Initial Environmental Examination

Document Status: Draft

August 2017

Viet Nam: Water Efficiency Improvement in Drought Affected Provinces

Khanh Hoa Province Subproject

Prepared by the Central Office for Water Resources Projects (CPO) - Ministry of Agriculture and Rural Development for the Asian Development Bank

TABLE OF CONTENTS

Page

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ADB	Asian Development Bank
AP	affected person
CEP	Commitment on Environmental Protection
CPC	Commune People's Committee
CPO	Central Office for Water Resources Projects
CPMU	Central Project Management Unit
CSC	Construction Supervision Consultant
DARD	Department of Agriculture and Rural Development
dBA	Decibel
DONRE	Department of Natural Resources and Environment
DPC	District People's Committee
EHS	environment, health, and safety
EIA	environmental impact assessment
EIAR	Environmental Impact Assessment Report
EM	ethnic minority
EMDF	Ethnic Minority Development Framework
EMP	Environmental Management Plan
EPC	Environmental Protection Commitment
EPP	Environmental Protection Plan
EPS	Environmental Protection Scheme
ESS	Environment Safeguard Specialist
FI	financial intermediary
GRM	grievance redress mechanism
ha	hectare
HDPE	high-density polyethylene
HH	household
HVC	high-value crop
IEE	Initial Environmental Examination
IMA	Independent Monitoring Agency
IEMC	Independent Environmental Monitoring Consultant
IPM	integrated pest management
ISRP	Irrigation Subsector Restructuring Plan
IWR	irrigation water requirement
IWRP	Institute of Water Resources Planning
km	kilometer
l/s	liter per second
LHS	Law on Hydraulic Structures
LIC	Loan Implementation Consultant
masl	meter above sea level
m	meter
mg/l	milligram per liter
mm	illimeter
mm^3	cubic millimeter
MONRE	Ministry of Natural Resources and Environment
PCC	People's Committee and Commission
PMU	Project Management Unit
PPC	Provincial People's Committee
PPE	personal protective equipment

PPMB	Provincial Project Management Board
PPMU	Provincial Project Management Unit
PPTA	Project Preparatory Technical Assistance
QCVN	National Technical Regulation
RF	Resettlement Framework
SEA	Strategic Environmental Assessment
SERD	Southeast Asia Department
SEMP	Site Environmental Management Plan
UXO	unexploded ordnance
VND	Vietnamese Dong
WB	World Bank
WEAT	water efficient application technologies
WEIDAP	Water Efficiency Improvement in Drought Affected Provinces Project

NOTE

This initial environmental examination (IEE) is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, Management, or staff, and may be preliminary in nature.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

EXECUTIVE SUMMARY

A. Subproject Background

1. The Water Efficiency Improvement in Drought Affected Provinces Project (WEIDAP) aims to improve agriculture water productivity (crop per drop) by increasing water use efficiency in irrigated agriculture in five drought-affected provinces in the Central Highland and South Central Coastal Regions: Binh Thuan, Dak Lak, Dak Nong, Khanh Hoa, and Ninh Thuan. The project is aligned with the Government's *Agricultural Restructuring Policy*, the *Law on Hydraulic Structures,*, and the *Irrigation Subsector Restructuring Plan.*[1] The project features: (i) increasing water productivity with the reduction of conveyance losses made possible by piped distribution systems and substantial improvements in operational control; (ii) increased adoption of water efficiency application technologies (WEAT)for climate mitigation, which are also effective in saving energy (through reduced fertilizer applications) and achieving significant labor reductions; (iii) conjunctive use of surface and groundwater–a pragmatic acknowledgement of current irrigation practices and farmers' coping strategies during periods of increasing climate variability; and (iv) reduced operation and maintenance (O&M)–rigorous asset management is central to the project design and provides greater confidence in sustainability of benefits.

2. Khanh Hoa province has one subproject that covers two irrigation schemes of Cam Ranh and Suoi Dau reservoirs. The system includes: (i) the upgrading of the south canal of the existing Cam Ranh canal and the north and south existing canals of Suoi Dau; and (ii) construction of a new pumping station together with five ring pipeline systems to irrigate nine communes in Cam Lam District, Khanh Hoa Province. These beneficiary communes are Suoi Cat, Suoi Tan, Cam Tan, Cam Hoa, Cam Hiep Bac, Cam Hai Tay, Cam Duc, Cam Hiep Nam, Cam Thanh Bac.

B. Environmental Impacts and Mitigations

3. The subproject has been categorized as B for environmental safeguards during the Project Concept Note stage as few significant impacts were identified, none of them irreversible. This Initial Environmental Examination (IEE) was prepared to: (i) screen impacts and formulate mitigation measures in the three phases of subproject implementation (design and pre-construction, construction, and operation); and (ii) describe the institutional arrangements that will ensure that the subproject environmental management plan (EMP) will be implemented.

4. During the design and pre-construction phase, the following potential environmental impacts of the subproject were identified: (i) land acquisition as around 7.24 hectare (ha) of annual crop land and 1.7 ha of perennial land will be acquired for subproject construction (RP report); (ii) conflicting water uses between Suoi Dau and Cam Ranh reservoirs due to an increase of the command area 4,000 ha with the construction of a new pumped pipe system; and (iii) unexploded ordnance (UXO) that may still exist underground in the subproject area. To minimize these impacts, the Central Project Management Unit (CPMU)/Provincial Project Management Unit (PPMU) will: (i) carry out a land acquisition and compensation process before the start of construction to ensure that all affected households (AHs) receive adequate compensation in accordance with current prevailing market prices and the Asian Development Bank (ADB) Safeguard Policy Statement (SPS) (2009); (ii) perform water balance calculations for Cam Ranh and Suoi Dau reservoirs to determine if the reservoirs will be able to supply the irrigation water demand of the expanded command area; (iii) conduct a UXO survey and clearance of UXO in the subproject area before the commencement of civil works.

[1] Ministry of Agriculture and Rural Development (MARD). *Decision No. 802/QD-BNN-TCTL* of 22 April 2014 approving the *Implementation Action Plan for Irrigation Subsector Restructuring Scheme*. Hanoi.

5. Potential negative impacts during the construction phase have been identified as follow: (i) disruption of irrigation service to the existing command area during the rehabilitation of the existing canals of Cam Ranh and Suoi Dau reservoirs; (ii) disturbance of villagers' cultivation activities during the installation of the pumped pipe system; (iii) pollution of agricultural land and irrigation water during the concreting of existing canals; (iv) Improper management of construction and domestic wastes at the sites (such as garbage, excavated soil, construction materials, cement bags, debris from the demolition and and reconstruction of 15.3 km of the existing south canal of the Cam Ranh Reservoir; (v) damage to community roads and traffic disturbances caused by the transport of heavy construction materials and increased traffic density at the sites; (vi) dust and noise generation due to demolition, excavation, levelling, and operation of construction machines and vehicles; (vii) occupational and community health hazards due to the lack of an environmental protection plan (EPP) and conflicts between migrant workers and local communities.

6. To minimize these impacts, the contractors will be required to: (i) coordinate with local people and authorities in the planning of the construction schedule and methods for use in the rehabilitation of the existing canals; (ii) collaborate with local people and commune authorities to establish an appropriate waste management plan so as not to disturb the local community's cultivation activities during the installation of the pumped line system; (iii) manage runoff to protect the agricultural land and irrigation water along the existing upgraded canals; (iv) practice good waste management to minimize the impacts of wastes on the quality of agricultural land and irrigation water at the subproject sites; (v) suppress dust by keeping excavated soil and stockpiling them moist, minimize gas emissions through well-maintained machines and turning them off when not in use; (vi) collaborate with local authorities to survey the condition of community roads to provide a basis for road repairs or compensation for road damages due to subproject construction; and (vii) provide workers with adequate personal protective equipment (PPE), instruct them to comply with safety guidelines, and educate them on good behavior and respect for local culture.

7. During the operation phase, the following potential negative impacts have been identified: (i) deterioration of water quality in the Suoi Dau and Cam Ranh reservoirs due to operational wastes; (ii) damage of or leaks in the pipeline system; (iii) community health and safety hazards, especially when untrained local people use electric equipment for taking water from the subproject canals to water their crops. To minimize the negative impacts, the Khanh Hoa Department of Agriculture and Rural Development (DARD), the responsible agency for subproject management during the operation phase, will periodically monitor and maintain the system and provide training courses to operation workers and villagers who will be using the water from the subproject irrigation system.

8. The Project Preparatory Technical Assistance (PPTA) Consultant identified key stakeholders and conducted public consultations from the provincial down to the commune level to seek the views of target beneficiaries, particularly people who are likely to be affected by the proposed subprojects. The meeting participants were very supportive of the subprojects, which they perceive as beneficial to them as they will help them cope with the shortage of water for their crops especially during summer. The participants did not give much attention to environmental concerns because they know that most of the civil works will be small-scale, and construction work will be far from the residential areas. They were more concerned about land acquisition and compensation issues and the use of land in the subproject area. All of these concerns are addressed in the Environmental Management Plan (EMP) that was prepared for the Khan Hoa Province subproject.

9. The EMP also provides details on the roles and responsibilities of relevant stakeholders in its implementation during the construction and operation phases of the subproject.

C. Institutional Arrangements

10. The Central Project Management Unit (CPMU) under MARD, the Khan Hoa Provincial Project Management Board (PPMB), and the Khan Hoa DARD are the key institutions that will play crucial roles in the implementation of the subproject and the environment safeguards. The CPMU/Provincial Project Management Unit (PPMU) will recruit one Environment Safeguard Specialist (ESS) under the Loan Implementation Consultant (LIC) to support subproject implementation in Khan Hoa. The ESS will support PMU in updating the EMP and in monitoring the compliance of contractors during the construction phase. The ESS will also be responsible for training and capacity building on EMP implementation.

11. The PMU will engage a Construction Supervision Consultant (CSC) for the monitoring and supervision of the subproject, including environmental monitoring. The CSC will ensure that the contractors implement the provisions of the subproject EMP.

D. Conclusion

12. This IEE of the Khan Hoa Subproject was undertaken to determine the environmental issues and concerns associated with the proposed irrigation schemes, following the modifications of the initial plans that were presented during project preparation. The modifications made are considered more suitable in terms of ensuring better irrigation water quality and quantity. The assessment confirmed that the subproject remains classified as Category B for environment based on the ADB SPS (2009).

13. There are expected beneficial impacts on health and well-being of people from the proposed irrigation schemes Khan Hoa Province. Besides, most of the environmentally negative impacts are expected to occur during the construction phase, are not expected to cause irreversible and significant adverse environmental impacts, and are easily controllable through the adoption of appropriate and conventional mitigation measures. All adverse impacts will be addressed by the proposed mitigation measures outlined in the subproject EMP, including the institutional responsibilities for implementing the said measures.

14. The IEE concludes that the subproject, combined with available information on the affected environment, is sufficient to identify the scope of environmental impacts of the subproject. No further environmental assessment is therefore required. The Environment Safeguards Specialist (ESS) will update the EMP before the finalization of the detailed design of the subproject.

INITIAL ENVIRONMENTAL EXAMINATION OF THE KHANH HOA PROVINCE SUBPROJECT

I. SUBPROJECT BACKGROUND

1. Located in the south-central coast region, Khanh Hoa Province experienced a prolonged drought from 2012-2016, recorded the driest period in 40 years, with dry season river flow levels dropping to between 20-30% of average annual figures. Over this period, the storage capacities of irrigation reservoirs from Da Nang to Phu Yen reached 60-80% of design capacities, and were as low as 30-50% of design capacity in Khanh Hoa, Ninh Thuan, and Binh Thuan.[2] The economic consequences of persistent drought in the region are significant in an environment where competition for water is increasing across multiple sectors.

2. Repercussions from the extended drought go beyond crop yields and impact upon other management practices in traditional cropping systems. With reduced stream flows, groundwater resources have rapidly diminished, forcing farmers dependent on this source to either develop new wells or deepen existing bores, adding significantly to pumping costs. There is currently widespread use of groundwater to irrigate dragon fruit in the command area, and it is likely that any surface system will be used in conjunction with the existing groundwater supplies. The subproject is likely to reduce pressure on groundwater reserves so that investments made in this high-value crop (HVC) is protected in the longer term.

3. Climate change is threatening the sustainability of the groundwater resource. The introduction of a modernized irrigation system will provide an alternative and somewhat higher level of service at a comparatively lower cost than that required for groundwater extraction. The introduction of gauges to measure consumption and charge service fees in the longer term will support the longer-term management objectives of this scarce resource.

4. In consonance with the Government's sustainable agricultural development program and in support of *Prime Minister Decision No. 1590/QD-TTg of 2009 Approving an Irrigation Development Strategy to 2020 and its Vision to 2050* and *Ministry of Agriculture and Rural Development (MARD) Decision No. 784/QD-BNN-TCTL of 2014 Concerning the Scheme for Improved Management and Effective Exploitation of Existing Irrigation Schemes,* WEIDAP aims to: (i) improve the quality of service delivery in irrigation systems to promote the economic use of water and serve agricultural production with increased diversification in response to climate change; (ii) contribute to the improved productivity, quality, and development of modernized irrigated agriculture, prioritizing the main upland crops and fisheries; and (iii) promote revenue generating services from irrigation works to maximize the potential and capacity of existing irrigation schemes, ensuring sustainable financing for organizations managing the exploitation of irrigation and reduced subsidies from the state budget.

5. WEIDAP will be implemented through a loan from the Asian Development Bank (ADB). With the support of MARD and the Provincial DARD, priority subprojects were identified during the PPTA. Eight subprojects in five provinces were selected for investment. Khanh Hoa Province has one subproject covering the Cam Ranh and Suoi Dau reservoir irrigation systems, including the rehabilitation of existing canals and construction of five pumping stations. Based on ADB's SPS (2009), the subproject was classified as Category B for environment and, therefore, required the preparation of an IEE.

[2] These are the south central coastal provinces targeted by the project. The two Central Highlands provinces include Dak Lak and Dak Nong.

II. POLICY, LEGAL, AND ADMINISTRATIVE FRAMEWORK

6. The subproject will comply with the requirements of ADB's SPS, 2009 and the Government of Viet Nam's *Guidelines on the Implementation of the Law on Environmental Protection* (2014). *Decree No. 18/2015/ND-CP* has detailed information on environmental protection assessment (EPA), environmental impact assessment (EIA), and environmental protection plans (EPPs). However, certain activities commonly associated with infrastructure projects, such as quarry operations, extraction of gravel, etc., will require, in addition, permission from the relevant provincial authorities. Depending on the scale, some civil works, such as bridges or spillways, will require the conduct of an EIA.

A. ADB Requirements

7. ADB's SPS (2009) imposes safeguard requirements for all its funded projects. The SPS (2009) clarifies the reason, scope, and contents of the environmental assessment. It emphasizes environmental and social sustainability in pursuit of economic growth and poverty reduction in Asia and the Pacific. Therefore, the objectives of the SPS are to:

- Avoid adverse impacts of projects on the environment and AP, where possible;
- Minimize/mitigate and/or compensate for adverse impacts on environment and AP when avoidance is not possible; and
- Help borrowers/clients to strengthen their safeguard systems and develop the capacity to manage environmental and social risks

8. **Environment categorization.** ADB uses a classification system to reflect the significance of a project's potential environmental impacts. A project's category is determined by the category of its most environmentally sensitive component, including direct, indirect, cumulative, and induced impacts in the project's area of influence. Each proposed project is scrutinized as to its type, location, scale, and sensitivity and the magnitude of its potential environmental impacts. Projects are assigned to one of the following four categories:

- **Category A.** A proposed project is classified as category A if it is likely to have significant adverse environmental impacts that are irreversible, diverse, or unprecedented. These impacts may affect an area larger than the sites or facilities subject to physical works. An environmental impact assessment is required.
- **Category B.** A proposed project is classified as Category B if its potential adverse environmental impacts are less adverse than those of Category A projects. These impacts are site-specific, few if any of them are irreversible, and in most cases, mitigation measures can be designed more readily than for category A projects. An initial environmental examination is required.
- **Category C.** A proposed project is classified as category C if it is likely to have minimal or no adverse environmental impacts. No environmental assessment is required although environmental implications need to be reviewed.
- **Category FI.** A proposed project is classified as category FI if it involves an investment of ADB funds to or through a financial intermediary (FI).

9. The IEE Report should include the EMP that specifies the proposed mitigating measures specific to a potential impact, environmental monitoring requirements, institutional arrangements, and budget requirements.

10. ADB also requires public disclosure for Category A and B projects. For Category A, there should be at least two consultations, once during the early stages of the EIA and once when the draft EIA is available prior to ADB loan appraisal. For Category B, the draft IEE report should be available to interested stakeholders before project approval and posted on the ADB's website upon Board approval of the project. Viability and existence of the project are also required.

B. Government's Legal and Institutional Framework

11. Viet Nam's *Law on Environmental Protection (Law No. 55/2014/QH13)* dated 23 June 2014 provides the basis for the country's environmental laws and EIA system. The implementation of this law is guided by implementing guidelines, amendments, regulations on impact assessments, as well as sanctions on violations, incentives, regulations on waste management, and national technical regulations or standards on environmental quality.

12. *Decree 19/2015/ND-CP* dated 14 February 2015 provides guidelines for the implementation of several articles of the law pertaining to the assignment of environmental management responsibilities among ministries, provinces, and people's organizations (POs).

13. *Decree 18/2015/ND-CP* dated 14 February 2015 contains the requirements for Environmental Protection Plan (EPP), Strategic Environmental Assessment (SEA), EIA, and Environmental Protection Scheme (EPS). It also provides a list of project categories requiring an EIA Report (EIAR); 113 project types are listed in Annex II.

14. *Decree No. 80/2014/ND-CP* issued on 6 August 2014 regulates drainage and treatment of wastewater in urban areas, industrial zones, economic zones, processing and export zones, and rural residential areas. It also prescribes the rights and obligations of organizations, individuals, and households with activities related to drainage and treatment of wastewater within Viet Nam's territory.

15. *Decree No. 179/2013/ND-CP* dated 14 November 2013, prescribes sanctions for administrative violations on the domain of environmental protection. *Decree No.59/2007/NĐ-CP* dated 9 April 2007 and *Decree 38/2015/ND-CP* dated 24 April 2015 contain provisions on the management of wastes and scraps, including hazardous wastes.

16. *Circular 27/2015/TT-BTNMT* issued by the Ministry of Natural Resources and the Environment (MONRE) dated 29 May 2015 provides detailed guidance for SEA, EIA, and Environmental Protection Commitment (EPC).

17. The environment standard that the subproject will be meeting and will be monitored against:

- National Technical Regulations on air and noise quality
  - QCVN 05: 2013/BTNMT on ambient air quality
  - QCVN 26: 2010/BTNMT on noise
  - QCVN 27: 2010/BTNMT on vibration

- National Technical Regulations on water quality
  - QCVN 01: 2009/BYT on drinking water quality
  - QCVN 02: 2009/BYT on domestic water quality
  - QCVN 08: 2008/BTNMT on surface water quality
  - QCVN 09: 2008/BTNMT on underground water quality
  - QCVN 14: 2008/BTNMT on domestic wastewater

18. By law, investors and enterprises are required to submit EIAs and EPCs for their projects; government guidelines prescribe the format and content of EIA and EPP reports. Implementation of each of the subcomponents under a project will require compliance with these government-mandated procedures. In this case, the responsibility for compliance rests with the designated CPMU and PPMU.

19. Even though this IEE is written mainly to respond to ADB's requirements for due diligence review of environmental safeguards, it will also serve as reference for the CPMU, during the project's detailed design phase, in preparing compliance documents in the form of an EPC for each subproject for clearance by the provincial Department of Natural Resources and Environment (DONRE) in accordance with Viet Nam's EIA system. Current national standards for construction safeguards (covering environmental protection, workers, and public safety), as well as standards governing water and air quality, will be used as references in assessing environmental impacts and formulating mitigation and monitoring measures.

20. With regard to the institutional framework, environmental management is administered at the national level by MONRE. Aside from MONRE, environment divisions in the various line ministries are tasked with environmental management functions related to specific sectors.

21. At the provincial level, the relevant management authorities are the Departments of Natural Resources and Environment (DONREs), which carry out their environmental protection activities through their respective environment divisions. DONRE is under the purview of MONRE only in relation to administrative matters and technical guidance. For all other purposes, the DONRE operates under the direct control of the respective provincial governments, through the Provincial People's Committees (PPCs).

C. International Conventions

22. Viet Nam is a party to several international conventions that are relevant to environmental management. None of the conventions has any direct or specific relevance for this IEE as the Project does not encounter any areas of environmental sensitivity covered by the conventions.

Convention Title	Convention date	Viet Nam participation
Convention on Wetlands of International Importance Especially as Waterfowl Habitat (RAMSAR)	1971	[20 September 1988]
Protocol to Amend the Convention on Wetlands of International Importance Especially as Waterfowl Habitat, Paris.	1982	
Convention Concerning the Protection of the World Cultural and Natural Heritage	1972	[19 October 1987]
Convention on International Trade in Endangered Species Wild Fauna and Flora	1973	[20 January 1994]
UN Environmental Modification Convention (ENMOD)	1977	[26 August 1980]
FAO International Code of Conduct on the Distribution and Use of Pesticides		
Montreal Protocol on Substances that Deplete the Ozone Layer	1987	[26 January 1994]
London Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, London.	1990	

Convention Title	Convention date	Viet Nam participation
Copenhagen Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, Copenhagen.	1992	
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal	1995	[13 March 1995]
United Nations Framework Convention on Climate Change	1992	[16 November 1994]
Convention on Biological Diversity	1992	[16 November 1994]

III. SUBPROJECT DESCRIPTION

A. Subproject Location

23. The subproject is located entirely within Cam Lam District, at the south of Khanh Hoa Province and near the border with Ninh Thuan. Nine communes will be directly benefited by the subproject (Suoi Cat, Suoi Tan, Cam Tan, Cam Hoa, Cam Duc, Cam Hiep Bac, Cam Hai Tay, and Cam Thanh Bac), with a total command area of 6,292 ha.

B. Subproject Specifications

24. The subproject will consist of two separate storage irrigation systems supplied from the existing Suoi Dau and Cam Ranh reservoirs. Both schemes will combine rehabilitation of existing gravity canal systems with new pumped piped systems. The existing gravity canal systems will supply rice and mango areas, while the new pumped pipe systems will supply expanded mango areas.

25. **Gravity canal system civil works**. The existing main canals are trapezoidal, 80 millimeters (mm) thick and concrete-lined, except for some buried flume sections. Some 4.0 kilometers (km) and 3.3 km of Suoi Dau north and south canals, respectively, will be rehabilitated. A 15.3-km section of the concrete trapezoidal lining of Cam Ranh south main canal will be demolished and replaced with reinforced concrete flume sections with 150-mm thick walls and with a reinforced concrete cover slab 100 mm thick. Around 30 bridges will be demolished and replaced to fit the new flume canal section.

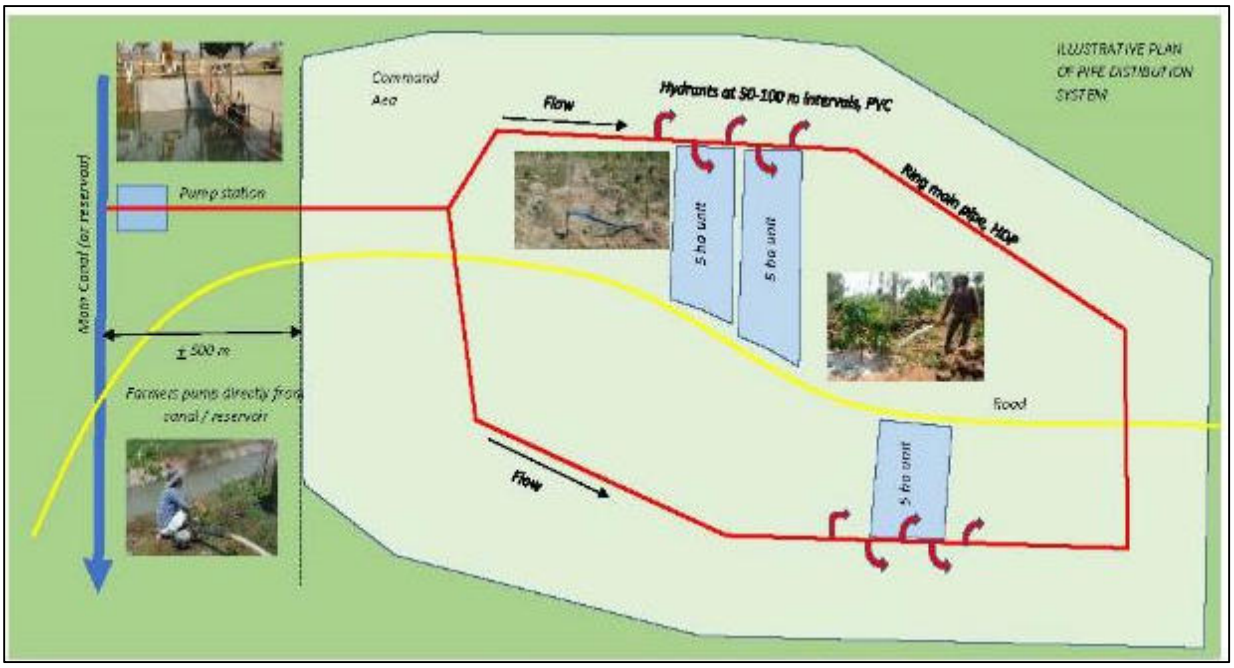
26. **Pumped pipe civil works.** The subproject will build five subsystems with pumping stations and ring main distribution pipelines to meet the adopted modern level of irrigation service. The five piped subsystems involve 38.45 km of pipe, ranging in nominal diameter from 75–450 mm, to supply 4,000 ha (Suoi Dau, 1,000 ha; Cam Ranh, 3,000 ha) of mango trees.

27. Three centrifugal electric pumps are proposed for each pumped pipe system, one being a standby system. Pump houses will be provided for pump security and will house the control and monitoring systems. Three-phase electric connections will be provided, complete with transformers, switches, and lighting arrestors, etc. General arrangement drawings of the pump houses, together with intake and small pumping reservoirs, have been prepared.

28. The irrigation schemes include single piped systems and combined pipes and canals. The design of the single piped system followed the following principles: (i) each point delivers 5 l/s, 60- mm diameter polyvinyl chloride (PVC) hydrants with a manifold to split flow to individual farmers; (ii) 500 m maximum distance from hydrant/source of water to farmer's field; and (iii)

minimum residual pressure at the hydrants of 1-10 m. Where appropriate, ring main systems will be used (being more cost-effective than dead-end pipe branching systems), while in narrow areas, a single supply pipeline is needed. For combined pipes and canals, design options include: (i) pumping directly from canals; (ii) lining of canals; (iii) provision of balancing storage; and (iv) size of communal pumped pipe schemes. The schematic diagram of the ring main pipeline is in **Figure 1**.

Figure 1: Schematic Diagram of Modernized Piped Irrigation System



Source: PPTA Study Report, June 2017.

29. A summary of the pipe requirements is shown in **Table 1**.

Table 1: Summary of Piped Subsystem Designs

Pipe ∅ (mm)	Unit	Piped Subsystem					Total
		SD	CR1	CR2	CR3	CR4	
75	m	963	0	0	0	0	963
110	m	481	1,539	1,216	512	464	4,212
160	m	1,444	736	441	512	929	4,062
200	m	963	529	499	2,501	464	4,956
250	m	1,926	1,010	1,720	2,883	1,393	8,932
315	m	1,444	2,144	1,496	547	1,857	7,488
355	m	0	1,264	1,995	0	0	3,259
400	m	0	399	998	866	201	2,464
450	m	75	1,734	308	0	0	2,117
Pipe length	**m**	**7,296**	**9,355**	**8,673**	**7,821**	**5,308**	**38,453**

30. The proposed irrigation system of Cam Ranh and Suoi Dau reservoirs is presented in **Figures 2** and **3**, respectively.

Figure 2: Proposed Irrigation System of Cam Ranh Reservoir

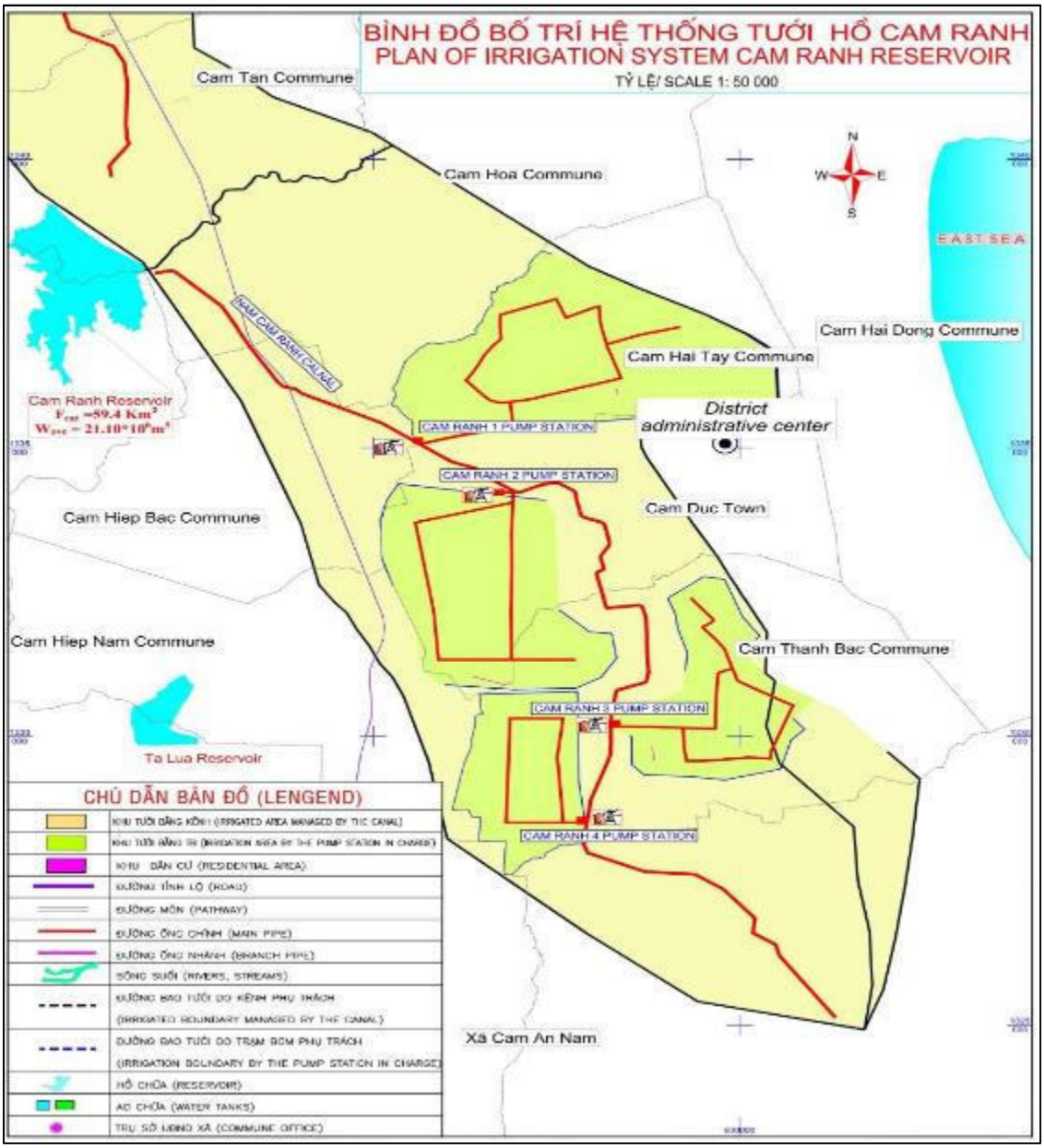
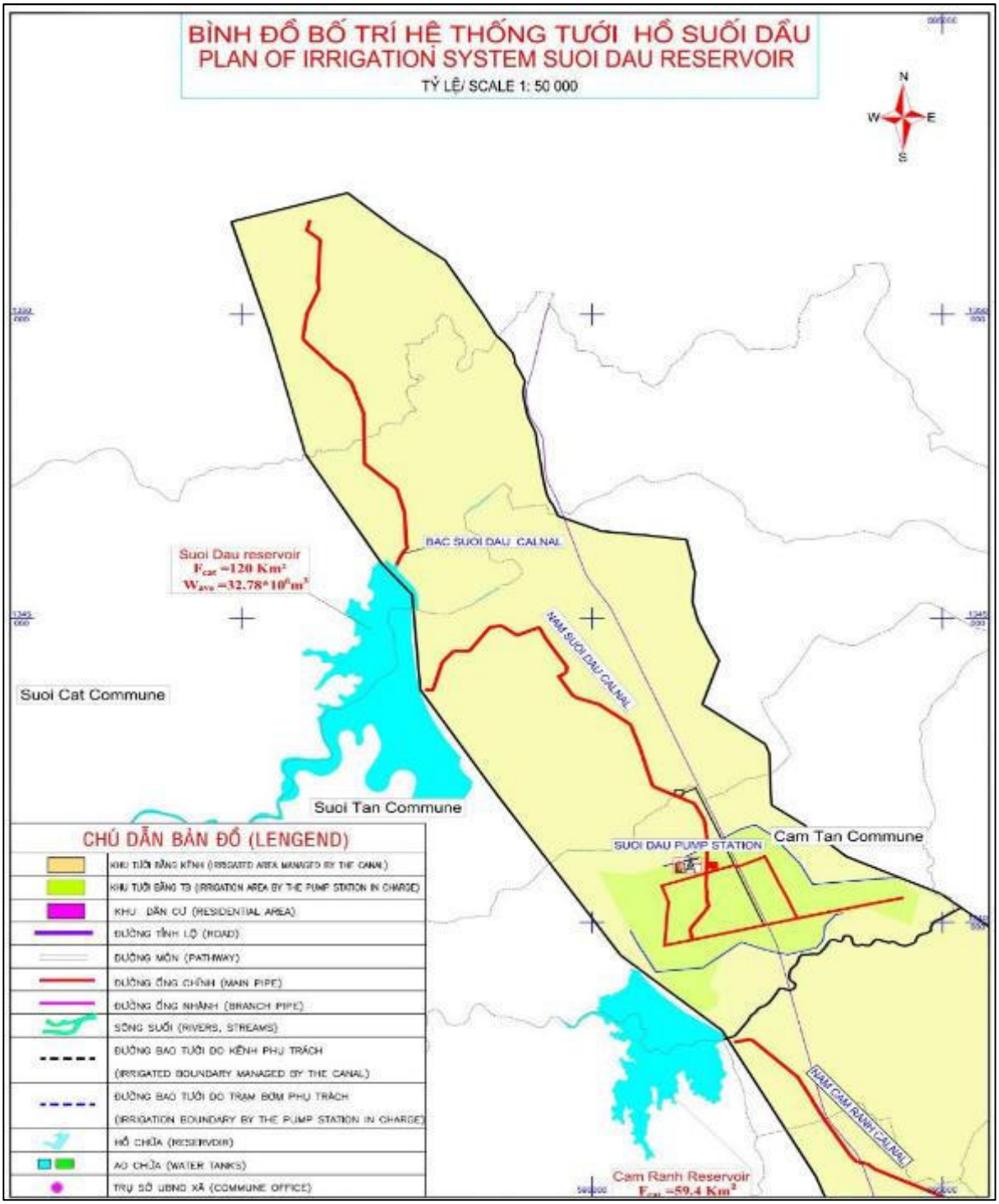


Figure 3: Proposed Irrigation System of Suoi Dau Reservoir



IV. DESCRIPTION OF THE ENVIRONMENT

A. Physical Environment

1. Topography

31. The topography of Cam Lam District is varied, with mountains, hills, and plains. It is lower from west to east and from north to south and includes three types of terrain: mountains (accounting for 33.3% of the area), low mountains (28% of the area), and plains and hills (about 38.7% of the area). The area in the west and northwest of the district is mainly mountainous, low mountains and hills with slopes ranging from 15º–25° and fragmented, with an average elevation of 500–700 m. The Hon Ba Mountain at 1,554 m above sea level (masl) is located in the district. The northeast area of the district is typically hilly, with slopes ranging from 3º–8°. This area is fertile and highly suitable for the cultivation of rice and vegetables. The east and southeast areas of the district have low mountain terrain with low hills and plains. Tidal lagoons can be seen at the eastern portion of the district.

32. Cam Lam District has many different types of soil, including gray soil, alluvial soil, and loam, which is suitable for agriculture. These soils are found mainly in the midland and plain communes, such as Cam An Nam, Cam Thanh Bac, Cam Hai Tay, Cam Hoa, Cam Tan, Suoi Tan, and Suoi Cat. Soils with high sodium content can be found in Cam Hoa, Cam Hai Tay, and Cam Thanh Bac communes. Alluvial soils located in the plain communes district are suitable for planting rice, crops, and short-term industrial crops.

2. Climate

33. The southern part of Viet Nam has a warm temperate climate that is characterized by dry winters and hot summers. The rainy season is from September to December, accounting for 70-80% of total annual rainfall. The prevailing wind during this period is the southwest monsoon. Average annual rainfall ranges from 1,400–2,200 mm. The dry season occurs from January to August. Average annual temperature ranges from 26–27 ºC.

3. Hydrology

34. Cam Ranh Reservoir (Thuong River reservoir) was constructed from 1996-1999 on the Thuong River, which has a total length of 22 km and a catchment area of 142 km^2. Suoi Dau Reservoir was constructed from 2002-2004 on Dau River, which has a catchment area of a 120 km^2. Both reservoirs have usable (live) storage of 48.3 cubic millimeters (mm^3) (**Table 2**).

Table 2: Details of Cam Ranh and Suoi Dau Reservoirs

Reservoir	Catchment Area (km^2)	Catchment Rainfall (mm)	Normal Water Level (m)	Dead Storage Level (m)	Total Storage (mm^3)	Dead Storage (mm^3)	Usable Storage (mm^3)
Suoi Dau	120.0	1,528	42.5	29.5	32.78	3.90	28.88
Cam Ranh	59.4	1,234	32.0	22.0	22.10	2.71	19.39

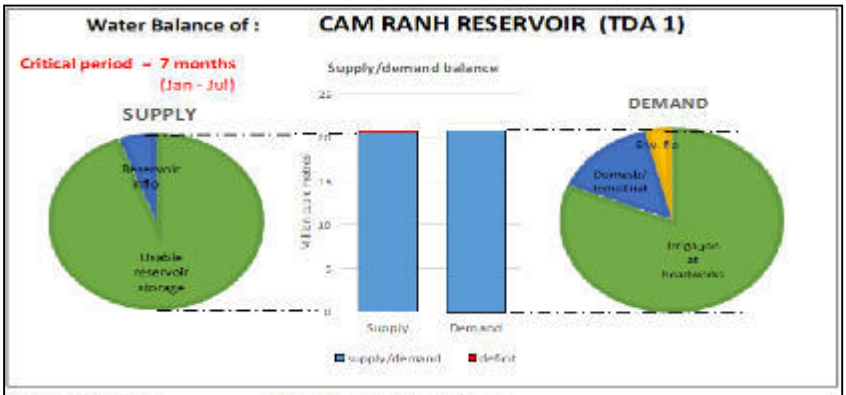
Source: Source: PPTA Hydrological Report, June 2017

4. Subproject Water Balance

35. Water balance assessment for Cam Ranh and Suoi Dau reservoirs was conducted by the Institute of Water Resources Planning (IWRP) based on their supplying capacity and the water requirements of the command areas, domestic/industrial use, and environmental flow.

36. **Cam Ranh reservoir water balance.** Cam Ranh Reservoir is designed to irrigate 2,300 ha of command area, including 530 ha of rice and 1,170 ha of vegetables and to supply water for domestic and industrial use with 68,800 m^3/day. The water usage efficiency brought about by improving the existing canals by the project. With the irrigation demand for 1,339 ha of rice plusan increase of 3,000 ha of mango supplied by the project and a surplus of 66,500 m^3/day, water is projected to remain after subtracting the current supply of 2,300 m^3/day.. The water balance assessment indicated that 245,000 m^3 of water will be in deficit during the driest months. **Figure 4** below presents the water balance calculations for Cam Ranh Reservoir.

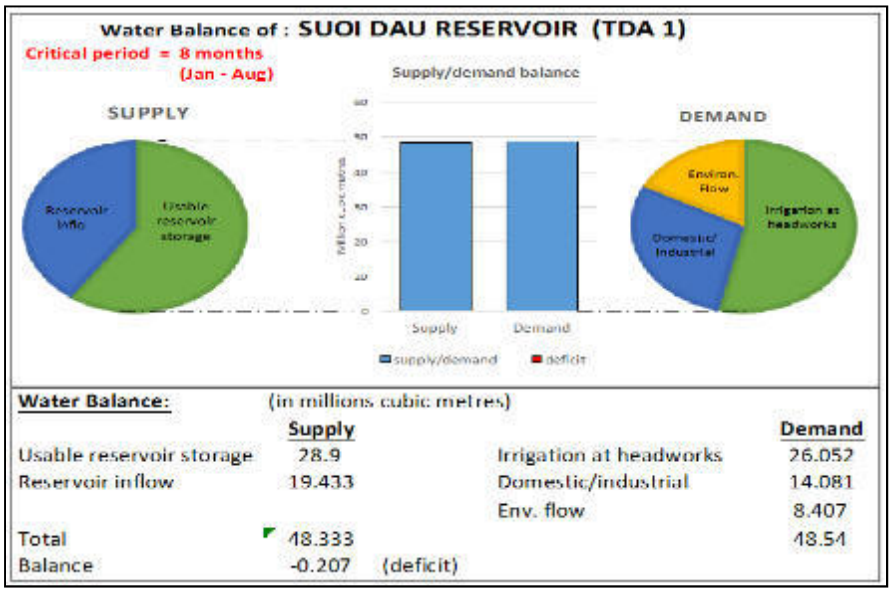
Figure 4: Water Balance Calculation for Cam Ranh Reservoir



Water Balance:	(in millions cubic metres)		
	Supply		Demand
Usable reservoir storage	19.4	Irrigation at headworks	16.899
Reservoir inflow	1.161	Domestic/ industrial	3.118
		Env. flow	0.789
Total	20.561		20.806
Balance	0.245 (deficit)		

37. **Suoi Dau Water Balance.** Suoi Dau Reservoir was designed to provide irrigation for 3,700 ha and water supply at 9.5 mm^3/yr. The reservoir has been irrigating 1,648 ha of the existing command area and supplying 1.15 mm^3/year for domestic usage. The water balance for an increase in the command area by another 1,000 ha of mango was calculated on the basis of 8.35 mm^3 water surplus a year after subtracting the amount of water currently used and the water remaining after irrigating 1,648 ha of existing command area. The water balance calculations done by IWRP showed a deficit of 207 mm^3 of water (**Fig. 5)**

Figure 5: Water Balance Calculation for Suoi Dau Reservoir



Water Balance:	(in millions cubic metres)		
	Supply		Demand
Usable reservoir storage	28.9	Irrigation at headworks	26.052
Reservoir inflow	19.433	Domestic/industrial	14.081
		Env. flow	8.407
Total	48.333		48.54
Balance	-0.207 (deficit)		

38. Aquaecosytem in Suoi Dau and Cam Ranh articifial reservoirs is a modified habitat where storage water comes from its own catchment area. The subproject will attract water directly from these reservoirs through existing canals, which will be upgratded, and HDPE pipe system to irrigate for agriculture cultivation. There is aquculture in the reservoirs with local fishes such as plaice, tench crap, tilapia etc. According to the water balance, actration of water will have limited impact on aquaculture in the reservoirs where they have enough capacity to supply water and operate to follow regulation for maintaining enough water above death level

5. Quality of Water Resources in the Subproject Areas

a. Surface Water

39. To assess the quality of surface water in the subproject area, six samples were obtained and analyzed by Southern Environment Experiment Analysis Co., Ltd. in 2016 for EIA purposes. The results revealed that the surface water in both reservoirs is good, as all the parameters were within acceptable levels based on Column B1 of the *National Technical Regulation* (*QCVN) 08:2015/BTNMT* (**Table 3**). The water is assessed to be suitable for both irrigation and drinking water.

Table 3: Results of Analysis of Surface Water, Khanh Hoa Subproject

Parameters	Unit	Results						QCVN 08:2015/BTNMT	
		SW 1	SW 2	SW 3	SW 4	SW 5	SW 6	B1	B2
pH	-	7.26	7.31	7.15	7.24	7.35	7.18	5.5 - 9	5.5 - 9
DO	mg/l	5.34	6.23	5.87	6.04	5.83	6.15	≥ 4	≥ 2
TSS	mg/l	12.5	11.2	11.7	13.7	10.8	12.8	50	100
COD	mg/l	2.16	2.37	2.40	1.96	2.27	2.52	30	50
BOD5 (20°C)	mg/l	1.52	1.67	1.58	1.32	1.51	1.78	15	25
NO3-	mg/l	1.18	0.92	1.12	1.15	1.02	1.14	10	15
NO2-		0.021	0.018	0.036	0.013	0.015	0.021		
PO43-	mg/l	0.081	0.076	0.084	0.068	0.071	0.074	0.3	0.5

Parameters	Unit	Results						QCVN 08:2015/BTNMT	
		SW 1	SW 2	SW 3	SW 4	SW 5	SW 6	B1	B2
NH4+	mg/l	0.085	0.081	0.092	0.078	0.084	0.089	0.5	1
Hg	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.002
Pb	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.05	0.05
Zn	mg/l	0.015	0.021	0.018	0.017	0.023	0.019	1.5	2
As	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.05	0.1
Oil	mg/l	0.078	0.064	0.058	0.056	0.067	0.081	1	1
Coliform	MPN/100ml	1.3x102	1.5 x102	1.4 x102	1.6x102	1.3 x103	1.5 x103	7,500	10,000

Source: EIA, 2016. Note: SW=Surface water

b. Groundwater

40. The groundwater near the coast of the subproject area is affected by saltwater intrusion and is not suitable for agricultural use. Six samples of underground water were analyzed. The results indicate that all the parameters, except for coliform, were within acceptable levels as per *QCVN 08:2015/BTNMT*. Thus, the water must be boiled before its consumption (**Table 4**).

Table 4: Results of Analysis of Groundwater, Khanh Hoa Subproject

Criteria	Unit	Results						QCVN 09/2015/BTNMT
		UW 1	UW 2	UW 3	UW 4	UW 1	UW 6	
pH	-	6.74	6.58	7.12	6.85	6.91	7.15	5.5-8.5
TSS	mg/l	16.3	28.4	35.6	13.7	21.8	32.4	-
DO	mg/l	3.2	4.6	5.8	3.4	4.2	5.3	-
BOD5 (20 ^{o}C)	mg/l	1.82	1.21	1.47	1.85	1.25	1.51	-
COD	mg/l	2.74	2.15	2.36	2.68	1.85	2.25	-
NH4+	mg/l	0.02	0.06	0.05	0.03	0.05	0.08	1
NO3-	mg/l	1.62	2.58	1.37	1.87	2.64	1.26	15
NO2-	mg/l	0.025	0.018	0.041	0.021	0.015	0.037	1
Hg	mg/l	NA	NA	NA	NA	NA	NA	0.001
Pb	mg/l	0.001	0.0036	0.005	0.002	0.0016	0.004	0.01
Fe	mg/l	0.97	1.15	0.86	0.89	1.28	0.57	5
Cd	mg/l	0.002	0.001	0.002	0.001	0.002	0.001	0.005
As	mg/l	NA	NA	NA	NA	NA	NA	0.05
E. coli	MPN/100ml	0	0	0	0	0	0	0
Coliform	MPN/100ml	0	0	0	90	0	87	3

6. Air Quality and Noise

41. Six samples were obtained for air quality and noise analysis by Southern Environment Experiment Analysis Co., Ltd. in 2016 for EIA purposes. The results indicated that air quality in the subproject area is good, with all parameters within the standards in *QCVN 05:2013/BTNMT* (**Tables 5 and 6**).

Table 5: Ambient Air Quality Measurements, 2016

Analysis Criteria	Unit	AIR 1	AIR 2	AIR 3	AIR 4	AIR 5	AIR 6	QCVN 05:2013/BTNMT Average 1 Hour
TSP	mg/m^3	0.05	0.08	0.07	0.06	0.09	0.05	0.3
PM 10		0.02	0.04	0.03	0.03	0.05	0.02	
CO	mg/m^3	1.81	2.15	2.26	1.76	1.85	2.16	30
SO_2	mg/m^3	0.019	0.017	0.015	0.017	0.014	0.015	0.35
NO_2	mg/m^3	0.014	0.012	0.010	0.012	0.011	0.013	0.2

Source: EIA, 2016.

Table 6: Ambient Noise Measurements (dBA), 2016

Analysis Criteria	Unit	KK1	KK2	KK3	KK4	KK5	KK6	QCVN 05:2013/BTNMT Average 1 Hour
Leq	dBA	55.6	55.3	54.8	54.8	54.3	55.1	70
L90 (max)	dBA	58.3	57.8	58.1	58.6	58.8	59.1	70

Source: EIA, 2016.

B. Socioeconomic Features

1. Population and Ethnic Minority

42. Khanh Hoa Province is a coastal province in South Central Vietnam. In 2016, the estimated total population was 1,212,877. There are 32 ethnic groups living in the province, but the Kinh comprise the majority, followed by the main EM groups of Raglai, Chinese, Ede, Co-ho and other small EM groups of Tay, Nung, Muong, Thai, Cham, Khmer, and Tho.

43. Nine communes will be directly benefited by the subproject, including Suoi Cat, Suoi Tan, Cam Tan, Cam Hoa, Cam Duc, Cam Hiep Bac, Cam Hai Tay, and Cam Thanh Bac. Their combined population is 80,106 from 22,000 households (HHs). The EMs account for 4.3% of the target commune population (**Table 7**).

Table 7: Summary Statistics for Beneficiary Communes

	District	Subproject Area									
		Cam Hiep Bac	Suoi Cat	Suoi Tan	Cam Tan	Cam Hoa	Cam Hai Tay	Cam Hiep Nam	Cam Duc	Cam Thanh Bac	Total, Target Area
Total land area (km^2)	547.2	15.1	100.9	76.3	29.1	37.2	11.9	19.1	17.6	21.8	328.9
Population (No. of persons)	115,294	3,560	9,491	11	8,275	14,323	5,383	6,640	17,271	15,152	80,106
EM population (No. of persons)	5,981	71	2,128	575	345	296	2	0	0	20	3,437

Sources: Khanh Hoa DOLISA, CEMA, 2016; Cam Lam District Statistical Yearbook, 2015.

C. Employment and Living Standards

44. Cam Lam District is situated in the southern part of Khanh Hoa Province, with a total land area of 550.26 km^2 and a total population of 113,625 persons or 28,572 households. The agriculture, forestry, and fishery sectors account for 10.35% of the district's gross domestic product (GDP), the industry and construction sectors account for 74.84%, and the commerce and service sectors account for 15.2%. The poor household ratio in 2016 was nearly 13.16%, and the near poor households account for 10.7%. EM persons in the district include 6,021 persons (1,553 households), of which 95% of the total EM persons belong to the Raglai group. The percentage of poor EM households out of the total poor households in the district is rather high at 29.2%.

45. The incidence of poverty in beneficiary communes was 8.9% in 2016 compared with 13% for the district. However, the incidence of poverty among the EMs was higher (72.5%) with some communes reporting rates of 95-100% for EM HHs (**Table 8**).

Table 8: Summary of Poverty Rates in Subproject Communes

	District	Subproject Area									
		Cam Hiep Bac	Suoi Cat	Suoi Tan	Cam Tan	Cam Hoa	Cam Hai Tay	Cam Hiep Nam	Cam Duc	Cam Thanh Bac	Total Target Area
Poverty rate in whole area (%)	13.06	7	20.7	12.7	12	6.7	3.4	6.3	5.6	5.9	8.9
Poverty rate of EMs (%)	71.6	83.3	75.2	40.6	100	95.7	100	0	0	75	72.5

Sources: Khanh Hoa DOLISA, CEMA, 2016; Cam Lam District Statistical Yearbook, 2015.

46. Agriculture is the main source of income of the commune residents, with key crops including rice, cassava, fruits (including mango) and cash crops including sugarcane and cashew. Livestock raising (cattle, pigs), poultry, and shrimp aquaculture are also important sources of income. The land areas for growing rice and mango in beneficiary communes account for 90% and 95% of the total land area of whole district, respectively (**Table 9**).

Table 9: Main Crops in Subproject Communes

Agricultural Products	District	Subproject Communes									
		Cam Hiep Bac	Suoi Cat	Suoi Tan	Cam Tan	Cam Hoa	Cam Hai Tay	Cam Hiep Nam	Cam Duc	Cam Thanh Bac	Total Target Area
Rice area (ha)	2,315	56	284	238	490	490	24	37	93	388	2,101
Cassava area (ha)	2,230	128.4	90.8	158	113.4	79.6	54.3	296.9	466.4	346.7	1,734
Sugarcane area (ha)	2,450	329.2	39.2	40	178.2	0	0	514.8	10.2	64.3	1,176
Cashew area (ha)	1,402	50.0	553.7	17.5	110.4	104.3	0	16.3	12.5	0	865
Mango area (ha)	3,294	150.2	153.2	244.7	222.5	283.2	975	177.6	580.4	330.7	3,118
Cattle (heads)	7,901	275.0	788.0	1,016	912	318	236	317	260	503	4,625
Pigs (heads)	34,561	1,459	2,593	3,491	2,718	6,588	1,173	1,309	4,177	5,560	29,068
Poultry ('000 heads)	249	6.9	4.3	50.0	52.2	28.7	5.4	10.6	14.4	33.7	205.7
Aquaculture area (ha)	542	0	0	0	96.4	126.8	59.3	0	82.9	80.8	446.2

Source: Cam Lam District Statistical Yearbook, 2015.

47. **Current agricultural land use.** Mango is the main crop grown in the area; rice is a secondary crop along with maize, banana, vegetables, and flowers. Rice is largely cultivated in the lower areas and at the tail of the existing irrigation system (main and small secondary canals). The status of agricultural land use in Cam Ranh and Suo Dau reservoirs is shown in **Figures 6** and **7**.

Figure 6: Status of Agricultural Land Use in the Cam Ranh Reservoir Watering Area

Figure 7: Status of Land Use in the Suo Dau Reservoir Watering Area

D. Other Environmental Issues

48. There are no biodiversity conservation or protected areas in the subproject area. The nearest protected area is the Hon Ba Conservation Area, which is located 10 km east of the subproject area. Thus, the implementation of the subproject will not have any impact on the said conservation area.

49. There are also no sites of archaeological significance within and around the subproject area. The project components will not affect any historical and archaeological sites, such as temples and burial sites. There are remains of ancient temples in the neighboring districts, but not within the subproject area.

50. **Community health and safety during operational phase.** As villagers will be allowed to pump water directly from the nearby canals for watering their crops, electric accidents could occur when untrained villagers use electric equipment without any personal protective equipment (PPE). In addition, children may be at risk of an electric accident if they swim in the canals while electric current leaks into the water. **Figure 8** shows the command area with villagers pumping water for their crops using electric pumps.

Figure 8: Command Area with Electric Pumpers

V. ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

51. The environmental impacts were evaluated in the areas of influence of the subproject component sites. At the proposed sites, temporary disruption and nuisance impacts may be experienced, mainly during the construction period. The potential environmental impacts were identified based on the project activities that may occur in each component and the evaluation of the environmental and social baseline situation in the subproject area. The identification of environmental impacts was mainly based on the technical information related to project component design and operation, field visits, information from stakeholders, feasibility study, and previous IEE reports of the proposed subproject.

A. Anticipated Benefits from the Project

52. Some beneficial impacts are expected from the proposed irrigation projects in Khan Hoa Province. The principal economic benefits are better returns from planting HVCs and more cost-effective utilization of irrigation water by the farmers via the introduction of high-technology irrigation systems and improved access to reliable irrigation water supply. Moreover, the implementation of the proposed irrigation project will reduce the dependence of farmers on groundwater sources for their water requirement.

53. In general, the provision of sustainable and sufficient irrigation water supply is expected to result in improved economic conditions and, consequently, better quality of life for the communities. The immediate impact will be sustainable and reliable irrigation water supply that will translate into higher service levels, particularly in terms of coverage of agricultural areas. There will be longer supply windows that would eventually lead to 24-hour supply in the service areas. Water pressure will likewise improve. Farmers will also need less time and effort in securing water for their crops.

54. There will also be employment or livelihood benefits for the local people. Contractors will use local labor for simple works, creating jobs, raising income, and, thus, contribute to alleviating poverty in the local communities in the short term. Local people in the residential areas of the subproject communes will benefit from subproject construction through their participation in the civil works. In order to support creating jobs for locals, there should be coordination between the contractor and commune people's committees (CPCs) of the subproject communes, as well as in nearby communes, in recruiting local laborers (contractors often prefer to engage their own trained workforces rather than training unskilled laborers). The duration of the impact is also short, only during the 24month construction period.

B. Anticipated Negative Impacts

1. Pre-Construction Phase

a. Water Use Conflicts

55. **Impact.** As the Cam Ranh north main canal has been abandoned, the Suoi Dau south main canal will replace Cam Ranh it to supply the existing command area that was previously supplied from the Cam Ranh reservoir. This means that more water from Suoi Dau reservoir will be used for the upgraded canal. In addition, a new pumped pipe system will be developed to serve 4,000 ha of mango plantations, which will be supplied by both reservoirs (Cam Ranh, 3,000 ha; uoi Dau, 100 ha). Conflicts of water use in both traditional and new command areas may occur especially in the driest months.

56. **Mitigation measure.** Water balance calculations were done IWRP to ensure that no conflicts of water use among subproject water users will occur, especially in summer.

b. Impact on Land Acquisition and Community Assets

57. **Impact.** There will be limited land acquisition required for the development of the project component facilities and for temporary use of land as only around 7.24 ha of annual crop land and 1.7 ha of perennial land will be acquired for subproject construction (RP report), and no household will have to relocate. There is also no loss or damage to assets anticipated during pipe laying.

58. **Mitigation measure.** An updated Resettlement Action Plan (RAP) for the subproject was prepared separately to ensure that any loss of land/trees or damage to property will be subject to compensation in accordance with the Resettlement Framework of WEIDAP.

c. Unexploded Ordnance (UXO)

59. Data on bombs dropped by US forces between 1968 and 1972 are available from the concerned Government of Viet Nam agency. A survey on UXO is required for this subproject before construction.

2. Environmental Impacts during Construction

a. Disturbance to Cultivation Activities

60. **Impact.** Local cultivation activities in the command area proposed to be irrigated by the pumped line system may be disturbed during the construction phase if stockpiles and excavated soil are not managed properly by contractors and if the installation of the pipeline system across the local access road is not properly planned.

61. **Mitigation measures.** Contractors will:

- Cooperate with local people and authorities to develop a plan for pipe installation through farmlands using appropriate work methods to avoid disturbance to cultivation activities;
- Not be allowed to temporarily stockpile and gather construction materials in areas that may prevent farmers from their cultivation activities;
- Prepare a temporary access road for farmers before installing pipe line across their access roads.
- Immediately rehabilitate excavated areas and/or any damaged road and path sections of the local access roads.

b. Interruption of Paddy Irrigation Service

62. **Impact.** The existing Cam Ranh and Suoi Dau canals are being used to irrigate rice fields and other crop areas. The upgrading will likely cause interruptions of the irrigation service to the paddy fields and changes in the cultivation pattern of farmers if the construction schedule and duration of construction do not match the local paddy cropping schedule. To mitigate this potential impact, the construction schedule will be prepared, taking into account the farmers' cropping schedule.

63. **Mitigation measures.** Contractors will:

- Collaborate with local people and authorities in preparing the suitable time to start construction so as not to disrupt farmers' activities;
- Comply strictly with the construction schedule to ensure that the irrigation service is available to farmers in the next cropping season;
- Address any shortcomings or compensate for crop/production losses of farmers in case of delays in restoring the irrigation service from the upgraded canals.

c. Agricultural Land Impacts

64. **Impact.** Several paddy fields are located along the canal, which will be upgraded to concrete. Residues from soil excavation and construction materials (such as cement, sand, and stones) as well as other construction wastes, such as cement bags, are likely to cause pollution of agricultural lands. However, the impact is assessed to be minor, short-term, and can be mitigated.

65. **Mitigation measures.** Contractors will be required to:

- Temporarily store soil residues and construction materials/waste in nylon canvas to prevent them from being scattered and discharged into the paddy fields along the proposed canal;
- Limit all activities to the acquired land areas and collect and transport construction wastes to permitted disposal sites; and
- Stop work at sites during heavy rains to avoid runoff contamination of the paddy fields.

d. Pollution of Irrigation Water

66. **Impacts.** The irrigation water in the existing canals of Cam Ranh and Suoi Dau reservoirs could be affected during canal upgrading and construction of pumping stations due to improper management of runoff and wastes at the sites. However, the impact will be small, short-term, reversible, and can be mitigated.

67. **Mitigation measures.** Contractors will:

- Implement proper measures, including the provision of silt traps, ditches, and sump pits to intercept the flow of silt-laden runoff from the work sites into the canals;
- Schedule excavation works during the dry season or stop work during heavy rains;
- Properly manage domestic wastewater from the contractor's facilities and workers' camps at all times;
- Not allow the building of workers' camps and temporary storage of construction materials near the canals; and
- Install portable toilets in the workers' camps and other facilities.

e. Waste Management

i. Excavated soil

68. **Impact.** Excavated soil that is left over after backfilling of the pipeline system will affect the land and cultivation activities of villagers. It will also be a source of dust during the dry season and can be easily washed away by runoff to form sediments in land at lower elevations or in nearby ponds and canals.

69. **Mitigation measure.** Any surplus soils and materials will be properly managed and disposed and given to interested villagers for free for them to use as backfill materials in coordination with village authorities. There is no anticipated need for spoil disposal sites.

ii. Construction Waste

70. **Impact.** The inert waste that will be generated during the works will consist mainly of scrap wood and metal, cement bags, aggregates, and plastics, which could affect land in the construction sites and pose physical danger to farmers.

71. **Mitigation measure.** These wastes will be collected and classified for reuse or recycling or otherwise disposed in Doc Do landfill so as not to pose any danger to people.

iii. Domestic Waste

72. **Impact.** The volume of domestic waste is not anticipated to be significant, as only small temporary workers' camps will be established at the construction site, and no camps will be set up at work sites for the transmission and distribution pipelines. It is projected that the temporary camps will generate an estimated 0.4-0.5 kg of wastes per person per day and would consist mainly of plastic and glass bottles, paper, cardboard, food wastes, and packaging wastes.

73. **Mitigation measure.** Contractors will provide the workers' camps with trash bins to ensure that all domestic wastes will be collected. The contractor will sign contract with Nhat Khanh Environment Service Ltd., Company for transfering and disposing the waste to/at Doc Do loandfill, Cam An Nam Commune, Cam Lam District.

iv. Hazardous wastes

74. **Impact.** Hazardous wastes, such as paint/solvent containers and spent batteries, will be generated during the works. Although the volume of such wastes is anticipated to be small, this type of waste is highly detrimental to the environment and public health.

75. **Mitigation measure.** The storage of all hazardous materials, including residual fuel and oil, will be secured and controlled following the guidelines in *Circular 36/2015/BTNMT*. These hazedous materials, by then, will be transferred and buened to/at designated area of Doc Do landfill by Nhat Khanh Environment Service Ltd., company.

f. Dust and Gas Emissions

76. Dust and suspended particles will be mainly generated from soil excavation, leveling, and movement of vehicles in the construction sites, while gas emissions will be generated from the operation of construction equipment and machinery and fugitive emissions from vehicles plying the area and during the transport of construction materials. Most of the emissions will be in the form of coarse particulate matter that will likely settle down within the close but vast vicinities of the work sites. As the working sites are far from residential areas, the impacts are assessed to be minor, local, short-term, direct, and reversible.

77. **Mitigation measures.** Best management practices will be adopted during the conduct of the works to minimize dust and the release of combustible emissions from the operation of heavy equipment and machinery including. These practices include the following:

- Excavated material and stockpiles will be kept moist.
- Transport vehicles will be required to install tarpaulin covers or other suitable materials to prevent spillage of the hauled materials.
- Construction equipment and vehicles will be well maintained and in good working condition to reduce fugitive emissions at all times.
- Speed limits on areas will be imposed to minimize dust emission.

g. Noise

78. **Impact.** Construction activities may cause noise and vibration impacts for a short duration. The operation of equipment for the installation of the pipe distribution network may cause a nuisance to the adjacent residential area during the installation of the pipeline system.

79. **Mitigation measures.** Contractors will be required to:

- Limit works at the sites to daytime, from 0700H to 1800H; and
- Stationary equipment, like diesel generators, will be installed, as far as practicable, from sensitive receptors. Buffers will also be established as further mitigation.

h. Impact on Community Health and Safety

80. **Impact.** During the works, the community may be exposed to health and safety risks from increased vehicular movements in the area, open excavations, and the operation of heavy equipment.

81. **Mitigation measures.** The contractor will be required to:

- Install barricades/barriers and sturdy plate covers in open excavations during non-working hours;
- Install warning signs in the area;
- Prioritize the hiring of qualified construction workers from the villages and to consult with the local authorities to avoid conflicts if migrant workers will be brought to the site.

i. Occupational Health and Safety

82. **Impact.** The construction activities may result in hazards to the safety of workers, such as tripping, slippery surfaces, carrying heavy loads, and accidents during the operation of machinery, equipment, and electricity-powered facilities.

83. **Mitigation measures.** The contractor will be required to:

- assess occupational health and safety as a part of site specific EMP prepared before construction commenced;
- provide specific OHS training/briefing to all workers
- provide appropriate Personal Protective Equipment (PPE) to all workers,
- provide first- aid kits at the construction work readily accessible by workers;
- ensure that vehicle and equipment operators are properly trained and licensed

j. Temporary Traffic Disturbance and Community Road Damage

84. **Impact.** Community roads will be used to transport materials to the subproject work sites. Damage to these roads and traffic disturbances are potentially adverse impacts from increased

road use and traffic density. However, the impact was assessed to be small, localized, short-term, and easily mitigated.

85. **Mitigation measures.** Contractors will be required to:

- Conduct a road transportation study, before the construction, to assess the condition of community roads and identify any large potholes on the roads, which pose a high risk of traffic accidents;
- Collaborate with the local transportation agency to install traffic signs near identified potholes;
- Use appropriate vehicles, based on the road condition, to avoid heavy damage to the community roads;
- Bear all responsibility for the rehabilitation of, or compensation for, any roads damaged as a result of subproject construction.

3. Environmental Impacts during Operation

86. The potential long-term or permanent impacts of project development are most important and generally determine the level of impact assessment that an irrigation project requires. The potential long-term impacts include: (i) deterioration of water quality; (ii) occupational health and safety; (iii) pipe leakages; and (iv) community health and safety.

a. Deterioration of Water Quality

87. **Impact.** The quality of raw water may deteriorate if there are detrimental human activities in the upstream catchment area of the Cam Ranh and Suoi Dau reservoirs. This will, in turn, affect the quality of irrigation water.

88. **Mitigation measures.** An Independent Environmental Monitoring Consultant (IEMC) will continuously coordinate with the villages and district authorities regarding community activities in the catchment area and monitor watershed activities that may contribute to the contamination of raw water. The IEMC will also conduct regular monitoring of the water quality parameters in the Cam Ranh and Suoi Dau reservoirs.

b. Leaks in Pipelines

89. **Impact.** There is a potential risk of high water pressure that could cause bursting of pipes, although this is very low-risk occurrence.

90. **Mitigation measures.** To minimize the risk of pipes bursting from high water pressure in the mains, the following measures will be put in place: (i) use of durable standard pipes for the lines; (ii) careful construction supervision by the Contractor to ensure that pipe laying and joining are done to the highest standards; and (iii) regular inspection of the network and prompt isolation and repair when leaks occur.

c. Occupational Health and Safety

91. **Impact.** The operation of the pumped pipe irrigation system will require operating equipment, which could pose risks to the safety of workers and staff.

92. **Mitigation measure.** Proper guidance and adherence to occupational health and safety protocols will to be established in the said facilities in accordance with World Bank's EHS Guidelines as a minimum standard.

d. Community Health and Safety

93. **Impact.** The community could be at risk of high voltage electric shocks from touching machines and equipment in operation, and untrained people who are wiring and using electric pumps for watering their crops are unsafe.

94. **Mitigation measures.** Constructed facilities, most especially the pumping station and storage tank area, will be properly fenced off and secured to restrict access and intrusion of unauthorized personnel. Watchmen/security personnel will be hired to secure the facilities on a 24- hour basis. The project will also provide a training course on techniques for effective application and safety for those who will be using subproject water.

VI. ANALYSIS OF ALTERNATIVES

A. Alternatives to the Subproject

95. The beneficiary villages to be covered by the Khan Hoa subproject were selected through the process adopted for WEIDAP subprojects, which involved screening, prioritization, and selection of candidate subprojects for feasibility study. The feasibility study then confirmed the eligibility of the subproject. Prioritization was based on a set of criteria aimed primarily at ensuring alignment with Government priorities, maximizing impact in terms of number of population to be served, and also maximizing the contribution to economic development and poverty alleviation.

B. Alternatives within the Subproject

96. Alternatives considered for the preliminary design included: (i) the configuration and location of the distribution system; (ii) alternative water sources/reservoirs; and (iii) village areas to be included. During the evaluation of possible service areas, the most populated and easily accessible villages were selected to be included in the irrigation improvement project.

97. Based on the principles of irrigation modernization, the project seeks to improve the level of service (LOS) to enable farmers to receive reliable deliveries of irrigation water, nearly on-demand, and at levels demanded by HVCs. Given this objective, the lower unit cost rehabilitation alternative is inconsistent with project objectives. As such, the unit hectare investment costs are higher. Proposed designs include the introduction of piped distribution systems that not only reduce water losses but also reduce operation and maintenance (O&M) requirements, as distribution pipes are buried and less vulnerable to solar deterioration and physical damage. Given the extensive use of piped distribution, costs were minimized by limiting the offtake hydrants and ensuring that pipe diameters are appropriate for system capacity. The project is not intended to rehabilitate (i.e., restore to the same level of service), but to enhance the level of service requiring a higher unit investment.

C. “No Project” Alternative

98. The “No Project” alternative would mean that the opportunity to provide more cost-effective and high-technology irrigation systems, which are highly suitable for the production of HVCs towards meeting Government of Viet Nam goals and priorities, would not be realized.

VII. INFORMATION DISCLOSURE, CONSULTATION, AND PARTICIPATION

A. Public Consultations

1. Methodology

99. Formal disclosure to stakeholders about the proposed Khan Hoa subproject occurred during the preparation of the IEE. A stakeholder consultation strategy was developed to meet the requirements of conducting meaningful consultation with stakeholders, as stipulated by the ADB SPS (2009). The strategy embodied the principles of meaningful engagement, transparency, participation, and inclusiveness to ensure that affected and marginalized groups, such as women and the poor, are given equal opportunities to participate in the planning of the subproject.

2. Identification of Related Stakeholders

100. Stakeholders were identified and engaged in a participatory manner. Stakeholder consultations focused on institutional stakeholders, affected communities, and persons directly affected by the proposed subproject interventions. The identified subproject stakeholders include: (i) Institutional stakeholders such as People's Committee and Commission (PCC), District People's Committee (DPC), PPMB, commune leaders, and design consultants. (The PPMB and the design consultant provided information for the design of the subprojects and the implementation of measures and interventions). Other stakeholders include the mass organizations, such as Women's Union and Farmers' Union, and villagers living in subproject areas, including beneficiaries and potential APs.

3. Public Consultation Meetings

101. Public/stakeholder consultations were held from 27 August–6 September 2016 during the project preparation phase. Stakeholders who participated during the public consultation process included villagers, local government officers, and staff. The consultations were conducted to discuss with the stakeholders the proposed project and the modifications from the original design and also to elicit the community's environmental concerns/issues on the proposed subprojects.

102. Formal community consultation meetings were held to discuss the location and potential environmental impacts of the proposed upgrading of existing canals and construction of pumping station and ring channels for irrigating the target watering area in nine communes in Cam Lam District, Khanh Hoa Province. A total of 205 people participated in the consultation meetings, of whom women accounted for 36%, and the EMs, mainly indigenous Raglai accounted for 14% (**Table 10**). The EM participants understand and speak the Kinh language fluently.

Table 10: Participants during the Community Consultation Meetings

District	Communes/ township	Officials		Households		Total			Ethnic Minorities	
		M	F	M	F	M	F	Total	Minority	Ethnics
Cam Lam	Cam Hai Tay	3	2	15	2	18	4	22	1	Kinh, Ede
	Cam Hiep Nam	3	1	10	8	13	9	22	2	Kinh, Raglai
	Cam Hoa	7	0	9	8	16	8	24	1	Kinh Raglai
	Cam Tan	4	2	7	9	11	11	22	2	Kinh Raglai
	Cam Thanh Bac	4	1	12	5	16	6	22	2	Kinh, Raglai
	Son Tan	3	2	10	7	13	9	22	14	Raglai, Kinh
	Suoi cat	5	1	18	8	23	9	22	3	Kinh, Raglai
	Suoi Tan	4	1	11	10	15	11	26	2	Kinh, Raglai
	Cam Duc township	5	0	11	7	16	7	23	2	Kinh, Raglai
Total	**9**	**38**	**10**	**103**	**64**	**141**	**74**	**205**	**29**	**3**

M= Male F= Female

103. The public meeting was conducted in each subproject commune in the local language using a loudspeaker and following a number of procedures, as listed below.

- The engineering consultant introduced the subproject, including the basic designs of each subproject work located in the project commune area.
- The environmental consultant presented ADB's environmental policy, safety regulations in Viet Nam construction sector, anticipated environmental impacts and mitigation measures to be developed in the IEE, and the grievance redress mechanism (GRM) for environment and resettlement issues;
- The social/resettlement consultants presented ADB's resettlement policy, impacts due to the acquisition of land and properties, policies of the Government and local authorities, and subproject policies on compensation as required by the State; and
- Open discussion of issues and concerns by the stakeholders.

4. Issues and Concerns Raised during the Public Consultations

104. During the meeting, the participants raised their questions and comments on the subprojects. The technical consultants and IEE national consultant, as representative of EA/IA, answered and explained all questions to the participants. The following are the comments raised during the consultation meetings:

- All local authorities and participants expressed their support for the subproject construction because the water shortage problem in their area has become more serious recently. The mango trees have also been affected by some disease, which they think could be due to water shortage in the area.
- In terms of environmental issues, the potentially negative impact of the subproject on the environment is insignificant because the construction sites are located far from the residential areas, and no sensitive or protected areas are adjacent to the construction sites.
- Local people were concerned about compensation policies to be developed by the subproject for people whose land will be acquired by the subproject. They suggested that the compensation policy, operational mechanism of allocating water in the dry season, and irrigation service fee to be applied by the project should be agreed upon with the stakeholders before the project begins. During the construction phase, they requested the project should ensure transportation safety, restore any damaged community roads to their previous condition, and keep social order.

- Local people in Cam Hoa commune are worried that the Southern canal of Suoi Dau Reservoir, which has been serving the irrigation needs of the local people, may not be able to provide adequate water to the area after construction, when it will have to share its water from the reservoir to the the Northern canal.

105. The comments and questions raisesd by the local authorities and villagers, as well as the responses from the project owners, are summarized in **Table 11**.

Table 11: Summary of Questions and Answers at the Public Consultations

Location and Time	Comments/Questions from Participants[3]	Addressed in the IEE
Cam Hai Tay 6 September 2016	The project should provide more information on water allocation and irrigation pricing.	The operation agency will provide the information.
Cam Hiep Nam 6 September 2016	Cam Ranh reservoir is not capable of sharing water with other communes because it has a shortage of water in the dry season.	Subproject water balance shows that Cam Ranh reservoir irrigation system is able to meet the irrigated demands of subproject targeted watering areas.
Cam Hoa 30 August 2016	The Southern canal of Suoi Dau Reservoir, which has been serving the irrigation needs of the local people, may not be able to provide adequate water to the area after construction, when it will have to share its water from the reservoir to the the Northern canal.	The design of the subproject was prepared, taking into account the results of the water balance studies conducted by IWRP for both reservoirs.
	Will villagers have to pay more for irrigation water after the project?	Alternatives have been taken into account, and the cheapest option will be selected.
Cam Tan 30 August 2016	There is a need to provide the local farmers with guidance on new irrigation techniques, including frequency of watering.	Operational agency will provide guidance.
	Will the project have negative effects on community transportation?	The subproject EMP includes mitigation measures to address the negative impacts, if they occur.
Cam Thanh Bac 27 August 2016	Will the project have negative effects on community transportation?	The subproject EMP includes mitigation measures to address the negative impacts, if they occur.
Son Tan 1 September 2016	Some households have planted trees near the pond. Will the rising subproject water harm the trees?	No.
Suoi Cat 1 September 2016	There is concern about transportation safety and social order.	The subproject EMP includes mitigation measures to address the negative impacts, if they occur.
	Jobs should be provided to local laborers.	The subproject EMP includes mitigation measures to address this concern.
Suoi Tan 1 September 2016	There is a need to provide the local farmers with guidance on new irrigation techniques, including frequency of watering.	Operational agency will provide guidance.

[3] Questions and issues raised during public consultation meetings are recorded in table as received.

Location and Time	Comments/Questions from Participants[3]	Addressed in the IEE
Cam Duc township 29 August 2016	Will the project have negative effects on community transportation?	The subproject EMP includes mitigation measures to address the negative impacts, if they occur.
Conclusion	The project will be responsible for providing further information to all communes and will take all the issues raised by local people to the concerned experts for further study. The project will ensure that local people will benefit from the proposed irrigation system improvement and will work with the local authorities to minimize negative impacts on the environment and people in the subproject area.	

B. Information Disclosure

106. Prior to project implementation, a copy of the approved Updated IEE and EMP will be submitted by CPMU to the DONRE in Khan Hoa Province. The updated IEE will also be posted on the ADB and MARD website. During construction and operation, communities within the impact area of the subproject area will be kept informed of construction activities through billboards or information boards about the construction activities and schedules. Detailed information on the PMU and the grievance redress mechanism (GRM) focal persons, as well as the Construction Managers, will be prominently displayed in the respective construction areas for the reference of affected communities/persons. Complaints and grievances, both written and verbal, can be directly filed, with the concerned entities. This will be an alternative to the village complaint system. All suggestions, opinions, and responses from the community on the project should be taken into account, and feedback provided on how the concerns and recommendations have been addressed.

VIII. GRIEVANCE REDRESS MECHANISM

A. Purpose of the Mechanism

107. During the deployment of the subproject, local people will be provided with information on environmental protection activities, such as EMP. Negative impacts on the environment may occur during the construction and operational phases. Any comments/suggestions of local people will be solved quickly, transparently, and according to the law, particularly for AP. A complaint handling mechanism will be established, classified by level and including the responsibilities of involved parties.

B. Grievance Redress Mechanism

108. Affected persons will be informed of policies and procedures to ensure that their livelihood will not be severely affected by the subproject. AHs will also be informed that, if they have any questions or concerns regarding the subproject, PPMU will be responsible for providing assistance to resolve such concerns. The GRM consists of several steps, namely:

- **Step 1:** Complaint form will be sent by APs, AHs, or groups of HHs to the subproject CPC.
- **Step 2:** The Subproject CPC will investigate the complaint within 15 days. If it is judged to be valid, the Complaint Form will be forwarded to the PPMU.
- **Step 3:** Within 15 days from the date the complaint is received, the PPMU and Subproject CPC will organize meetings to discuss how to resolve the matter. All meetings will be recorded, and copies of the minutes of meetings will be provided to APs/AHs.

- **Step 4:** PPMU shall take such mitigation measures, as agreed in meetings, from Step 3 by PPMU and Subproject CPC within 15 days, or some other period acceptable to the parties referred to in Step 3.
- **Step 5:** When the complaint is resolved, the Complaint Form needs to be signed by Complainer/HH head, subproject CPC, PPMU, and annotated at each stage of the process by PPMU.
- **Step 6:** In case no understanding or amicable solution is reached, or if no response is received from the subproject CPC within 15 days after the registration of complaint, the APs/AHs can appeal to the DPC. The APs/AHs must lodge the complaint within 30 days of registering the original complaint and must produce documents with copies of appeal that support his/her claim. The DPC will provide a decision within one month of receiving the appeal.
- **Step 7:** If the APs/AHs are not satisfied with the decision, or in the absence of any response from DPC, the APs/AHs can appeal to the PPC, which will then review and issue a decision on the appeal within 30 days from the day it is received.
- **Step 8:** If the AP is still not satisfied with the decision of the PPC, or in the absence of any response within the stipulated time, the AP, as a last resort, may submit his/her case to the court, which will render the final decision.

C. Type of Grievances

109. Complainants are entitled to lodge complaints regarding any aspect of the project. Any affected person will be able to submit a grievance if he/she believes that a practice has a detrimental impact on the community, the environment, or their quality of life. Eligible grievances or complaints include:

- Negative impacts on a person or a community (e.g., financial loss, such as from loss of water or roadside trees, health and safety issues, nuisances, etc.).
- Dangers to health and safety or pollution of the environment;
- Hazards due to construction activities (e.g., noise, dust, disruption of access, etc.);
- Impacts on social infrastructure;
- Failure to comply with standards or legal obligations;
- Improper conduct or unethical behavior of contractor leading to the nuisance of affected person(s);
- Misuse of funds and other irregularities;
- Grievances due to land acquisition, resettlement, compensation, relocation, and unaddressed losses.
- Complaints related to gender issues.

D. Grievance Resolution Process

110. Complaints can be made verbally or in written form. It is recognized that, in many cases, complainants do not have the writing skills or ability to express their grievances verbally. However, complainants are encouraged to seek assistance from family members or village heads to have their grievances recorded in writing and to ensure that, where disputes occur, all the details have been recorded accurately to enable all parties to be treated fairly. In the case of verbal complaints, a written record of the complaint will be made during the first meeting with the complainant. Complainants, who present their complaints within the prescribed procedures, will be exempt from all administrative fees incurred. In addition, complainants who lodge complaints and appeals to district courts will be provided with free legal representation. If efforts to resolve complaints or disputes are still unresolved and unsatisfactory following the Government's grievance redress mechanism, the AP/AHs have the right to send their concerns or problems directly to ADB's Operations Department (i.e., Natural Resources,

Environment, and Agriculture Division (SEER), Southeast Asia Department (SERD) or through the ADB Vietnam Resident Mission (VRM). If the AP is still not satisfied with the responses of SERD, he/she can directly contact the ADB's Office of the Special Project Facilitator, as outlined in the *Information Guide to the Consultation Phase of the ADB Accountability Mechanism*. The Information Guide can be downloaded through this link: https://www.adb.org/documents/information-guide-consultation-phase-adb-accountability-mechanism

IX. ENVIRONMENTAL MANAGEMENT PLAN

111. The CPMU under MARD, the Khan Hoa PPMB, and the Khan Hoa DARD are the key institutions that will play crucial roles in the implementation of the subproject as well as in ensuring environment safeguards. CPMU/PPMU will recruit one Environment Safeguards Specialist (ESS) under the Loan Implementation Consultant (LIC) to support subproject implementation in Binh Thuan. The ESS will support the PMUs in updating the EMP and in monitoring the compliance of the contractors during the construction phase. The ESS will also be responsible for training and capacity building on EMP implementation. The PMUs will engage a Construction Supervision Consultant (CSC) for the monitoring and supervision of the subproject, including environmental monitoring. The CSC will ensure that the contractors implement the provisions of the subproject EMP. The administrative and environmental management responsibilities of these institutions are summarized in **Table 12**.

Table 12: Environmental Management Responsibilities of Concerned Parties

No.	Organization	Environmental Management Responsibilities
1.	CPMU	• Exercise general responsibility for entire supervision, monitoring, and preparation of environmental monitoring reports (EMRs) submitted to ADB. • Provide training on environmental safeguard policy for subproject staff. • Prepare bidding documents, including the Scope of Work for adverse environmental impact mitigation, as contained in the EMP. • Recruit an independent environmental monitoring consultant (IEMC) during subproject civil works implementation to monitor the implementation of the contractor's Site EMP. • Prepare periodic EMRs for submission to ADB.
2.	PPMU	• Deploy for implementation of all environmental protection and mitigation activities included in the subproject EMP during pre-construction and construction phases. • Prepare bidding documents and integrate environmental mitigation measures in the EMP to ensure that contractors comply fully and correctly with the regulations. • Supervise and report on the implementation, by the contractor, of those mitigation measures according to approved detailed EMP for construction activities. • Support the contractor in the implementation of mitigation measures during construction. • Facilitate effective coordination among the contractor, local authorities, and local communities during construction, establish linkages among all relevant parties during project implementation and environmental management work of the subproject. • Coordinate with the local governments in dealing with complaints (if any). • Prepare periodic reports to CPMU on the implementation of the subproject and the EMP.
3.	Contractor	• Prepare Contractors' Site Environmental Management Plan (SEMP) for construction activities to meet environmental management requirements for the subproject. Such detailed plans shall be approved by the project owner before the commencement of construction activities.

No.	Organization	Environmental Management Responsibilities
		• Implement measures specified in the approved SEMP, especially effective mitigation measures during construction and other issues related to the EMP for the subproject and propose amendments or alternative mitigation measures if necessary. • Proactively contact local community representatives and deploy measures to avoid unnecessary disturbances during the construction activities, train workers on knowledge of environmental issues during construction, and be responsible for implementation of SEMP and labor safety measures in the construction sites. • Ensure that all construction activities have secured necessary permits from competent authorities. • Report to PPMU on any difficulties faced and propose solutions. • Immediately report to the local authorities and PPMU any environmental accidents and coordinate with relevant authorizes and parties to solve the problem. • Solve any complaints concerning construction activities and conduct issues of workers. • Submit weekly/monthly reports on the implementation of mitigation measures to construction supervision consultant and PMU.
4.	Construction Supervision Consultant (CSC)	• Support PPMU in supervising environmental safeguards in accordance with the daily EMP. • Prepare a rapid periodic report on EMP implementation at the construction sites together with proposed improvements to the Contractor for synthesis and submission to PPMU. • Maintain contacts with the local communities. • Support PPMU in resolving any construction-related complaints following the subproject's GRM.
5.	Project Implementation Consultant (PIC)	• Support CPO/PMU to procure environmental monitoring contract; • Work closely with CSC and independent environmental monitoring consultant (IEMC) to support the PPMU in monitoring and supervision of EMP implementation and ensure environmental compliance in each subproject. • During the construction phase, support the PPMB to prepare and submit semi-annual EMRs to CPO/PMU (on behalf of MARD) and ADB for review and uploading on ADB's website.
6.	Environment Safeguard Specialist (ESS)	• Assist CPO/PMU with the review of the IEEs and associated EMPs prepared for each subproject during the PPTA and assist with updating the EMPs in response to requirements of the detailed engineering design. • Brief the staff of the CPO/PMU and DARD/PPMUs on the environmental procedures and requirements for subproject implementation (construction and operations). • In cooperation with the M&E specialists, develop the indicators that need to be monitored for groundwater quality and levels that can be incorporated into routine project monitoring activities. • Support PPMU to establish an environmental management system that links with CPO/PMU environment management, including the procedures of construction inspection and monitoring, periodic reporting, and responsibilities of each party in the project's environment management system. • Support CPO/PMU to procure independent environmental monitoring contract and support the IEMC to prepare semi-annual EMRs to be submitted to CPO/PMU and ADB for review and uploading on ADB's website; • Visit each subproject during construction to ensure that environment safeguards are being properly conducted in accordance with the subproject EMP; • Develop environmental management procedures to be adopted by both the provincial IMCs in operating the system storage facilities to sustain

No.	Organization	Environmental Management Responsibilities
		environmental flows and the PPP irrigation operators drawing water from existing reservoirs to pump to beneficiary farmers within newly established command areas. • Assist in developing operational guidelines for water utilization by beneficiary farmers to maximize the efficient use of water from irrigated agriculture. • Assist in the preparation and implementation of training activities with regard to the environmental aspects of the project.
7.	Independent Environmental Monitoring Consultant (IEMC)	• Conduct periodic independent supervision of contractor's implementation of SEMP. • Perform quarterly environmental quality monitoring of key analytical parameters (i.e., air, water, soil, noise, etc.) in the subproject sites to assess the effectiveness of mitigation measures in addressing construction-related adverse environmental impacts during the construction and operations phases. • Collaborate with/support PPMU and the Contractor in the effective implementation of the EMP in the construction areas.
8.	Systems Operating Organization	• Be responsible for environmental management during the operation period of the subproject. • Implement mitigation measures during the O&M period.
9.	Local Resident Communities	• Local resident communities have the right and responsibility to conduct preliminary supervision of activities related to the environment during the construction phase to ensure their rights and safety is adequately protected, and that mitigation measures are effectively implemented by the contractor and PPMU. They shall report any unexpected environmental issues arising from the construction works to the CSC/PPMU/CPCs.
10.	Local Governments: PPC, DPC, and CPC of the Subproject Area	• Monitor the implementation of the subproject based on recommendations of the provincial DONRE and PPMU to ensure compliance with the regulations and policies of the Government.
11.	Provincial Environmental Management Agency	• DONRE is the provincial environmental management agency, representing MONRE in managing environmental issues in the province. • DONRE will be responsible for the supervision of compliance with environmental regulations of the Government during various implementation phases of the subproject.
12.	Other Concerned Parties	• Advise and inform of any aspects related to the environmental management and protection regulations of Vietnam. • Provide technical support during the construction of the subproject, as necessary. • Participate in the resolution of environment-related issues (if any).

A. Environmental Management Plan (EMP)

112. The anticipated environmental impacts and mitigation measures discussed in the previous section are presented in **Table 13** for the Khan Hoa subproject. The responsibilities and timeframe/schedule for implementation of mitigation measures of stakeholders, as shown in the tables, indicate that most mitigation activities during pre-construction are to be implemented by the PMU/ESS, while the measures will be primarily implemented by the contractors during the construction phase. During subproject operation, DARD will carry out the environmental mitigation and monitoring requirements specified in the EMP. To ensure implementation of mitigation measures during construction, the EMP shall be included in the tender and contract documents for civil works. Contractors' conformity with environmental contract procedures and specifications shall be regularly monitored by PMUs with assistance from CSC and results shall be reported semi-annually to ADB.

Table 13: Detailed Environmental Management Plan for the Khanh Hoa Subproject

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
I. Pre-construction Phase						
Conflict of water use	To ensure both reservoirs water balance when upgraded canals and pumped line system put in operation	• The result of the subproject water balance study by IWRP showed that there will be a deficit of about 1 Mm3 of supply water in the driest months. During the detailed design, the subproject command area in the driest months will be reduced to ensure adequate water supply to subproject irrigation users.	Detailed design consultant	Before approval of FS	N/A	Included in the contract with subproject design consultant
Land acquisition	To minimize l the impact of land acquisition	• Implement the updated land acquisition and compensation plan that was approved by ADB for the subproject. • Design access roads to the minimum necessary width and install pipelines within the right-of-way (ROW) when feasible.	PMU, ESS	Before construction	N/A	Included in the contract with ESS and PMU operation budget
Environmentally responsible procurement	To ensure proper EMP implementation by selected contractors	• Update the EMP. • Include the EMP in the tender documents to ensure that mitigation measures are budgeted and prepare the contractors for environmental responsibilities. • Specify in bid document that contractors shall engage capable and trained staff to take responsibility for the environmental management and safety issues at the working level and to monitor the effectiveness and review mitigation measures as the subproject proceeds.	ESP; PMU;	Before bidding and before construction commencement	N/A	Included in the contract with ESP and PMU operation budget

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
		• Require the contractors to recruit qualified staff to oversee the implementation of environmental and safety measures specified in the EMP.				
Environmental capacity development	To develop the environmental management capacity of PMU to ensure proper EMP implementation and promote environmental awareness among workers.	• PMU to commit and retain dedicated staff for the subproject duration to oversee EMP implementation. ESP to train PMU to build their capacity on EMP implementation, monitoring and reporting using workshops and on-the-job training techniques and case studies. • Conduct workers' orientation on EMP provisions. Such orientation shall be periodically conducted by the ESP as every new contractor is engaged.	PMU, ESS	Throughout the pre-construction and construction phases	N/A	Included in the contract with the ESS and PMU operation budget
Unexploded ordnance	To Avoid risk of injury to project workers.	• The contractor will ensure that the workforce is briefed that although, unlikely, there may be UXO in the area and to keep watch and report any suspected items found.	PMU	Before civil works commencement	N/A	Included in PMU operation budget
II. Construction Phase						
Disturbance to local cultivation activities	To ensure normal cultivation activities in the area where the pumped pipeline system will be installed.	• Do not put temporary stockpiles on local access roads to the farms. • Prepare a temporary access road for farmers before construction on the road used by villagers to their farms. • Require the contractor to immediately rehabilitate xcavated areas and any damaged road and path sections.	PMU, contractor	Before installing the pipeline system	Command areas	Included in civil works cost

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
Disruption of rice irrigation service when upgrading existing canals	To ensure the rice irrigation service not to be interrupted	• Contractor will collaborate with local people and authorities to prepare the appropriate construction schedule. • Inform local people and authorities on the contractors' work plan.	PMU, contractor	During the upgrading of open canals	Command areas	Included in civil works cost
Agriculture land pollution	To prevent agricultural land from pollution due to construction wastes.	• Store construction materials/waste temporarily in nylon canvas to prevent them from being scattered into paddy fields along the proposed canal. • All activities of contractor will be allowed only within the acquired land areas. Construction wastes will be collected and transported to permitted disposal sites. • Stop working at sites once it rains heavily to avoid contaminated runoff to field.	PMU, Contractor	During the upgrading of open canals	Paddy field located both sides of the proposed canal	Included in civil works cost
Irrigation water pollution	To reduce sediment runoff during excavation, earthworks, and grading in the rainy season to nearby the upgraded canals.	• Implement proper measures, including the provision of silt traps, ditches, and sump pits to intercept the flow of silt-laden runoff from the worksites into the reservoir. • Schedule excavation works during the dry season or stop work during heavy rains. • Properly manage the domestic wastewater from the contractor's facilities and workers camps should be undertaken at all times. • Not allow contractors to build their worker camps and temporarily store construction	PMU, Contractor	Durign the construction of the pumping station and installation of the 430-m pressure pipe.	Both Cam Ranh and Suoi Dau open canals	Included in civil works cost

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
		materials about 50m from Tra Tan reservoir. • install mobile toilets in the camps and facilities of the Contractor;				
Waste management	To avoid or minimize negative impacts on environment due to improper management of wastes at sites.	• **Excavated soil** Any surplus material will be disposed properly and given for free to interested villagers as backfill materials in coordination with the village authority. • **Construction wastes** These wastes are collected and classified for reusing or recycling otherwise disposal to Doc Do landfill, Cam An nam Commune, Cam Lam District to ensure no danger to people. • **Domestic wastes** Contractor will provide trash bins to workers' camps to ensure that all domestic wastes are collected and properly disposed in Doc Do Lanfill, Cam An Nam Commune, Cam lam District • **Hazardous wastes** Secured and controlled storage of all hazardous materials, including fuel and lubricants, will follow *Circular 36/2015/BTNMT.*	PMU, contractor	During civil works, transportation	N/A	Included in civil works cost
Dust and air emissions	To minimize dust and gas emission at the sites.	• Excavated material and stockpiles will be kept moist. • Transport vehicles will be required to install tarpaulin covers or other suitable material to prevent spillage of the hauled materials.	PMU, contractor	During civil works, transportation	N/A	Included in the civil works cost

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
		• Construction equipment and vehicles will, at all times, be well maintained and in good working condition to reduce fugitive emissions. • Speed limits on areas will be imposed to minimize dust emissions.				
Noise	To minimize noise at sites to avoid any nuisance to communities,	• Work at the sites will be limited only to daytime from 0700H to 1800H. • Stationary equipment like the diesel generators will be installed as far as practical from sensitive receptors. Buffers will also be established as further mitigation.	PMU. Contractor	During civil works, transportation	N/A	Included in the civil works cost
Community health and safety	To minimize risk of locals' exposure to danger of open excavations and conflicts with migrant workers.	• The work sites will be properly secured to prevent unauthorized people access to the restricted area. • Barricades and wood/steel plate covers will be provided in open excavations during non-working hours. • The contractor will immediately remove any drivers that ignore any of the community safety requirements. The required warning signage will be installed in all the worksites. • The contractor will be required to provide priority hiring of qualified construction workers from the villages and to consult with the local authorities to avoid conflicts if migrant workers will be brought to the site.	PMU, Contractor	Throughout construction phase	N/A	Included in civil works cost

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
Occupational health and safety	To minimize risks of workers when working at sites	• Require the contractor to implement the construction health and safety plan in accordance with the World Bank's Environment, Health And Safety (EHS) Guidelines (http://www.ifc.org/ehsguidelines) as a minimum standard. The contractor will appoint an EHS officer to ensure implementation of the plan. The plan will at minimum include: • Provision of first-aid facilities readily accessible by workers. • Provision of personal protective equipment (PPEs) such as hard hats, gloves, rubber boots, etc., • Wearing of PPEs while working onsite will be a mandatory requirement for workers. • Posting of safety signs/reminders in strategic areas within the construction area. • Ensure that vehicle and equipment operators are properly licensed and trained. • Provide staff with communicable disease and HIV-related awareness training.	PMU, Contractor	Throughout construction phase	N/A	Included in civil works cost
Traffic disturbance and deterioration	To minimize interruptions of existing facilities and	• Conduct a road transportation study before construction to assess the condition of community roads	PMU, Contractor	Throughout the construction phase	Community roads used for transpor	Included in civil works cost

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
of community roads	avoid traffic accidents.	quality and identify any large potholes in the roads which pose traffic hazards. • Collaborate with the local transportation agency to install traffic signs near the identified potholes. • Use appropriate vehicles, based on the road condition, to avoid heavy damage to the community roads; • Bear all responsibility for the rehabilitation or compensation to any road damage caused by the subproject construction.			ting materials to sites	
III. Operation Phase						
Deterioration of water quality	To protect water quality of reservoirs from deterioration.	• Monitor community activities in the catchment area to check activities at the upstream that may cause contamination of raw water quality in the reservoir. • Monitor of reservoir water to ensure the good quality of water for drinking purposes.	Irrigation Division/DARD	Throughout the operation phase	Cam Ranh and Suoi Dau reservoirs	Operation cost
Leak of pipelines	To protect pipeline from damage.	• Use durable standard pipes for the lines. • Contractor will perform careful construction supervision to ensure that pipe laying and joining are done to the highest standard; • Conduct reregular inspection of the network and prompt isolation and repair when leaks occur.	Irrigation Division/DARD	Throughout the operation phase	Command areas	Operation cost

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
Occupational health and safety	To protect operational staff and workers from any occupational risks.	• Proper guidance and adherence to occupational health and safety protocols will be established in the said facilities in accordance with the World Bank EHS Guidelines (http://www.ifc.org/ehsguidelines) as a minimum standard.	Irrigation Division/DARD	Throughout the operation phase	Pumping station	Operation cost
Community health and safety	To prevent locals from electric accidents due to exposure to domestic electric lines.	• The project will provide a training course on techniques for effective application and safety for those who will use subproject water.	Irrigation Division/DARD	Throughout the operation phase	Pumping station	Operation cost

B. Environmental Monitoring

1. Compliance Monitoring

113. **Table 14** below shows the program for monitoring compliance with various provisions of the EMP during the pre-construction, construction, and operation phases. The ESS needs to implement a number of measures during the detailed design phase (e.g., incorporation of environmental design measures in detailed design, updating of EMP, etc.), and these will be confirmed by CPMU/PPMU (PMU) to ADB. During construction, most of the mitigation measures will be implemented by the contractors, and their environmental performance, in terms of implementation of such measures, will be monitored by the CSC and the ESS. The timing or frequency of monitoring is also specified in Table 14. During subproject operation, EMP implementation will be the responsibility of the Khan Hoa DARD.

114. At the design phase, PMU will ensure that EMP measures for the design stage are incorporated in the detailed design. The effective incorporation of the EMP in the civil works contracts will also be ensured by PMU, with assistance from the ESS and this, along with the implementation of EMP provisions, will be audited by ADB as part of the loan conditions.

115. Prior to implementation of the subproject, the IEE and EMP will be updated and amended, as necessary, by the ESS after the detailed designs have been completed and contracting arrangements are known. Such updating will be based on reconfirmation and any additional information on the assumptions made at the feasibility study stage on the location, scale, and expected conditions of the subproject.

116. At the pre-construction phase, PMU, with the support from the ESS will prepare all environmental protection compliance certificates under Viet Nam's regulations, as guided by LEP 2014. The CSC and the ESS will also need to confirm that the contractors and their suppliers have complied with all statutory requirements for permits from DONRE and provincial authorities. The CSC and the ESS will check that contractors have all the necessary valid licenses and permits for use of powered mechanical equipment, if necessary, and the use of local water supplies (and to construct or operate plants such as for cement batching or asphalt/bitumen (if required) in line with all environmental regulations and permit conditions from the provincial authorities.

117. During the construction phase, the ESS will undertake regular monitoring of the contractor's implementation of mitigation measures specified in the subproject EMP, if applicable. On the other hand, the CSC will monitor the construction activities on a daily basis. The CSC will ensure that the contractors comply with all environmental regulations, as specified in the subproject EMP, if applicable.

118. The Khan Hoa DARD will be in charge of EMP implementation during the operation phase. Its tasks will include monitoring of water quality, leaks of pipelines, and community and occupational health and safety.

2. Environmental Effects Monitoring

119. The monitoring of environmental effects of water and air quality will not be undertaken because all the impacts were assessed to be minor, localized, short-term, and reversible.

Table 14: Environmental Monitoring Compliance

Environmental Concern	Parameter to Monitor	Location	Frequency and Verification	Responsible for Monitoring	Monitoring Cost
Design and Pre-construction Phase					
Conflicts of water use	Water balance calculation	N/A	Once during the preparation phase	Detailed design consultant/PMU	Included in the operation budget of PMU
Land acquisition	Compensation documents	N/A	Only once before the commencement of construction	Khanh Hoa DARD/DONRE, PMU	Included in the operation budget of PMU
UXO clearance	Khanh Hoa PPC Decision	N/A	Only once before the commencement of construction	Khanh Hoa DARD/DONRE, PMU	Included in the operation budget of PMU
Environmentally responsible procurement	Include in bidding documents. Check compliance	N/A	Bidding preparation period. Before start site works	PMU	Included in the operation budget of PMU
Environmental capacity development	Require in contract with ESS. Check at Detailed Design. Complete training and check before and during the construction works.	N/A	Before construction commencement and at the beginning period of the construction phase	PMU	Included in the operation budget of PMU
Construction Phase					
Disturbance of local cultivation activities and disruption of paddy irrigation service	Check implementation	Construction sites for pipeline installation and upgrading of existing canal	Biweekly and spot checks Part of daily construction supervision	ESS/PMU	Included in the operation budget of PMU/ESS/ CSC
Agricultural land	Check implementation	Along the proposed canals of both Cam Ranh and Suoi Dau reservoirs	Biweekly Part of daily construction supervision	ESS/PMU CSC	Included in the operation budget of PMU/ESS/CSC
Waste management	Check implementation	All worksites	Biweekly	ESS/PMU	Included in the operation

			Part of daily construction supervision	CSC	budget of PMU/ESS/CSC
Irrigation water quality	Check implementation	Both Cam Ranh and Suoi Dau canals	Biweekly Part of daily construction supervision	ESS/PMU CSC	Included in the operation budget of PMU/ESP/CSC
Dust and gas emission	Check implementation	Site of installation of pipe system in farmland near residential areas and tranportation routes	Biweekly and spot checks Part of daily construction supervision	ESS/PMU	Included in the operation budget of PMU/ESS/CSC
Noise	Check implementation	Site of installation of pipe system in farmland near residential areas and tranportation routes	Biweekly and spot checks Part of daily construction supervision	ESS/PMU	Included in the operation budget of PMU/ESS/CSC
Occupational health and safety	Check implementation. Check compliance with Labor Code of Vietnam and other relevant Decisions, Decrees, and Circulars under Government requirements	Throughout the construction sites, quarries and borrow areas, community roads used for transportation	Biweekly Part of daily construction supervision	ESS/PMU CSC	Included in the operation budget of PMU/ESS/CSC
Community health and safety					
Traffic disturbance and community road deterioration	Check implementation	Community roads used for subproject transportation	Biweekly Part of daily construction supervision	ESS/PMU CSC	Included in the operation budget of PMU/ESS/CSC
Operational Phase					
Water deterioration	Check implementation	Cam Ranh and Suoi Dau reservoirs	Semi-annual in the first two years	DARD/ESS	Included in operation budget of Khanh Hoa DARD
Protection of pipeline system	Check implementation	Along alignment	Semi-annual in the first two years	DARD/ESS	Included in operation and maintenance cost

Occupational and community health and safety	Check implementation	Along alignment, pumping stations, storage tank, and villagers using private pumps	Weekly	DARD/ESS	Included in the operation budget of PPC

C. Reporting

120. The PMU will submit environmental compliance monitoring reports to ADB. Environmental monitoring reports (EMRs) will describe the status of EMP implementation in terms of required mitigation measures for different phases of the subproject, necessary remedial actions to effectively address negative environmental impacts due to subproject implementation, status of environmental capacity building activities as well as documentation of complaints received and corresponding action/resolution. The EMRs will be submitted to ADB semi-annually during the construction phase and annually for two years after the completion of construction (**Table 15**).

Table 15: Reporting Procedures

Project Phase	Type of Report	Frequency	Responsibility	Submitted to Whom
Construction	**Environmental Performance Report** indicating compliance with EMP and monitoring results at the contractor site	Monthly	Construction contractor	CSC
	Subproject EMP Compliance Report indicating compliance with subproject EMP and monitoring results	Quarterly	CSC	PMU
	EMP Compliance Report indicating compliance with subproject EMP and monitoring results.	Semi-annually during construction phase	ESS/PMU	ADB
Operation	**EMP Compliance Report: Operation** indicating compliance with subproject EMP commitments during operation	Annually in the first two years of operation. Ongoing frequency to be determined based on review after two years.	Binh Thuan DARD	Binh Thuan DONRE

D. Environmental Management Plan Implementation Costs

121. The cost of EMP implementation during construction phase will be included (i) the cost for implementation of mittigation measures which will be intergrated in the civil contract package and;

(ii) the cost for environment management and monitoring including the cost for 06 man-months of environment saguard specialist and the cost for Independent Environment Monitoring Consultant, estimated about $ 90,000 .

122. The cost of EMP implementation during the operation phase will be borne by the Irrigation Management Company (IMC), as part of their operation and maintenance (O&M) activities.

X. CONCLUSIONS AND RECOMMENDATIONS

123. This IEE for the Khan Hoa Province subprojects was undertaken to determine the environmental issues and concerns associated with the proposed irrigation system improvement, following modifications from the initial plans that were presented during project preparation. The modifications made are considered more suitable in terms of ensuring better irrigation water quality and quantity. The assessment confirms that the subproject remains classified as **Category B for environment** based on ADB's SPS (2009).

124. Beneficial impacts are expected in terms of the health and well-being of people because of the proposed irrigation subprojects in Binh Thuan Province. Principal benefits will be derived from the improved accessibility to reliable irrigation water supply as well as economic benefits in the form of better returns from planting high-value crops and more cost-effective utilization of irrigation water by the farmers from the introduction of, and improved access to, high-technology irrigation systems.

125. **Most of the environmental impacts are expected to occur during the construction phase. The environmental impacts are not expected to cause irreversible and significant adverse environmental impacts,** and are easily controllable through the application of appropriate and conventional mitigation measures. Based on the assessment of environmental impacts, the anticipated adverse impacts during project implementation are related to nuisances which may happen during the construction of the subproject components, such as temporary alienation of access, temporary disruption of community facilities, noise, and sediment runoff, and release of dust and engine gas emissions. **Recommendations formulated in the EMP, its inclusion in the contractual framework, and an effective inspection of construction sites will reduce these risks to an acceptable level.**

126. Environmental mitigation measures have been designed, as outlined in the subproject EMP, to address any adverse impacts during the various phases of project implementation. The EMP also presents the institutional responsibilities for implementing the mitigation measures. All subproject activities prior to construction, during construction, and during operation will be managed as provided in the EMP, and the Contractor's compliance and implementation of the mitigation measures shall be monitored. An environmental monitoring plan has been provided to ensure compliance with prevailing GOV standards.

127. The IEE concludes that the subproject information on the affected environment is sufficient to identify the scope of environmental impacts of the subproject, and **no further environmental assessment is, therefore, required.**

Appendix 1

PICTURES AND MINUTES OF CONSULTATION MEETINGS

A. Pictures of Consultation Meetings

Consultation meeting at Cam Hai Tay Commune

Consultation meeting at Cam Hiep Nam Commune

Consultation meeting at Cam Hoa Commune

Consultation meeting at Cam Tan Commune

Consultation meeting at Cam Thanh Bac Commune	Consultation meeting at Son Tay Commune
	
Consultation meeting at Suoi Cat Commune	Consultation meeting at Suoi Tan Commune
	
Consultation meeting at Cam Duc Township	

B. Minutes of Consultation Meetings

- **Cam Hai Tay Commune**

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

BIÊN BẢN THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Cải tạo, nâng cấp kênh dẫn hồ Cam Ranh & Suối Dầu

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Hôm nay là ngày 29 tháng 08 năm 2016

Cuộc họp được tiến hành tại: xã Cam Hải Tây huyện Cam Lâm, tỉnh Khánh Hòa

Tổ chức họp dân về vấn đề: Tham vấn cộng đồng

Tiểu dự án: ....

thuộc dự án "Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)".

Nội dung làm việc:

- Phổ biến thông tin của dự án;
- Các vấn đề về môi trường và biện pháp giảm thiểu tác động môi trường;

Thành phần tham dự:

Đại diện UBND xã:

1. Họ và tên:........................ Chức vụ: ....
2. Họ và tên: Ngọc Trinh Chức vụ: cán bộ địa chính xã

Đại diện các tổ chức chính trị xã hội

1.Mặt trận tổ quốc xã:

Họ và tên: Nguyễn Hữu Tài Chức vụ: ....

2. Đại diện Hội liên hiệp phụ nữ xã :

Họ và tên: Văn Thị Quế Chức vụ: ....

3. Đại diện Hội nông dân xã :

Họ và tên: Nguyễn Minh Tâm Chức vụ: ....

4. Đại diện hội cựu chiến binh xã :

Họ và tên: Võ Văn Hùng Chức vụ: ....

5. Đại diện Đoàn thanh niên xã :

Họ và tên: Nguyễn Thị Mỹ Dung Chức vụ: ....

Đại diện hỗ trợ kỹ thuật huyện........................

1. Họ và tên:........................ Chức vụ:........................
2. Họ và tên:........................ Chức vụ:........................

Đại diện Ban quản lý dự án tỉnh: ....

1. Họ và tên:........................ Chức vụ:........................
2. Họ và tên:........................ Chức vụ:........................

Đại diện đơn vị tư vấn:

Họ và tên:........................ Chức vụ: ....

Chức vụ: ....

Người dân trong xã tham gia:

Tổng số người tham gia: 16 /........ chiếm ..... % trong tổng số người ảnh hưởng của xã

Trong đó: Nam: 9 ....người, chiếm [illegible] %

Nữ: 7 ....người, chiếm [illegible] %

Dân tộc thiểu số: 5 ....% (nếu có)

Đã tiến hành tham vấn về tiểu dự án:...

....

Chủ toạ cuộc họp:...

Chức vụ:...

Nơi công tác:...

Nội dung làm việc:

....

Đại diện xã giới thiệu lý do cuộc họp

Ban tư vấn giới thiệu thành phần tham dự, nội dung tham vấn

Địa chính xã trình bày vị trí tiểu dự án tại xã, giải thích cho các hộ dân được mời tới tham vấn

Khu vực xã tình trạng khan hiếm nước trầm trọng, đề xuất có thêm thông tin về lưu lượng cấp nước, giá nước sau dự án cho nhân dân

Xã có 1 hộ duy nhất là dân tộc Ê đê tại Bãi Giếng 2

.....

.....

.....

.....

.....

.....

.....

Cuộc họp kết thúc vào lúc: 11 giờ 00 ngày 14 tháng 04 năm 2016

CÁC BÊN THỐNG NHẤT KÝ TÊN

Đ/D: UBND xã CAN MAI TAY

KT. CHỦ TỊCH
PHÓ CHỦ TỊCH

Lê Anh Tuấn

Đ/D: Cơ quan tư vấn

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập - Tự do - Hạnh phúc

--------***--------

DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Cải tạo nâng cấp tuyến kênh Ki Cam Ranh xã Suối Dầu

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Địa điểm: Ủy ban nhân dân xã Cam Hải Tây

Thời gian: 11 giờ 00 ngày 29 tháng 08 năm 2016

TT	Họ và tên	Tuổi	Dân tộc	Giới tính		Chữ ký
				Nam	Nữ	
01	Nguyễn Hữu Tài	58	Kinh	x		[signature]
02	Võ Văn Huy	46	"	x		[signature]
03	Huỳnh Tấn Nam	58	"	x		[signature]
04	Phan Văn Giao					[signature]
05	Nguyễn Văn Ngọc	62	Kinh			[signature]
06	La Văn Xê	75	Kinh			[signature]
07	Liêng					[signature]
08	Nguyễn Quang	50	Kinh			[signature]
9	Bùi Văn Đạt	44	Kinh			[signature]
10	Hồ Thừa	48	Kinh			[signature]
11	Lê Tuấn	75	Kinh			Tuấn
12	Lê Văn Hạ	50	Kinh			[signature]
13	Trần Thanh Tùng	26	Kinh			[signature]
14	Nguyễn Sĩ	53	Kinh			[signature]
15	Nguyễn Thành Đạt	67	Kinh			[signature]
16	Trần Thị Quế	49	Kinh			[signature]
17	Nguyễn Thị Diễm Hương	24	Kinh		x	[signature]

- **Cam Hiep Nam Commune**

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

BIÊN BẢN THAM VẤN CỘNG ĐỒNG

Tiểu dự án:...Cải tạo, nâng cấp kênh chính Nam hồ chứa Cam Ranh; hồ Bò Dầu
Thuộc dự án: "*Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)*"
Hôm nay là ngày 11 tháng...8...năm ...2016
Cuộc họp được tiến hành tại: xã Cam Hiệp Nam, huyện Cam Lâm...., tỉnh Khánh Hòa.........
Tổ chức họp dân về vấn đề: ...Tham vấn cộng đồng...; Lấy ý kiến đánh giá hiện trạng tác động.
Tiểu dự án: ....
thuộc dự án "Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)".
Nội dung làm việc:

- Phổ biến thông tin của dự án;
- Các vấn đề về môi trường và biện pháp giảm thiểu tác động môi trường;

Thành phần tham dự:

Đại diện UBND xã:
1. Họ và tên:..Chức vụ: ....
2. Họ và tên...Lê Đình Vinh.........................Chức vụ: ...Cán bộ QLNĐ....

Đại diện các tổ chức chính trị xã hội
1.Mặt trận tổ quốc xã:
Họ và tên.....Nguyễn....Văn....Vẽ......................Chức vụ: ....
2. Đại diện Hội liên hiệp phụ nữ xã :
Họ và tên:...Cao Thị Thu Dung.......................Chức vụ: ...CT HLPN.........
3. Đại diện Hội nông dân xã :
Họ và tên:.....Võ Trung Phi...............................Chức vụ: ....PCT....HND.....
4. Đại diện hội cựu chiến binh xã :
Họ và tên:..Chức vụ: ....
5. Đại diện Đoàn thanh niên xã :
Họ và tên:.....Cao Thái Nguyên.......................Chức vụ: ....
Đại diện hỗ trợ kỹ thuật huyện..........................
1. Họ và tên:..Chức vụ:...............................
2. Họ và tên:..Chức vụ:...............................
Đại diện Ban quản lý dự án tỉnh: ....
1. Họ và tên:..Chức vụ:...............................
2. Họ và tên:..Chức vụ:...............................
Đại diện đơn vị tư vấn:
Họ và tên:..Chức vụ: ....
Chức vụ: ....

Người dân trong xã tham gia:

Tổng số người tham gia: 18 /........ chiếm ..... % trong tổng số người ảnh hưởng của xã

Trong đó: Nam:..10.......người, chiếm 65..%

Nữ:....8......người, chiếm 35..%

Dân tộc thiểu số:.....9............% (nếu có)

Đã tiến hành tham vấn về tiểu dự án:..

....

Chủ toạ cuộc họp:...

Chức vụ:...

Nơi công tác:...

Nội dung làm việc:

....

....

- Dự án có phù hợp không, tham khảo ý kiến người dân. Do

sự có đủ nước tưới và sinh hoạt và cho nhu cầu [illegible]

hoàn toàn đồng tình

2. - Chưa đền khoa sát thì sao nói lại vậy, nên chúng tôi

rất khó khăn cho việc lấy ý kiến người dân.

- Hiện tại hồ chứa nước cạn kiệt không đủ nước để

tưới cho các xã khác.

....

.....

.....

.....

.....

.....

.....

.....

Cuộc họp kết thúc vào lúc: 17 giờ 00 ngày 07 tháng 07 năm 2016.

CÁC BÊN THỐNG NHẤT KÝ TÊN

Đ/D: UBND xã ... Cẩm Hiệp ...

KT. CHỦ TỊCH
PHÓ CHỦ TỊCH

Nguyễn Văn Dũng

Đ/D: Cơ quan tư vấn

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập - Tự do - Hạnh phúc

--------***--------

DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Cải tạo, nâng cấp kênh chính hồ chứa Cam Ranh, hồ suối Dầu

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Địa điểm: UBND xã Cam Hiệp Nam

Thời gian: 13 giờ 10, ngày 01 tháng 9 năm 2016.

TT	Họ và tên	Tuổi	Dân tộc	Giới tính		Chữ ký
				Nam	Nữ	
1	Trần Phước					
2	Lê Đức Viễn					
3	Cao Thị Thu Trang					
4	Võ Trọng Phi					
5	Bùi Ngọc Yến					
6	Ngô Văn Dũng					
7	Tào Kim Thoa					
8	Trần Hoàng					
9	Bùi Văn Quyết					
10	Nguyễn Văn Duy					
11	Võ Thắng Lê					
12	Lê Văn Cao					
13	Lê Văn Đại					
14	Cao Văn Bé					
15	Lê Thị Hợi					
16	Hoàng Cao Đạt					
17	Vũ Kim Thanh					
18	Huỳnh Thị Lưu					

- **Cam Hoa Commune**

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

BIÊN BẢN THAM VẤN CỘNG ĐỒNG

Tiểu dự án:...Cải tạo, nâng cấp kênh chính Nam hồ chứa Cam Ranh, hồ Suối Dầu
Thuộc dự án: "*Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)*"
Hôm nay là ngày 30 tháng...8...năm .2016.
Cuộc họp được tiến hành tại: xã...Cam Hòa..., huyện..Cam Lâm tỉnh.......Khánh Hòa
Tổ chức họp dân về vấn đề: ...Tham vấn cộng đồng, [illegible]
Tiểu dự án: ....
thuộc dự án "Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)".
Nội dung làm việc:

- Phổ biến thông tin của dự án;
- Các vấn đề về môi trường và biện pháp giảm thiểu tác động môi trường;

Thành phần tham dự:

Đại diện UBND xã:
1. Họ và tên:.......Phùng Minh Quang............Chức vụ: .....PCT.................
2. Họ và tên.......Phan Văn Minh.....................Chức vụ: .....Chủ tịch..........

Đại diện các tổ chức chính trị xã hội
1.Mặt trận tổ quốc xã:
Họ và tên......Nguyễn Trung Phương.............Chức vụ: ......Chủ tịch..........
2. Đại diện Hội liên hiệp phụ nữ xã :
Họ và tên:......Lê Vũ Ngọc Nguyên...............Chức vụ: ....Chủ tịch..........
3. Đại diện Hội nông dân xã :
Họ và tên:......Trần Vỹ Long.........................Chức vụ: ....Chủ tịch.........
4. Đại diện hội cựu chiến binh xã :
Họ và tên:.........Lê Văn Canh...................Chức vụ: ....Chủ tịch........
5. Đại diện Đoàn thanh niên xã :
Họ và tên:.......Lê Đình Chiến...................Chức vụ: ....Bí thư..........

Đại diện hỗ trợ kỹ thuật huyện..........................
1. Họ và tên:...Chức vụ:.............................
2. Họ và tên:...Chức vụ:.............................

Đại diện Ban quản lý dự án tỉnh: ....
1. Họ và tên:...Chức vụ:.............................
2. Họ và tên:...Chức vụ:.............................

Đại diện đơn vị tư vấn:
Họ và tên:...Chức vụ: ....
Chức vụ: ....

Người dân trong xã tham gia:

Tổng số người tham gia: 17........ chiếm ..... % trong tổng số người ảnh hưởng của xã

Trong đó: Nam:...9.......người, chiếm 53 %

Nữ:...8.......người, chiếm 47 %

Dân tộc thiểu số:......3.............% (nếu có)

Đã tiến hành tham vấn về tiểu dự án:..

....

Chủ toạ cuộc họp:...

Chức vụ:...

Nơi công tác:..

Nội dung làm việc:

- Đơn vị tư vấn thiết kế nói về ứng dụng dự án, Nâng cấp cải tạo kênh dẫn Nam [illegible] đưa nước Suối Dầu. Hoàn thiện hệ thống công trình thủy lợi, mở rộng địa bàn thu tưới để sử dụng nước tiết kiệm.

- Kênh tuyến Nam hiện nay đang phục vụ rất tốt cho xã Cam Hòa, liên [illegible] tới toàn thôn dự án người dân sử dụng nước trả phí có khả thi

- Hàng đời bà con tiến [illegible] chủ yếu là khoan giếng [illegible] nước ngầm và nước hạ thủy thiên...

- Bà con rất vui mừng nếu dự án được triển khai, về quản lý thì địa phương chúng tôi sẽ họp các hộ lại và bầu cho 1 hộ quản lý chung.

.....

.....

.....

.....

.....

.....

.....

Cuộc họp kết thúc vào lúc 12 **giờ** 00 **ngày** 30 **tháng** 08 **năm** 2016

CÁC BÊN THỐNG NHẤT KÝ TÊN

Đ/D: UBND xã ....Cam Hoa.... **Đ/D: Cơ quan tư vấn**

CHỦ TỊCH

Phan Văn Minh

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập - Tự do - Hạnh phúc

DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Nâng cấp cải tạo kênh chính xã Cam Phú huyện Cam Lâm

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Địa điểm: Xã Cam Hoà Huyện Cam Lâm, Khánh Hoà

Thời gian: 17 giờ 00 ngày 30 tháng 08 năm 2016

TT	Họ và tên	Tuổi	Dân tộc	Giới tính		Chữ ký
				Nam	Nữ	
1	Nguyễn Trung Phương	57	Kinh	x		
2	Nguyễn Đức Tín	64	Kinh	x		
3	Phạm Tuấn	58	Kinh	x		
4	Nguyễn Văn Nhuận	55	Kinh	x		
5	Nguyễn Minh Thế	50	Kinh	x		
6	Nguyễn Ngọc Hồng	66	Kinh	x		
7	Lê Vũ Ngọc Nguyên	37	Kinh		x	
8	Trần Vỹ Long	50	Kinh	x		
9	Nguyễn Văn Thanh	39	Kinh	x		
10	Lương Văn Vật	42		x		
11	Khánh Đại Nam	43		x		
12	Lương Văn Quy	28			x	
13	Lương Phương Thảo	27			x	
14	Phạm Thị Hồng	35			x	
15	T. Bích Thu Trang	41			x	
16	Nguyễn Văn Bé	47			x	
17	Đặt Thị Phương	53			x	

- **Cam Tan Commune**

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

BIÊN BẢN THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Cải tạo, nâng cấp kênh mương xã Cam Tân và khu đầu mối

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Hôm nay là ngày 20 tháng 8 năm 2016

Cuộc họp được tiến hành tại: xã Cam Tân, huyện Cam Lâm, tỉnh Khánh Hòa

Tổ chức họp dân về vấn đề: tham vấn cộng đồng, báo cáo đánh giá tác động môi trường

Tiểu dự án: .....

thuộc dự án "Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)".

Nội dung làm việc:

- Phổ biến thông tin của dự án;
- Các vấn đề về môi trường và biện pháp giảm thiểu tác động môi trường;

Thành phần tham dự:

Đại diện UBND xã:

1. Họ và tên: Võ Ngọc Trung ..... Chức vụ: Chủ tịch
2. Họ và tên ..... Chức vụ: .....

Đại diện các tổ chức chính trị xã hội

1.Mặt trận tổ quốc xã:

Họ và tên: Trần Công Hiền ..... Chức vụ: chủ tịch

2. Đại diện Hội liên hiệp phụ nữ xã :

Họ và tên: Phan Thị Thuật Mỹ ..... Chức vụ: chủ tịch

3. Đại diện Hội nông dân xã :

Họ và tên: Nguyễn Thế Kiên ..... Chức vụ: Chủ tịch

4. Đại diện hội cựu chiến binh xã :

Họ và tên: Nguyễn Trường Hoa ..... Chức vụ: Chủ tịch

5. Đại diện Đoàn thanh niên xã :

Họ và tên: Cao Thị Ánh Phương ..... Chức vụ: bí thư

Đại diện hỗ trợ kỹ thuật huyện.....

1. Họ và tên: ..... Chức vụ: .....
2. Họ và tên: ..... Chức vụ: .....

Đại diện Ban quản lý dự án tỉnh: .....

1. Họ và tên: ..... Chức vụ: .....
2. Họ và tên: ..... Chức vụ: .....

Đại diện đơn vị tư vấn:

Họ và tên: ..... Chức vụ: .....

Chức vụ: .....

Người dân trong xã tham gia:

Tổng số người tham gia: 17 .... chiếm ..... % trong tổng số người ảnh hưởng của xã

Trong đó: Nam: 11 người, chiếm 68 %

Nữ: 6 người, chiếm 32 %

Dân tộc thiểu số: 11 % (nếu có)

Đã tiến hành tham vấn về tiểu dự án: ....

Chủ toạ cuộc họp: ....

Chức vụ: ....

Nơi công tác: ....

Nội dung làm việc:

Đại diện chính quyền xã giới thiệu lý do buổi họp

Đại diện ban tư vấn phát biểu, trình bày nội dung làm việc

Các hộ dân quan tâm tới tần suất nước và lưu lượng nước tưới cho cây trồng, và nước sinh hoạt cho bà con

Các hộ dân quan tâm tới ảnh hưởng của tiểu dự án tới giao thông, đại diện ban tư vấn trả lời bà con

Thảo luận về cơ cấu chuyển đổi cây trồng khi tiểu dự án được triển khai

.....

.....

.....

.....

.....

.....

.....

Cuộc họp kết thúc vào lúc: 11 **giờ** 15 **ngày** 30 **tháng** 08 **năm** 2016

CÁC BÊN THỐNG NHẤT KÝ TÊN

Đ/D: UBND xã .....

CHỦ TỊCH

Võ Ngọc Trung

Đ/D: Cơ quan tư vấn

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập - Tự do - Hạnh phúc

--------***--------

DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP THAM VẤN CỘNG ĐỒNG

Tiểu dự án: ..Cải tạo, nâng cấp kè chống sạt lở Cam Lâm và kè Suối Dứa

Thuộc dự án: "*Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)*"

Địa điểm: ....xã....Cam Tân..., huyện Cam Lâm..., tỉnh Khánh Hòa.....

Thời gian: 11.. giờ 15.., ngày 24..tháng 08...năm 2016..

TT	Họ và tên	Tuổi	Dân tộc	Giới tính		Chữ ký
				Nam	Nữ	
1	Mãn Thị Phú	80	DR		x	
2	Mãn Thị Rang	52			x	
3	Mãn Thơm	67		x		
4	Mãn Thị Hồng	67			x	
5	Mãn Thị Tuyết	23				
6	Mãn Thị Hồng	42			x	
7	Nguyễn Văn Tiếp	52		x		
8	Trần Văn Hảo	51		x		
9	Lê Thanh Hòa	55		x		
10	Nguyễn Thanh Đô	49		x		
11	Phan Thị Bé				x	
12	Mãn Thị Hồng				x	
13	Mãn Thị Thủy				x	
14	Trần Văn Bá			x		
15	Nguyễn Thị Hường				x	
16	Lý Văn Đường			x		

- **Cam Thanh Bac Commune**

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

BIÊN BẢN THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Cải tạo, nâng cấp kênh chính hồ Cam Ranh ... xã hồ Suối Dầu

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Hôm nay là ngày 27 tháng 08 ...năm 2016.

Cuộc họp được tiến hành tại: xã Cam Thành Bắc, huyện Cam Lâm..., tỉnh Khánh Hòa.

Tổ chức họp dân về vấn đề: ...Tham vấn cộng đồng, báo cáo đánh giá [illegible]

Tiểu dự án: ....

thuộc dự án "Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)".

Nội dung làm việc:

- Phổ biến thông tin của dự án;
- Các vấn đề về môi trường và biện pháp giảm thiểu tác động môi trường;

Thành phần tham dự:

Đại diện UBND xã:

1. Họ và tên:.....Hà Thọ..................................Chức vụ: .PCT.....................
2. Họ và tên...Chức vụ: ....

Đại diện các tổ chức chính trị xã hội

1.Mặt trận tổ quốc xã:

Họ và tên.....Phan Diện..................................Chức vụ: .....CT....................

2. Đại diện Hội liên hiệp phụ nữ xã :

Họ và tên:....Trần Thị Thu Trang......................Chức vụ: ....CT.....................

3. Đại diện Hội nông dân xã :

Họ và tên:....Lâm Ngọc Xuyên.........................Chức vụ: ...CT.....................

4. Đại diện hội cựu chiến binh xã :

Họ và tên:.......Lê Công Lương.........................Chức vụ: ....

5. Đại diện Đoàn thanh niên xã :

Họ và tên:.......Đoàn Văn Chuẩn......................Chức vụ: ....

Đại diện hỗ trợ kỹ thuật huyện...............................

1. Họ và tên:...Chức vụ:..............................
2. Họ và tên:...Chức vụ:..............................

Đại diện Ban quản lý dự án tỉnh: ....

1. Họ và tên:...Chức vụ:..............................
2. Họ và tên:...Chức vụ:..............................

Đại diện đơn vị tư vấn:

Họ và tên:...Chức vụ: ....

Chức vụ: ....

Người dân trong xã tham gia:

Tổng số người tham gia: 18 /........ chiếm ..... % trong tổng số người ảnh hưởng của xã

Trong đó: Nam: 10 ......người, chiếm 63 %

Nữ: ...8.......người, chiếm 37 %

Dân tộc thiểu số: ....7.............% (nếu có)

Đã tiến hành tham vấn về tiểu dự án:..

....

Chủ toạ cuộc họp:...

Chức vụ:...

Nơi công tác:..

Nội dung làm việc:

- Đại diện UBND giới thiệu về chính sách về dự án tại địa phương.

Đại diện nhóm tư vấn giới thiệu dự án, thiết kế về dự án, huyện đó, của huyện.

Nhân dân rất mong muốn có nước để sinh hoạt và canh tác.

Các hộ dân đều quan tâm đến ảnh hưởng của dự án đến giao thông, tiếng ồn, bụi và nguồn nước sử dụng cho sinh hoạt và trồng trọt.

- Thảo luận về chuyển đổi cơ cấu cây trồng khi TDA đi vào triển khai.

....

....

....

....

....

....

....

Cuộc họp kết thúc vào lúc:..11..giờ..15 ngày..22..tháng..08..năm..2016..

CÁC BÊN THỐNG NHẤT KÝ TÊN

Đ/D: UBND xã ..[illegible]..

KT. CHỦ TỊCH
PHÓ CHỦ TỊCH

Hồ Thổ

Đ/D: Cơ quan tư vấn

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập - Tự do - Hạnh phúc

--------***--------

DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Cải tạo nâng cấp kênh chính hồ Cam Ranh và hồ Suối Dầu...........

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Địa điểm: ...Cam Thành Bắc..., Huyện Cam Lâm..., tỉnh Khánh Hòa.........

Thời gian: 14.. giờ..15.. ngày 22 tháng 8....năm 2016...

TT	Họ và tên	Tuổi	Dân tộc	Giới tính		Chữ ký
				Nam	Nữ	
1.	Nguyễn Trung Phương	57	Kinh	x		
2.	Nguyễn Đức Trí	64	Kinh	x		
3	Phan Tùng	58	Kinh	x		
4.	Nguyễn Văn Nhuận	55	Kinh	x		
5.	Nguyễn Minh Thi	50	Kinh	x		
6	Nguyễn Ngọc Hồng	65	Kinh	x		
7.	Lê Vũ Ngọc Nguyên	37	Kinh		x	
8	Trần Vỹ Long	50	Kinh	x		
9	Nguyễn Văn Thanh	39	Kinh	x		
10	Lương Vinh Việt	47	Kinh	x		
11	Huỳnh Đức Hoa	53			x	
12	Lý Văn Quy	49	Kinh	x		
13	Lương Phụng Thảo	28			x	
14	Phan Thị Hồng	33			x	
15	Trần Thu Trang	49				
16	Nguyễn Văn Ba	47				
17	Đào Thị Huỳnh	48			x	

- **Son Tan Commune**

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

BIÊN BẢN THAM VẤN CỘNG ĐỒNG

Tiểu dự án: [illegible]

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Hôm nay là ngày 01 tháng 09 năm 2016.

Cuộc họp được tiến hành tại: xã Sơn Tân, huyện Cam Lâm, tỉnh Khánh Hòa

Tổ chức họp dân về vấn đề: Tham vấn cộng đồng, báo cáo [illegible]

Tiểu dự án: ....

thuộc dự án "Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)".

Nội dung làm việc:

- Phổ biến thông tin của dự án;
- Các vấn đề về môi trường và biện pháp giảm thiểu tác động môi trường;

Thành phần tham dự:

Đại diện UBND xã:

1. Họ và tên: [illegible] Chức vụ: PCT UBND
2. Họ và tên: .... Chức vụ: ....

Đại diện các tổ chức chính trị xã hội

1.Mặt trận tổ quốc xã:

Họ và tên: [illegible] Chức vụ: [illegible]

2. Đại diện Hội liên hiệp phụ nữ xã :

Họ và tên: [illegible] Chức vụ: Chủ tịch Hội

3. Đại diện Hội nông dân xã :

Họ và tên: [illegible] Chức vụ: Chủ tịch Hội

4. Đại diện hội cựu chiến binh xã :

Họ và tên: [illegible] Chức vụ: Chủ tịch Hội

5. Đại diện Đoàn thanh niên xã :

Họ và tên: [illegible] Chức vụ: [illegible] Đoàn TN

Đại diện hỗ trợ kỹ thuật huyện.............................

1. Họ và tên: .... Chức vụ: ....
2. Họ và tên: .... Chức vụ: ....

Đại diện Ban quản lý dự án tỉnh: ....

1. Họ và tên: .... Chức vụ: ....
2. Họ và tên: .... Chức vụ: ....

Đại diện đơn vị tư vấn:

Họ và tên: .... Chức vụ: ....

Chức vụ: ....

Người dân trong xã tham gia:

Tổng số người tham gia: [illegible]........ chiếm ..... % trong tổng số người ảnh hưởng của xã

Trong đó: Nam:..[illegible]......người, chiếm [illegible]..%

Nữ:....[illegible].....người, chiếm 25.%

Dân tộc thiểu số:......20...........% (nếu có)

Đã tiến hành tham vấn về tiểu dự án:...

[illegible]

Chủ toạ cuộc họp:..

Chức vụ:...

Nơi công tác:...

Nội dung làm việc:

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

.....

.....

.....

.....

.....

.....

.....

Cuộc họp kết thúc vào lúc: 11 giờ 15 ngày 01 tháng 09 năm 2016.

CÁC BÊN THỐNG NHẤT KÝ TÊN

Đ/D: UBND xã Sơn Lôi

KT.CHỦ TỊCH
PHÓ CHỦ TỊCH

Trần Thu

Đ/D: Cơ quan tư vấn

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập - Tự do - Hạnh phúc

--------***--------

DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Cải tạo nâng cấp kênh chính hồ Cam Ranh và hồ Suối Dầu.....

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Địa điểm: ...Xã Sơn Tân, Huyện Cam Lâm, tỉnh Khánh Hoà.....................

Thời gian: 11... giờ 15..., ngày 01...tháng 9....năm ..2016.

TT	Họ và tên	Tuổi	Dân tộc	Giới tính		Chữ ký
				Nam	Nữ	
1	Mang Tấn	1982	Raglay			[illegible]
2	Cao Minh Giao					[illegible]
3	Cao phước		Raglai			[illegible]
4	Bo Bo Tấm	85	Raglai			[illegible]
5	Mang Thị Lan	1989	Raglay		x	[illegible]
6	Mấu Quanh	1967				Quanh
7	Cao thị Ngọc	1991				[illegible]
8	TRO Thị Nương	1991				[illegible]
9	Tro Nên	1975	Rắc lay	x		[illegible]
10	Tro Thị Kim Lan	1983	Raglay			[illegible]
11	Cao Bảng	1984	Raglai	x		[illegible]
12	Cao Hoài Kh					[illegible]
13	Bo Bo Lộc	1977	Raglay			vinh
14	mấu thị vinh		Raglay			
15	Mấu Dũng	1988	Raglay	x		[illegible]
16	Mang Nẻ	1961	Rắc lay	x		[illegible]
17	Cao Tranh	1968	Raglay	x		[illegible]

- **Suoi Cat Commune**

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

BIÊN BẢN THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Nâng cấp kênh chính Nam Ái Cam Ranh và kênh chính Hồ Suối Dầu

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Hôm nay là ngày 31 tháng 08 năm 2016

Cuộc họp được tiến hành tại: xã Suối Cát, huyện Cam Lâm, tỉnh Khánh Hòa

Tổ chức họp dân về vấn đề: Tham vấn cộng đồng báo cáo đánh giá môi trường dự án

Tiểu dự án: .....

thuộc dự án "Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)".

Nội dung làm việc:

- Phổ biến thông tin của dự án;
- Các vấn đề về môi trường và biện pháp giảm thiểu tác động môi trường;

Thành phần tham dự:

Đại diện UBND xã:

1. Họ và tên: Lê Thanh Hưng ..... Chức vụ: PCT UBND .....
2. Họ và tên ..... Chức vụ: .....

Đại diện các tổ chức chính trị xã hội

1.Mặt trận tổ quốc xã:

Họ và tên: Hoàng Bình ..... Chức vụ: CT .....

2. Đại diện Hội liên hiệp phụ nữ xã :

Họ và tên: Hồ Thị Minh Nguyệt ..... Chức vụ: CT .....

3. Đại diện Hội nông dân xã :

Họ và tên: Nguyễn Minh Đức ..... Chức vụ: CT .....

4. Đại diện hội cựu chiến binh xã :

Họ và tên: Phạm Văn Hoàng ..... Chức vụ: PCT .....

5. Đại diện Đoàn thanh niên xã :

Họ và tên: Nguyễn Anh Phương ..... Chức vụ: Bí thư Đoàn .....

Đại diện hỗ trợ kỹ thuật huyện.....

1. Họ và tên: ..... Chức vụ: .....
2. Họ và tên: ..... Chức vụ: .....

Đại diện Ban quản lý dự án tỉnh: .....

1. Họ và tên: ..... Chức vụ: .....
2. Họ và tên: ..... Chức vụ: .....

Đại diện đơn vị tư vấn:

Họ và tên: ..... Chức vụ: .....

Chức vụ: .....

Người dân trong xã tham gia:

Tổng số người tham gia: 26/........ chiếm ..... % trong tổng số người ảnh hưởng của xã

Trong đó: Nam:...18.....người, chiếm 65%

Nữ:..08......người, chiếm 33%

Dân tộc thiểu số:......2%.......% (nếu có)

Đã tiến hành tham vấn về tiểu dự án:..

...Cải tạo, nâng cấp [illegible]...

Chủ toạ cuộc họp:...

Chức vụ:...

Nơi công tác:...

Nội dung làm việc:

Đại diện UBND giới thiệu về [illegible] về [illegible] dự án [illegible]

[illegible] dự án [illegible] về dự án

Dự án [illegible] nâng cấp [illegible] địa phương

[illegible] nhân dân [illegible] 36 ha [illegible]

[illegible]

[illegible]

[illegible] sinh hoạt

Khi dự án [illegible] cần phải [illegible] các tuyến đường [illegible] cần phải [illegible] dân khi dự án [illegible] đường đi lại

[illegible] trong dự án cần [illegible]

dự án khi triển khai sẽ [illegible] địa phương

.....

.....

.....

.....

.....

.....

.....

Cuộc họp kết thúc vào lúc: 11 giờ 15. ngày 31 tháng 08 năm 2016.

CÁC BÊN THỐNG NHẤT KÝ TÊN

Đ/D: UBND xã .....Sơn Lai.....

PHÓ CHỦ TỊCH

Lê Thành Huy

Đ/D: Cơ quan tư vấn

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập - Tự do - Hạnh phúc

---------***---------

DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Cải tạo, nâng cấp hồ chứa Cam Ranh và ... [illegible]

Thuộc dự án: "*Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)*"

Địa điểm: Xã Suối Cát, Huyện Cam Lâm, tỉnh Khánh Hoà

Thời gian: 11 giờ 15, ngày 31 tháng 08 năm 2016

TT	Họ và tên	Tuổi	Dân tộc	Giới tính		Chữ ký
				Nam	Nữ	
1	Hồ Thị M. Guyệt	52	Kinh		x	[illegible]
2	Cao Thanh Giỏi	66	dân Tộc	x		[illegible]
3	Hồ ... Xuân	47	Raglai	x		[illegible]
4	Kràng ... Thông	54	Raglai	x		[illegible]
5	Hồ Thị Mỹ Liên	47	Kinh		x	Liên
6	Phan Văn Chở	63	Kinh	x		[illegible]
7	Võ Minh Tâm	51	Kinh	x		[illegible]
8	Ngô Như Anh	50	Kinh	x		[illegible]
9	Ngô Văn Dương					[illegible]
10	Nguyễn Thị Tố	61	Kinh		x	[illegible]
11	Nguyễn Thị Kim Anh	59	Kinh		x	[illegible]
12	Trần Thị Thu Thủy	40	Kinh		x	[illegible]
13	K Thị Mộng Trinh	67	Kinh		x	[illegible]
14	Nguyễn Anh [illegible]	32	Kinh	x		[illegible]
15	Hồ Tấn Bổ					[illegible]
16	Huỳnh Anh Vũ	31	Kinh	x		[illegible]
	Hồng Thị Bi	68	Kinh		x	Bi
18	Nguyễn Văn Tư	63			[illegible]	
19	Lê Thị Ngọc Thu					[illegible]
20	Nguyễn Thị Quyên					[illegible]
21	Nguyễn Thị Thu					[illegible]
22	Phan Thị Thảo	42				[illegible]

- **Suoi Tan Township**

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

BIÊN BẢN THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Cải tạo, nâng cấp hệ thống kênh hồ Cam Ranh và hồ Suối Dầu

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Hôm nay là ngày….tháng…….năm ……..

Cuộc họp được tiến hành tại: xã Suối Tân, huyện Cam Lâm, tỉnh Khánh Hoà

Tổ chức họp dân về vấn đề: tham vấn cộng đồng … Cải tạo đê sông Trường Tây

Tiểu dự án: ……………… mới đây ………………

thuộc dự án "Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)".

Nội dung làm việc:

- Phổ biến thông tin của dự án;
- Các vấn đề về môi trường và biện pháp giảm thiểu tác động môi trường;

Thành phần tham dự:

Đại diện UBND xã:

1. Họ và tên: Lê Văn Tư ……… Chức vụ: Phó chủ tịch
2. Họ và tên: Nguyễn Bá Anh ……… Chức vụ: Địa chính xã

Đại diện các tổ chức chính trị xã hội

1.Mặt trận tổ quốc xã:

Họ và tên: Nguyễn Hữu Đức ……… Chức vụ: Chủ tịch

2. Đại diện Hội liên hiệp phụ nữ xã :

Họ và tên: Lê Thị Mai Hân ……… Chức vụ: P.C.T

3. Đại diện Hội nông dân xã :

Họ và tên: Phan Công Quyết ……… Chức vụ: C.T

4. Đại diện hội cựu chiến binh xã :

Họ và tên: Bùi Tiến Dũng ……… Chức vụ: P.C.T

5. Đại diện Đoàn thanh niên xã :

Họ và tên: Nguyễn Minh Thuận ……… Chức vụ: bí thư

Đại diện hỗ trợ kỹ thuật huyện………………………..

1. Họ và tên:……………………………………… Chức vụ:…………………………
2. Họ và tên:……………………………………… Chức vụ:…………………………

Đại diện Ban quản lý dự án tỉnh: ……………………

1. Họ và tên:……………………………………… Chức vụ:…………………………
2. Họ và tên:……………………………………… Chức vụ:…………………………

Đại diện đơn vị tư vấn:

Họ và tên:……………………………………… Chức vụ: …………………………

Chức vụ: ………………………………………………………………………………

Người dân trong xã tham gia:

Tổng số người tham gia: 21 /........ chiếm ..... % trong tổng số người ảnh hưởng của xã

Trong đó: Nam: 11......người, chiếm 52 %

Nữ: 10......người, chiếm 48 %

Dân tộc thiểu số: 9 %........% (nếu có)

Đã tiến hành tham vấn về tiểu dự án:..

....

Chủ toạ cuộc họp:...

Chức vụ:..

Nơi công tác:...

Nội dung làm việc:

....

Đại diện lãnh đạo xã phát biểu khai mạc

Đại diện ban tư vấn trình bày thông phiên thảo đổi và nội dung tham vấn

Hiện tại khu vực xã bà con chủ yếu là trồng lúa

Các hộ dân quan tâm đến tăng suất, nước và đảm bảo nước tưới cho cây trồng và lượng nước sinh hoạt cho bà con

Các hộ dân quan tâm đến cải tạo cấp nước, chú ý đến giao thông

- thảo luận về cơ cấu chuyển đổi cây trồng khi TPA được triển khai

....

.....

.....

.....

.....

.....

.....

.....

Cuộc họp kết thúc vào lúc: 17 giờ 00 ngày 31 tháng 09 năm 2016

CÁC BÊN THỐNG NHẤT KÝ TÊN

Đ/D: UBND xã .....

KT. CHỦ TỊCH
PHÓ CHỦ TỊCH

Lê Văn Tự

Đ/D: Cơ quan tư vấn

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập - Tự do - Hạnh phúc

---***---

DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Nâng cấp cải tạo hệ thống cấp nước sinh hoạt xã Suối Tân

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Địa điểm: xã Suối Tân huyện Cam Lâm Tỉnh Khánh Hòa

Thời gian: 10 giờ 00 ngày 31 tháng 09 năm 2016.

TT	Họ và tên	Tuổi	Dân tộc	Giới tính		Chữ ký
				Nam	Nữ	
1	Trịnh Vinh	45	Kinh	Nam		
2	Phạm Công Luận	58	Kinh	Nam		
3	Lê Thị Mai Hân	35	Kinh	Nữ		
4	Nguyễn Thanh Hải	59	Kinh	Nam		
5	Vũ Văn Tâm	54	Kinh	Nam		
6	Lê Văn Xuê	66	Kinh	Nam		
7	Ngô Quang Chiêu	64	Kinh	Nam		
8	Võ Văn Hoàng	65	Kinh	Nam		
9	Phạm Thanh	53	Kadai	Nam		
10	Văn Giáp	49	Kinh	Nam		
11	Đinh Văn Dũng	58	Kinh	Nam		
12	Nguyễn Minh Thương	30	Kinh	Nam		
13	Nguyễn Bá Anh	46	Kinh	Nam		
14	Lê Văn Tư	34	Kinh	Nam		
	Trần Văn Việt					
	Nguyễn Minh Bảo					

- **Cam Duc Township**

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

BIÊN BẢN THAM VẤN CỘNG ĐỒNG

Tiểu dự án:.....

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Hôm nay là ngày 24 tháng 05 năm 2016

Cuộc họp được tiến hành tại: xã TT Cam Đức huyện Cam Lâm tỉnh Khánh Hòa

Tổ chức họp dân về vấn đề: tham vấn cấp đăng ký sử dụng nước

Tiểu dự án: .....

thuộc dự án "Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)".

Nội dung làm việc:

- Phổ biến thông tin của dự án;
- Các vấn đề về môi trường và biện pháp giảm thiểu tác động môi trường;

Thành phần tham dự:

Đại diện UBND xã:

1. Họ và tên: VT Văn Tâm Chức vụ: PCT UBND
2. Họ và tên..... Chức vụ: .....

Đại diện các tổ chức chính trị xã hội

1.Mặt trận tổ quốc xã:

Họ và tên: Ng Văn Thu Chức vụ: PCT

2. Đại diện Hội liên hiệp phụ nữ xã :

Họ và tên: Thới Ngọc Hằng Thư Chức vụ: CT

3. Đại diện Hội nông dân xã :

Họ và tên: Lê Văn Đăng Chức vụ: CT

4. Đại diện hội cựu chiến binh xã :

Họ và tên: Phạm Cường Chức vụ: CT

5. Đại diện Đoàn thanh niên xã :

Họ và tên: Mai Văn Cường Chức vụ: Phó bí thư đoàn

Đại diện hỗ trợ kỹ thuật huyện.....

1. Họ và tên:..... Chức vụ:.....
2. Họ và tên:..... Chức vụ:.....

Đại diện Ban quản lý dự án tỉnh: .....

1. Họ và tên:..... Chức vụ:.....
2. Họ và tên:..... Chức vụ:.....

Đại diện đơn vị tư vấn:

Họ và tên:..... Chức vụ: .....

Chức vụ: .....

Người dân trong xã tham gia:

Tổng số người tham gia: 12/........ chiếm ..... % trong tổng số người ảnh hưởng của xã

Trong đó: Nam:....10....người, chiếm.65.%

Nữ:.....3.....người, chiếm..35.%

Dân tộc thiểu số:......5.............% (nếu có)

Đã tiến hành tham vấn về tiểu dự án:...

....

Chủ toạ cuộc họp:...

Chức vụ:...

Nơi công tác:...

Nội dung làm việc:

.........ĐP Về Văn Toản giới thiệu về nhóm tư vấn về tại địa phương

.........Đại diện nhóm tư vấn trình bày về dự án tại địa phương, và xin ý kiến nhân dân về dự án.

.........Ý kiến thứ 1: Nay dự án rất tốt, làm tốt, nhân dân rất hưởng ứng dự án.

.........Người dân rất quan tâm đến tiền sạt lở nơi dòng mưa: bồi chỗ sinh hoạt và bồi tiền cho cây ăn quả

.........Quan tâm đến việc triển khai dự án và tác động đến hoạt động giao thông trong khu vực.

....

....

....

....

....

....

....

Cuộc họp kết thúc vào lúc 12...giờ 00 ngày 29..tháng 08...năm 2016.

CÁC BÊN THỐNG NHẤT KÝ TÊN

Đ/D: UBND xã ...TT. Cam Đức....

KT. CHỦ TỊCH
PHÓ CHỦ TỊCH

Võ Văn Toàn

Đ/D: Cơ quan tư vấn

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập - Tự do - Hạnh phúc

--------***--------

DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Cải tạo, nâng cấp kênh dẫn từ Cam Ranh về hồ Suối Dầu

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Địa điểm: ...Xã Cam Đức..., Huyện Cam Lâm..., tỉnh Khánh Hòa...........

Thời gian: 17.. giờ..00.. ngày 24 tháng 08..năm 2016.

TT	Họ và tên	Tuổi	Dân tộc	Giới tính		Chữ ký
				Nam	Nữ	
1	Cao Văn Bảy					
2	Lý thị Hải					
3	Huỳnh Đại Đỉnh					
4	Phan Huỳnh Thành					
5	Nguyễn Cao Hỷ					
6	Trần Đại Nam					
7	Lương Phước Cháp					
8	Nguyễn Văn Sơn					
9	Lê Công Tuấn					
10	Lê Văn Linh					
11	Nguyễn Văn Dụng					
12	Lê thị Hải					
13	Huỳnh thị Bái					
14	Trần Đại Nam					
15	Huỳnh Văn Hùng					
16	Cao Văn Quyết					
17	Nguyễn Tuấn Sơn					
18	Trần thị Gấm					