3 to 5 m wide               | 6 Other (specify):                      |                              |
| 20. Features of the road/lane/all                        | ey leading to your house (combined      | with observation):           |
| $\square_1$ Paved with asphalt                           | 3 Paved with gravel/stone/brick/ce      |                              |
| (specify):                                               |                                         |                              |
| 2 Concrete                                               | 4 Soil road                             |                              |
| 21 Which of the following tech                           | aical infrastructure does the read      | lang/allow gystam in your    |
| family's living area have?                               | nical infrastructure does the road/     | lane/aney system in your     |
| U water supply pipes                                     | 4 Common drainage culvert               | 7 Electricity                |
| 2 Stormwater drain                                       | 5 Technical trench                      | 8 Other (specify):           |
| 3 Wastewater drain                                       | 6 Lighting electricity                  |                              |
| <b>22. Evaluate the road/lane/alley</b> <i>selected)</i> | v system in your living area (mor       | e than 1 options may be      |
| I Generally good                                         | 4 Low roadbed                           | $\Box_6$ A lot of dust, dirt |
| 2 Flooding/muddy                                         | 5 Roadbed is rough, hard to travel      | 7 Other (specify):           |
| 3 Narrow road                                            |                                         |                              |
| 23. Which of the following vehic                         | les and how many of each type doe       | es vour family have?         |
| $\Box_1$ Car, quantity:                                  |                                         |                              |
| 2 Motorbikes, quantity:                                  |                                         |                              |
| 3 Electric bike/motorcycle, qu                           | antity:                                 |                              |
| $\square_4$ Bikes, quantity:                             |                                         |                              |
| 5 Tricycles, quantity:                                   |                                         |                              |
|                                                          |                                         |                              |
| IV. <u>WATER SUPPLY SITUATION OF</u>                     | HOUSEHOLD                               |                              |
| 24. How many water sources do round?                     | es your family use for the whole fa     | amily's activities all year  |

 $\square_1$  1 source

2 2 sources

 $\Box_3$  3 sources or more

### 25. How much water is used daily in your family for various purposes?

| Water used for the purposes of the whole | 1. Summer | 2. Winter | Average/per capita |
|------------------------------------------|-----------|-----------|--------------------|
| household                                | (Liter)   | (Liter)   | amount of water    |

#### COASTAL CITIES ENVIRONMENTAL SANITATION PROJECT NHA TRANG CITY SUB-PROJECT (NHA TRANG CCESP)

| 1. Eating, drinking                                                  |  |  |
|----------------------------------------------------------------------|--|--|
| 2. Use for cooking (including water for washing vegetable/food/rice) |  |  |
| 3. Use for bathing, washing                                          |  |  |
| 4. Watering plants, washing vehicles                                 |  |  |
| 5. Other, specify:                                                   |  |  |
| Total number of liters of water used for<br>household                |  |  |

#### 26. Is the amount of water above sufficient for the needs of the whole family?

1 Enough

<sup>2</sup> Not enough. So, *how much is enough:* \_\_\_\_\_*liters/day* 

#### 27. Which major water sources do you use for eating/drinking and bathing/washing?

|                                       |                               | 1. Us                     | e purpose                                                  | 2. Quality   | y of water |
|---------------------------------------|-------------------------------|---------------------------|------------------------------------------------------------|--------------|------------|
| Water source                          | 1.<br>Eating,<br>drinkin<br>g | 2.<br>Bathing,<br>washing | 3. Other: producing,<br>watering trees, cleaning<br>cages, | 1.<br>Summer | 2. Winter  |
| 1. Tap water through its own meter    |                               |                           |                                                            |              |            |
| 2. Tap water through other households |                               |                           |                                                            |              |            |
| 3. Bored well                         |                               |                           |                                                            |              |            |
| 4. Dug well                           |                               |                           |                                                            |              |            |
| 5. Rainwater                          |                               |                           |                                                            |              |            |
| 6. Pond/lake/river/canal water        |                               |                           |                                                            |              |            |
| 7. Other: bought/bottled              |                               |                           |                                                            |              |            |

Water quality code: 1. Clear and clean water 2. Clear but with odor

3. Not clear and with odor/color

4. Other (specify):

#### 28. Have you ever checked the quality of water?

1 Yes

28.1. If yes, specify the inspection form:

 $\Box_1$  Use trial pen for checking

 $\square$  2 Send testing samples to the laboratory

3 Preventive medicine/inspection program

4 Through visual assessment/folk experience as tea making...

5 Other, specify\_\_\_\_\_

| 29.1. If yes, specify the type of water treatment system:                                               |
|---------------------------------------------------------------------------------------------------------|
| 1     Sand filter tank     5     Ozone generation device                                                |
| 2 Ceramic filter (Korean style)   6 Ion exchange purifier                                               |
| 3 Micro filter (3 filtering blocks) 7 R.O filter                                                        |
| Filter mounted with faucet head                                                                         |
| 29.2. How much is the cost of the above equipment?VND                                                   |
| 29.3. How long does it have to be remodeled/renovated/replaced once?                                    |
| Everymonths. How much does one time cost?VND/time                                                       |
| 29.4. Evaluate water quality after filtering with these devices:                                        |
| <sub>2</sub> None                                                                                       |
| o you need to improve the water quality?                                                                |
| $\Box_1$ Yes                                                                                            |
| 30.1. <u>If yes, specify how to improve:</u>                                                            |
| $\Box_1$ Connected to the water supply system of the city (in case not connected)                       |
| $\square_2$ Improve water quality at the water supply plant (in case connected)                         |
| 3 Family additionally equip water purifier                                                              |
| <sup>2</sup> None. Why?                                                                                 |
| ER DRAINAGE SITUATION                                                                                   |
| <b>Where is your family's wastewater drained to?</b> (more than one reply may be selected)              |
| <sup>1</sup> Wastewater from toilets into septic tanks <sup>5</sup> Directly drained to river/lake/cana |
| <sup>2</sup> Wastewater from laundry/kitchen into septic tanks                                          |
| <sup>3</sup> Drained the common sewer/trench (closed/open)                                              |
| 4 Other, specify:                                                                                       |
| lease describe the sewer system of group, ward where your family is living.                             |
| $\Box_1$ Concrete sewer pipes $\Box_4$ No drainage sewer/ditch                                          |
| $\Box_2$ Opened ditch $\Box_5$ Other form, specify:                                                     |
|                                                                                                         |
| ]<br>[]<br>[]<br>[]<br>[]<br>[]                                                                         |

|                                                   | NO.                  | Information                            | Indoor                | Outdoor             |
|---------------------------------------------------|----------------------|----------------------------------------|-----------------------|---------------------|
|                                                   | 1.                   | Number of floods/year                  |                       |                     |
|                                                   | 2.                   | Time of floodshours/time               |                       |                     |
| -                                                 | 3.                   | Deepest flood cm                       |                       |                     |
| 33.2. Possibl                                     | e causes             | s of flooding in your localities (more | than one answer ca    | n be selected)      |
|                                                   | 1 Heav               | _                                      | Culvert is too small  |                     |
|                                                   | 2 Floor              | is lower than street                   | No sewer              |                     |
|                                                   | 3 Sewe               | er blocked                             | Other                 |                     |
| <u>33.3. Before</u>                               | the floo             | ding season, does your family has to   | spend for the reinfo  | prcement of the hou |
|                                                   | 1 Yes.               | How much does it cost/year             | VND/yea               | r                   |
|                                                   | 2 None               |                                        |                       |                     |
| <u>33.4. After th</u>                             | <u>e floodi</u>      | ng season, does your family has to sp  | pend for the reinford | cement of the hous  |
|                                                   | 1 Yes.               | How much does it cost/year             | VND/yea               | r                   |
|                                                   | 2 None               | 2.                                     |                       |                     |
| 2 None                                            |                      |                                        |                       |                     |
|                                                   |                      | ate the water drainage system w        | vhere you are livi    | ng?                 |
|                                                   |                      | vate and upgrade immediately           |                       |                     |
| $\square_2$ If possible, it is                    |                      |                                        | d                     |                     |
| $\square_3$ No need to rem<br>$\square_4$ Unknown | iovale, I            | nvestment in other items is prioritize | a                     |                     |
|                                                   |                      |                                        |                       |                     |
| GARBAGE COLLEC                                    | <b>FION</b>          |                                        |                       |                     |
| 35. Which form of g                               | arbage               | collection does your family use        | ?                     |                     |
| $\Box_1$ Garbage bin                              | 2                    | Garbage bag $\square_3$ Other for      | orms, specify         |                     |
|                                                   |                      |                                        |                       |                     |
| 36. Does your family                              |                      | ·                                      |                       |                     |
| 1 Yes                                             | ] <sub>2</sub> No. ] | Reason:                                |                       |                     |
| <b>37.</b> How is waste tre                       | atad b               | y your family?                         |                       |                     |
|                                                   |                      | ning to door to collect, frequency     | : Everv               | davs.               |
|                                                   |                      | bage to dump in designated pla         |                       |                     |
| collection truck)                                 | U                    |                                        | ~                     |                     |
| 3 Pour into riv                                   | vers, ca             | nals, ponds, lakes 5 Dig holes         | s/pour into garden    |                     |
| 4 Pour into en                                    | npty lot             |                                        | ury/burn              |                     |
|                                                   |                      |                                        |                       |                     |
|                                                   | living               | environment here contaminated          | d?                    |                     |
| $\Box_1$ Yes                                      |                      | 2 No                                   | (Move to part VII)    |                     |

#### 39. If yes, why and how?

| NO.  | 1. Sources of pollutants                        | 2. Level of impact |          |           |  |
|------|-------------------------------------------------|--------------------|----------|-----------|--|
| 110. | 1. Sources of ponutains                         | 1. Really great    | 2. Great | 3. Little |  |
| 1.   | Noise                                           |                    |          |           |  |
| 2.   | Dust                                            |                    |          |           |  |
| 3.   | Flooding due to rainwater                       |                    |          |           |  |
| 4.   | Waste water from living sewers                  |                    |          |           |  |
| 5.   | Wastewater from production, business facilities |                    |          |           |  |
| 6.   | Stagnant wastewater from rivers, lakes          |                    |          |           |  |
| 7.   | Odor from drains, ditches                       |                    |          |           |  |
| 8.   | Odor from garbage                               |                    |          |           |  |

#### VII. HOUSEHOLD SANITATION WORKS AND SOCIAL INFRASTRUCTURE

#### 40. Does your family have a private toilet?

 $\Box_1$  Yes

| 40.1. If yes, which kind of toilet is | your family's?  |  |
|---------------------------------------|-----------------|--|
| 1 Septic                              | 3 Box           |  |
| 2 Semi-septic                         | 4 Temporary     |  |
| 40.2. How frequently is the septic    | tank suctioned? |  |
| 40.3. And the cost for each suction   |                 |  |
| 2 None                                |                 |  |
| Assess the quality of your family's   | toilet?         |  |
| Clean and hygienic                    |                 |  |

### 41. A

- <sup>1</sup> Clean and hygienic
- <sup>2</sup> Dirty and unhygienic (specify reason: \_\_\_\_\_)
- $\square_3$  No answer

#### 42. How are the following infrastructure systems in your area?

| NO | Infrastructure            | 1. Quantity |             |        |     | 2. Hygie | ne sys | tem    |
|----|---------------------------|-------------|-------------|--------|-----|----------|--------|--------|
| •  |                           | 1.          | 2.          | 3.     | 1.  | 2.       | 3.     | 4.     |
|    |                           | Sufficien   | Insufficien | Unknow | Goo | Norma    | Ва     | Unknow |
|    |                           | t           | t           | n      | d   | 1        | d      | n      |
| 1. | Kindergarten/preschool    |             |             |        |     |          |        |        |
| 2. | Primary school (level 1). |             |             |        |     |          |        |        |

| 3. | Secondary school (level 2).               |  |  |  |  |
|----|-------------------------------------------|--|--|--|--|
| 4. | Clinics                                   |  |  |  |  |
| 5. | Culture House                             |  |  |  |  |
| 6. | Market                                    |  |  |  |  |
| 7. | Park                                      |  |  |  |  |
| 8. | Points of<br>recreation/entertainmen<br>t |  |  |  |  |

#### VIII. EDUCATION, HEALTH, KNOWLEDGE AND PRACTICE OF THE PEOPLE

| 43. How | many    | children | of | school | age | in | your | family | are | not | taken | to | school? |
|---------|---------|----------|----|--------|-----|----|------|--------|-----|-----|-------|----|---------|
|         | childre | n        |    |        |     |    |      |        |     |     |       |    |         |

| 4 | 3.1. | Why | are | they | v not | taken | to | school? |  |
|---|------|-----|-----|------|-------|-------|----|---------|--|
|   |      |     |     |      |       |       |    |         |  |

| $\square_1$ School too far | 3 Children are needed to support |
|----------------------------|----------------------------------|
| their families             |                                  |
|                            |                                  |

2 Do not afford for them to school 4 Other, specify:

### 44. Does your family often drink boiled water or unboiled water?

| 4. Does your family often drink dolled water | r or undolled water?                |
|----------------------------------------------|-------------------------------------|
| 1 Boiled water                               | 3 Sometimes boiled water, Sometimes |
| unboiled water                               |                                     |
| 2 Unboiled water                             | 4 Drink directly from R.O filter    |
|                                              |                                     |

#### 45. Do your family member wash hands before eating?

| 1 Regularly wash | 3 Do not wash |
|------------------|---------------|
| 2 Occasionally   | 4 No answer   |

#### 46. Do your family member wash hands after eating?

| 1 Regularly wash | 3 Do not wash |
|------------------|---------------|
| 2 Occasionally   | 4 No answer   |

## 47. Which sources of information do you often listen about dissemination of water and sanitation from?

| 1 Speaker/radio in ward/commune           | 4 TV                                 |
|-------------------------------------------|--------------------------------------|
| 2 Clinic staff/personnel of women's union | 5 Meetings                           |
| 3 Poster/pictures/slogans                 | 6 Children (information from school) |
|                                           | 7 Other (specify):                   |

#### 48. What are the common diseases in the village/area of residence of your family?

| 🗌 1 Flu                     | 7 Gynecology        |
|-----------------------------|---------------------|
| 2 Headache                  | 8 Parasitical worms |
| 3 Diarrhea                  | 9 Hepatitis A       |
| 4 Dysentery                 | 10 Stomach          |
| 5 Cholera                   | 11 Unknown          |
| 6 Itching/allergies, rashes | 12 Other (specify): |

#### 49. In the past month, is anyone in your family ill/infected with diseases?

 $\Box_1$  Yes

 $\square_2$  No (Move to part IX)

#### 50. If yes, please fill in the table below?

| Patient | Age | Gender<br>1. Male<br>2. Female | Disease type<br>(specify code as<br>the above<br>question) | How were they<br>treated? |
|---------|-----|--------------------------------|------------------------------------------------------------|---------------------------|
|         |     |                                |                                                            |                           |
|         |     |                                |                                                            |                           |
|         |     |                                |                                                            |                           |
|         |     |                                |                                                            |                           |
|         |     |                                |                                                            |                           |

Code for patients:

Code of treatments:

| 1. Household head | 1. No treatment, self-healing Wor | rshiping                    |
|-------------------|-----------------------------------|-----------------------------|
| 2. Spouse         | 2. Buy medicine.                  | 6. Treated with traditional |
| 3. Children       | medicine.                         |                             |
| 4. Parent         | <i>3. Treated at clinics.</i>     | 7. Other (specify):         |
| 5. Grandparent    | 4. Go to ho                       | spital                      |
| 6. Other:         |                                   |                             |

## **51.** Do you know that the common diseases/or illnesses of family members are related to the conditions of sanitation and living water?

 $\Box_1$  Yes

| 51.1. If yes, | what is the | main reason | 01 | f this disease? |
|---------------|-------------|-------------|----|-----------------|
|               |             |             |    |                 |

<sup>1</sup> Contaminated by food source

|  | 2 Muddy, flooding roads | 3 Damp house |
|--|-------------------------|--------------|
|--|-------------------------|--------------|

Contaminated by sewage and waste source

Noise/sludge of production facilities

| 6 Other (specify) |
|-------------------|
|-------------------|

\_\_\_\_\_2 Unrelated (Move to part IX)

3 Unknown (Move to part IX)

#### IX. GENDER ISSUE

#### 52. How is the division of labor in your family?

| NO.    | Work                                                                                            | Division of labor |        |         |
|--------|-------------------------------------------------------------------------------------------------|-------------------|--------|---------|
|        | WOI K                                                                                           | 1. Women          | 2. Men | 3. Both |
| In the | family                                                                                          |                   |        |         |
| 1.     | Money keeping                                                                                   |                   |        |         |
| 2.     | Housewife                                                                                       |                   |        |         |
| 3.     | Main decisions related to finance as purchasing/selling expensive assets: house, land, vehicles |                   |        |         |
| 4.     | Decision on study and work of children                                                          |                   |        |         |
| 5.     | Decision on marrying wife/husband for children                                                  |                   |        |         |
| 6.     | Bank loans                                                                                      |                   |        |         |
| Tradi  | ng                                                                                              |                   |        |         |
| 1.     | Purchase from dealers                                                                           |                   |        |         |
| 2.     | Sell                                                                                            |                   |        |         |
| 3.     | Calculate records                                                                               |                   |        |         |
| 4.     | Accounting work                                                                                 |                   |        |         |
| Asset  | ownership issue                                                                                 |                   |        |         |
| 5.     | Title to the land use rights and assets                                                         |                   |        |         |
| Partic | ipate in community activities                                                                   |                   |        |         |
| 6.     | Participate in community meetings                                                               |                   |        |         |
| 7.     | Join local organizations                                                                        |                   |        |         |
| 8.     | Other (specify):                                                                                |                   |        |         |

### 53. In your opinion, can gender equality issue be improved by the implementation of the project? Why?

| 1 Yes   | 2 No. |
|---------|-------|
| Reason: |       |

#### X. DESIRE AND ABILITY TO PARTICIPATE

### **54.** If the area is invested for the purpose of development, what are the three areas of first priority of the ward/commune?

| 1 Upgrade roads.                        | 7 Garbage collection.                 |
|-----------------------------------------|---------------------------------------|
| 2 Upgrade electricity network           | 8 Cultural House.                     |
| 3 Build and upgrade water supply system | 9 Hospitals/clinics.                  |
| 4 Rain water and waste water drainage   | $\square$ 10 School.                  |
| system                                  | 11 Points of recreation/entertainment |

| 5 Public sanitation facilities                                                                                                                                         | 12 Market                                                                             |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--|--|--|
| $\square_6$ Household sanitation facilities                                                                                                                            | 13 Other, specify:                                                                    |  |  |  |
|                                                                                                                                                                        |                                                                                       |  |  |  |
| IF INFRASTRUCTURE UPGRADING PROC                                                                                                                                       | GRAMS FOR YOUR AREA, THEN:                                                            |  |  |  |
| 55. Are you willing to participate in making discussions) to develop the project?                                                                                      | 55. Are you willing to participate in making comments (eg, participation in meetings, |  |  |  |
| $\square_1$ Yes                                                                                                                                                        | 2 No                                                                                  |  |  |  |
| 56. Are you willing to participate in monitor                                                                                                                          | ring the project implementation?                                                      |  |  |  |
| $\square_1$ Always ready                                                                                                                                               | $\square$ 3 Do not participate                                                        |  |  |  |
| Will participate if requested                                                                                                                                          |                                                                                       |  |  |  |
| 57. Does your family wish to renovate/const                                                                                                                            | ruct new toilets in the next 3 years?                                                 |  |  |  |
| $\square_1$ Yes and ready to self-pay                                                                                                                                  |                                                                                       |  |  |  |
| $\square_2$ Yes, and propose to borrow with                                                                                                                            | h preferential interest rate (an amount of                                            |  |  |  |
| approximatelyVND/househousehousehousehousehousehousehouse                                                                                                              | old)                                                                                  |  |  |  |
| $\square_3$ None.                                                                                                                                                      |                                                                                       |  |  |  |
| <ul> <li>58. Does your family wish to connect to the s</li> <li>1 Yes and ready to pay for connecting drain/groove</li> <li>2 None. Please specify reasons:</li> </ul> | the sewage pipe of the family to the general                                          |  |  |  |
| 59. In case sewerage charge must be paid, pay for drainage?                                                                                                            | does your family afford and is willing to                                             |  |  |  |
| $\square_1$ Yes                                                                                                                                                        | 3 Unkown                                                                              |  |  |  |
| $\square_2$ No (move to question 61)                                                                                                                                   | $\square_4$ It depends on the payment                                                 |  |  |  |
| 60. If yes, how much can your family afford                                                                                                                            | to pay monthly and payment forms?                                                     |  |  |  |
| 59.1. Regarding drainage fee:                                                                                                                                          |                                                                                       |  |  |  |
| $\Box_1$ 5% of living water price                                                                                                                                      | e 3 20% of living water                                                               |  |  |  |
| price                                                                                                                                                                  |                                                                                       |  |  |  |
| $\square_2$ 10% of living water pri                                                                                                                                    | ce 4 Other, specify:                                                                  |  |  |  |
| 59.2. Forms of payment:                                                                                                                                                |                                                                                       |  |  |  |
| $\square_1$ In monthly water bill                                                                                                                                      |                                                                                       |  |  |  |
| $\square_2$ Separately from month                                                                                                                                      | ly water bill                                                                         |  |  |  |
| 3 Other, specify:                                                                                                                                                      |                                                                                       |  |  |  |

#### 61. Are you willing to contribute to the construction and maintenance of infrastructure projects in the community where you are living? Г

| 1 | Yes |  |
|---|-----|--|
|   |     |  |

| 60.1. If yes, how do you want to contribute?                                        |
|-------------------------------------------------------------------------------------|
| $\Box_1$ Contribute in cash divided into several installments                       |
| 2 Contribute in cash in one installment                                             |
| 3 Contribute in things                                                              |
| 4 Contribute with labor                                                             |
| 5 Other, specify:                                                                   |
| 2 None                                                                              |
| 60.2. If you do not want to contribute, why not? (More than 1 option can be chosen) |
| $\square_1$ No cash, things, effort to contribute                                   |
| 2 Because it is the responsibility of the State                                     |
| 3 Satisfied with current conditions                                                 |
| $\square_4$ It is better to live with lower conditions than to contribute           |
| 5 Other, specify:                                                                   |
|                                                                                     |

#### 62. Do you propose any suggestion, desires for the project?

#### XI. FOR HOUSEHOLDS WITH AFFECTED LAND/ASSETS

| Com           | ou know know the cor<br>mittee for all types of<br>ock when the State rec | and, houses,      | structures,          |                     | -             |
|---------------|---------------------------------------------------------------------------|-------------------|----------------------|---------------------|---------------|
|               | Yes                                                                       | $\square_2$ No    |                      |                     |               |
| If ye         | s, do you have any idea                                                   | about the level o | f compensat          | ion in the above    | e decision:   |
| $\square_1$ ] | Гоо low                                                                   | 2 Reasonable      | ;                    | □ <sub>3</sub> High |               |
| If lo         | w, how much is it lower?                                                  | ?                 | (compared t          | to the approprid    | ate level)    |
| If hig        | h, how much is it higher                                                  | ?                 | (compare             | ed to the approp    | priate level) |
|               | o <mark>u have any informatio</mark><br>Yes                               | n about the prio  | ce of land w         | here you are li     | ving?         |
| If ye         | es, how much?                                                             |                   |                      |                     |               |
|               | For residential land:                                                     |                   | _ VND/m <sup>2</sup> |                     |               |
|               | For agricultural land:                                                    |                   | _ VND/m <sup>2</sup> |                     |               |
|               | Other land, specify:                                                      |                   | _ VND/m <sup>2</sup> |                     |               |
|               |                                                                           |                   |                      |                     |               |

| 65. In case your family land is want to be compensated?                                                                                                    | requisitioned or affected by the project, how do you                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| $\square_1$ Change land for land                                                                                                                           | 4 Compensate in cash satisfactorily                                                                                 |
| $\square_2$ Change house for house                                                                                                                         | 5 Disagree to requisition with all                                                                                  |
| conditions                                                                                                                                                 |                                                                                                                     |
| 3 Money and land                                                                                                                                           | 6 Other, specify:                                                                                                   |
| 6                                                                                                                                                          | cultural land is retrieved, in addition to compensation,<br>licy of the Project; what other supports do you wish to |
| $\Box_1$ Occupational training                                                                                                                             | $\square_4$ Development of agricultural models                                                                      |
| 2 Borrow credit                                                                                                                                            | 3 Create jobs                                                                                                       |
| 5 Business support                                                                                                                                         | 6 Other, specify:                                                                                                   |
| <u>64.1. If no suggestions</u> , please l                                                                                                                  | et us know your plans to restore the family's income?                                                               |
| <ul> <li>I Desire to resettle in local</li> <li>2 Want to go to the resettle</li> <li>3 Want to buy/arrange acc</li> <li>4 Other form, specify:</li> </ul> | ement site with full project infrastructure ommodation                                                              |
| please specify.                                                                                                                                            |                                                                                                                     |
|                                                                                                                                                            |                                                                                                                     |
|                                                                                                                                                            |                                                                                                                     |
|                                                                                                                                                            | The interview is over. Thank for your cooperation!                                                                  |
| Surveyor                                                                                                                                                   | Respondent                                                                                                          |
| (Signature and full name)                                                                                                                                  | (Signature and full name)                                                                                           |