Initial Environmental Examination

July, 2015

VIE: INTEGRATED RURAL DEVELOPMENT SECTOR PROJECT IN THE CENTRAL PROVINCES (Additional Financing)
SUBPROJECT: LINING AND UPGRADING MAIN AND BRANCH CANALS OF DONG CAM IRRIGATION SYSTEM SUBPROJECT, PHU YEN PROVINCE

Prepared by Central Project Management Unit – Agriculture Project Management Board - Ministry of Agriculture & Rural Development for the Asian Development Bank

CURRENCY EQUIVALENTS

(as of 19 August 2014)

Currency unit	–	Vietnamese Dong (VND)
VND 1.00	=	$0.000047
$1.00	=	VND 21,246

ABBREVIATIONS

ADB	Asian Development Bank
AP	Affected persons
CEP	Commitment on Environmental Protection
CPC	Communal People's committee
CPMU	Central Project Management Unit
DARD	Department of Agriculture and Rural Development
DONRE	Department of Natural Resources and Environment
DPC	District People's Committee
EIAR	Environmental Impact Assessment Report
EMDF	Ethnic Minority Development Framework
EMP	Environmental Management Plan
DARD	Department of Agriculture and Rural Development
FPD	Forest Protection Department
IEE	Initial Environmental Examination
IPM	Integrated Pest Management
IRDPCP	Integrated Rural Development Project in Central Provinces
LIC	Loan Implementation Consultant
MONRE	Ministry of Natural Resources and Environment
PC	People's Committee
PPC	Provincial Peoples Committee
PPMU	Provincial Project Management Unit
RF	Resettlement Framework
SIR	Subproject Investment Report
TPC	Town People's Committee
UXO	Unexploded Ordnance

WEIGHTS AND MEASURES

km	–	kilometer
kg	–	kilogram
ha	–	Hectare
m	–	Meter

NOTE

In this report, "$" refers to US dollars.

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1. INTRODUCTION

1. The Integrated Rural Development Sector Project in the Central Provinces (IRDPCP) is being implemented through a sector loan from the Asian Development Bank (ADB). The Ministry of Agriculture and Rural Development (MARD) is the executing agency for the sector loan.

2. Due to the success of the project, ADB proposes to provide Additional Financing of $70 million for a second phase of the project, which will be implemented in 6 of the original 13 provinces. The IRDSPCP 2nd phase is located in 6 provinces in central Viet Nam and has involved construction of medium scale rural infrastructure of the following types:

    (1) Irrigation, drainage and flood control infrastructure including river embankments, sluices and salinity intrusion control structures;
    (2) Rural roads including bridges and culverts.

3. As part of IRDPCP 2nd phase, Lining and upgrading main and branch canals of Dong Cam Irrigation System Subproject will be constructed in 4 Communes: Hoa Thang, Hoa An, Hoa Quang, Hoa Tri of Phu Hoa District and 1commune: Hoa Kien of Tuy Hoa Town and 4 communes : Hoa Phu, Hoa Phong, Hoa Tan Tay, Hoa Thinh of Tay Hoa District

4. This Initial Environmental Examination/Commitment on Environmental Protection (IEE/CEP) document has been prepared to meet the environmental safeguards requirements of the ADB[1] and GOV[2]. The IEE/CEP contains the following information:

    (i) Section I Introduction;

    (ii) Section II contains a description of the subproject;

    (iii) Section III contains a description of environmental conditions in the vicinity of the subproject;

    (iv) Section IV contains a describes potential environmental impacts of the subproject;

    (v) Section V contains the environmental management plan including mitigation measures, monitoring system and cost estimation for the implementation of Environmental Monitoring System;

    (vi) Section VI contains activities description on community consultation and subproject disclosure;

    (vii) Section VII contains conclusion and recommendation including summarization of main impacts and typical mitigation measures in the subproject's implementation.

[1] ADB SPS 2009

[2] Law on Environment Protection (Revised) 2006; Decree 29/2011/NĐ-CP dated April, 18th 2011 and circular No. 26/2011/TT-BTNMT dated July, 18th 2011

2. PROJECT DESCRIPTION

Table 1. General information of subproject

<table>
<tr><th>DATA ITEM</th><th>SUBPROJECT DATA</th></tr>
<tr><td>GENERAL INFORMATION</td><td></td></tr>
<tr><td>Subproject Name</td><td>Lining and upgrading main and branch canals of Dong Cam Irrigation System, Phu Hoa and Tay Hoa District, Tuy Hoa Town</td></tr>
<tr><td>Subproject Type</td><td>Irrigation</td></tr>
<tr><td>Project owner</td><td>DARD of Phu Yen Province</td></tr>
<tr><td>Sub-project Management Unit</td><td>PPMU of IRDPCP, Phu Yen Province</td></tr>
<tr><td>Address of Project owner</td><td>77 Phan Dinh Phung, Tuy Hoa City, Phu Yen province</td></tr>
<tr><td>Name and Title of Head of Project owner</td><td>Nguyen Tri Phuong
Title : Director</td></tr>
<tr><td>Telephone, fax and email details of Project owner</td><td>Tel : 057.3841869; FAX : 057.3842704</td></tr>
<tr><td>Name of Environmental Officer of PPMU</td><td>Tran Con Son</td></tr>
<tr><td>Telephone, fax and email details of PPMU Environmental Officer</td><td>0972735248</td></tr>
<tr><td colspan="2">SUBPROJECT DESCRIPTION</td></tr>
<tr><td>New project or rehabilitation project</td><td>Lining and Upgrading and improvement</td></tr>
<tr><td>Design Irrigation Frequency</td><td>P= 85%</td></tr>
<tr><td>Surface and underground water</td><td>Surface water</td></tr>
<tr><td>Identification of water source</td><td>Dong Cam Weir (Ba river/Da Rang river is name river in downstream of Ba river).</td></tr>
<tr><td>Water source used for living or not?</td><td>No. The main canal is upgraded for irrigation purpose. At residential areas: local peoples use well water and tap water from water supply system</td></tr>
<tr><td>Area to be irrigated</td><td>17,700 ha</td></tr>
<tr><td>Length of existing canals and upgraded canal</td><td>Total 19.406,4m, of which 9,571.7m of north canals and 9,834.7m of south canals
Length of existing earth canals and proposed concrete canals are described in bellow table
<table>
<tr><td></td><td>Canal</td><td>Existing earth Canal Length (m)</td><td>Proposed concreted Canal Length (m)</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>DATA ITEM</th><th>SUBPROJECT DATA</th></tr>
<tr><td></td><td>
<table>
<tr><td></td><td>North canals</td><td></td><td>9,571.7</td></tr>
<tr><td>1</td><td>Canal N3</td><td>15,271</td><td>7,096.69</td></tr>
<tr><td>2</td><td>Canal N6</td><td>1,440</td><td>553.31</td></tr>
<tr><td>3</td><td>Xuan Hoa Canal 2</td><td>2,000</td><td>1,146.6</td></tr>
<tr><td>4</td><td>Xuan Hoa Canal 3</td><td>2,000</td><td>775.1</td></tr>
<tr><td></td><td>South canals</td><td>2,100</td><td>9,834.7</td></tr>
<tr><td>5</td><td>Hoc Ram main canal</td><td>2,100</td><td>2,096</td></tr>
<tr><td>6</td><td>Tan My canal</td><td>3,950</td><td>3,025</td></tr>
<tr><td>7</td><td>Canal N1-Hoc Ram</td><td>2,900</td><td>1,592</td></tr>
<tr><td>8</td><td>Canal N8-2</td><td>2,000</td><td>1,933</td></tr>
<tr><td>9</td><td>Canal N8</td><td>3,390</td><td>1,188</td></tr>
</table>
</td></tr>
<tr><td>The width and depth of upgrading canal</td><td>Cross surface is rectangular with dimension
<table>
<tr><td></td><td>Canal</td><td>Width x depth (W X H)m</td><td>Design Capacity (m^3 /s)</td></tr>
<tr><td></td><td>North canals</td><td></td><td></td></tr>
<tr><td>1</td><td>Canal N3</td><td>2.7 x 1.4</td><td>0.793</td></tr>
<tr><td>2</td><td>Canal N6</td><td>1.2-2.0 x 1.0</td><td>0.102</td></tr>
<tr><td>3</td><td>Xuan Hoa Canal 2</td><td>1.0 x 0.8</td><td>0.26</td></tr>
<tr><td>4</td><td>Xuan Hoa Canal 3</td><td>1.0 x 0.8</td><td>0.128</td></tr>
<tr><td></td><td>South canals</td><td></td><td></td></tr>
<tr><td>5</td><td>Hoc Ram main canal</td><td>0.5- 0.8 x 1.0</td><td>0.223</td></tr>
<tr><td>6</td><td>Tan My canal</td><td>1.0-1.2 x 1.0</td><td>0.332</td></tr>
<tr><td>7</td><td>Canal N1-Hoc Ram</td><td>0.6 x 0.6</td><td>0.104</td></tr>
<tr><td>8</td><td>Canal N8-2</td><td>0.9 x 0.8</td><td>0.173</td></tr>
<tr><td>9</td><td>Canal N8</td><td>0.8-1.2x0.8-0.9</td><td>0.224</td></tr>
</table>
</td></tr>
<tr><td>Structures on canal</td><td>– 107 inlet culverts on the branch canal
– 2 bridges over the canal;</td></tr>
<tr><td>The width and length of management road</td><td>Upgrading of 24.290 km of road , included:
▪ 17.498 km of canal embankment and management road combined interior field traffic road;
▪ 6.792 km of village rural road, of which 3,716.15m from the starting point of N1 canal’s lelf bank to Aquaculture Experimental Establish & 3,075.60 m from Hoi Cu village to Storehouse ground of Phu Khanh Commune-Tay Hoa District
▪ 23 culverts and 2 slab bridges along canal embankment road & village rural road</td></tr>
<tr><td colspan="2">CONSTRUCTION ACTIVITIES</td></tr>
<tr><td>Construction commencement date (month/year)</td><td>Expect Oct 2015</td></tr>
<tr><td>Construction completion date (month/year)</td><td>Expect Dec 2016</td></tr>
<tr><td>Number of construction workers</td><td>Approx. about 150 - 200 workers (average)</td></tr>
<tr><td>Construction camp required (Yes/No)</td><td>Yes. About 5 worker camps (30-40 workers/camp)</td></tr>
</table>

<table>
<tr><th>DATA ITEM</th><th>SUBPROJECT DATA</th></tr>
<tr><td>Construction in rainy season (Yes/No)</td><td>In case of favorable weather conditions</td></tr>
<tr><td>Number and conditions construction vehicles and equipment</td><td>+ Excavators: 02 units;
+ Bulldozers: 06 units;
+ Dump-trucks: 30 units;
+ Concrete compactors of all kinds: 20 units;
+ Water pumps: 04 units; Generators: 02 units; Water spraying vehicles: 04 unit;
+ Oil trucks: 01 unit;
+ Cutters, benders: 10 units;
+ Concrete mixing machines: 10 units;</td></tr>
<tr><td>Location and square of disposal site and sources of materials</td><td><u>Permanent disposal site:</u>
Dumping ground in Hoa Quang Nam Commune – Phu Hoa District with a distance about 8-10 km far from the Site. <u>Temporary gathering site:</u>
Along the canal banks have some wild area where use for gathering material. This does not affect residential area
<u>Sources of materials:</u>
Sand and gravel taken from the Ba River in Hoa An Commune& Ben Sach river in Hoa Tan Tay Commune , an average of about 5 km to the Site ; the sand is exploited under license from DONRE.
Stone: from Chinh Nghia Quarry (at Km 1325 –NH1), Suoi Coi Quarry – Minh Anh Company in Hoa Phu Commune-Tay Hoa District (at Km 49-NH29) about 12-15 km to the site
Other materials (cement, steel & others): to buy in Phu Hoa and Tuy Hoa City around 7km to the Site;
Borrow area: will be exploited at Dong Dinh , Suoi Coi, An Phu about 12-14 km to the subproject site & approved by Local Authority
Cement and steel: supplies from Phu Hoa and Tuy Hoa City to work around 7km;.</td></tr>
<tr><td>Quantity of excavated soil & filling soil</td><td>
<table>
<tr><th>No</th><th>Items</th><th>Unit</th><th>Management road combined interior field traffic road</th><th>Canal</th><th>Structures on the canals</th><th>Total</th></tr>
<tr><td>1</td><td>Excavated soil</td><td>m^3</td><td>28,350</td><td>9,451</td><td>80</td><td>37,881</td></tr>
<tr><td>2</td><td>Filling soil</td><td>m^3</td><td>39,240</td><td>14,291</td><td>295</td><td>53,826</td></tr>
</table>
</td></tr>
<tr><td>Balancing and management measures for excavated/excess soil</td><td>The excavated soil will be used for backfill of management / production road along the canal system</td></tr>
</table>

<table>
<tr><th>DATA ITEM</th><th>SUBPROJECT DATA</th></tr>
<tr><td>Quantity of construction materials</td><td>
<table>
<tr><th>No</th><th>Items</th><th>Unit</th><th>Management road combined interior field traffic road</th><th>Canal</th><th>Structures on the canals</th><th>Total</th></tr>
<tr><td>1</td><td>Concretes</td><td>m^3</td><td>13,826</td><td>1,.683</td><td>224</td><td>14,052</td></tr>
<tr><td>2</td><td>Stones</td><td>m^3</td><td>1,167</td><td></td><td></td><td>1,167</td></tr>
<tr><td>3</td><td>Steel</td><td>kg</td><td></td><td>34,325</td><td>2.731</td><td>34,328</td></tr>
<tr><td>4</td><td>Formwork</td><td>m^2</td><td>23,643</td><td>59,937</td><td>897</td><td>84,477</td></tr>
<tr><td>5</td><td>Canvas</td><td>m^2</td><td>128,359</td><td></td><td></td><td>128,359</td></tr>
<tr><td>6</td><td>Sand</td><td>m^3</td><td>3,836</td><td></td><td></td><td>3,836</td></tr>
<tr><td>7</td><td>Bitumen paper</td><td>m^2</td><td>110,042</td><td>1,079</td><td></td><td>111,121</td></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>8</td><td>Geotextile ART 17</td><td>m^2</td><td></td><td>51,221</td><td></td><td>51,221</td></tr>
</table>
</td></tr>
<tr><td colspan="2">OPERATION AND MAINTENANCE ACTIVITIES</td></tr>
<tr><td>Design Capacity at canal: (m3/s)</td><td>Design capacity for all canal – grade 1: 0.102 – 0.793 m^3 /s</td></tr>
<tr><td>Subproject irrigated area (ha)</td><td>17,700 ha will be irrigated sustainability by gravity</td></tr>
<tr><td>Cycle of water treatment</td><td>No. Water source from Ba river has been using for irrigation purpose. Currently, there is no cycle of water treatment</td></tr>
<tr><td>Operation, management and maintenance Unit</td><td>Phu Yen Province’s One Member Irrigation Limited Liability Company is responsible for operation, management and maintenance after the completion of the work</td></tr>
<tr><td>Maintenance activities</td><td>(i) Regular operate and maintain:
Carry out regularly to minimize broken for works, including: drainage canal heart, do clearance, repair temporary broken, maintain exhaust and paint for mechanical equipment
(ii) Periodically operate and maintain
Carry out for broken and downgraded section to restore works item. Displace mechanic items and repair broken, carry out dredging and maintain canal side.
Frequency: twice/ a year
(iii) Operation and maintenance in case of emergency: carry out repair for broken and downgraded items. Carry out check, propose technical method and cost for repairing based on current regulation of State.</td></tr>
<tr><td colspan="2">RESETTLEMENT AND LAND ACQUISITION [3]</td></tr>
<tr><td>Number of Affected households</td><td>Total land acquisition: 153,164 m^2 (from RP)</td></tr>
<tr><td>Number of severely affected person</td><td>Nil</td></tr>
<tr><td>Number of APs that must relocate</td><td>Nil</td></tr>
</table>

[3] This data is obtained from Resettlement Plan

DATA ITEM	**SUBPROJECT DATA**	
Total land area to be acquired	Temporary: 0	Permanent : 153,164 m^2
Agricultural land area to be acquired (ha)	Temporary-	Permanent : 32, 382 m^2
Forestry land area to be acquired (ha)	Temporary-Nil	Permanent :Nil
Residential land to be acquired (ha)	Temporary-Nil	Permanent :Nil
Aqua-cultural land to be acquired (ha)	Temporary-Nil	Permanent :Nil
Garden land to be acquired(ha)	Temporary-Nil	Permanent : 22, 925 m^2
Other land to be acquired (ha)		Permanent: 97,857 m^2
SUBPROJECT COST		
Total subproject cost (VND and $USD)	**125,210,613,179 VNĐ; 5,893,373 USD** (at USD= 21,246 VND)	

Figure 1: Map of the subproject location

Figure 2: Map of the air and water quality monitoring locations

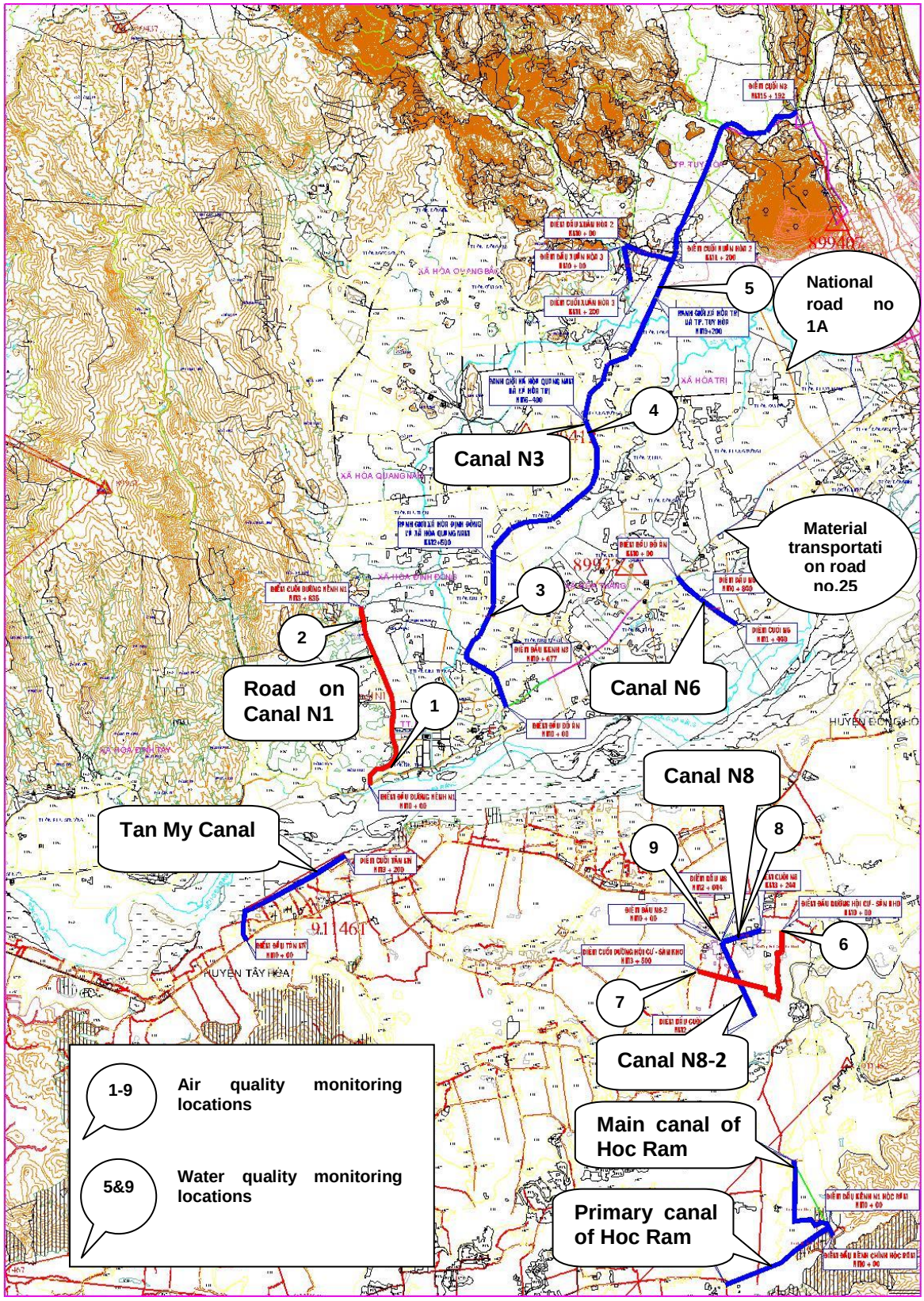


Figure 3: Map of the source of raw material

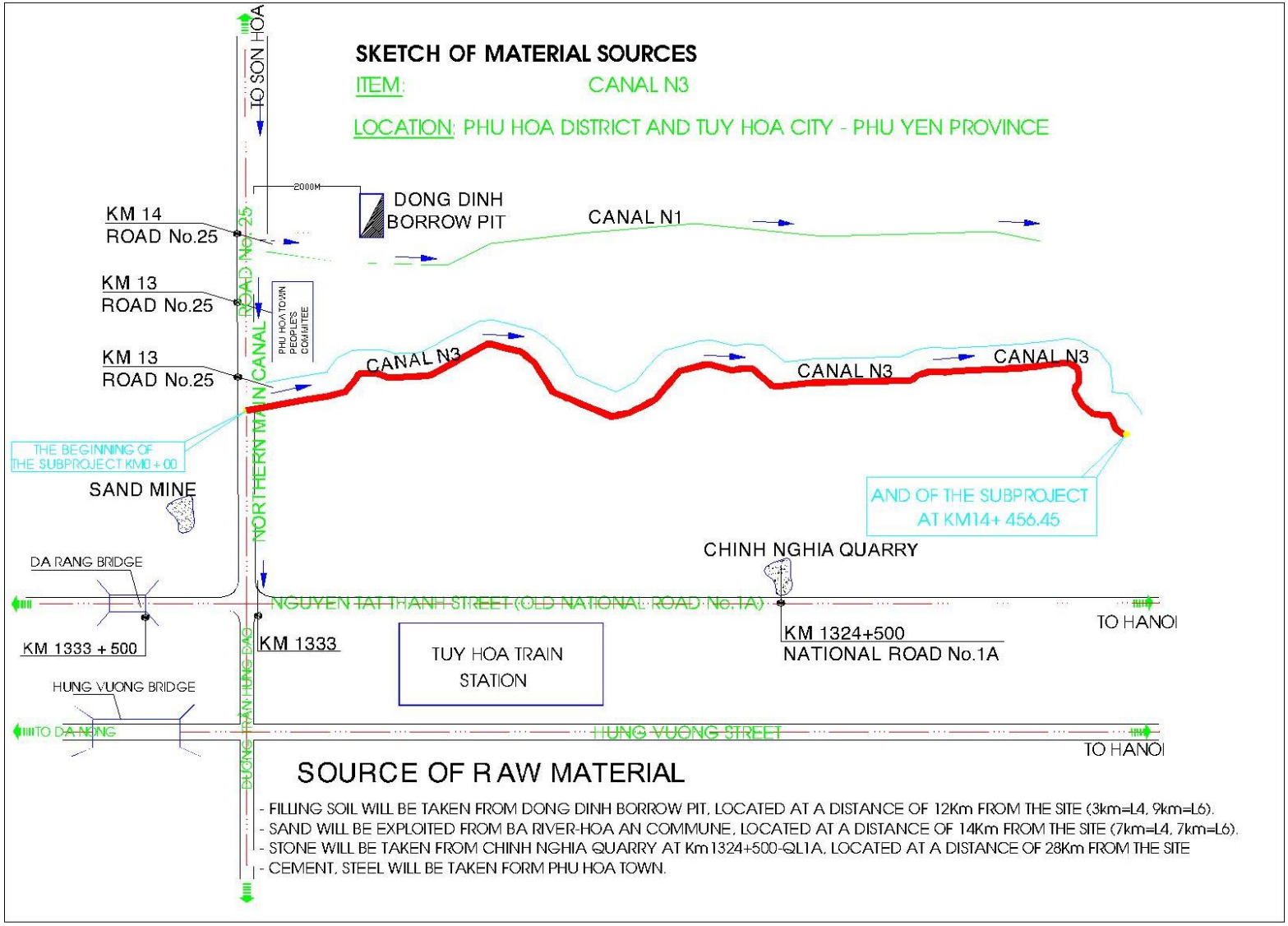


Figure 4: Map of the proposed north canals of Dong Cam Lai Giang Weir

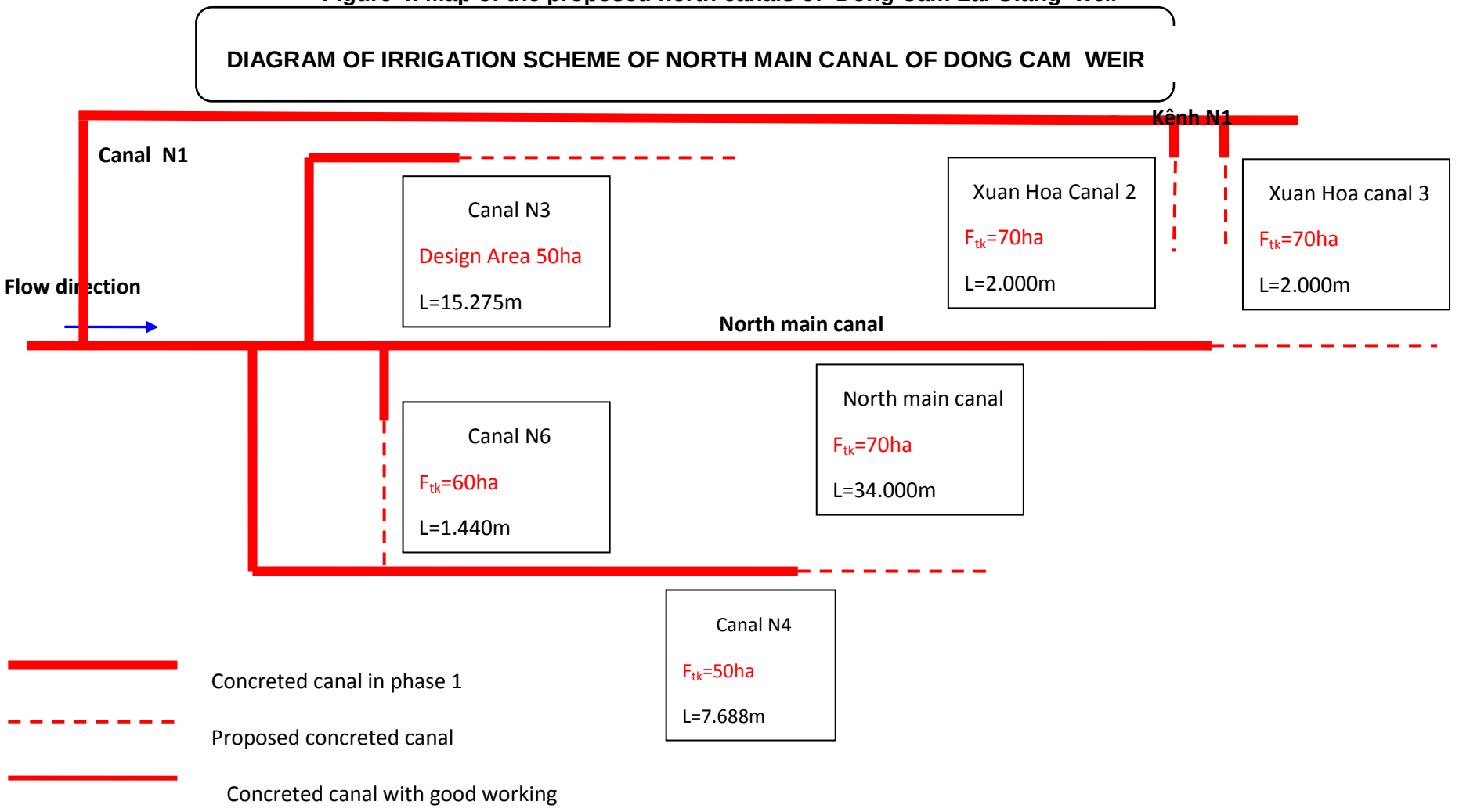
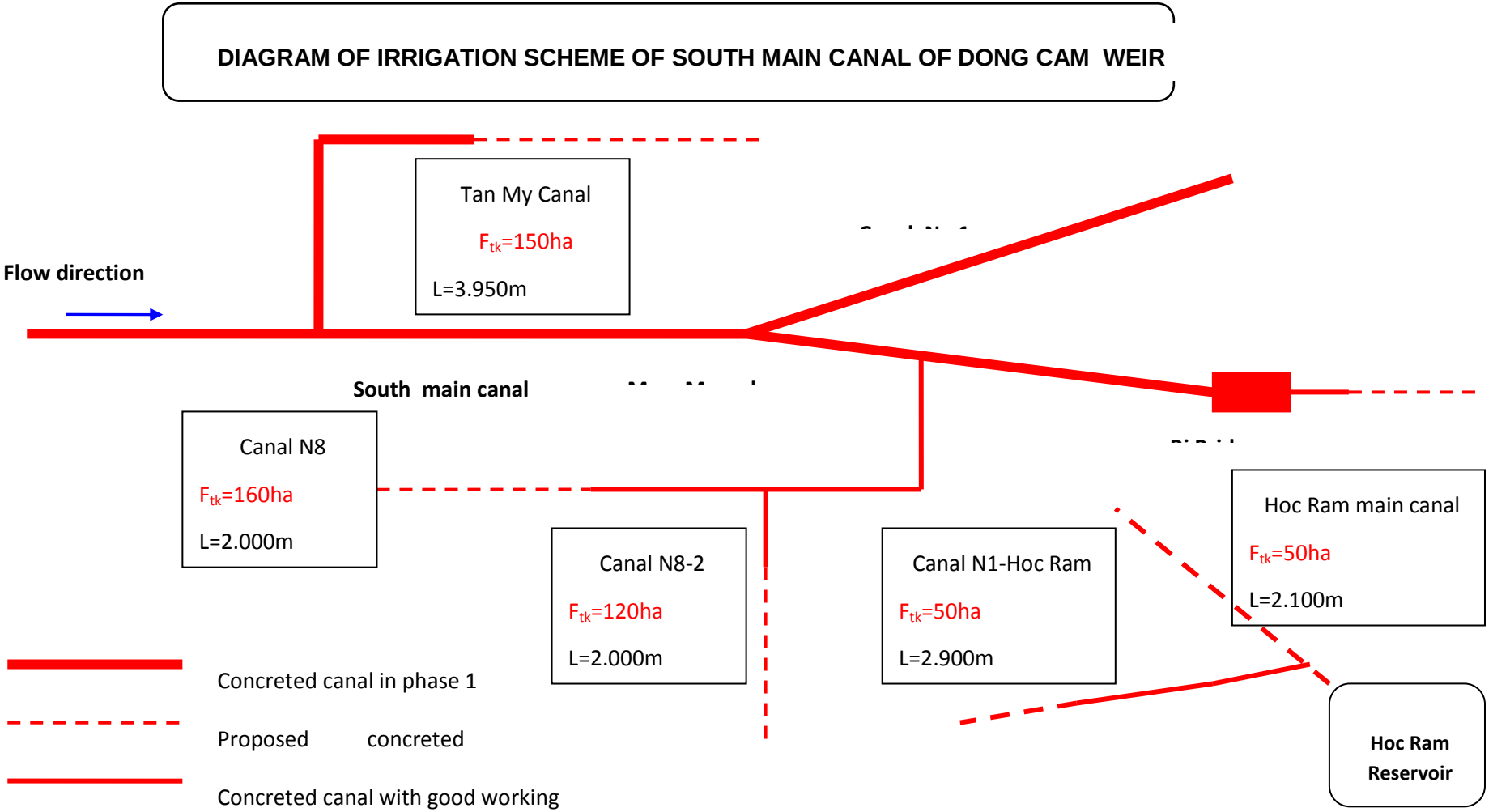


Figure 5: Map of the proposed north canals of Dong Cam Lai Giang Weir



3. DESCRIPTION OF EXISTING ENVIRONMENT

Table 2. Environmental baseline

DATA ITEM	SUBPROJECT DATA
PROJECT LOCATION	
Commune(s):	▪ Hoa Thang, Hoa An, Hoa Quang, Hoa Tri, Hoa Dinh Dong Communes of Phu Hoa District ▪ Hoa Kien, Commune of Tuy Hoa City ▪ Hoa Phu, Hoa Phong, Hoa Tan Tay, Hoa Thinh of Tay Hoa District
District:	Phu Hoa, Tay Hoa District, Tuy Hoa City
Province:	Phu Yen Province
Geographic location:	From $11^{o}32'$ N÷ $11^{o}40'$ N. From $108^{o}52'$ E ÷ $109^{o}04'$ E.
NATURAL ENVIRONMENT CONDITIONS	
Air quality	According to Results of Phu Yen Province's Center of Observation and Environmental Analysis in 2013, the level of CO, NO_2, SO_2 at subproject area is in the allowable limit of QCVN 05: 2009/BTNMT(in Subproject area : TSP: 0.03 – 0.14 mg/m^3, CO, NO_2, SO_2: undetected) There is none construction activities, mostly is from commune transportation activities. In dry season, dust is generated from passing vehicles. (along NH25 and inter-district/inter-commune road). Generally, air quality in the entire region is good .
Noise and vibration	Because of rural area, noise and vibration is very low, Noise level in the subproject area is low and there is nil impact on local people.(noise level in the project area : 51.4- 64.8 dBA, except Hoa An-Hoa Tri crossroads, noise level exceed allowable limit 1.05 – 1.13 times, compared to QCVN 26:2010/BTNMT due to traffic means activities –(Source: Phu Yen Province's Center of Observation and Environmental Analysis, 2013)
Climate and natural disasters	The subproject is located in a tropical monsoon area with two seasons: the dry season begins from January to August, rainfall accounts only 20÷30% and the rainy season begins from September to December, rainfall accounts for 70÷80%. Drought often occurs from April to August when surface water flow of Ba river is low, affecting agricultural activities and the daily life of residents in the subproject area. Floods in the rainy season are typical of areas with sloping terrain and short river lengths. Early floods occur from May and June while the main flood is from September to December.
Topography and soils	Topography of subproject area is a plain with altitude is 10÷15m. The lowest area of hollow is Dam Nai (area of 650 ha in Phu Hoa district) and the river mouth of Ba River of which altitude is 1÷2m. the slope of this area varies from 0,001÷0,005, gradually lower from West to East; The surrounding of irrigation area is the transition area between mountain and plain, of which altitude is 50÷15m. Pumping irrigation methods can be applied in this area for agriculture cultivation; Ba river is the largest one flows through subproject area, divides

DATA ITEM	SUBPROJECT DATA
	irrigation area into 2 separate area. In addition, it is also the main drainage axis of the subproject area.
Water bodies	The Ba river is largest river in the subproject area. In general, rivers characteristic in Phu Yen Province are short, high slope (>2%), downstream of rivers are affected by tide and salt water instruction (*The river is called many different names through different localities in these provinces. The upstream flowing through the districts of Son Hoa, Song Hinh, Phu Hoa, Tay Hoa is named Ba river or Ea Ba, Krong Pa. The downstream from Dong Cam to the sea in the south of Tuy Hoa city is named Da Rang River)* The Dong Cam Weir's water is supplied by Ba River *Ba river's hydrological characteristic:* Catchment area: 13,900 km^2 (In Phu Yen territory, its catchment is only 2,420km 2 in total area and 90km long) Total annual water volume: 9.5 billions m^3 (This distributed unevenly through the year, total water generated in 4 months from September to December of flood season contributes 70-80% of the total annual water flow. In dry season, which lasts 8 months from January to August, the water flow provided is only 20-30%)
Groundwater	Groundwater level is at the depth of 2 to 7m by deep wells observation. Changes of groundwater level depend on the season as 5 to 7 m in depth in dry season but about 2m from soil surface in rainy season. Currently, groundwater is mainly used for domestic water and daily living demand but it has not been used for production activities. Urban People of subproject area often use water from water treatment plant which is qualified and controlled according to standard; at rural area, people used water from drilled or wells; According to Results of Phu Yen Province's Center of Observation and Environmental Analysis in 2013 shows that groundwater in the subproject area polluted symbolically such as parameters: pH, hardness, TS, COD, Fe, NO2-, Cl- are within allowed limits compared to Vietnamese Standard -QCVN 09: 2008/BTNMT; other parameters as NH4+, NO3-, at some wells, especially coliform at most of wells exceed allowed limit (NH4+ exceeds 2.2 times, NO3- exceeds 1.53-7.8 times, coliform exceeds 7 - 800 times); level of heavy metals as Cyanide(CN-), Cr 6+, Fe at all observed wells are not detected
Water quality	The results of water quality analysis in 2013 from Phu Yen Province's Center of Observation and Environmental Analysis show that most of parameters at Dong Cam Weir and Ba river at Hoa Dinh Tay Commune are within allowed limits compared to Vietnamese Standards (QCVN 08: 2008/BTNMT, Column B1 use for irrigation water), except PO_4^{3-} exceeds 9.5 – 12.8 times, COD exceeds 1.06-1.26 times, Coliform exceeds 1.05-1.46 times. So that water from Dong Cam and Ba river in subproject area is polluted symbolically by agricultural production activities and rubbish…
Flooding	Flooding often occurs twice a year (mainly flood from September and October).

DATA ITEM	SUBPROJECT DATA
Terrestrial flora and fauna	*Terrestrial flora*: mainly rice field and fruits and vegetables gardens in residential areas; Along the canal bank, mainly industrial trees: acacia, bushes …but no valuable and rare trees are available in this area. *Terrestrial fauna:* - Wild animals live on field, including some reptile kinds (python, snake), small beasts like rats, etc.. - Domestic animals like buffalo, cow, pig, chicken, ducks, etc many types of freshwater fish, etc; Terrestrial flora and fauna in subproject area are not listed in Vietnam's Red Data Book.
Aquatic flora and fauna	Aquatic product include freshwater fish in canal and ponds; Aquatic flora and fauna in subproject area are not listed in Vietnam's Red Data Book.
Protected areas	There is no protected area in the subproject area.
SOCIAL ECONOMIC CONDITIONS	
UXO	Canal have been constructed based on the existing route, currently, there is no possibility of UXO
Land use	Most of land areas serves for agriculture, forestry, aquiculture purposes According to Phu Hoa & Tay Hoa District's Statistic Books, agricultural and forest land occupy 74% of total land area
Nearest residential land	Upgrading canal goes through residential land of Hoa Thang commune. Nearest distance is about 50 meters.
Rural infrastructure	Rural infrastructure works in subproject including electric system, roads, railway, schools at all level, hospitals, medical centers, public houses at communes/districts, etc. There are 03 primary schools, 03 secondary schools, 1 high school and 03 medical care center. These infrastructures are not located near the canal, so that activities during construction period have no impact on existing infrastructure except for taking advantage of rural road to transfer material.
Agriculture and aquaculture	▪ Agriculture: mainly rice, bean, maize, sweet potato, and cassava, peanuts and other crop tree; ▪ Aquaculture: fish raising following garden-pond-cage model
Population of beneficiary area	Total population of the subproject area in 2013 is 142,940 ; of which 49.5% of male, 50.5% of female (Source: from SIR of the Dong Cam Subproject)
Ethnic minorities	No ethnic groups are living in the subproject area.
Livelihoods	▪ According to annual statistic in 2013 of Phu Hoa and Tay Hoa District, currently average poor rate is about 14-16%, ▪ About 70-75% population in subproject earn living from forest-agriculture production , average income is about 4-5 millions of VND/ person/per year ▪ In addition to agriculture production, local people earns living from husbandry, such as pig, cow, buffalo chicken and duck… and tradition trade such as pottery, weave fabric, rice paper, rice vermicceli…to

DATA ITEM	SUBPROJECT DATA
	improve their life and income.
Physical and cultural heritage	No physical and cultural heritages are locating within subproject area
Public health	The Subproject communes having a medical station are 100% and there are 9 commune medical stations in the whole subproject area. In general, the quality of medical examination and treatment, also of medical equipment and material facilities is improved In 2013, water borne illnesses were dominated by Diarrheal , Dengue fever and Dysentery, Sore Eyes, sore throat, etc

4. ENVIRONMENTAL IMPACT SCREENING

Table 3. Environmental impact screening

IMPACT	POTENTIAL IMPACT				BRIEF DESCRIPTION OF IMPACT LOCATION AND SCOPE
	YES / NO?	IS IT MINOR OR SIGNIFICANT?	IS IT POSITIVE OR NEGATIVE?	IS IT TEMPORARY OR PERMANENT?	
Pre-Construction Stage Impacts					
Environmentally responsible procurement and SEMP preparation	Yes	N/A	N/A	N/A	Environmental requirements in biding documents and civil work contracts will take importance role to fully reflect environmental protection cost of the civil works and engage the environmental responsibilities of civil contractors. Any missing of environmental management cost will create high risks of implementing mitigation measures during the construction phase due to lack of resources and capacity. Thus, environmental protection cost and responsibility need to involve at the beginning. A Site Environmental Management Plan (SEMP) will help the contracts deeply understanding on environmental requirement and preparing detail/specific mitigation action on the site, therefore, the an appropriate SEMP will help to implement actual mitigation measures and identify any unanticipated environmental impacts and propose additional mitigation measures.
Construction materials management plan	Yes	N/A	N/A	N/A	Materials Management Plan (MMP) detailing arrangements to be made to facilitate the timely production and supply of construction materials to avoid impacts due to unnecessary stockpiling outside the Project site.
Spoil and Waste Disposal Plan	Yes	N/A	N/A	N/A	Waste Management and Spoil Disposal Plan is prepared for storage, treatment, transport and disposal of solid and liquid wastes, hazardous materials, hazardous wastes and excavation spoils. Ensuring disposal of excavation spoils will not cause negative visual impacts. The plan will also provide details of a trip ticket system to ensure that contractors dispose excavation spoils in approved areas. Such system will be designed so that the PPMU and construction supervisors could readily monitor the volume and disposal site of excavation spoils, and to ensure that the total volume of spoils disposed will not exceed the maximum capacity of

IMPACT	POTENTIAL IMPACT				BRIEF DESCRIPTION OF IMPACT LOCATION AND SCOPE
	YES / NO?	IS IT MINOR OR SIGNIFICANT?	IS IT POSITIVE OR NEGATIVE?	IS IT TEMPORARY OR PERMANENT?	
					disposal site (landfill). Domestic waste collection and management also need to set plan during this phase to avoid missing implementation resources and ensure sanitation issues on the site
Disturbance of UXO	No				The canal is upgraded from existing alignment. The subproject is located in rural area, consisting of agricultural cultivation area, existing residential area. Thus, there is no possible of UXO
Impacts on households from loss of residential or agricultural land	Yes	Minor	Negative	Permanent	There is no household requiring relocation in the subproject. The upgrading of canals will need some land acquisition. It is agricultural land. Total land acquisition: land: 54.166,20 m^2, of which yearly tree land: 17,047.50 m^2, rice land: 37,118.70m^2 (from The Subproject Investement Report)
Construction Stage Impacts					
Erosion or sedimentation caused by during clearing or earthworks	Yes	Minor	Negative	Temporary	**Description:** In the work of excavating and filling the canal embankment, construction of the facilities on the canal (culvert gate receiving water from branch canal, flood spillway) if excavated soil is not collected then siltation will be occurred, obstruct the water transmission capacity from the main canal to branch canal. However, the excavated soil will be used for upgrading of management production road along the canal system Soil from excavation of canal canal bank fill (water inlet, lateral spillway) not collected causing sedimentation in the canal bed, preventing water flow from main canal into the branches; sedimentation may affect the rice fields and the farming of the local peoples; **Location**: along 9,571.7km of north canals and 9,834.7km of south canals; at location of culvert to branch canals, rice fields closed by the upgraded canal;

IMPACT	POTENTIAL IMPACT				BRIEF DESCRIPTION OF IMPACT LOCATION AND SCOPE
	YES / NO?	IS IT MINOR OR SIGNIFICANT?	IS IT POSITIVE OR NEGATIVE?	IS IT TEMPORARY OR PERMANENT?	
					Objects: - Cultivated land, rice fields closed by the subproject canals - Local peoples in beneficiary area **Impact level**: Minor due to excavated volume soil is designed to fill embankment and managed road. **Impact duration**: about 24 months;
Polluted soil due to leakage of oil and other chemical substances.	Yes	Minor	Negative	Temporary	**Description:** In the process of pumping for dry foundation holes for the canal construction and other works on the canal, oil and grease leakage will generate canal water pollution. **Location**: at the subsection of canal under construction along the primary & secondary canal (9,571.7 km of north canals and 9,834.7 km of south canals to be upgraded) **Objects** - The subproject canal's water quality - Local peoples in the beneficiary project area **Impact level**: Machine oil and grease pollution on the canal and facilities is small as: (i) construction activities are mainly manual, small number of construction machines (see project description); (ii) construction activities are scattered on a 9,571.7 km of north canals and 9,834.7 km of south canals; thus, the oil and grease emitted is insignificant; **Impact duration**: about 24 months;
Generate a big quantity of dredged soil which can be reused	Yes	Minor	Positive	Temporary	**Description:** Excavated soil: 37,881m ^{3} and Filling soil : 53,826m^3 About 80% of excavated soil of all types: 30,305 m3 can be reused for re-filling embankment and management road. Thus, most of excavated soil which can be reused and will not impact on environment.

IMPACT	POTENTIAL IMPACT				BRIEF DESCRIPTION OF IMPACT LOCATION AND SCOPE
	YES / NO?	IS IT MINOR OR SIGNIFICANT?	IS IT POSITIVE OR NEGATIVE?	IS IT TEMPORARY OR PERMANENT?	
					Discarded soil quantity: 7,576 m^3 (20% of excavated soil). This soil will be dumped at dumping ground in Hoa Quang Nam Commune with a distance about 8-10 km far from the Site. **Location**: Along 9,571.7 km of north canals and 9,834.7 km of south canals to be upgraded **Objects**: Local peoples in the subproject area **Impact duration**: about 24 months;
Impacts from temporary storage site for construction materials, including: dust, noise.	Yes	Minor	Negative	Temporary	**Description:** Total quantity of materials needed for construction is estimated as: Steels: 34.328 tons; Stone: 1,167 m^3; Sand: 3,836 m^3 and Wood frames: 84,477 m^2 - Stone, sand will be located near the construction site where uncultivated land to minimize affecting on living residents; - Steel, cement, bitumen will be stored at commune PCs, other public buildings or in rented houses. Transportation of material will generate noise, dust which affect local residents along transportation roads (NH29, inter-district & inter-commune roads with allowed loading capacity from 7 to 10 tons. Some road sections run though residential areas as Dinh Thai, Dinh Thanh Villages, Hoa Thinh Dong, Long Phung & Phung Tuong Villages-Hoa Tri Commune, Hoi Cu & Phu Khanh-Hoa Tan Tay Commune **Location:** Temporary material store sites, material transportation roads **Objects:** - Local residents along transportation roads - Local residents living around temporary material store sites **Impact level:** is minor because (i) the volume of construction works is not high; (ii) there is only small households along the construction routes ; (iii) contractor will apply minimize methods to reduce noise, dust, therefore may be minimize impact on local people;

IMPACT	POTENTIAL IMPACT				BRIEF DESCRIPTION OF IMPACT LOCATION AND SCOPE
	YES / NO?	IS IT MINOR OR SIGNIFICANT?	IS IT POSITIVE OR NEGATIVE?	IS IT TEMPORARY OR PERMANENT?	
					Impact duration: estimated 12 months
Other impacts in quarries sites for construction material on dust, noise, working safety and water or soil pollution by exploitation activities:	Yes	Minor	Negative	Temporary	**Description:** Construction material transportation to the construction site will affect the local roads in the Subproject twelve communes. **Location**: - Soil will be is taken from Dong Dinh borow area , about 14 km to the subproject site - Sand and gravel taken from the Ba River (Da Rang river) & other rivers , an average of about 5 km to the Site ; the sand is operated under license from DONRE. - Stone: from An Phu Quarry, about 15 km to the site; the quarry is operated under licience from DONRE - Other materials (cement, steel & others): buy in Phu Hoa and Tuy Hoa City around 7km to the Site;. **Objects**: NH29, inter-district & inter-commune roads in the Subproject twelve communes - Local peoples around quarries & borrow areas - The workers in quaries - Water quality of water bodies near the quarries - Soil quality of borrow areas **Impact level:** Materials will be bought from sources which are licensed and confirmed by Local Authoritie. So only impact could be from dust and noise during the transport of materials from quarries to construction sites. Dust and noise will not be seriously affected because (i) loading capacity of vehicles is less than 10 tons, (ii) communal roads are almost structured of concrete with the width of 3-3.5m for higher bearing-capacity; and (iii) it is possible to control these impacts by applying noise and air pollution mitigation measures **Impact duration**: 12 months

IMPACT	POTENTIAL IMPACT				BRIEF DESCRIPTION OF IMPACT LOCATION AND SCOPE
	YES / NO?	IS IT MINOR OR SIGNIFICANT?	IS IT POSITIVE OR NEGATIVE?	IS IT TEMPORARY OR PERMANENT?	
Pollution of waterways, aquatic environments or underground water from wastes, chemicals or waste water	Yes	Minor	Negative	Temporary	**Description:** In the process of pumping out water to dry foundation holes for the canal construction and other works on the canal, oil and grease leakage will generate water pollution. **Location**: along 9,571.7 km of north canals and 9,834.7 km of south canals to be upgraded) **Objects**: - The subproject canal's water quality - Aquatic environments: - Groundwater quality around the subproject canals **Impact level**: Minor level because: (i) The construction is mainly implemented manually, the number of construction machines is small; (ii) the construction is scatted along the canal, thus the concentration of the uncontrolled waste, oil and grease leaking is not remarkable; **Impact duration**: 12 months
Making sensitive flora disappeared and deteriorated	No				The construction sites are in existing agricultural lands
Dust and exhaust fume from construction equipment and machinery	Yes	Minor	Negative	Temporary	**Description**: Dust and exhaust will be generated from operation of any construction equipment, vehicles and machineries. The dust also released from uncovered surface which could create impacts on local people health and workers on the site. **Location**: along 9,571.7 km of north canals and 9,834.7 km of south canals to be upgraded) **Objects**: - The subproject workers

IMPACT	POTENTIAL IMPACT				BRIEF DESCRIPTION OF IMPACT LOCATION AND SCOPE
	YES / NO?	IS IT MINOR OR SIGNIFICANT?	IS IT POSITIVE OR NEGATIVE?	IS IT TEMPORARY OR PERMANENT?	
					- Local people in the subproject area **Impact level**: Minor level due to construction activities on canal do not cause dust or exhaust, because (i) the quality of machine has been registered, controlled and maintained periodically, (ii) Dust and noise is mainly from transportation process of construction material. (iii) There are only small numbers of households living along construction routes . **Impact duration**: Estimate 12 months
Noise from construction machine	Yes	Minor	Negative	Temporary	**Description**: Noise and vibration will be generated from operation of any construction equipment, vehicles and machineries, which could create impacts on local people close to and worker on the sites. **Location:** along 9,571.7 km of north canals and 9,834.7 km of south canals to be upgraded & residential area near by Subproject Site **Objects**: - The subproject workers - Local peoples in the subproject area **Impact level**: is minor, because (i) Number of vehicles, construction equipment and machinery is not remarkable, therefore, noise level will be under allowed limit level; (ii) There are only small residential areas living sparsely along construction routes. **Impact duration**: Estimate 12 months
Increase flooding time and area	No				Canals will take the function of irrigating water for cultivation areas and take no function of drainage; therefore the drainage of the area will not be affected by construction activities;
Effects on infrastructure works like telephone	No				Main and branch canals of Dong Cam Irrigation System will be constructed following the existing route and will not affect the infrastructure works;

IMPACT	POTENTIAL IMPACT				BRIEF DESCRIPTION OF IMPACT LOCATION AND SCOPE
	YES / NO?	IS IT MINOR OR SIGNIFICANT?	IS IT POSITIVE OR NEGATIVE?	IS IT TEMPORARY OR PERMANENT?	
cables and drainage system, etc.					However, canal construction through along cultivation areas may have effects on rice productivity of farmers living in the Subproject Communes ;
Employment or livelihood benefits from employment of local people	Yes	Moderate	Positive	Temporary	**Description:** Local labors (who have professional skills and simple labor) could be employed for construction; their livelihood/living standard could be remarkably improved thanks to extra works **Location**: project area and adjacent areas in 9 Subproject Communes in Phu Hoa and Tay Hoa Districts as described in item: "The Subproject Communes " in Table 2 " Environmental Baseline " **Objects**: Local peoples in the subproject area **Impact duration**: about 12 months
Effects on social aspect due to workers at site	Yes	Minor	Negative	Temporary	**Description:** concentration of workers on the site could create conflict with local people and create high risks of social evil and disease. **Location**: At camps and in nearby residential areas in the Subproject's nice Communes. **Objects**: Local peoples in the subproject area **Impact level:** The presence of workers from other localities may cause social evil such as gambling, theft, drug, prostitution, etc.. However, these impacts are insignificant because workers will be registered with local police & strict management of Contractor **Impact duration:** estimate 12 months;

IMPACT	POTENTIAL IMPACT				BRIEF DESCRIPTION OF IMPACT LOCATION AND SCOPE
	YES / NO?	IS IT MINOR OR SIGNIFICANT?	IS IT POSITIVE OR NEGATIVE?	IS IT TEMPORARY OR PERMANENT?	
Risks to public or	Yes	Minor	Negative	Temporary	**Description**: Risks to public and construction worker health or safety could be raised due to the following reasons: - Construction machines and equipment are arranged along the canal, obstructing the travelling of the residents and endangering the traffic, especially at nights; - There will be the risk of unsafe traffic conditions on the commune road, especially at intersection with residential road. - Dust and noise from material transport will have impacts on daily life of residents living in the subproject area; - There will be the risk of site incidents on workers due to the improper use of equipment and machines; **Location**: residential areas along the transport roads as Dinh Thai, Dinh Thanh Villages, Hoa Thinh Dong, Long Phung & Phung Tuong Villages-Hoa Tri Commune, Hoi Cu & Phu Khanh-Hoa Tan Tay Commune **Impact level**: the above risks are insignificant because (i) the contractor will control the arrangement of equipment on site; (ii) travel demand on road along the canal is not high; ii) material transport will be carried out in day time to avoid the rest time of residents; (iv) the contractor will conduct training courses on labor safety for workers prior to the subproject commencement; **Impacted duration**: estimate 12 months;
Effects on nearby heritages such as graves, pagodas…	No				No heritage items such as graves, pagodas, etc. will be near subproject.
Effect on nearby stone and sand	No				All the materials will be supplied/ bough from licensed sources & quarries

IMPACT	POTENTIAL IMPACT				BRIEF DESCRIPTION OF IMPACT LOCATION AND SCOPE
	YES / NO?	IS IT MINOR OR SIGNIFICANT?	IS IT POSITIVE OR NEGATIVE?	IS IT TEMPORARY OR PERMANENT?	
exploring areas, including: dust, noise, land pollution caused by exploring activities					
Risks of natural calamity	Yes	Minor	Negative	Temporary	**Description**: In subproject may be happen flood and storm (there are 3 – 4 floods & storms /year), most in October and November, Storm and flood often causes flooding **Location**: along 9,571.7km of north canals and 9,834.7km of south canals to be upgraded **Objects**: - Local peoples in the subproject area - The subproject canals **Impact level:** Natural calamity will have serious affects on resident life as well as economic growth in the region. However, directly impacts on canal is minor because its position in paddy field, not directly suffered from river **Impact duration**: estimate 12 months
Solid waste generated from construction activities or camp	Yes	Minor	Negative	Temporary	**Description:** solid waste generate from construction sites could be included: i) domestic waster from daily activities of worker, ii) construction waste from excavation actives and hazardous waste, which need to be collected, transported and treated appropriately to avoid any impacts on surrounding environments and human health. Domestic wastes including solid waste and wastewater in construction camp could cause water and air pollution along canal **Location**: Worker Camp and construction site. **Objects**: - Air quality in & around worker camps

IMPACT	POTENTIAL IMPACT				BRIEF DESCRIPTION OF IMPACT LOCATION AND SCOPE
	YES / NO?	IS IT MINOR OR SIGNIFICANT?	IS IT POSITIVE OR NEGATIVE?	IS IT TEMPORARY OR PERMANENT?	
					- Water quality of water bodies near by worker camps - Workers living in the camps **Impact level**: will be minor as Contractor will collect and manage waste. Impact duration: estimated 12 months
Affect irrigation water supply system for agriculture production	Yes	Minor	Negative	Temporary	**Description:** Construction of main and branch canals requires dry construction area, meaning of stop water flow in the existing canal. There will be a conflict between water demand for agriculture and construction demand during cultivation period and construction time; **Location**: Primary canal and downstream cultivation area; **Objects**: - Cultivated land, rice fields irrigated by the subproject canals - Local peoples/farmers using water supply by the project canals **Impact level**: Irrigation schedule could be changed flexibly to construction time. (Construction time should be the same time that Dong Cam Irrigation System stop water supply for major repairs or after harvesting Summer-Autumn Crop & before starting Winter-Spring Crop, construction time is proposed: from 15 April to 15 May, then the end August to 15 September); therefore this impact could be mitigated and impact level is considered at small level; **Impact duration**: during construction time
Impacts in operation stage					
Vegetables and trees areas will be flooded due to water	No				- Completion of 9,571.7 km of north canals and 9,834.7 km of south canals and auxiliary works in canal will ensure the irrigation capacity of 17,700 ha for two crops in the subproject communes in Tuy Hoa City, Phu Hòa and Tay Hoa Districts, Phu Yen

IMPACT	POTENTIAL IMPACT				BRIEF DESCRIPTION OF IMPACT LOCATION AND SCOPE
	YES / NO?	IS IT MINOR OR SIGNIFICANT?	IS IT POSITIVE OR NEGATIVE?	IS IT TEMPORARY OR PERMANENT?	
filling/ storing and operation of irrigation canal					Province - Regulation works in these canals have adjusting valves to control the water level; Therefore, there will be no risk of flooding situation on cultivation areas.
Excessive exploitation of surface water and groundwater will make water supply capacity cannot catch up with demands and/or cause conflicts among households	No				- Reasonably exploit water source following approved design assignments (irrigation capacity has not reached the maximum rate as designed capacity (17,700 ha); - Further increase the water supply capacity to meet demands of water users, especially land area which has not been supplied with water for a long time from the project site; - Accordingly, conflicts among households will be remarkably reduced;
Water quality is changed due to salinity intrusion, aluminiferous water or sedimentation	No				- The area is not affected by seawater or tide, so it is not affected by salinity intrusion or alumiferious; - Sediment of the canal bed is dredged and the canal is upgraded by concrete instead of the earthen canal, so that the water quality will not be polluted by sediment.
Water is exploited at sensitive ecological places/or reservation areas	No				- There is no sensitive ecological areas or protection areas in the subproject area; - Water source for irrigation is taken from Ba river by Dong Cam Dam to serve a purpose of agricultural water supply
Changing living conditions and/or public health thanks to improved water supply	Yes	Significant	Positive	Permanent	**Location:** beneficiary area **Objects**: Local peoples in beneficiary area **Scope**: Living conditions and standard is improved thanks to providing of enough water for intensive cultivation demands in agriculture

IMPACT	POTENTIAL IMPACT				BRIEF DESCRIPTION OF IMPACT LOCATION AND SCOPE
	YES / NO?	IS IT MINOR OR SIGNIFICANT?	IS IT POSITIVE OR NEGATIVE?	IS IT TEMPORARY OR PERMANENT?	
Productivity is improved by increase of irrigation capacity	Yes	Significant	Positive	Permanent	**Location**: beneficiary area in 10 subproject communes of Tuy Hoa City, Phu Hoa & Tay Hoa Districts **Objects**: Local peoples in beneficiary area **Scope**: the cultivation area is increase, water supply is initiative; productivity and output are increased;
Cultivation habits will be changed due to the turning of land use for agriculture purposes	Yes	Significant	Positive	Permanent	**Location**: beneficiary area in 10 subproject communes of Tuy Hoa City, Phu Hoa & Tay Hoa Districts **Objects**: Local peoples in beneficiary area **Scope**: agriculture area is increased (mainly annual trees need to be irrigated with water) thanks to supplying sufficient water, land structure will be changed following extensive cultivation, cultivation productivity increase; accordingly changing the agriculture using customs;
Leaching nutrition from soil or salinity of soils due to excessive irrigation (not following irrigation regimes and specifications);	Yes	Minor	Negative	Permanent	There is not statistics or research in the area regarding the percentage loss of nutrients. Actually, the rate of soil nutrient loss is very small due to the cultivation in the plain with small slope that can not cause drift of soil when it rains or excessive irrigation. After the irrigation canal is complete, the regulating system will be facilitated and more flexible, hence, the land will not lose nutrients due to excessive irrigation; Location: beneficiary area in 10 subproject communes of Tuy Hoa City, Phu Hoa & Tay Hoa Districts Objects: - Soil quality of Cultivated land - Local peoples in beneficiary area Impact level: is small due to application of advanced technology in agriculture;
Soil erosion or scouring of streams or canals	No				The canal is reinforced by concrete so that soil erosion and land slide will not occur;

IMPACT	POTENTIAL IMPACT				BRIEF DESCRIPTION OF IMPACT LOCATION AND SCOPE
	YES / NO?	IS IT MINOR OR SIGNIFICANT?	IS IT POSITIVE OR NEGATIVE?	IS IT TEMPORARY OR PERMANENT?	
Affecting water quality due to the increased quantity of fertilizer or pesticide or chemical substances or waste water	Yes	Minor	Negative	Permanent	After constructing the canals, the cultivated area will increase about 550 ha. Consequently, the quantity of pesticides or chemical fertilizers will be increased. The amount of pesticides on field surface and drainage system will affect the quality of agricultural land and irrigation water, possibly groundwater. The risk will increase if the management of pesticides is not reasonable. Location: Benefit area: 17,700 ha for two crops Objects: Water quality of the subproject canal & others water bodies around the subproject area Impact level: is small due to famer will be trained & applied IPM method
Congested canals cause flooding situation	Yes	Negative	Minor	Permanent	In case of improperly operation and regulation of the culvert system, water will cause overflows and broke the canal. In addition, waste, weed growing on the branch canal can reduce water transmission capacity of the main canal; Location: along the main& branch canal, at gates of inlet. Objects: - The subproject canals - Local peoples in beneficiary area
Risks caused by natural calamity	Yes	Minor	Negative	Permanent	Natural calamity will have serious affects on resident life as well as economic growth in the region. However, directly impacts on canal is minor because its position in paddy field, not directly suffered from river or dynamic flow damage Location: Houses, Cultivated area & infrastructures in the project area Objects • Local peoples in the subproject area • The subproject canals
Changing the service approaching ability of local	Yes	Significant	Positive	Permanent	Management/ Production road along the upgraded main canal & primary & secondary canal in connection with existing traffic road network will increase the approaching ability of local residents to services from markets, areas for commodity and agriculture product exchange.

IMPACT	POTENTIAL IMPACT				BRIEF DESCRIPTION OF IMPACT LOCATION AND SCOPE
	YES / NO?	IS IT MINOR OR SIGNIFICANT?	IS IT POSITIVE OR NEGATIVE?	IS IT TEMPORARY OR PERMANENT?	
residents thanks to building approaching road for the work					Location: Subproject area Objects: Local peoples in beneficiary area
Affects on employment and livelihood	Yes	Significant	Positive	Permanent	Employment and jobs will be diversified thanks to the increase of project effectiveness; Location: Subproject area Objects: Local peoples in beneficiary area
Impacts on ethnic minorities	No	No	No	No	No ethnic minority living within project area;
Increase solid waste in productive area	Yes	Minor	Negative	Permanent	Agricultural wastes after harvest or waste of production activities such as insecticide cover, rice straw occurs popular. However, the canals are small and easily to clean by hand Location: Cultivated area Objects - The subproject canals - Local peoples in beneficiary area
Encroachment land in canal side	Yes	Minor	Negative	Permanent	May be occur the encroachment of land for agricultural activities along the upgraded 9,571.7 km of north canals and 9,834.7 km of south canals Location: along two sides of the subproject canals Objects: - Embankment of the subproject canals - Local peoples in beneficiary area

5. OUTLINE ENVIRONMENTAL MANAGEMENT PLAN (EMP)

5.1 Environmental Mitigation Plan

Table 4. Environmental mitigation plan

POTENTIAL IMPACTS	MITIGATION MEASURES	RESPONSIBILITY	COST
Pre-Construction			
Environmentally responsible procurement and SEMP preparation	▪ EMP is included in tender documents to ensure that mitigation measures are budgeted and to prepare the contractors for environmental responsibilities. ▪ Specify in bid document that Contractors shall engage capable and trained staff or site agent(s) 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 sub project proceeds. Contractors recruit qualified staff to oversee implementation of environmental and safety measures specified in the EMP. ▪ Any recent recommendations and initiatives from DONRE or other local environmental authorities will be incorporated in the EMP and updated as necessary. ▪ Before contracting based on the requirements of the IEE, contractors should prepare SEMPs for implementation by contractors. Such SEMPs shall not be in conflict with any provisions of the EMP in the IEE: Waste Management and Spoil, Disposal Plan, Materials Management Plan, Drainage Management Plan, Erosion Control Plan, Tree-cutting and Replanting Plan, Temporary Transport Management Plan, Utilities and Irrigation Re-supplying Plan, Noise and Dust Control Plan, and Workers and Public Safety Plan		Included in the contract
Construction materials management planning	As planed in design documents, the main construction material will be taken from existing quarries as: *Sand and gravel* taken from the Ba River in Hoa An Commune& Ben Sach river in Hoa Tan Tay Commune , an average of about 5 km to the Site ; *Stone*: from Chinh Nghia Quarry (at Km 1325 – NH1), Suoi Coi Quarry – Minh Anh Company in Hoa Phu Commune-Tay Hoa District (at Km 49-NH29) about 12-15 km to the site *Other materials* (cement, steel & others) : to buy in Phu Hoa and Tuy Hoa City around 7km to the Site;. *Borrow area*: will be exploited at Dong Dinh , Suoi Coi, An Phu about 12-14 km to the subproject site & approved by Local Authority *Cement and steel*: supplies from Phu Hoa and	Design Consultant, PPMU	Included in the contract

POTENTIAL IMPACTS	MITIGATION MEASURES	RESPONSIBILITY	COST
	Tuy Hoa City to work around 7km;. In case that, above material sources will be change, an appropriate material management plan should including the following: ▪ Required materials, potential sources and estimated quantities available; ▪ Material supply manners: preferring to purchase from existing material quarries. ▪ Agreement with the local authorities ▪ Check with environmental permission/certification of the quarries to ensure that environmental impacts and mitigation measures have been considered by owners. ▪ Environmental recovery plan Material transportation manner plans and schedules		
Plan Spoil and Waste Disposal	▪ Re-use of waste materials & spoil disposal locations included in bid and contract documents. ▪ Select an properly treatment manners, preferred of for fill up the site of other projects activities/purposes ▪ Determine waste materials & spoil disposal locations. The expectation is that construction waste will be stored temporarily along the proposed road, domestic waste will be stored in rubbish bins and then will be collected and treated by the local authority at Quang Dien landfill and contractors will be responsible for paying the bill ▪ Agreement with the local authorities need to be obtain during detail design or before starting construction activities; ▪ Environmental l recovery plan since construction activities completed ▪ Waste materials transportation manner plans and schedules Establishment of complaints management system for duration of the works	Design Consultant, PPMU	Included in the contract
Effects on households from loss of residential or agricultural land	Implement mitigation measures outlined in the subproject Resettlement Plan	PPMU	Included in resettlement report
Construction stage			
Erosion or sedimentation caused by during clearing or earthworks	▪ Install sediment dyke and/or sediment traps around the temporary excavated material area to collect sediment before it enters waterways. ▪ Construct temporary drainage canal for reducing affects on residential area; ▪ Minimize area of land clearance and duration of works within this area;	Contractor	Included in the Contract with the Contractor

POTENTIAL IMPACTS	MITIGATION MEASURES	RESPONSIBILITY	COST
	▪ Undertake progressive re -vegetation of land clearance areas ▪ Avoid clearing activities during the rainy season where possible		
Polluted soil due to leakage of oil and other chemical substances	▪ Store chemicals (lubricating oil, etc.) in safe area with impermeable containment and weatherproof roof; ▪ Use mobile sanitary toilets following regulations of Health Ministry and washing facilities at construction camps	Contractor	Included in the Contract with the Contractor
Impacts from temporary storage site for construction materials, including: dust, noise.	▪ Provide public information for local people on construction conditions; ▪ Minimize clearance and cut off crop and tree to reduce dust and noise at temporary material store ▪ For affected crop and tree, Contractor should have proper plan, thus, local people may harvest before construction start. ▪ Ensure that all machines are in good operation condition.	Contractor	Without marginal cost
Other impacts in quarries for construction material on dust, noise, working safety and water or soil pollution by exploitation activities	▪ In soil quarries, Contractor should follow environmental protection issues, including: - Working machines must be under periodically quality controlled; - Oil and other chemical pollutants from working machines should be strictly controlled and stored separately, avoiding leakages; - Workers should use protective equipment while working within the Site; - Temporary earth drainage system and ditch should be formed to store waste water safely in rainy season to reduce turbidity before releasing water into cultivated area; - Water should be regularly sprayed within borrow areas to reduce dust generation; ▪ The contractor should select registered service providers with necessary licenses to supply construction materials such as sand and stone;	Contractor	Without marginal cost
Pollution of waterways, aquatic environment or groundwater due to rubbish, chemical substance or polluted soil	▪ Store chemicals (lubricating oil, etc.) in safe area with impermeable containment and weatherproof roof; ▪ Use mobile sanitary toilets following regulations of Health Ministry and washing facilities at construction camps ▪ Do not wash construction vehicles and equipment onsite to avoid pollution by lubricating oil from	Contractor	Mentioned in contract with Contractor

POTENTIAL IMPACTS	MITIGATION MEASURES	RESPONSIBILITY	COST
	washing. ▪ Waste water and wasted lubricating oil should be controlled in accordance with relevant regulations on wastewater and hazardous wastes; ▪ Regularly collect and dispose-off the wastes		
Dust and exhaust fume from construction equipment and machinery	▪ Building measures on construction techniques to minimize the reasonable time and area for use during construction ▪ Successive construction method should be used by contractor. Therefore impact arising can be reduced by this method will makes the tidy construction, minimize construction time. ▪ Cover all trucks carrying materials to or from the site; ▪ Ensure all construction vehicles and equipment is well-maintained. ▪ Water sector under construction and related road, increasing the frequency of watering when passing through communities ▪ Minimize traffic travelling on the village's road and monitor speed limit ▪ Frequency measurement of dust control to be increased when close to residential areas	Contractor	Included in the Contract with the Contractor
Noise from construction machine	▪ Ensure all construction vehicles and equipment are well maintained; ▪ Limit construction activities which can make noise in day time; ▪ Inform local communities of schedule and duration of construction works; ▪ Receive opinions and feedbacks from the community.	Contractor Local assistance group Commune PC CSC	Included in the Civil Work Contract Local budget for community monitoring activities
Effects on social aspect due to workers at site	▪ Consult local authorized staff to prepare house renting plan for workers at the same local area; ▪ Consult local staff to consider the ability of renting house for workers instead of building camps; ▪ In case of camps at site, it is necessary to ensure that camps are maintained in good conditions; ▪ Provide training to workers on the way of communicating with local community, abiding laws and traditional customs and culture in the local area and implement education programs on sanitation/hygienic means and diseases through contact; ▪ Implement communication of prevention of HIV/AIDS and sexually transmitted diseases and	Contractor PCs at all level, bureau of social evil prevention, Center of HIV/AIDS prevention and Center of Contingency Medical/Committee of HIV/AIDS	Included in the Civil Work Contract r Relevant programs under local budget such as HIV/AIDS and social

POTENTIAL IMPACTS	MITIGATION MEASURES	RESPONSIBILITY	COST
	dissemination on social evils like drugs, gambling, prostitution, violence, stealing, etc. ▪ Delivery condoms to workers	prevention at commune/ward levels and at other levels/ NGO	evils prevention
Risks to public or construction worker health or safety	▪ Provide safety equipment to workers like mufflers, gloves, safety belt and train them in its use. Functional agencies always check and supervise works on labour safety of workers at site and residents within the construction area; ▪ Regularly implement working inspection to ensure working safety in the construction area; ▪ Secure construction site and restrict access by local community by arranging warning signs and fencing wall; ▪ Inform residents about possible incidents or risks during construction by louder speakers.	Contractor Contractor Construction monitoring consultant	Included in the Contract with the Contractor
Risks of natural calamity	▪ Ensure that subproject design will meet all safety standards on prevention of flooding, storms and other potential natural calamity; ▪ Phu Yen Irrigation Management Company closely coordinate with Disaster Mitigation & Flooding Prevention Committee in the local area to timely find out assistance methods such as: fight with flooding, storm ect.	Designing Consultant, Phu Yen Irrigation Management Company, Provincial Natural Calamity & Flooding Prevention Committee	Without marginal cost
Solid waste generated from construction activities or camp	▪ Establish temporary latrines which meet regulations of Health Ministry and supply enough water to camp. ▪ Discussing with local people and Government to choose the suitable waste dumping site when workers build camps; ▪ Collect solid wastes and temporary store at a safety place before transporting to disposal sites;	Contractor	Without marginal cost
Affect irrigation water supply system for agriculture production	▪ Construction of primary canal should be implemented in dry season with application of construction and irrigation at same time. ▪ The Contractor should coordinate with irrigation authority (irrigation exploitation management enterprise), commune's irrigation staff and cultivation households in water supply area of subproject main canal and primary canal of N3, N6, Xuan Hoa Canal 2&3 (north canal), Hoc Ram main canal, Tan My canal , Canal N1-Hoc Ram, Canal N8-2, Canal N8 to reach agreement	PPMU/ Contractor; Phu Yen Irrigation Management Company, commune authorities and local residents in the nice (9) commune in	Included in the Contract with the Contractor

POTENTIAL IMPACTS	MITIGATION MEASURES	RESPONSIBILITY	COST
	on water supply time (when construction suspension), construction time (should be implemented at the time when irrigation activities are not done); ▪ Commune's irrigation staff, irrigation exploitation enterprise or relevant authorities should early inform households and contractor on water supply schedule so that they can make plan on their own initiative; ▪ PPMU and the Contractor should pay attention to mitigation measures to reduce damages or to implement compensation for arising impacts due to stop of water supply at cultivation area, etc ▪ Construction time should be the same time that Dong Cam Irrigation System stop water supply for major repairs or after harvesting Summer-Autumn Crop & before starting Winter-Spring Crop, construction time is proposed: from 15 April to 15 May, then from the end August to 15 September) ▪ To implement stop of water supply alternatively, e. g water supply for 10 days, construction for 15 days.	the subproject area in Tuy Hoa City, Phu Hoa and Tay Hoa District	
Operation stage			
Leaching nutritive substances or salinity of soil disappeared due to excessive irrigation	Coordinate with agriculture authority to ensure that farmers are trained on proper irrigation method;	Agricultural extension center of the province	Local budget
Affecting water quality due to the increased quantity of fertilizer or pesticide or chemical substances or waste water	▪ Coordinate with agriculture authority to ensure that farmers are trained on irrigation method; ▪ Solid waste from pesticide, insecticide as well as other substance such as herbicide should be stored in tanks at cultivation area before transport to disposal sites; ▪ Coordinate with Agriculture Extension Centre to ensure that farmers are trained on Integrated Pesticide Management (IPM).	Phu Yen Irrigation Management Company	Local budget
Congested irrigation canal causes flooding	▪ Ensure that canal is regularly inspected and maintained. ▪ Ensure weed and other floating waste are periodically cleaned along the canal;	Phu Yen Irrigation Management Company	Local budget
Risks of natural calamity	▪ Reservoir management unit must closely coordinate with Natural Calamity & Flooding Prevention Committee in the local area to timely find out assistance methods.	Phu Yen Irrigation Management Company	Local budget

POTENTIAL IMPACTS	MITIGATION MEASURES	RESPONSIBILITY	COST
Increase solid waste in productive area	▪ Periodically collect waste in canal ; ▪ Establish rubbish collecting system; ▪ Enhance farmers' awareness about managing and collecting rubbish in field and canal through training.	Phu Yen Irrigation Management Company	Local budget
Encroachment land in canal side	Implement management method, ensure that canal bank and canal protection corridor are not occupied (using for growing or other occupying activities)	Commune authority, Irrigation Management Company of district and province	Local budget

5.2 Environmental Monitoring Plan

5.2.1 Environmental effects monitoring

1. Environmental effects monitoring is carried out to examine impacts of project in relation to ambient environmental conditions.

Table 5. Environmental effects monitoring plan

Mitigation Measure	Parameters	Location	Methods	Frequency	Responsibility	Cost
Construction stage						
Minimization of noise generation	Noise level	At nearest residential areas, from the main canal : N3, N6 of north main canal & Tan My, N8 of South main canal ; Hoc Ram and N1 Canal embankment road at Dinh Tho village- Hoa Dinh Dong Commune - Phu Hoa District	Observation and community consultation	Weekly or when community's feedback is raised	Construction	See the budget for EMP (annex)
				Once/ 3 months during construction or when community's feedback is raised	Construction Supervision Consultant (CSC)/ hold Environmental Supervision Consultant	Budget of PPMU
				Every 6 months during construction period or when community's feedback is raised	Monitoring consultant on environmental safeguard policies of LIC team	Included in separated contract with CPMU
Minimization	Dust	The same	Observation	Weekly or	Contractor	See the

Mitigation Measure	Parameters	Location	Methods	Frequency	Responsibility	Cost
of dust generation	concentration	locations to Noise Monitoring	and community consultation	when community's feedback is raised		budget for EMP (annex)
				Once/ 3 months during construction or when community's feedback is raised	Construction Supervision Consultant (CSC)/ hold Environmental Supervision Consultant	Budget of PPMU
				Every 6 months during construction period or when community's feedback is raised	Monitoring consultant on environmental safeguard policies of LIC team	Included in separated contract with CPMU
Control of surface water quality	Sedimentation, rubbish, lubricating oil and solid waste	At downstream of upgraded canal section, near the construction site of upgraded primary & secondary canals: N3, N6 of north main canal & Tan My, N8 of South main canal ; Hoc Ram Total monitoring points: 5 points for primary canals: N3, N6, Tan My, N8, Hoc Ram 4 points for secondary canals: Tan	Visual Observation ; Sampling and analysis	Every 3 months during construction or when community's feedback is raised	Construction Supervision Consultant (CSC)/ hold Environmental Supervision Consultant	See the budget for EMP (annex)
				Based on requirement of water supply	Local people, Community monitoring committee Local irrigation staff (commune)	Province budget Without marginal cost
				Every 6 months during construction or in case of at any time or in case of complaints of residents	Monitoring consultant on environmental safeguard policies/LIC	Included in separated contract with CPMU

Mitigation Measure	Parameters	Location	Methods	Frequency	Responsibility	Cost
		Hoa 2, Tan Hoa 3, N8-2, N1-Hoc Ram				
Control of irrigation capability	Meet irrigation demands following the agreed irrigation schedule	At division gates from the main canal	Consider harvest time and discuss with local residents within subproject area	Every 6 months during construction or in case of at any time or in case of complaints of residents	Monitoring consultant on environmental safeguard policies/LIC	Included in separated contract with CPMU
				Following regional cropping water demand	Local residents, Community Monitoring Board Irrigation official in local area (commune)	Local budget Without marginal cost
Labor safety and community safety	Number, use of labor equipment; signal system Obey for traffic law of transportation mean of construction material	In construction area On road where carry material along residential areas of 11 subproject communes;	Observation and community consultation	Weekly or when community's feedback is raised	Local people, Community monitoring committee	Without marginal cost
				Every 3 months during construction or in case of essential time	Construction Supervision Consultant (CSC)/ hold Environmental Supervision Consultant	Budget of PPMU
				Every 6 months during construction or in case of at any time if necessary	Monitoring consultant on environmental safeguard policies/LIC	Included in separated contract with CPMU
Operation stage						
Using irrigation water	Conflicts during water source access as mentioned in report	At division gate for cultivation areas of commune; Cultivation area supplied /irrigated by	Observation and community consultation	Once every 6 months in first 2 years of operation	Phu Yen Irrigation Management Company; irrigation official of commune, households	Included in operation cost of Phu Yen Irrigation Management Company

Mitigation Measure	Parameters	Location	Methods	Frequency	Responsibility	Cost
		upgraded canals :				
Surface water quality	BOD, DO, pH, TSS, Total colifom; fecal colifom, turbidity	Location: At 2 points : starting & ending points of primary & secondary canals: N3, N6, Tan My, N8 , Hoc Ram , and Tan Hoa 2, Tan Hoa 3, N8-2, N1-Hoc Ram	Observation and community consultation Or sampling methods following Vietnamese standard when receiving feedback from communities	Twice a year in two first years of operation (1 time in rainy season and 1 time in dry season)	Phu Yen Irrigation Management Company;	Included in operation cost of Phu Yen Irrigation Management Company
Waste management	Conditions on environmental sanitation within project area; temporary waste storage yard	Throughout subproject area	Observation and community consultation	Every 6 months in first 2 years of operation	Phu Yen Irrigation Management Company;	Budget provided following regulations at Decree No.115
Periodical canal maintenance	Level of canal sedimentation and conditions of sluices, equipment and works on the main canal	Along primary & secondary canals: N3, N6, Tan My, N8 , Hoc Ram , and Tan Hoa 2, Tan Hoa 3, N8-2, N1-Hoc Ram	Field survey, community consultation	Every 6 months in first 2 years of operation	Phu Yen Irrigation Management Company;	Local budget
Re-occupation of canal corridor	Occupation area, type of occupation (for planting trees or other purposes)	Along primary & secondary canals: N3, N6, Tan My, N8 , Hoc Ram , and Tan Hoa 2, Tan Hoa 3, N8-2, N1-Hoc Ram	Field survey, community consultation	Every 6 months in first 2 years of operation	Phu Yen Irrigation Management Company;	Local budget

5.2.2 Environmental Compliance Monitoring

2. Environmental compliance monitoring is carried out to test compliance with operating procedures, technical standards and/or contractor specifications in the EMP.

Table 6. Environmental Compliance Monitoring

Mitigation Measure	Parameters	Location	Methods	Frequency	Responsibility	Cost
Construction Stage						
Control of soil erosion and sedimentation	Ensure that soil erosion and sedimentation will not occur in construction site	Throughout the construction site	Observation and community consultation	Weekly and after heavy rain events	Construction Management-and-Environmental Management Consultant Local Community Monitoring Boards	Without marginal cost Local budget
				Every 6 months during construction or in case of at any time if necessary	Monitoring consultant on environmental safeguard policies/LIC	Included in separated contract with CPMU
Storage of materials	Condition of materials storage areas	Throughout the construction site	Observation and community consultation	Weekly	Construction Management-and-Environmental Management Consultant Local Community Monitoring Boards	Without marginal cost Local budget
				Every 6 months during construction	Monitoring consultant on environmental	Included in separated

Mitigation Measure	Parameters	Location	Methods	Frequency	Responsibility	Cost
				or in case of at any time if necessary	safeguard policies/LIC	contract with CPMU
Construction equipment and vehicles	Noise and exhaust generation; covering of trucks; oil/fuel leakage	Throughout construction site	Observation and community consultation	Weekly	Construction Management-and-Environmental Management Consultant Local Community Monitoring Boards	Without marginal cost Local budget
				Every 6 months during construction or in case of at any time if necessary	Monitoring consultant on environmental safeguard policies/LIC	Included in separated contract with CPMU
Construction camp conditions	Cleaning waste treatment; general conditions	At all camps	Observation and community consultation	Weekly	Construction Management-and-Environmental Management Consultant	Without marginal cost
				Every 6 months during construction or in case of at any time if necessary	Monitoring consultant on environmental safeguard policies/LIC	Included in separated contract with CPMU
Property access	Rehabilitate the possibility of temporary and fixed access	Affected assets: roads in commune and affected assets during construction	Observation and community consultation	Once during construction works and once after finishing construction	Construction Management-and-Environmental Management Consultant Local Community Monitoring Boards	Included in the Contract Local budget

Mitigation Measure	Parameters	Location	Methods	Frequency	Responsibility	Cost
				Once every 6 months during construction or in case of at any time if necessary	Monitoring consultant on environmental safeguard policies/LIC	Included in separated contract with CPMU
Waste treatment	Environmental sanitation at construction site and temporary waste storage area	Throughout construction site	Observation and community consultation	Weekly	Construction Management-and-Environmental Management Consultant Local Community Monitoring Boards	Without marginal cost Local budget
				Once every 6 months during construction or in case of at any time if necessary	Monitoring consultant on environmental safeguard policies/LIC	Included in separated contract with CPMU
Areas of standing water	Pond or standing water	Throughout construction site	Observation and community consultation	Weekly during rainy season	Construction Management-and-Environmental Management Consultant Local Community Monitoring Boards	Without marginal cost Local budget
				Once every 6 months during construction or in case of at any time if necessary	Monitoring consultant on environmental safeguard policies/LIC	Included in separated contract with CPMU
Operation stage						
Using irrigation	Using matter	Households near canals	Observation and community	Once every 6 months in first 5 years	Phu Yen	Budget provided following

Mitigation Measure	Parameters	Location	Methods	Frequency	Responsibility	Cost
water			consultation	of operation	Irrigation Management Company	regulations at Decree No.115
Soil erosion or land slide in canal	Conditions of canal; level of sludge in water	At sections which have not be rehabilitated	Observation	Once every 6 months in first 2 years of operation	Phu Yen Irrigation Management Company	Budget provided following regulations at Decree No.115
Prevention of soil erosion and land slide in canal	Conditions of canal bank	At some representative locations in subproject area	Observation and community consultation	Once every 6 months in first 2 years of operation	Phu Yen Irrigation Management Company	Budget provided following regulations at Decree No.115
Waste management	Conditions on environmental sanitation within project area; temporary waste storage yard	Throughout subproject area	Observation and community consultation	Once every 6 months in first 2 years of operation	Phu Yen Irrigation Management Company	Budget provided following regulations at Decree No.115

5.3 EMP Implementation Arrangements

Table 7. EMP Implementation

Organization	Roles and Responsibilities		
	Subproject Preparation	**Subproject Implementation**	**Subproject Operation**
CPMU	Provide advice to PPMU Safeguards Officer on IEE/CEP and IEE/EIAR preparation Review and provide "no-objection" on IEE/CEPs or IEE/EIARs submitted by PPMUs	Provide advice to PPMU Safeguards Officer on EMP implementation during construction Monitor progress during construction Consolidate PPMU environmental reporting	Provide advice to PPMU Safeguards Officer on EMP implementation during first year of operation Monitor progress during first year of operation Consolidate PPMU environmental reporting
PPC	Sign-off on environmental assessment documents prior to submission for approval Approval of any	Project owner with ultimate responsibility for environmental performance of subproject during construction	Project owner with responsibility for operation stage environmental performance including implementation of EMP

Organization	Roles and Responsibilities		
	Subproject Preparation	**Subproject Implementation**	**Subproject Operation**
	subprojects requiring EIAR that are not subject to MONRE approval		during operation
DONRE	Provide advice and guidance on environmental issues as required during subproject preparation	Monitoring implementation of EMP through their own internal monitoring system	Monitoring implementation of EMP through their own internal monitoring system
PPMU	Engage consultant and have overall responsibility for IEE/CEP or IEE/EIAR preparation and submission for approval Ensure staff are adequately trained in environmental issues	Responsibility for EMP implementation during pre-construction and construction Ensure that contract specifications and bid documents include environmental requirements Undertake inspections and monitoring of environmental issues during construction Coordinate environmental monitoring reporting to CPMU	Responsibility for EMP implementation during first year of operation Undertake inspections and monitoring of environmental issues during first year of operation Assist project owners to incorporate environmental requirements into infrastructure O&M procedures
District PCs	Approval of subproject CEPs in accordance with GOV legislative requirements	Monitoring implementation of EMP through their own internal monitoring system	Monitoring implementation of EMP through their own internal monitoring system
Environmental Monitoring Consultant under LIC team	n/a	Implement independent environmental monitoring at subproject area twice every 1 month. Monitoring results will be included in the report which will be sent to CPMU once a month.	n/a
District Subproject Support Teams (SST)	Assist in IEE/CEP preparation as required Assist PPMU to review bidding documents, contract documents, and tenders to ensure environmental issues are adequately addressed	Day to day supervision of contractors' in district including compliance with environmental management requirements Undertake environmental monitoring and coordination of local community environmental monitoring activities	Undertake environmental monitoring and coordination of local community environmental monitoring activities for first year of operation
Commune Supervision	Involvement in consultation and participation activities	Involvement in environmental monitoring activities under the	Involvement in environmental monitoring

Organization	Roles and Responsibilities		
	Subproject Preparation	**Subproject Implementation**	**Subproject Operation**
Boards (CSBs) and local community members[4]	to identify and develop subprojects Ability to comment on environmental assessment documentation upon disclosure	direction of SSTs	activities under the direction of SSTs
Construction contractor	n/a	Prepare detailed Site EMP to meet the Subproject EMP general requirements Allocate adequate resources to meet the requirements and obligations of Site EMP	n/a

[4] CSBs have been established under Decree 80 Regulation for Participatory Investment Supervision. Article 8 of Decree 80 provides the community with opportunities to inspect compliance, monitor implementation and evaluate the results of investments in the commune, including environmental impacts.

5.4 Monitoring and Reporting System

Table 8. Monitoring and Reporting System

Project Phase	Type of Report	Frequency	Responsibility	Submitted To Whom
Construction	**EMP of subproject**	Once/ (first month since construction beginning	Construction contractor	PPMU/CPMU
	EMP implementation report of subproject according to report sample approved by ADB	Quarterly	CSC (to hold Environmental Supervision Consultant)	CPMU
	EMP implementation report of province (syntheses of construction package) according to report sample approved by ADB	Quarterly	Phu Yen PPMU	CPMU
	EMP Compliance Report indicating compliance with subproject EMP and monitoring results	Once/ 6 month	CPMU/LIC	ADB/AFD/DONRE
	EMP completion report of each package/ subproject according to report sample approved by ADB	At completion of subproject	CSC (to hold Environmental Supervision Consultant)	CPMU
	Subproject completion Environmental Report indicating overall subproject environmental performance and EMP compliance	At completion of subproject	PPMU	CPMU

Project Phase	Type of Report	Frequency	Responsibility	Submitted To Whom
	Project completion Environmental Report indicating overall subproject environmental performance and EMP compliance	At completion of The whole Subproject	CPMU/LIC	ADB/AFD/DONRE
Operation	**EMP Compliance Report: Operation** indicating compliance with subproject EMP commitments during operation	6 monthly for first two years of operation. Ongoing frequency to be determined based on review after 2 years.	Project owner/ Phu Yen irrigation works exploring company	ADB, DONRE, MONRE

5.5 EMP Budget

Table 9. EMP Budget

Item	Marginal Costs for Pre-Construction	Marginal Costs for Construction	Marginal Costs for Operation	Marginal Costs Sub-Total
Mitigation				
Compensation and land clearance	In a separated item on project compensation and resettlement	No	No	Included in other items
Monitoring				
PPMU's Internal monitoring	Included in management cost of PPMU	Included in the Contract with Contractor and CMC as well as in PPMU's management cost	Local and provincial budget	Included in contracts or other operation capital sources
Community monitoring	Not available (n/a)	Local budget (as in Decision No.80/2005/QĐ-TTg)	Local budget (as in Decision 80/2005/QD-TTg)	Local budget
Independent monitoring consultant on environmental safeguard policies	n/a	Included in a separate contract with CPMU	n/a	
Training on capacity enhancement on	n/a		Local budget	n/a

Item	Marginal Costs for Pre-Construction	Marginal Costs for Construction	Marginal Costs for Operation	Marginal Costs Sub-Total
environmental monitoring capability				
Public disclosure	Defined in consultancy contract on IEE		n/a	Public disclosure
TOTAL *(intensify the capability and public disclosure)*				

6. PUBLIC CONSULTATION AND DISCLOSURE ACTIVITIES

6.1 Description of Activities to Date

Table 10. Public consultation and public disclosure activities

CONSULTATION METHOD	DETAILS OF ACTIVITIES	
Correspondence and meetings with local authorities (District and Commune PCs, Commune Fatherland Front, Women's Union, Youth Union and others)	Date of correspondence	05 /05/ 2014
	Dates of meetings (if requested)	15/05/2014
	Minutes of meeting attached (Yes / No)	Yes
Public meetings	Date(s) held	15 -16 /05/2014
	Location(s) held	PC's meeting hall of Hoa Tan Tay, Hoa Phu Communes of Tuy Hoa Town; and Hoa Thang, Hoa Tri Communes of Phu Hoa District
	Invitees	Commune PCs, stakeholders, village heads, Young Communist League, Fatherland front, Farmer Association, Women Union of the communes.
	Methods of invitation	Letter, coordinate with Women Union to mobilize women's participation in meetings
	Agenda attached (Yes / No)	Yes
	Minutes of meeting attached (Yes / No)	Yes
	Number of participants	Total have 110 people Man: 73 people Women: 37 people (the list of participants will be closed in the minutes of consultation)

6.2 Outcomes of Public Consultation to Date

Table 11. Results of public consultation

Description of Issue Raised	By Whom?	Reference in IEE/CEP	Required Follow-up Actions?
Subproject design	District Agriculture Office, and local residents of Hoa Tan Tay, Hoa Phu, Hoa Thang, Hoa Tri Commune	The canal will follow the current alignment to mitigate land acquisition and other environmental impacts. The problem that people concerns are the canal bridges. They must ensure tonnage enough to serve the construction process and people's passage.	In the surveying and detailed design period, the design consultant is expected to coordinate with local authorities to find suitable water inlets for taking water in to the fields Design width of canal embankment road is expected at least ≤ 3.0 m for tractors pass easily
Dust or exhaust generated from construction machines	Local peoples of Hoa Tan Tay, Hoa Phu, Hoa Thang, Hoa Tri Commune	The mitigation measures prescribed in Section V	Apply mitigation measure
Traffic disturb when transporting material and constructing the production/management road,	Local people of Hoa Tan Tay, Hoa Phu, Hoa Thang, Hoa Tri Commune	The mitigation measures prescribed in Section V	Apply mitigation measure
Affect water supply and agriculture production	Farmer union, Local peoples of whole subproject communes : Hoa Thang, Hoa An, Hoa Quang, Hoa Tri Communes of Phu Hoa District; Hoa Kien Commune of Tuy Hoa City, and Hoa Phu, Hoa Phong, Hoa Tan Tay, Hoa Thinh of Tay Hoa District	The mitigation measures prescribed in Section V	Make plan for water supply properly. Inform famers water supply stopping schedule.
Recommendations to facilitate the employment for people in the construction period	People living in the subproject communes as above in Phu Hoa & Tay Hoa Districts	The mitigation measures prescribed in Section V	Apply mitigation measure

6.3 Future Public Consultation Activities

Table 12. Proposed community consultation activities

Activity	Participants	Expected Outcomes	Schedule	Cost Estimate
Kick-off meeting prior to construction commencement	PPMU, the Contractor, CMC, community representatives at project area	Publicize construction contents, schedule and plan for water supply	1 week prior to construction commencement	Be estimated in EMP budget
Periodical meetings	Contractor, CMC and representatives of local authority, organizations and community at project area	Periodically check mitigation activities and arising problems Propose treatment alternatives and reach agreement on implementation	Once every month from construction commencement	Included in contract signed with parties

7. CONCLUSION AND RECOMMENDATIONS

5. The Upgrading Main and Branch Canals of Dong Cam Irrigation System subproject , part of the IDRSPCP – Additional Financing Project will be implemented by Phu Yen Province's PPMU

6. The implementation of the subproject could acquire total land acquisition: 153,164 m^2 (from RP), of permanent land, of which 32, 382 m^2 is agriculture land, 22, 925 m^2 garden land, and 22, 925 m^2 is other land, no temporary land to be acquired

7. Project environmental assessment implemented and main potential environmental impacts of subproject in construction stage

   (i) Dust and exhaust emission from construction equipment and machinery, material transport and material mixing. Pollution mainly occurred along transport route and at the construction site; it is necessary to have mitigation measures for negative impacts;

   (ii) Noise pollution due to construction, motorbikes and material transport means;

   (iii) Solid waste and liquid waste pollution from excavation, material mixing, residue of gasoline and lubricating oil from tents;

   (iv) Conflicts between agriculture water supply for irrigation area and water supply stop

   (v) Traffic disturb when transporting material and constructing the management /production road/canal embankment

8. Main potential environmental impacts in operation stage

(i) Agriculture wastes (residue of vegetables, pesticide cover, straw of cultivation area) from the boundaries of the upgraded main & primary canal have been focus at the canal bed, obstructing and polluting the flow;

(ii) Affecting water quality due to the increased quantity of fertilizer or pesticide or chemical substances or waste water

(iii) Risks of natural calamity due to Storm & flood occur during rainy season

9. Mitigation measures and construction monitoring for subproject, including the following main activities

Mitigation measures for negative impacts caused by project execution include the following:

(i) Reduce soil erosion, sediment, land slide due to excavation, it is necessary to restore the vegetation covers, implement site clearance like planting grass, trees for shadow,

(ii) Minimize soil/water pollution, exhaust pollution, rubbish, and chemical substances during construction by methods like using equipment and vehicles in good conditions; erecting tents and latrines for workers in conformity with standard; implement cleaning and dredging at polluted areas, excavate to create holes for burying rubbish. If necessary, community at downstream should be informed about water quality changes,

(iii) Dust, noise from construction equipment and vehicles: reduce the time and construction area/ transport vehicles, construction materials must be covered by canvas; limit the noise from construction equipment at rush hours, at nights/ labour safety devices for workers,

(iv) During exploitation process, management authority should disseminate and consult the local authority/water users to limit the excessive use of water; establish regulated procedures and detailed water supply plan; update information year by year to inform users, implement dissemination and training on scientific irrigation to the community for understanding and implementation,

(v) The Contractors do not transport materials at rush hours (6 am to 7 am; 11 am - 12 pm; 5 pm- 6pm) and to be supposed to slow down when transporting materials by the residential area and to plan construction signposts and speed limit signs

(vi) Avoid deteriorating soil/water quality by increasing quantity of fertilizer and pesticide Phu Yen PPMU should coordinate with Agriculture Extension Centre to ensure that farmers are trained on Integrated Pesticide Management (IPM)

(vii) PPMU should ensure that subproject design will meet all safety standards on prevention of flooding, storms and other potential natural calamity

Monitoring measures

(i) Contractor shall have methods and commitment on implementation of mitigation measures in aspects of both implementation location/mitigation measures/and frequency of implementation. Concurrently, the Contractor shall prepare detailed plan on environmental monitoring and mobilize enough manpower to meet general requirements and compulsory regulations on EMP.

(ii) During operation stage, Project Owner (Irrigation Management Unit of work operation) should implement periodical management on water quality following current standards of Vietnam.

10. Conclusion and recommendations

a) Investment and construction of Consolidation of 19.406 km length of the main canal and branch canal of Dong Cam Reservoir's irrigation canal system and upgrading 24.290 km canal management roads & village roads is to promote the irrigation effectiveness of Dong Cam Reservoir, improve living standard and eliminate poverty for 10 subproject communes in Tuy Hoa City, Phu Hoa and Tay Hoa District in beneficiary areas with population of 142,940 peoples . Reducing natural calamity is an essential and urgent matter which helps bring significant economic effect and contribute to state-oriented agricultural and rural development.

b) The results of environmental study presents that negative impacts during project implementation could minimize through environmental management measures including monitoring programs. Negative impacts related to subproject activities is mainly from construction process and these are temporary impacts.

c) Based on IEE, Consultants in F/S stage, PPMU would like to request functional Authority to give approval of IEE for Consolidation of 19.406 km length of the main canal and branch canal of Dong Cam Reservoir's irrigation canal system and upgrading 24.290 km canal management roads & village roads of Dong Cam Reservoir' irrigation canal system to create basis for next implementation steps, ensuring the implementation progress, effectiveness and benefits of the project./.

IEE/ CEP prepared by			
Signature:		***Signature:***	
Date:		***Date:***	

8. ANNEXES

- Current status of irrigation system and ambient environment
- Public consultation activities
- Data sources
- Environmental Monitoring Form
- Mitigation Measures included in Bidding Document

Annex 1: Current status of irrigation system and ambient environment

Photo 1: Existing status of Canal N3, taking water from North main canal & management road

Photo 2: Existing status of Tan My Canal

Photo 3: Branch canal N8-2 is eroded and canal bed is silted

Photo 4: Existing status of Hoc Ram main canal

Some proposed environmental monitoring locations (Air /Noise monitoring and traffic disturb monitoring points)

Photo 5: Air quality& Water quality monitoring & Public Safety monitoring point at Canal N3 at Km 8 +00

Photo 6: Public Safety monitoring point at Crossroad of Canal N3 management road (Km 4+00) and commune road

Photo 7: Air quality monitoring location at the beginning of the road on canal N1, Dinh Tho hamlet – Phu Hoa town

Photo 8: Air quality monitoring location at the end of the road on canal N1, Dinh Thai hamlet – Hoa Dinh Dong commune

Photo 9: Air quality monitoring location at the beginning of the proposed canal N3, Long Phung hamlet - Hoa Tri commune

Photo 10: Water quality monitoring location at the beginning of the proposed canal N3, Long Phung hamlet - Hoa Tri commune

Photo 11: Air quality monitoring location at the road on canal N3, Dinh Thanh hamlet – Hoa Dinh Dong commune

Photo 12: Air quality monitoring location at the intersection of road on canal N3 and a concrete road of Phung Tuong 2 halet - Hoa Tri commune

Photo 13: Air quality monitoring location at Hoi Cu road near the residential are of Hoi Cu hamlet - Hoa Tan Tay commune

Photo 14: Air quality monitoring location at the end of Hoi Cu road near the residential are of Phu Khanh hamlet - Hoa Tan Tay commune

Annex 2. Public consultation activities

Public consultation contents

1. Participants: Safeguard policies consultants, local leaders (communal and district levels), affected households and other local people living near project area;

2. Objectives: Project disclosure and public consultation on potential environmental impacts and proper mitigation measures during project's implementation;

3. Meeting content

3.1. Safeguard policies consultants introduced on basic information on project, construction items and their parameters;

3.2. Main environmental impacts and their mitigation measures were defined as by safeguard policies consultants, including:

+ Environmental impacts, social impacts before construction, consist of popular impacts such as land occupy, plants and tree removal, UXO area determination and their mitigation measures;

+ Environmental impacts during construction implementation such as dust, noise, safety for transportation as well as safety for local people on traffic roads, other impacts on agricultural activities; water, soil pollution, etc. and their mitigation measures;

3.3. Collecting contribution from local people on other potential environmental impacts before construction implementation, during construction stage and on operation, maintenance stages;

3.4. Safeguard policies consultants introduced in general on Environmental System Management in Viet Nam that my be applied in this subproject such as responsibilities of DONRE, DARD, DPC, CPC, Construction Management Consultants, Contractors and especially local Community Environmental Management Board;

The details will be described in meeting minutes as written following. People's contribution on environmental impacts and mitigation measures were presented in detail at "Table 11. Public consultation results".

Meeting minutes at public consultation and lists of attendance in the public consultation meeting at Hoa Tan Tay commune

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

Hòa Tân Tây ngày 16 tháng 05 năm 2014

DỰ ÁN PHÁT TRIỂN NÔNG THÔN TỔNG HỢP CÁC TỈNH MIỀN TRUNG (Loan 2357-VIE)

BIÊN BẢN LÀM VIỆC

Hôm nay, ngày 16 tháng 05 năm 2014, tại Hòa Tân Tây chúng tôi gồm:

I. Đại diện nhóm tư vấn của dự án Phát triển nông thôn tổng hợp miền Trung:

- Ông/Bà Vũ Hoàng Lân, Chức vụ Chuyên gia môi trường
- Ông/Bà Đoàn Văn Định Chức vụ Chuyên gia tái định cư
- Ông/Bà Lê Thị Mộng Phương Chức vụ Chuyên gia Giới

II. Đại diện Ban QLDA tỉnh

- Ông/Bà Nguyễn Doãn Dũng Chức vụ PGĐ Ban QLDA tỉnh
- Ông/Bà Trương Anh Việt, Chức vụ Điều phối viên
- Ông/Bà .... Chức vụ ....

III. Đại diện địa phương

- Ông/Bà Phạm Phi Long, Chức vụ CT UBND xã
- Ông/Bà Lê Minh Khương Chức vụ CB Địa chính
- Ông/Bà Ngô Thị Hồng Hoa Chức vụ CT Hội nông dân xã

Nội dung làm việc:

- Tư vấn thiết kế trình bày các nội dung về quy mô các hạng mục công trình của DATP.
- Đoàn tư vấn giới thiệu trình bày các nội dung liên quan đến chính sách an toàn của DATP như: môi trường, tái định cư, giới và sự tham gia của cộng đồng.
- Các bên trao đổi thảo luận, ghi nhận ý kiến, nhất trí và thống nhất ghi biên bản làm việc như sau: chúng tôi đồng ý cho dự án lựa chọn thiết kế các hạng mục là như vậy có thể giảm thiểu các tác động cần thực hiện theo đúng quy định kết hợp chặt chẽ với địa phương trong quá trình thực hiện.

Sau khi đọc lại biên bản, những người có mặt đồng ý về nội dung biên bản, không có ý kiến gì khác.

Đại diện Ban QLDA tỉnh

GIÁM ĐỐC

BAN QUẢN LÝ CÁC DỰ ÁN NÔNG NGHIỆP

Ngô Đình Thiện

Đại diện UBND xã

CHỦ TỊCH

Phạm Phi Lệnh

Đại diện tư vấn

CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

Hòa Tân Tây, ngày 16 tháng 05 năm 2014

DỰ ÁN PHÁT TRIỂN NÔNG THÔN TỔNG HỢP

CÁC TỈNH MIỀN TRUNG - KHOẢN VAY BỔ SUNG

BIÊN BẢN HỌP THAM VẤN CỘNG ĐỒNG

Về các chính sách an toàn: Môi trường, Tái định cư, Giới và Dân tộc thiểu số

Tên tiểu dự án: Kiên cố kênh hệ thống thủy nông Đông Cam.

Xã Hòa Tân Tây huyện Tây Hòa, tỉnh Phú Yên

I. Thành phần tham dự:

- Ông/Bà Nguyễn Doãn Dương, Chức vụ Phó GĐ ban QLDA Huyện
- Ông/Bà Trương An Khởi, Chức vụ Điều phối viên ban QLDA Huyện
- Ông/Bà Vũ Hoàng Lân, Chức vụ Chuyên gia Môi trường
- Ông/Bà Đoàn Văn Anh, Chức vụ Chuyên gia tái định cư
- Ông/Bà Hoàng Hồng Hạnh, Chức vụ Chuyên gia Giới
- Ông/Bà Phạm Đài Lộc, Chức vụ CT UBND xã
- Ông/Bà Lê Mạnh Hùng, Chức vụ Cán bộ Địa chính

- Đại diện những hộ bị ảnh hưởng ..... người, trong đó .....nữ, chiếm....(%) , Dân tộc thiểu số.....người, chiếm....%

II. Nội dung

2.1 Các nội dung phổ biến:

- Cung cấp các thông tin về dự án như địa điểm, quy mô, các thông số kỹ thuật cơ bản ....

- Chính sách an toàn của dự án bao gồm: Chính sách về giới và sự tham gia của cộng đồng; Kế hoạch hành động giới; Chính sách môi trường, Chính sách Tái định cư và kế hoạch phát triển người dân tộc thiểu số.

2.2 Tham vấn cộng đồng:

- Tham vấn các vấn đề giám sát và tham gia của cộng đồng trong các giai đoạn chuẩn bị, thực hiện, vận hành tiểu dự án, các vấn đề về giới và lồng ghép giới, nhóm dễ tổn thương, hộ bị ảnh hưởng nặng...

- Tham vấn các vấn đề về môi trường, tác động môi trường tiềm năng của dự án bao gồm tác động lên môi trường tự nhiên và xã hội của khu vực dự án và những biện pháp giảm thiểu các tác động tiêu cực;

- Tham vấn các vấn đề về tái định cư, các tác động dự kiến, quyền lợi của người bị ảnh hưởng, các biện pháp giảm thiểu tối đa nhằm có ít tác động nhất đến người bị ảnh hưởng.

- Tham vấn nhu cầu đào tạo của các hộ bị ảnh hưởng.

III. Ý kiến thảo luận

III.1.Các vấn đề về giới, tham gia cộng đồng

- Công đồng tình các tham gia và đưa ra góp ý kiến cho quá trình thực hiện dự án và tình đất cụ thể cho phù hợp, chính sách
- Ban giám sát cộng đồng tham gia và giám sát thực hiện cụ thể
- Tỷ lệ nữ giới tham gia vào các cuộc họp tham vấn, tập huấn còn thấp. Cần có chủ trương cụ thể và khuyến khích phụ nữ tham gia

III. 2. Các vấn đề về môi trường

- Tác động môi trường của dự án là nhỏ, bà con sẽ ủng hộ thực hiện thuận lợi nhất cho thi công
- Tuy nhiên nhà thầu cần chú ý đảm bảo an toàn giao thông, tránh gây ảnh hưởng đến và gây mất an ninh trật tự
- Cần đăng ký tạm trú cho công nhân và tạo hợp đồng chặt chẽ để phòng tránh quá trình thực hiện

STT	Họ và tên	Giới tính	Địa chỉ	Ký tên	Ghi chú

Đại diện cộng đồng

Đại diện UBND xã

CHỦ TỊCH

Phạm Phi Lệnh

Đại diện Ban QLDA tỉnh

GIÁM ĐỐC

Ngô Đình Thiện

Đại diện tư vấn

Cuộc họp các bên thống nhất và kết thúc vào lúc ngày.16.tháng.05.năm 2014

Đại diện cộng đồng

Đại diện UBND xã

CHỦ TỊCH

Phạm Phi Lệnh

Đại diện Ban QLDA tỉnh

GIÁM ĐỐC

Ngô Đình Thiện

Đại diện tư vấn

CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

Hoà Tân Tây, ngày 16 tháng 05 năm 2014

DỰ ÁN PHÁT TRIỂN NÔNG THÔN TỔNG HỢP CÁC TỈNH MIỀN TRUNG – KHOẢN VAY BỔ SUNG

DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP

(Tham vấn cộng đồng về chính sách an toàn: Môi trường, Tái định cư, Giới và Dân tộc thiểu số

Tên tiểu dự án: Kiên cố kênh hè Hầy thuộc nông Đông Cam.

Xã Hoà Tân Tây, huyện Tây Hòa, tỉnh Phú Yên

STT	Họ và tên	Giới tính	Địa chỉ	Ký tên	Ghi chú
01	Trương Thị Anh	Nữ	Xã Hòa Tân Tây	Anh	
02	Nguyễn Thị Nào	Nữ	Xã Hòa Tân Tây	Nào	
03	Nguyễn Thị Thu Phương	Nữ	"	Thuyn	
04	Lê Thị Lang	Nữ	"	Lang	
05	Lê Thị Duyên	Nữ	"	Duyên	
06	Trần Thị Hoa	Nữ	"	Hoa	
07	Phạm Thị Lành	Nữ	"	Lành	
08	Hồ Thị Thuyết	Nữ	"		
09	Võ Thị Tuyết Nhung	Nữ	"	Nhu	
10	Bùi Thị Nhung	Nữ	"	Nhu	
11	Đỗ Thị Hường	Nữ	"	Hường	
12	Ng Thị Nhi	Nữ	"	Nhi	

STT	Họ và tên	Giới tính	Địa chỉ	Ký tên	Ghi chú
01	Nguyễn Ngọc Anh	Nam	Xã Hòa Tân Tây		
02	Lê Thanh Lịch	Nam	"		
03	Võ Bá Vân	Nam	"		
04	Bùi Thiên Hùng	"	"		
05	Huỳnh Long Hải	"	"		
05	Nguyễn Thắng	"	"		
06	Phạm Đài	"	"		
07	Nguyễn Văn Lên	"	"		
08	Lê Tấn Phúc	"	"		
09	Lê Thanh Tùng	"	"		
10	Nguyễn Văn Tài	"	"		
11	Ngô Văn Lên	"	"		
12	Đào Minh Lý	"	"		

STT	Họ và tên	Giới tính	Địa chỉ	Ký tên	Ghi chú

Đại diện cộng đồng

Đại diện UBND xã

CHỦ TỊCH

Phạm Phi Lệnh

Đại diện Ban QLDA tỉnh

GIÁM ĐỐC

Ngô Đình Thiện

Đại diện tư vấn

Meeting minutes at public consultation and lists of attendance in the public consultation meeting at Hoa Phu commune

CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

Hoà Phú, ngày 16 tháng 05 năm 2014

DỰ ÁN PHÁT TRIỂN NÔNG THÔN TỔNG HỢP CÁC TỈNH MIỀN TRUNG (Loan 2357-VIE)

BIÊN BẢN LÀM VIỆC

Hôm nay, ngày 16 tháng 05 năm 2014, tại xã Hoà Phú chúng tôi gồm:

I. Đại diện nhóm tư vấn của dự án Phát triển nông thôn tổng hợp miền Trung:

- Ông/Bà. Hoàng Hồng Hạnh, Chức vụ. Chuyên gia quản lý và công trình
- Ông/Bà. Nguyễn Thị Thu Trang, Chức vụ. Chuyên gia Môi trường
- Ông/Bà..... Chức vụ.....

II. Đại diện Ban QLDA tỉnh

- Ông/Bà. Trương Anh Tuấn, Chức vụ. Phó Phòng viên Ban QLDA Tỉnh
- Ông/Bà....., Chức vụ.....
- Ông/Bà..... Chức vụ.....

III. Đại diện địa phương

- Ông/Bà. Lê Anh Quốc, Chức vụ. PCT UBND
- Ông/Bà. Đặng Lê Sơn, Chức vụ. PCT UB MTTQ
- Ông/Bà. Phạm Thị Lan Huệ Chức vụ. CT Hội LHPN.

Nội dung làm việc:

Tham vấn ý kiến đại diện chính quyền địa phương và các hộ dân về các nội dung liên quan đến vấn đề giải phóng mặt bằng, các tác động môi trường, giới và sự tham gia của cộng đồng vào công tác thiết kế thi công và vận hành công trình

Sau khi đọc lại biên bản, những người có mặt đồng ý về nội dung biên bản, không có ý kiến gì khác.

Đại diện Ban QLDA tỉnh

GIÁM ĐỐC

SỞ NÔNG NGHIỆP VÀ PHÁT TRIỂN NÔNG THÔN PHÚ YÊN
BAN QUẢN LÝ CÁC DỰ ÁN NÔNG NGHIỆP

Đinh Thiện

Đại diện UBND xã

PHÓ CHỦ TỊCH

Lê Anh Quốc

Đại diện tư vấn

CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

Hòa Phú, ngày 16 tháng 05 năm 2014

DỰ ÁN PHÁT TRIỂN NÔNG THÔN TỔNG HỢP

CÁC TỈNH MIỀN TRUNG - KHOẢN VAY BỔ SUNG

BIÊN BẢN HỌP THAM VẤN CỘNG ĐỒNG

Về các chính sách an toàn: Môi trường, Tái định cư, Giới và Dân tộc thiểu số

Tên tiểu dự án: Kiên cố kênh chính và kênh nhánh Hệ thống thuỷ nông Đông Cam

Xã Hòa Phú, huyện Tây Hòa, tỉnh Phú Yên

I. Thành phần tham dự:

- Ông/Bà Lê Anh Quốc, Chức vụ Phó CT UBND Xã
- Ông/Bà Đặng Thế Sơn, Chức vụ Phó CT UBMTTQ xã
- Ông/Bà Phạm Thị Lan Huệ, Chức vụ Chủ tịch Hội phụ nữ xã
- Ông/Bà Trương Anh Kiệt, Chức vụ Phó phòng viên Ban QLDA tỉnh
- Ông/Bà Hoàng Hồng Hạnh, Chức vụ Chuyên gia giới và cộng đồng
- Ông/Bà Ng Thị Thu Trang, Chức vụ Chuyên gia Môi trường
- Ông/Bà....., Chức vụ.....

- Đại diện những hộ bị ảnh hưởng ..... người, trong đó .....nữ, chiếm....(%) , Dân tộc thiểu số.....người, chiếm....%

II. Nội dung

2.1 Các nội dung phổ biến:

- Cung cấp các thông tin về dự án như địa điểm, quy mô, các thông số kỹ thuật cơ bản ....

- Chính sách an toàn của dự án bao gồm: Chính sách về giới và sự tham gia của cộng đồng; Kế hoạch hành động giới; Chính sách môi trường, Chính sách Tái định cư và kế hoạch phát triển người dân tộc thiểu số.

2.2 Tham vấn cộng đồng:

- Tham vấn các vấn đề giám sát và tham gia của cộng đồng trong các giai đoạn chuẩn bị, thực hiện, vận hành tiểu dự án, các vấn đề về giới và lồng ghép giới, nhóm dễ tổn thương, hộ bị ảnh hưởng nặng...

- Tham vấn các vấn đề về môi trường, tác động môi trường tiềm năng của dự án bao gồm tác động lên môi trường tự nhiên và xã hội của khu vực dự án và những biện pháp giảm thiểu các tác động tiêu cực;

- Tham vấn các vấn đề về tái định cư, các tác động dự kiến, quyền lợi của người bị ảnh hưởng, các biện pháp giảm thiểu tối đa nhằm có ít tác động nhất đến người bị ảnh hưởng.

- Tham vấn nhu cầu đào tạo của các hộ bị ảnh hưởng.

III. Ý kiến thảo luận

III.1.Các vấn đề về giới, tham gia cộng đồng

- Cây đây tham gia đóng góp ý kiến bổ sung cho các hạng mục công trình như trên đây.
- Nên giám sát công đồng của xã được thành lập để giám sát hoạt động.
- Nữ giới thường ít tham gia các cuộc họp thôn, họp bản, do biết là các cán bộ lo liên quan đến kỹ thuật.
- Bà con mong muốn được tham gia nhiều hơn nữa dự án.
- Người dân đi mong ước thông tin về dự án tới địa bàn và được tốt đẹp.

III. 2. Các vấn đề về môi trường

- Các đồng mương thủy lợi thường dư nên là nhà và bà con sẽ tạo điều kiện hết mức cho thi công.
- Cần có biển báo cho người qua lại thì công trình các xe cần chuyên chở che phủ bạt, giảm tốc độ phù đi qua khu dân cư.
- Đảm bảo an ninh trật tự.
- Tạo điều kiện cho người dân đi lại thuận lợi.
- Thông báo kế hoạch thi công để bà con chủ động lên kế hoạch sản xuất.

III.3. Các vấn đề về tái định cư và dân tộc thiểu số

- Dự án không có người dân tộc thiểu số.
- Các hộ bị ảnh hưởng về đền bù + giải phóng mặt bằng là nhỏ.
- Người dân đồng ý với quá trình thực hiện giải phóng mặt bằng theo quy trình mà nhà nước đề ra vì lợi ích của cả cộng đồng.

IV. Kết luận

Nhìn chung, dự án mang lại nhiều lợi ích thiết thực.
Bà con nhất trí ủng hộ và mong muốn dự án sớm triển khai thực hiện.

Cuộc họp các bên thống nhất và kết thúc vào lúc .....ngày 16 tháng 05 năm 2014

Đại diện cộng đồng

Đại diện UBND xã

PHÓ CHỦ TỊCH

Lê Anh Quốc

Đại diện Ban QLDA tỉnh

GIÁM ĐỐC

BAN QUẢN LÝ CÁC DỰ ÁN NÔNG NGHIỆP

Ngô Đình Thiện

Đại diện tư vấn

CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

Hòa Phú, ngày 16 tháng 05 năm 2014

DỰ ÁN PHÁT TRIỂN NÔNG THÔN TỔNG HỢP CÁC TỈNH MIỀN TRUNG – KHOẢN VAY BỔ SUNG

DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP

(Tham vấn cộng đồng về chính sách an toàn: Môi trường, Tái định cư, Giới và Dân tộc thiểu số

Tên tiểu dự án: Kiên cố hóa kênh chính và nâng nhanh hệ thống thủy nông Đông Cam

Xã Hòa phú, huyện Tây Hòa, tỉnh Phú Yên

STT	Họ và tên	Giới tính	Địa chỉ	Ký tên	Ghi chú
01	Nguyễn Thị Nở	Nữ	Tân Mỹ	Nở	
02	Huỳnh Thị Diễm	Nữ	Tân Mỹ	Diễm	
03	Phạm Thị Lan Thư	Nữ	Hội PN 2 cấp	Thư	
04	Nguyễn Thị Hiền	Nữ	PBT Hội PN	Hiền	
05	Nguyễn Thị Mỹ Lưu	Nữ	CB. Tuyên giáo	Lưu	
06	Nguyễn Thị Huyền Trân	Nữ	Cb Phụ NN	Trân	

STT	Họ và tên	Giới tính	Địa chỉ	Ký tên	Ghi chú
01)	Nguyễn Hiệp	Nam	PCT. HĐND xã		
02)	Hà Trọng Thọ	Nam	CB địa chính		
03)	Võ pháo	Nam	Tân Mỹ		
04)	Đặng Lê Sơn	Nam	phó CT MTTQ xã		
05	Nguyễn Thành Dư	Nam	Tân Mỹ		
06	Nguyễn Nhu	Nam	Tân Mỹ		
07	Phan Đắc Lộc	Nam	Tân Mỹ		
08	Võ Kim Hường	Nam	Tân Mỹ		
09	Võ Văn Hồng	Nam	Tân Mỹ		
10	Nguyễn An	Nam	Tân Mỹ		
	Trần Bích Hải				
11	Lê Minh Vương	Nam	Tân Mỹ		
12	Cao Minh Hải	Nam	Tân Mỹ		
13	Cao Văn Vinh	Nam	Tân Mỹ		
14	Võ Văn Tự	Nam	Tân Mỹ		
15	Cao Văn phương	Nam	Tân Mỹ		
16	Nguyễn Ngôi	Nam	Tân Mỹ		
17	Trần Văn Phúc	Nam	Tân Mỹ		
18	Nguyễn Văn Thiện	Nam	Tân Mỹ		
19	Võ Văn Long	Nam	Tân Mỹ		
20	Huỳnh Hữu Phú	Nam	Tân Mỹ		
21	Huỳnh Văn Thắng	Nam	Tân Mỹ		
22	Huỳnh Hữu Đức	Nam	Tân Mỹ		
23	Đỗ Văn Cấp	Nam	Bí thư Đảng ủy xã		
24	Lê Anh Quốc	Nam	PCT HĐND xã		
25	Nguyễn Tuyên Hoàng	Nam	CB. Địa chính xã		

STT	Họ và tên	Giới tính	Địa chỉ	Ký tên	Ghi chú
26	Phan Văn Phong	Nam			
27	Nguyễn Văn Nhân	Nam	CT Cựu chiến binh		
28	Trần Thiên Phương	Nam	Ch. VHTT		
29	Nguyễn Hồng Thái	Nam	CB		

Đại diện cộng đồng

Đại diện UBND xã

PHÓ CHỦ TỊCH

Lê Anh Quốc

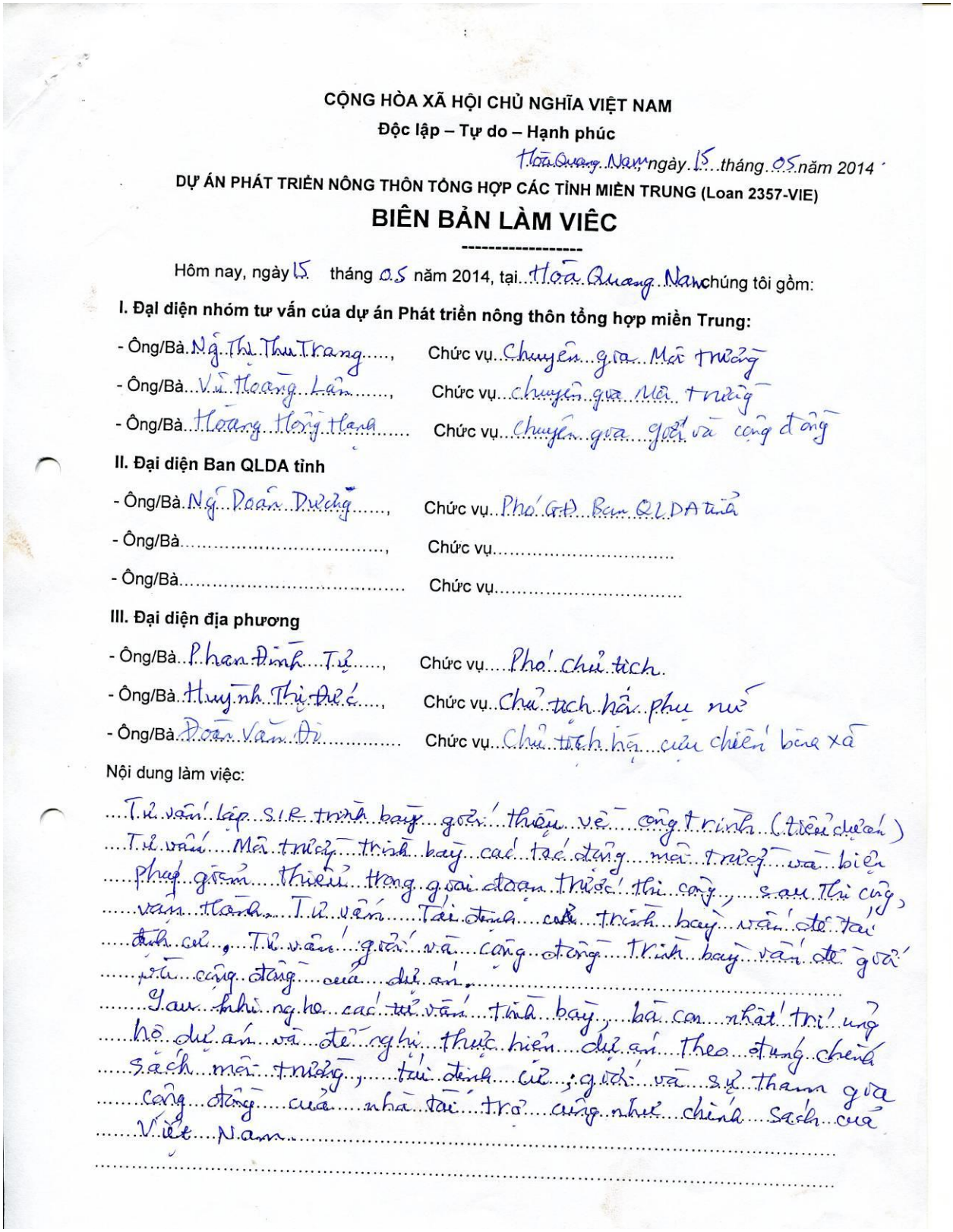
Đại diện Ban QLDA tỉnh

GIÁM ĐỐC

Ngô Đình Thiện

Đại diện tư vấn

Meeting minutes at public consultation and lists of attendance in the public consultation meeting at Hoa Quang Nam commune



CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

Hòa Quang Nam, ngày 15 tháng 05 năm 2014

DỰ ÁN PHÁT TRIỂN NÔNG THÔN TỔNG HỢP CÁC TỈNH MIỀN TRUNG (Loan 2357-VIE)

BIÊN BẢN LÀM VIỆC

Hôm nay, ngày 15 tháng 05 năm 2014, tại Hòa Quang Nam chúng tôi gồm:

I. Đại diện nhóm tư vấn của dự án Phát triển nông thôn tổng hợp miền Trung:

- Ông/Bà. Ng. Thị Thu Trang....., Chức vụ. Chuyên gia Môi trường
- Ông/Bà. Võ Hoàng Lân....., Chức vụ. chuyên gia Môi trường
- Ông/Bà. Hoàng Hồng Hạnh..... Chức vụ. Chuyên gia giới và cộng đồng

II. Đại diện Ban QLDA tỉnh

- Ông/Bà. Ng. Doãn Dương....., Chức vụ. Phó GĐ Ban QLDA tỉnh
- Ông/Bà....., Chức vụ.....
- Ông/Bà..... Chức vụ.....

III. Đại diện địa phương

- Ông/Bà. Phan Đình Tứ....., Chức vụ. Phó chủ tịch.
- Ông/Bà. Huỳnh Thị Đức....., Chức vụ. Chủ tịch hội phụ nữ
- Ông/Bà. Đoàn Văn Đi..... Chức vụ. Chủ tịch hội cựu chiến binh xã

Nội dung làm việc:

Tư vấn lập SIP trình bày giới thiệu về công trình (triển khai)
Tư vấn Môi trường trình bày các tác động môi trường và biện pháp giảm thiểu trong giai đoạn thực thi công, sau thi công, vận hành. Tư vấn Tái định cư trình bày vấn đề tái định cư, Tư vấn giới và cộng đồng trình bày vấn đề giới và cộng đồng của dự án.
Sau khi nghe các tư vấn trình bày, bà con nhất trí ủng hộ dự án và đề nghị thực hiện dự án theo đúng chính sách môi trường, tái định cư, giới và sự tham gia cộng đồng của nhà tài trợ cũng như chính sách của Việt Nam.

CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

Hòa Quang Nam, ngày 15 tháng 05 năm 2014

DỰ ÁN PHÁT TRIỂN NÔNG THÔN TỔNG HỢP CÁC TỈNH MIỀN TRUNG (Loan 2357-VIE)

BIÊN BẢN LÀM VIỆC

Hôm nay, ngày 15 tháng 05 năm 2014, tại Hòa Quang Nam chúng tôi gồm:

I. Đại diện nhóm tư vấn của dự án Phát triển nông thôn tổng hợp miền Trung:

- Ông/Bà. Ng. Thị Thu Trang....., Chức vụ. Chuyên gia Môi trường
- Ông/Bà. Vũ Hoàng Lân....., Chức vụ. chuyên gia Môi trường
- Ông/Bà. Hoàng Hồng Hạnh..... Chức vụ. Chuyên gia giới và cộng đồng

II. Đại diện Ban QLDA tỉnh

- Ông/Bà. Ng. Doãn Dưỡng....., Chức vụ. Phó GĐ Ban QLDA tỉnh
- Ông/Bà....., Chức vụ.....
- Ông/Bà..... Chức vụ.....

III. Đại diện địa phương

- Ông/Bà. Phan Đình Tứ....., Chức vụ. Phó chủ tịch.
- Ông/Bà. Huỳnh Thị Đế....., Chức vụ. Chủ tịch hội phụ nữ
- Ông/Bà. Đoàn Văn Đi..... Chức vụ. Chủ tịch hội cựu chiến binh xã

Nội dung làm việc:

Tư vấn lập SIP trình bày giới thiệu về công trình (tiểu dự án)
Tư vấn Môi trường trình bày các tác động môi trường và biện pháp giảm thiểu trong giai đoạn trước thi công, sau thi công, vận hành. Tư vấn Tái định cư trình bày văn đề tái định cư, Tư vấn giới và cộng đồng trình bày văn đề giới và cộng đồng của dự án.
Sau khi nghe các tư vấn trình bày, bà con nhất trí ủng hộ dự án và đề nghị thực hiện dự án theo đúng chính sách môi trường, tái định cư, giới và sự tham gia cộng đồng của nhà tài trợ cũng như chính sách của Việt Nam.

Sau khi đọc lại biên bản, những người có mặt đồng ý về nội dung biên bản, không có ý kiến gì khác.

Đại diện Ban QLDA tỉnh

GIÁM ĐỐC

Ngô Đình Thiện

Đại diện UBND xã

Phan Đình Cự

Đại diện tư vấn

Vũ Hoàng Lâu

CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

Hoà Quang Nam, ngày 15 tháng 05 năm 2014

DỰ ÁN PHÁT TRIỂN NÔNG THÔN TỔNG HỢP

CÁC TỈNH MIỀN TRUNG - KHOẢN VAY BỔ SUNG

BIÊN BẢN HỌP THAM VẤN CỘNG ĐỒNG

Về các chính sách an toàn: Môi trường, Tái định cư, Giới và Dân tộc thiểu số

Tên tiểu dự án: Nâng cấp hệ thống kênh chính và kênh nhánh - HT thuỷ lợi Đông Cam

Xã Hòa Quang Nam, huyện Phú Hòa, tỉnh Phú Yên

I. Thành phần tham dự:

- Ông/Bà Phan Đình Tứ, Chức vụ Phó chủ tịch UBND Xã
- Ông/Bà Huỳnh Thị Đức, Chức vụ Chủ tịch hội Phụ nữ
- Ông/Bà Đoàn Văn Đi, Chức vụ Chủ tịch hội cựu Chiến binh xã
- Ông/Bà Ng Duẩn Dưỡng, Chức vụ Phó GĐ Ban QLDA tỉnh
- Ông/Bà Ng Thị Thu Trang, Chức vụ Chuyên gia Mô trường
- Ông/Bà Vũ Hoàng Lân, Chức vụ Chuyên gia Mô trường
- Ông/Bà Hoàng Hoài Nam, Chức vụ Chuyên gia giới và cộng đồng

- Đại diện những hộ bị ảnh hưởng ..... người, trong đó .....nữ, chiếm....(%) , Dân tộc thiểu số.....người, chiếm....%

II. Nội dung

2.1 Các nội dung phổ biến:

- Cung cấp các thông tin về dự án như địa điểm, quy mô, các thông số kỹ thuật cơ bản ....

- Chính sách an toàn của dự án bao gồm: Chính sách về giới và sự tham gia của cộng đồng; Kế hoạch hành động giới; Chính sách môi trường, Chính sách Tái định cư và kế hoạch phát triển người dân tộc thiểu số.

2.2 Tham vấn cộng đồng:

- Tham vấn các vấn đề giám sát và tham gia của cộng đồng trong các giai đoạn chuẩn bị, thực hiện, vận hành tiểu dự án, các vấn đề về giới và lồng ghép giới, nhóm dễ tổn thương, hộ bị ảnh hưởng nặng...

- Tham vấn các vấn đề về môi trường, tác động môi trường tiềm năng của dự án bao gồm tác động lên môi trường tự nhiên và xã hội của khu vực dự án và những biện pháp giảm thiểu các tác động tiêu cực;

- Tham vấn các vấn đề về tái định cư, các tác động dự kiến, quyền lợi của người bị ảnh hưởng, các biện pháp giảm thiểu tối đa nhằm có ít tác động nhất đến người bị ảnh hưởng.

- Tham vấn nhu cầu đào tạo của các hộ bị ảnh hưởng.

III. Ý kiến thảo luận

III.1.Các vấn đề về giới, tham gia cộng đồng

- Ban giám sát cộng đồng đề nghị lập gồm đại diện chính quyền và các thôn nên do người dân bầu lên. Tăng cường việc giám sát thấy lúng cộng đồng còn hạn chế do chưa biết chưa thấy thì
- Tỷ lệ tham gia của phụ nữ và các cuộc họp tham vấn, tập huấn còn hạn chế
- Người dân mong muốn tham gia nhiều hơn và quá trình thực hiện dự án, thi công ổn định lâu dài cho người dân địa phương

III. 2. Các vấn đề về môi trường

Bà con ủng hộ dự án nhưng bà con đề nghị cắm biển báo giảm tốc độ và biển báo cẩn trọng khi xe vận chuyển vật liệu qua ngã 3, 4 và khu vực đông dân và nơi có công trường. Công nhân thi công phải đảm bảo an ninh trật tự, không làm ảnh hưởng tới người dân

III.3. Các vấn đề về tái định cư và dân tộc thiểu số

Bà con hoàn toàn ủng hộ dự án, tạo điều kiện cho việc thực hiện dự án. Nếu dự án có lấy đất tạm để thi công hoặc việc giải phóng mặt bằng của dự án sẽ làm mất cây cối thì phải đền bù cho dân theo đúng chính sách của nhà nước và nhà tài trợ

IV. Kết luận

Bà con sẵn sàng tạo điều kiện cho việc thực hiện dự án, hoàn toàn ủng hộ dự án, mong muốn dự án được triển khai sớm. Bà con mong dự án được thực hiện theo đúng chính sách về môi trường, tái định cư, vị thế và sự tham gia của cộng đồng

Cuộc họp các bên thống nhất và kết thúc vào lúc 16.4 ngày 15 tháng 05 năm 2014

Đại diện cộng đồng

Đại diện UBND xã

KT. CHỦ TỊCH
PHÓ CHỦ TỊCH

Phan Đình Tự

Đại diện Ban QLDA tỉnh

GIÁM ĐỐC

BAN QUẢN LÝ CÁC DỰ ÁN NÔNG NGHIỆP

Ngô Đình Thiện

Đại diện tư vấn

Vũ Hoàng Lân

CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

Hòa Quang Nam, ngày 15 tháng 05 năm 2014

DỰ ÁN PHÁT TRIỂN NÔNG THÔN TỔNG HỢP CÁC TỈNH MIỀN TRUNG – KHOẢN VAY BỔ SUNG

DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP

(Tham vấn cộng đồng về chính sách an toàn: Môi trường, Tái định cư, Giới và Dân tộc thiểu số

Tên tiểu dự án: Kiên cố hóa kênh chính và kênh nhánh hệ thống thủy lợi Đông Cam

Xã Hòa Quang Nam, huyện Phú Hòa, tỉnh Phú Yên

STT	Họ và tên	Giới tính	Địa chỉ	Ký tên	Ghi chú
1	Huỳnh Thị Đức	Nữ	CT. Hội LHPN xã		
2	Hà Thị Phương Liên	"	VP. UBND xã	Liên	
3	Nguyễn Thị Tròng	"	Thôn Đại Bình	Tròng	
4	Phan Thị Chứng	"	"	Chứng	

STT	Họ và tên	Giới tính	Địa chỉ	Ký tên	Ghi chú
1	Phan Đình Tuỳ	Nam	PCT. UBND xã		
2	Dương Văn Tam	"	PCT. UBMTTQVN xã		
3	Đoàn Văn Đi	"	CT. Hội CCB xã		
4	Nguyễn Ngọc Lê	"	Thôn Đại Phú		
5	Đặng Ngọc Tuấn	"	Thôn Đại Bình		
6	Dương Thanh Nam	"	Thôn Đại Phú		
7	Trần Vĩnh Linh	"	Thôn Đại Bình		
8	Đào Xuân Thưởng	"	"		
9	Đặng Thanh Phương	"	"	Phương	
10	Đặng Văn Tâm	"	"	Tâm	
11	Trần Đình Mai	"	"	Mai	
12	Đặng Ngọc Chung	"	"		
13	Lê Xu	"	Thôn Đại Phú		
14	Lê Văn Thạch	"	"		
15	Nguyễn Trọng Thuận	"	DC - NN - XD		
16	Bùi Văn Tứ	"	CT. Hội NDân xã		

STT	Họ và tên	Giới tính	Địa chỉ	Ký tên	Ghi chú

Đại diện cộng đồng

Đại diện UBND xã

Phan Đình Tí

Đại diện Ban QLDA tỉnh

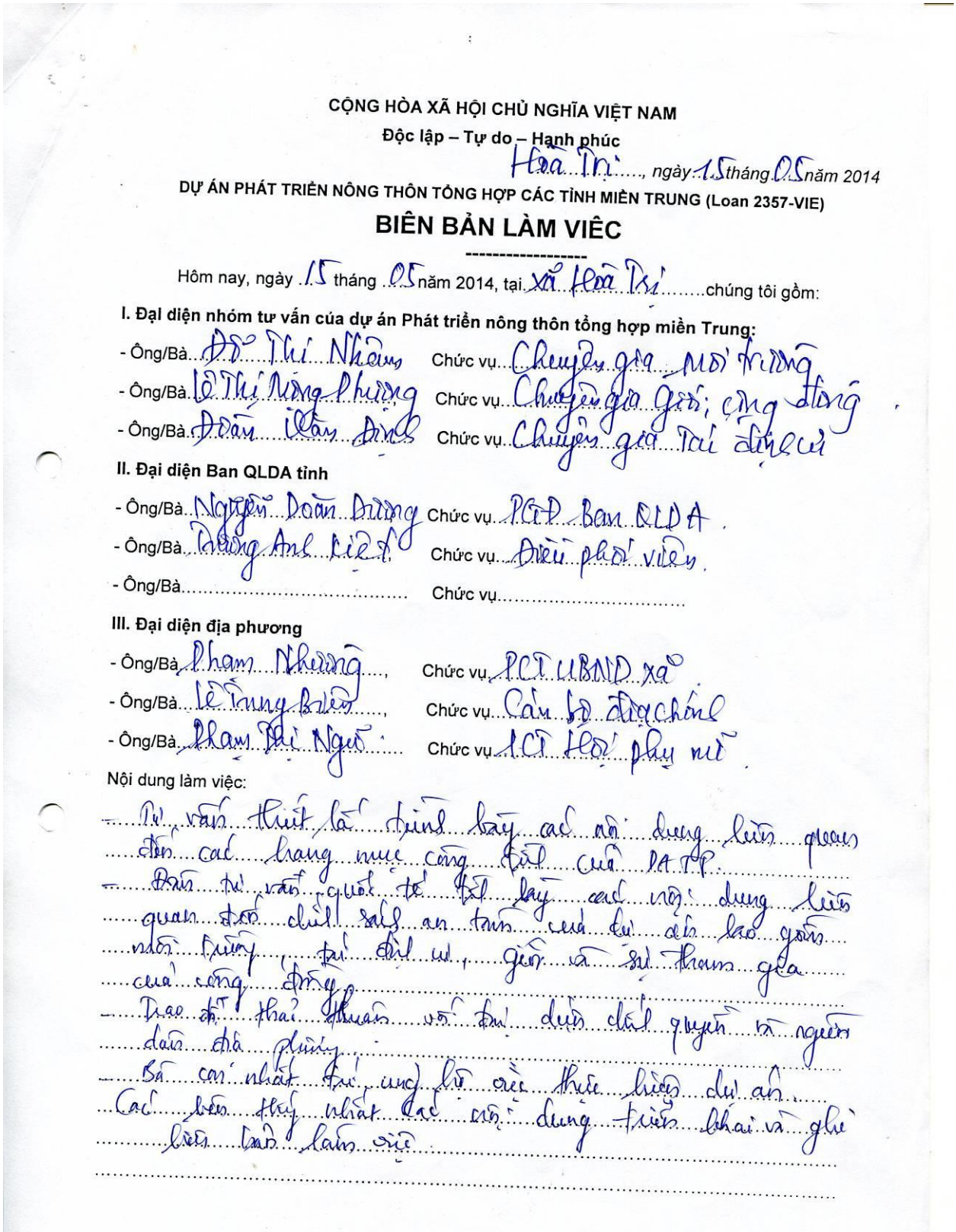
GIÁM ĐỐC

Ngô Đình Thiện

Đại diện tư vấn

Vũ Hoàng Lân

Meeting minutes at public consultation and lists of attendance in the public consultation meeting at Hoa Tri commune



CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

Hòa Trị, ngày 15 tháng 05 năm 2014

DỰ ÁN PHÁT TRIỂN NÔNG THÔN TỔNG HỢP CÁC TỈNH MIỀN TRUNG (Loan 2357-VIE)

BIÊN BẢN LÀM VIỆC

Hôm nay, ngày 15 tháng 05 năm 2014, tại xã Hòa Trị chúng tôi gồm:

I. Đại diện nhóm tư vấn của dự án Phát triển nông thôn tổng hợp miền Trung:

- Ông/Bà: Đỗ Thị Nhàm Chức vụ: Chuyên gia môi trường
- Ông/Bà: Lê Thị Nông Phương Chức vụ: Chuyên gia giới; cộng đồng
- Ông/Bà: Đoàn Văn Anh Chức vụ: Chuyên gia Tái định cư

II. Đại diện Ban QLDA tỉnh

- Ông/Bà: Nguyễn Doãn Dũng Chức vụ: PGĐ Ban QLDA
- Ông/Bà: Đặng Anh Việt Chức vụ: Điều phối viên
- Ông/Bà: ..... Chức vụ: .....

III. Đại diện địa phương

- Ông/Bà: Phạm Nhường, Chức vụ: PCT UBND xã
- Ông/Bà: Lê Trung Biên, Chức vụ: Cán bộ địa chính
- Ông/Bà: Phan Thị Ngữ Chức vụ: CT Hội phụ nữ

Nội dung làm việc:

- Tư vấn thứ tự trình bày các nội dung liên quan đến các hạng mục công trình của DA TP.
- Đại tư vấn cuốn tờ trình bày các nội dung liên quan đến đánh giá an toàn của đê đến bao gồm nhóm đường, tái định cư, giới và sự tham gia của cộng đồng.
- Trao đổi thảo luận với đại diện chính quyền và người dân địa phương.
- Bổ sung nhất trí ủng hộ việc thực hiện dự án.
- Các bên thống nhất các nội dung triển khai và ghi biên bản làm việc.

Sau khi đọc lại biên bản, những người có mặt đồng ý về nội dung biên bản, không có ý kiến gì khác.

Đại diện Ban QLDA tỉnh

GIÁM ĐỐC

Ngô Đình Thiện

Đại diện UBND xã

Phạm Nhường

Đại diện tư vấn

CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

Hoà Thi..., ngày 15 tháng 05 năm 2014

DỰ ÁN PHÁT TRIỂN NÔNG THÔN TỔNG HỢP

CÁC TỈNH MIỀN TRUNG - KHOẢN VAY BỔ SUNG

BIÊN BẢN HỌP THAM VẤN CỘNG ĐỒNG

Về các chính sách an toàn: Môi trường, Tái định cư, Giới và Dân tộc thiểu số

Tên tiểu dự án: Kiên cố kênh chính, kênh nhánh Đông Cam.

Xã Hoà Thi, huyện Phú Hoà, tỉnh Phú Yên.

I. Thành phần tham dự:

- Ông/Bà Nguyễn Doãn Dương, Chức vụ PGĐ Ban QLDA tỉnh
- Ông/Bà Trần Anh Kiệt, Chức vụ Điều phối viên
- Ông/Bà Hồ Thị Nhàn, Chức vụ Chuyên gia Môi trường
- Ông/Bà Lê Thị Hồng Phương, Chức vụ Chuyên gia Giới
- Ông/Bà Trần Văn Định, Chức vụ Chuyên gia Tái định cư
- Ông/Bà Phạm Nhường, Chức vụ PCT UBND xã
- Ông/Bà Phạm Thị Ngữ, Chức vụ CT Hội phụ nữ xã.

- Đại diện những hộ bị ảnh hưởng ..... người, trong đó .....nữ, chiếm....(%) , Dân tộc thiểu số.....người, chiếm....%

II. Nội dung

2.1 Các nội dung phổ biến:

- Cung cấp các thông tin về dự án như địa điểm, quy mô, các thông số kỹ thuật cơ bản ....

- Chính sách an toàn của dự án bao gồm: Chính sách về giới và sự tham gia của cộng đồng; Kế hoạch hành động giới; Chính sách môi trường, Chính sách Tái định cư và kế hoạch phát triển người dân tộc thiểu số.

2.2 Tham vấn cộng đồng:

- Tham vấn các vấn đề giám sát và tham gia của cộng đồng trong các giai đoạn chuẩn bị, thực hiện, vận hành tiểu dự án, các vấn đề về giới và lồng ghép giới, nhóm dễ tổn thương, hộ bị ảnh hưởng nặng...

- Tham vấn các vấn đề về môi trường, tác động môi trường tiềm năng của dự án bao gồm tác động lên môi trường tự nhiên và xã hội của khu vực dự án và những biện pháp giảm thiểu các tác động tiêu cực;

- Tham vấn các vấn đề về tái định cư, các tác động dự kiến, quyền lợi của người bị ảnh hưởng, các biện pháp giảm thiểu tối đa nhằm có ít tác động nhất đến người bị ảnh hưởng.

- Tham vấn nhu cầu đào tạo của các hộ bị ảnh hưởng.

III. Ý kiến thảo luận

III.1.Các vấn đề về giới, tham gia cộng đồng

- Ban giám sát cộng đồng được thành lập do người dân bầu các thành viên và UBMTTQ làm trưởng ban.
- Phụ nữ thường ít tham gia vào các hoạt động xã hội, họp hành, tập huấn. Cần phải nêu các chỉ tiêu về giới rõ ràng thì có thể thực hiện được.
- Người dân mong muốn được tham gia vào quá trình thực hiện dự án.

III. 2. Các vấn đề về môi trường

- Tác động môi trường của dự án chủ yếu trong giai đoạn thi công nhưng tác động nhỏ và có thể chấp nhận được.
- Bà con đề nghị các xe vận chuyển phải đảm bảo trọng tải để tránh gây hư hỏng đường thôn xóm, có biển báo tại các khu vực thi công.
- Đăng ký tạm trú đầy đủ cho công nhân.
- Trong giai đoạn vận hành phải đảm bảo hành lang an toàn kênh và tránh hiện tượng vứt rác ra kênh.

III.3. Các vấn đề về tái định cư và dân tộc thiểu số

- Đền bù giải phóng mặt bằng là nhỏ, chủ yếu là đất nông nghiệp.
- Người dân đồng thuận ủng hộ dự án và đề nghị thỏa mãn các yêu cầu, quyền lợi về đền bù được đề ra.
- Không có dân tộc thiểu số trong khu vực.

IV. Kết luận

Dự án mang lại nhiều lợi ích kinh tế, đặc biệt là đảm bảo cho các sản xuất nông nghiệp. Và em rất chính quyền nhất là ủng hộ dự án và mong muốn dự án sớm được triển khai thực hiện. Đây quả thật là một dự án cần có sự kết hợp chặt chẽ với địa phương để việc thực hiện được thuận lợi.

Cuộc họp các bên thống nhất và kết thúc vào lúc .....ngày 15..tháng.05.năm 2014

Đại diện cộng đồng

Đại diện UBND xã

Phạm Nhường

Đại diện Ban QLDA tỉnh

GIÁM ĐỐC

Ngô Đình Thiện

Đại diện tư vấn

CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

Hoà Trí, ngày 15 tháng 05 năm 2014

DỰ ÁN PHÁT TRIỂN NÔNG THÔN TỔNG HỢP CÁC TỈNH MIỀN TRUNG – KHOẢN VAY BỔ SUNG

DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP

(Tham vấn cộng đồng về chính sách an toàn: Môi trường, Tái định cư, Giới và Dân tộc thiểu số

Tên tiểu dự án: Kiên cố kênh chính, kênh nhánh HT Đông Cam.

Xã Hòa Trí, huyện Phú Hòa, tỉnh Phú Yên.

STT	Họ và tên	Giới tính	Địa chỉ	Ký tên	Ghi chú
1	Lê Thị Lý	Nữ	Hoà Trí	Lý	
2	Bùi Xuân Thu	"	"	Thu	
3	Ng Thị Sang	"	"	Sang	
4	Lê Xuân Hương	"	"	Hương	
5	Nguyễn Thị Bông	"	"	Bông	
6	Nguyễn Thị Cúc	"	"	Cúc	
7	Huỳnh T. Phương	"	"		
8	Huỳnh Thị Sương	"	"	Sương	
9	Bùi Thị Nhường	"	"	Nhường	
10	Lê Thị Mộng Linh	"	"	Linh	
11	Nguyễn Thị Sáu	"	"	Sáu	
12	Huỳnh Thị Xuân	"	"	Xuân	
13	Nguyễn Thị Hoa	"	"	Hoa	
14	Lê Xuân Hường	"	"	Hường	
15	Ng Đại Công Thủy	"	"	Thủy	

STT	Họ và tên	Giới tính	Địa chỉ	Ký tên	Ghi chú
1	Nguyễn Phi Hùng	Nam	Hoà Trí	Hùng	
2	Nguyễn Tấn Chánh	Nam	"		
3	Lê Xuân Đơn		"		
4	Ng Thanh Quang		Hoà Trí		
5	Nguyễn Thắng		"		
6	Đặng Đèo		"		
7	Ng Thanh Sử		"		
8	Lê Ngọc Dậy		"		
9	Nguyễn Cường		"		
10	Nguyễn Thanh Đức		"		
11	Ng Trọng Thắng		"		
12	Lê Văn Năm		"	Năm	
13	Cao Xuân Hường		"		
14	Lê Văn Cảnh		"		
15	Nguyễn Văn Phi		"		
16	Nguyễn Trọng Đức		"		

STT	Họ và tên	Giới tính	Địa chỉ	Ký tên	Ghi chú

Đại diện cộng đồng

Đại diện UBND xã

Phạm Nhường

Đại diện Ban QLDA tỉnh

GIÁM ĐỐC

Ngô Đình Thiện

Đại diện tư vấn

Photos of public consultation meetings

Photo 15: Public consultation meeting at Hoa Thang commune

Photo 16: Public consultation meeting at Hoa Tan Tay commune

Photo 17: Meeting at Phu Hoa district people's committee

Photo 18: Public consultation meeting at Hoa Phu commune

Photo 19: Public Consultation in Hoa Tri Commune, 15 May 2014

Annex 3. Data source

1- *SIR - Lining and Upgrading Main and Branch Canals of Dong Cam Irrigation System subproject, Phu Yen province;*

2- *Annual report on social economic of Hoa Tri, Hoa Phu, Hoa Quang Nam and Hoa Tan Tay; 2013;*

3- *Environmental Monitoring data for Air quality, water quality in the subproject area 2013, Phu Yen Province's Center of Observation and Environmental Analysis, Data collection from beneficiary communities in the years of 2013.*

Annex 3: Environmental monitoring forms

Environmental Compliance Monitoring Form for Construction Package

Part A: General Project Information

Subproject Name:_____

SIR Code:_____ Subproject Package #:_____ Activity Sector:_____

Province:_____ Districts: _____

Design and Supervision Consultant Firm:_____

Construction Company Name:_____ Contract Date: _____

Contract Amount:_____ Contract Duration (days)_____

Person Responsible: _____ Phone _____

PPMU EMO:_____ Phone _____

Part B: Monitoring checklist

Performance Indicator 1. Design and Preparations

The PPMU to complete 1-4 in conjunction with the subproject design consultant at the time the project is tendered. Date of Monitoring:_____

	Yes	No	Remarks
1. Have all UXO been cleared prior to commencement of construction?			
2. Does the subproject design meet applicable engineering safety and public health standards?			
3. Have the resettlement provisions been disclosed to the affected communities and compensation made to affected persons or households?			
4. For the applicable subproject type:			
a. Roads, embankments, irrigation works and coastal protection: does the design provide cross drainage to prevent flooding?			
b. Markets: does the design provide washing facilities and toilets in the market area?			

The construction Supervision consultant (CSC) to complete 5-10 with the PPMU and construction contractor at the time of start-up. Date of Monitoring:_____

5. Has the contractor prepared a Site EMP?			
6. Has the contractor posted a public notice regarding the nature, extent and cost of the project?			
7. Are locations for mixing plants sufficiently distant from houses, schools and hospitals?			
8. Are agreements in place with owners for temporary use of land for worker camps and construction yards?			
9. Have spoil disposal sites been selected in consultation with local authorities?			
10. Are official permits on record for quarry sites and borrow pits?			
Score (1-10; 10 total)			(%)

Performance Indicator 2. Worker Provisions

The CSC to complete 11-16 in conjunction with the PPMU and construction contractor following commencement of construction. Date of Monitoring:_____

	Yes	No	Remarks
11. Were local authorities consulted in the planning for the location of construction worker housing?			
12. Are supervisors or other site personnel trained in basic first aid emergency response measures?			
13. Are first aid kits readily available to workers at the job site along with instructions for use?			
14. Has the contractor or Inspector from the Department of Health undertaken an awareness program for communicable diseases/HIV-AIDS?			
15. Has the contractor provided safety equipment (hard hats, ear plugs, dust masks, safety boots and glasses) to workers and training in use?			
16. Are construction camps equipped with adequate water supply, sanitary toilets, washing facilities and facilities for waste collection and storage?			
Score (11-16; 6 total)			(%)

Performance Indicator 3. Biodiversity

The CSC should complete 17-21 in conjunction with the PPMU and construction contractor following commencement of construction. Date of Monitoring:_____

	Yes	No	Remarks
17. Does the project avoid encroaching on natural forests or wetlands?			
18. Does the project avoid adverse effects on flow of natural streams and water quality?			
19. Are worker camps located outside of forested areas and has the contractor restricted access of workers to forests, fishing and hunting?			
20. Does the contractor obtain fill materials only from pre-existing quarries, or from borrow pits within the strict limits of the construction zone?			
21. For irrigation sector projects, are effects on agricultural biodiversity limited through use of integrated pest management?			
Score (17-21; 5 total)			(%)

Performance Indicator 4. Community Based Monitoring

The CSC to complete 22 and 23 in conjunction with the PPMU and construction contractor following commencement of construction. Date of Monitoring:_____

	Yes	No	Remarks
22. Has the contractor posted a public notice regarding complaints from the community?			
23. Has there been a public consultation regarding construction, environmental impact, and the community complaints system?			
Score (22-23; 2 total)			(%)

Outcome of Public Consultation:

Date: _____ Location: _____

Topics covered in presentation: _____
_____

Comments from Attendees:

Performance Indicator 5. Community Values and Safety

Items 24 – 35 should be inspected quarterly. Date of Monitoring:_____

	Yes	No	Remarks
24. Is temporary access provided to adjacent properties as needed?			
25. Is permanent access to adjacent properties reinstated on completion of a segment of work?			
26. Are construction hours adjusted around houses, hospitals and schools to minimize disturbance?			
27. Does the contractor limit the scope of construction in progress to minimize community impacts?			
28. Are physical impacts on public infrastructure and service disruption minimized?			
29. Are materials transported on approved haul routes?			
30. Are construction equipments maintained in good condition?			
31. Do vehicles operate within legal speed limits?			
32. Are material loads traveling on public routes covered?			
33. Is dust suppressed by watering exposed surfaces?			
34. Has the contractor installed signs and lighting in vicinity of works on public roads?			
35. Is access to the construction site restricted to the public?			
Score (24-35; 12 total)			(%)

Performance Indicator 6. Hydrology/Water Pollution

Items 36 – 43 should be inspected quarterly. Date of Monitoring:_____

	Yes	No	Remarks
36. Are construction camps maintained in a clean and hygienic condition?			
37. Are oil, fuel and chemicals stored in enclosed areas (dyked or covered)?			
38. Is discharge of wastewater into water bodies used for water supply avoided?			
39. Is clearing activity suspended during rains?			
40. Does the contractor prevent discharge of concrete trucks to waterways?			
41. Have existing drainage patterns been maintained during construction?			
42. Are areas of standing water in the construction area drained and backfilled?			
43. Are sediment controls installed upslope of waterways?			
Score (36-43; 8 total)			(%)

Performance Indicator 7. Project Completion

Items 44 – 50 should be inspected prior to finalizing the construction works. Date of Monitoring:_____

	Yes	No	Remarks
44. Have drainage fixtures, curbs, road shoulders and ditch slopes been finished out to prevent hazard to the public during use?			
45. Are ground surfaces in the project area graded to prevent water from collecting?			
46. Have all construction debris, tree cuttings, excess dirt, rubble and scrap been removed from the construction zone?			
47. Have all pits been filled in and graded to drain, underground tanks (including septic tanks) removed and holes backfilled?			
48. Are all waste products removed from the construction site, equipment yards and worker camps, including oil waste, scrap materials and equipment, building materials and domestic waste?			
49. Have all points of access (drives, walks) and utilities (water supply, power, communications) to public and private property been restored to original condition?			
50. Have all complaints by the local community and individuals been resolved by the Contractor?			
Score (44-50; 7 total)			(%)

Annex 4: Environmental monitoring forms

Environmental Compliance Monitoring Form for Construction Package

Part A: General Project Information

Subproject Name:_____

SIR Code:_____ Subproject Package #:_____ Activity Sector:_____

Province:_____ Districts: _____

Design and Supervision Consultant Firm:_____

Construction Company Name:_____ Contract Date: _____

Contract Amount:_____ Contract Duration (days)_____

Person Responsible: _____ Phone _____

PPMU EMO:_____ Phone _____

Part B: Monitoring checklist

Performance Indicator 1. Design and Preparations

The PPMU to complete 1-4 in conjunction with the subproject design consultant at the time the project is tendered. Date of Monitoring:_____

	Yes	No	Remarks
51. Have all UXO been cleared prior to commencement of construction?			
52. Does the subproject design meet applicable engineering safety and public health standards?			
53. Have the resettlement provisions been disclosed to the affected communities and compensation made to affected persons or households?			
54. For the applicable subproject type:			
a. Roads, embankments, irrigation works and coastal protection: does the design provide cross drainage to prevent flooding?			
b. Markets: does the design provide washing facilities and toilets in the market area?			

The construction Supervision consultant (CSC) to complete 5-10 with the PPMU and construction contractor at the time of start-up. Date of Monitoring:_____

55. Has the contractor prepared a Site EMP?			
56. Has the contractor posted a public notice regarding the nature, extent and cost of the project?			
57. Are locations for mixing plants sufficiently distant from houses, schools and hospitals?			
58. Are agreements in place with owners for temporary use of land for worker camps and construction yards?			
59. Have spoil disposal sites been selected in consultation with local authorities?			
60. Are official permits on record for quarry sites and borrow pits?			
Score (1-10; 10 total)			(%)

Performance Indicator 2. Worker Provisions

The CSC to complete 11-16 in conjunction with the PPMU and construction contractor following commencement of construction. Date of Monitoring:_____

	Yes	No	Remarks
61. Were local authorities consulted in the planning for the location of construction worker housing?			
62. Are supervisors or other site personnel trained in basic first aid emergency response measures?			
63. Are first aid kits readily available to workers at the job site along with instructions for use?			
64. Has the contractor or Inspector from the Department of Health undertaken an awareness program for communicable diseases/HIV-AIDS?			
65. Has the contractor provided safety equipment (hard hats, ear plugs, dust masks, safety boots and glasses) to workers and training in use?			
66. Are construction camps equipped with adequate water supply, sanitary toilets, washing facilities and facilities for waste collection and storage?			
Score (11-16; 6 total)			(%)

Performance Indicator 3. Biodiversity

The CSC should complete 17-21 in conjunction with the PPMU and construction contractor following commencement of construction. Date of Monitoring:_____

	Yes	No	Remarks
67. Does the project avoid encroaching on natural forests or wetlands?			
68. Does the project avoid adverse effects on flow of natural streams and water quality?			
69. Are worker camps located outside of forested areas and has the contractor restricted access of workers to forests, fishing and hunting?			
70. Does the contractor obtain fill materials only from pre-existing quarries, or from borrow pits within the strict limits of the construction zone?			
71. For irrigation sector projects, are effects on agricultural biodiversity limited through use of integrated pest management?			
Score (17-21; 5 total)			(%)

Performance Indicator 4. Community Based Monitoring

The CSC to complete 22 and 23 in conjunction with the PPMU and construction contractor following commencement of construction. Date of Monitoring:_____

	Yes	No	Remarks
72. Has the contractor posted a public notice regarding complaints from the community?			
73. Has there been a public consultation regarding construction, environmental impact, and the community complaints system?			
Score (22-23; 2 total)			(%)

Outcome of Public Consultation:

Date: _____ Location: _____

Topics covered in presentation: _____
_____

Comments from Attendees:

Performance Indicator 5. Community Values and Safety

Items 24 – 35 should be inspected quarterly. Date of Monitoring:_____

	Yes	No	Remarks
74. Is temporary access provided to adjacent properties as needed?			
75. Is permanent access to adjacent properties reinstated on completion of a segment of work?			
76. Are construction hours adjusted around houses, hospitals and schools to minimize disturbance?			
77. Does the contractor limit the scope of construction in progress to minimize community impacts?			
78. Are physical impacts on public infrastructure and service disruption minimized?			
79. Are materials transported on approved haul routes?			
80. Are construction equipments maintained in good condition?			
81. Do vehicles operate within legal speed limits?			
82. Are material loads traveling on public routes covered?			
83. Is dust suppressed by watering exposed surfaces?			
84. Has the contractor installed signs and lighting in vicinity of works on public roads?			
85. Is access to the construction site restricted to the public?			
Score (24-35; 12 total)			(%)

Performance Indicator 6. Hydrology/Water Pollution

Items 36 – 43 should be inspected quarterly. Date of Monitoring:_____

	Yes	No	Remarks
86. Are construction camps maintained in a clean and hygienic condition?			
87. Are oil, fuel and chemicals stored in enclosed areas (dyked or covered)?			
88. Is discharge of wastewater into water bodies used for water supply avoided?			
89. Is clearing activity suspended during rains?			
90. Does the contractor prevent discharge of concrete trucks to waterways?			
91. Have existing drainage patterns been maintained during construction?			
92. Are areas of standing water in the construction area drained and backfilled?			
93. Are sediment controls installed upslope of waterways?			
Score (36-43; 8 total)			(%)

Performance Indicator 7. Project Completion

Items 44 – 50 should be inspected prior to finalizing the construction works. Date of Monitoring:_____

	Yes	No	Remarks
94. Have drainage fixtures, curbs, road shoulders and ditch slopes been finished out to prevent hazard to the public during use?			
95. Are ground surfaces in the project area graded to prevent water from collecting?			
96. Have all construction debris, tree cuttings, excess dirt, rubble and scrap been removed from the construction zone?			
97. Have all pits been filled in and graded to drain, underground tanks (including septic tanks) removed and holes backfilled?			
98. Are all waste products removed from the construction site, equipment yards and worker camps, including oil waste, scrap materials and equipment, building materials and domestic waste?			
99. Have all points of access (drives, walks) and utilities (water supply, power, communications) to public and private property been restored to original condition?			
100. Have all complaints by the local community and individuals been resolved by the Contractor?			
Score (44-50; 7 total)			(%)

Performance Tracking

Performance Tracking consists of three sections:

a. Performance Follow-up, where performance shortfalls noted in prior monitoring are listed and checked against current monitoring results.

b. Community Complaints, where issues raised by the affected community are registered, tracked and outcomes recorded.

c. Performance Indicator Results, where environmental performance against indicators are recorded.

Section 1: Performance Follow-up

Column 1	Column 2	Column 3	Column 4	Column 5
Performance variable (#) / Date Observed	Reason for negative rating	Was agency responsible notified? / Date	Was problem corrected before next monitoring?	Was performance indicator adjusted?

Section 2: Community Complaints

Column 1	Column 2	Column 3	Column 4	Column 5
Person Registering Complaint / Date	Summary of Complaint	Was agency responsible notified? / Date	Was problem corrected before next monitoring?	Was Person satisfied with Action?

Section 3: Performance Indicator Results

Project Name:_____ SIR No.:_____ Package #:_____Province:_____

Project Start Date:_____

	Startup	Rev.	Q1	Q2	Q3	Q4	Average	Completion	Rev.	Final
Recording Date:										
1. Design and Preparations										
2. Worker Provisions										
3. Biodiversity										
4. Community Based Monitoring										
5. Community Values / Safety										
6. Hydrology/Water Pollution										
7. Project Completion										

Submittal Date:_____ For Calendar Quarter: _____

Inspector:_____

(Signature)

Annex 5:

Environmental mitigation measure to include into bid documents Subproject of Dong Cam irrigation system (Lining and Upgrading total 19.406,4m canals and Upgrading of 24.290 km of rural road)

Sub-project Activity	Potential impacts	Proposed Mitigation Measure
Earthworks Concrete embankment Waste and material transportation	Noise and vibration generation	▪ Use modern and new construction machines and equipment to meet standards of exhaust, noise, and vibration as regulated by the Government. The Contractor needs to submit the Engineer documents proving that all construction vehicles, equipment, and machines are checked and meet requirements concerning noise and vibration generation of the current Vietnam standards as QCVN 26: 2010 for noise level and QCVN 27:2010 for vibration emitted by construction works; ▪ All noise and vibration generation activities shall be restricted to the hours of 22h – 6h and not to be undertaken on Sundays or public holidays at the location nearby residential area such as: Residential areas in Hoa Thang, Hoa An, Hoa Quang, Hoa Tri, Hoa Dinh Dong Communes of Phu Hoa District, Hoa Kien, Commune of Tuy Hoa City, Hoa Phu, Hoa Phong, Hoa Tan Tay, Hoa Thinh of Tay Hoa District Regularly maintenance of construction machines. ▪ Provision noise protection equipment for worker; ▪ In case that, noise generation equipment need to run during night time and holiday time nearby the above sensitive objects, the detail schedule will be considered and approved by SC before could be applied. ▪ Local communities must be informed about construction schedules and time through informal public consultation or any local people meetings and notice board; ▪ Strictly implementing noise control measures as noted above through sampling and taking adequate corrective actions if needed
	Dust and exhaust generation	▪ All excavated soil should be reused for leveling low areas where applicable such as excavated soil could be used for leveling existing sites for construction of access road surface. ▪ Excavation at site will be watered to maintain certain moisture levels, and to prevent or minimize dust dispersion. The watering activities have been proposed at least one per day during dry season in the residential areas, such as residential area in Dinh Tho hamlet – Phu Hoa town, Dinh Thai hamlet – Hoa Dinh Dong commune, Long Phung hamlet - Hoa Tri commune ▪ The construction machineries and equipment have to comply with Decision No. 249/2005/QĐ-TTg dated 10/10/2005 of Prime minister, Regulation on Emission roadmap for road transportation vehicles ▪ Cover the material storage, setting up appropriate of mobilize material to the site to ensure that material will not obstruct at the site and release dust; ▪ All material/waste storage shall be located at least 50 meters from any households and sensitive areas as mentioned above.

Sub-project Activity	Potential impacts	Proposed Mitigation Measure
		▪ Trucks carrying construction waste are covered. All trucks used should have well fitted bodies and not be overtopped in loading to avoid soil scattering. Excavated sludge will be transported by specialized vehicles. ▪ Speeds shall be limited when the trucks pass residential areas to constrain dust flying in the wind which affect health and daily activities of the people living along the roads. The certain section route will be identified by SPC. Speed limitation signs shall be adequately installed within construction site and its regulation shall be remind to each driver by contractor. ▪ Soil scattered on the paved road and public road shall be removed immediately.
Sludge excavation, Worker camp establishment, Waste generation	Odour generation and in-sanitation condition	▪ Excavation activities must be carefully scheduled to avoid the rainy season in order to ensure drainage of runoff water as well as sanitation for both local residents and workers; ▪ It is strong recommended that any intervention actions on the channels, it should be dewatered and dried before implementing excavation activities to reduce odour generation and in-sanitation condition and avoid polluting surface water quality. ▪ Construction waste need to be transported by adequate manners to use for leveling purpose at hollow areas in Hoa Thang, Hoa An, Hoa Quang, Hoa Tri, Hoa Dinh Dong Communes of Phu Hoa District, Hoa Kien, Commune of Tuy Hoa City, Hoa Phu, Hoa Phong, Hoa Tan Tay, Hoa Thinh of Tay Hoa District ▪ Domestic waste and garbage from construction site will be collected by hygienic manner. Provide dustbins at work site. ▪ Disposal of solid wastes into canals, stream, other watercourses, agricultural field and public areas shall be prohibited. ▪ Burning of construction and domestic wastes shall be prohibited. ▪ Toxic waste, if any, need to be collected, transported and treated according to the Circular No. 12/2011-BTNMT dated on 14/04/2011 of MONRE. ▪ Excavated sludge will be transported by specialized vehicles to avoid the leaking out of sludge on the transport routes: ▪ Before the construction activities completed, contractors have to carry out site clearance and environmental recovery, such as: + Transport of all unused materials from the site; + Remove all construction machine and equipment, temporary facilities, worksites; ▪ Environmental recovery at the site such as provision of green trees, grass in both construction sites and disposal location in Hoa Thang, Hoa An, Hoa Quang, Hoa Tri, Hoa Dinh Dong Communes of Phu Hoa District , Hoa Kien, Commune of Tuy Hoa City, Hoa Phu, Hoa Phong, Hoa Tan Tay, Hoa Thinh of Tay Hoa District ,
Excavate activities and worker camp establish on sites…	Water quality impacts	▪ Worksite, camps, material storage areas and load/unload construction material/waste activities must be located far from watercourse to ensure that materials will not be disposed into water, ▪ Excavation activities of drain items must be scheduled to avoid rainy to reduce suspended maters in runoff water entering the surrounding water bodies and existing canals; ▪ Provide adequate facilities in the site including latrines, holding

Sub-project Activity	Potential impacts	Proposed Mitigation Measure
		areas and garbage cans. Waste from latrines will be collected and treated properly through an economic contract with local environmental co-operatives/companies. ▪ Cover material storage areas when raining is needed. Temporary storage of construction and domestic waste on the sites will be no longer than 24 hours. ▪ The placement of washing instruments/vehicles next to the water bodies, existing canals (identified in Water quality impact section) will not allowed avoiding the leaching of waste, sludge, soil and oil contaminated water and maintenance activities will be banned on the sites in all construction drains; ▪ Equipping the dustbins and mobility septic tanks to work sites ((it is proposed that there will be 1 dustbin and 1 mobility septic tank for each site)
Inappropriate soil pit practices and concrete station operation	Soil erosion, vegetation clearance and run off water at soil pit	- Prioritize the use of existing soil pit sites with suitable materials and update the list of soil pit monthly and report to PPMU and minimize impacts on other local resources; - Procure materials only from DONRE authorized soil pit and borrow sites; - Extraction of sand and gravel in river beds shall be prohibited except: (i) where this is no technically and economically feasible alternatives and (ii) provided specific mitigation measures are implemented to minimize impact on river morphology, water quality (e.g., turbidity) and aquatic ecosystems (e.g., reduced extraction during fish spawning period); - Checking the environmental protection commitment documents of soil pit, asphalt concrete stations since the Project will purchased construction material and hot concrete from these areas; - Monitoring the implementation of environmental protection measures at the soil pit and concrete stations; - Supervision the responsibility of environmental recovery activities at the soil pit areas and concrete stations.
Inappropriate construction waste management	Sludge and waste water spreading to surrounding cultivation area as well as air pollution to ambient environment	▪ All solid waste should be reused for levelling low areas where applicable; ▪ Construction waste shall to be transported by adequate manners to places under permission from Commune authorities in Hoa Thang, Hoa An, Hoa Quang, Hoa Tri, Hoa Dinh Dong Communes of Phu Hoa District, Hoa Kien, Commune of Tuy Hoa City, Hoa Phu, Hoa Phong, Hoa Tan Tay, Hoa Thinh of Tay Hoa District and dumped at local peoples gardens ▪ Equip dustbins and mobility septic tanks to work sites ((it is proposed that there will be 4 dustbins and 2 mobility septic tanks provided at each construction site ; ▪ Domestic waste and garbage from worker camps need to be collected by hygienic manner through survive provision of Binh Thuan environmental co-operative; ▪ Disposal of solid wastes into canals, stream, other watercourses, agricultural field and public areas shall be prohibited; ▪ Burning of construction and domestic wastes shall be prohibited; ▪ Toxic waste, if any, need to be collected, transported and treated according to Circular No. 12/2011-BTNMT dated on 14/04/2011 of MONRE

Sub-project Activity	Potential impacts	Proposed Mitigation Measure
		▪ Before construction is completed, the contractor will move all construction wastes and unused materials from the site; ▪ Providing environmental protection measures at the soil disposal location include leveling, temporary drainage during rainy time, boundary edge provision, plantation and environmental recovery.
Use of hazardous substances and hazardous waste disposal	Air, soil and water contamination	▪ The storage area for all hazardous substances are located away from any water bodies in the project area such as irrigation canals, ponds… to avoid the leakage to water bodies ▪ Ensure that safe storage of fuel, other hazardous substances are agreed by PMU and have necessary approval/permit from DONRE and local authorities; ▪ Equipment/vehicle maintenance and refuelling areas will be confined to areas in construction sites designed to contain spilled lubricants and fuels; ▪ Fuel and other hazardous substances shall be stored in areas provided with roof as stated in TCVN 5507:2002- *Hazardous chemicals − Code of practice for safety in production, commerce, use, handling and transportation*; ▪ Segregate hazardous wastes (oily wastes, fuel drums) and ensure that storage, transport and disposal shall not cause pollution; ▪ Ensure all storage containers are in good condition with proper labelling; ▪ Collected, transported and treated by contract with company which has a work permit for treating hazardous waste disposal according to the Circular No. 12/2011/TT-BTNMT on 14 April, 2011 of MONRE.
Transport vehicle activities Construction machinery operation Worker concentration	Community Disturbance and Traffic safety	▪ Place sign boards near construction sites to direct traffic means to slow down at the section close to Work site: ▪ Regulating the transport vehicle speed will not be over 20km when passing above areas; ▪ Construction materials shall be stored tidily at the required locations. ▪ Inform the community about construction schedule through informal public consultation or any local people meetings and notice board;
.Poor management at worksites	Health and safety for the construction workers and the nearby community	▪ Constructor need to work with CS, PMU to establish labour safe regulations on the sites required by law and by good engineering practice, which include: electric safety, operating equipment - general safety requirements, general safety requirements. ▪ Workers shall be provided with appropriate personal protective equipment (PPE) such as safety shoes, hard hats, safety glasses, ear plugs, gloves, etc. at no cost to the employee.. ▪ A first aid kit will be provided at each construction site to ensure patients can receive first aid timely before transporting them to the medical station/hospital ▪ It is mandatory for workers to attend training courses on labour safety before they are recruited to work for the project; ▪ Supervise period on compliance to labour safe measures of workers at project sites. ▪ Contractors ensure to provide safe drinking water to workers for daily uses.

Sub-project Activity	Potential impacts	Proposed Mitigation Measure
		▪ Construction site shall be provided with toilet/sanitation facilities ▪ Contractor shall readily provide and maintain lights, protection fences, signboards and wardens where necessary as requested by the Engineer or local authorities.
Excavation, transport activities	Impacts to public facilities	▪ Obtain the agreement with local authorities in using the transport routes, intervening the canals and if any downgraded observations due to project activities have been found, the contractors have to fully compensate; ▪ Providing the temporary irrigation canals or drainage canals during construction phases if any interventions will be made on these canals; ▪ Consultation and obtain the agreement from local authorities and local peoples on replacement of all affected canals on the fields; ▪ Record the status of the existing roads and canals before construction and make proper compensation for the damages if any. ▪ All public facilities should be fully compensated as its origin after completion of construction works;
Earthworks and excavation activities	Impacts on surrounding agricultural land and infrastructure	▪ No construction materials and/or wastes fall into agricultural land; ▪ Providing the temporary irrigation canals or drainage canals during construction phases if any interventions will be made on these canals to ensure the water flows on all cultivation areas; ▪ Appropriate management of water pollution sources from construction activities to ensure that the construction will not pollute water and soil on all cultivation areas; ▪ Reinstate road surface and fix up damages caused to irrigation canals, water supply/drainage canals; ▪ All activities of contractor only allow within the acquired land areas.
Construction activities Concentration of workers and equipment	Social disturbance	▪ Excavated pond will be dewatered and fenced to reduce high risk for local peoples; ▪ Construction materials shall be stored tidily at the required locations. ▪ Install barriers (temporary fence) at construction areas to deter people access to the site. ▪ The local people shall not be allowed in high-risk areas (excavation sites and areas where heavy equipment is in operation) . ▪ Remain the light during the nigh time on all construction sites. ▪ Construction workers who are not local people must register temporary residents and obtain temporary residential certificate from local authority. ▪ Educate workers on appropriate behaviour for interactions with local community and risks of communicable diseases
Obstructed drainage water flow	Localized flooding and insanitation condition	▪ Setting up appropriate construction schedule at the site to avoid rainy season, especially for excavation activities; ▪ Provision supplemental temporary drainage plans in the construction site to ensure the quickly respond in case of heavy rain, other unforeseen drainage issues and avoid obstructing water in surrounding areas and construction sites; ▪ Providing the temporary irrigation canals or drainage canals during construction phases if any interventions will be made on these canals to ensure the water flows;

Sub-project Activity	Potential impacts	Proposed Mitigation Measure
		▪ Supplemental temporary drainage plans must be revised and approved by PMU, and Construction Supervision before construction works started.
Excavation activities and Lining & upgrading for canals	Affect irrigation water supply system for agriculture production	▪ The Contractor should coordinate with irrigation authority (irrigation exploitation management enterprise), commune's irrigation staff and cultivation households in water supply area of subproject main canal and primary canal of N3, N6, Xuan Hoa Canal 2&3 (north canal), Hoc Ram main canal, Tan My canal , Canal N1-Hoc Ram, Canal N8-2, Canal N8 to reach agreement on water supply time (when construction suspension), construction time (should be implemented at the time when irrigation activities are not done); ▪ Commune's irrigation staff, irrigation exploitation enterprise or relevant authorities should early inform households and contractor on water supply schedule so that they can make plan on their own initiative; ▪ Phu Yen PPMU and the Contractor should pay attention to mitigation measures to reduce damages or to implement compensation for arising impacts due to stop of water supply at cultivation area, etc ▪ Construction time should be the same time that Dong Cam Irrigation System stop water supply for major repairs or after harvesting Summer-Autumn Crop & before starting Winter-Spring Crop, construction time is proposed: from 15 April to 15 May, then from the end August to 15 September)
All construction activities	Cultural heritage impacts	▪ Where grave is found during construction, coordinate with local authorities to arrange for relocation and mapping the location of the graves before and after relocation; ▪ Halt construction activities, protect the site and inform construction supervision for guidance if artifacts are found at construction site.
Environmental recovery	Odour generation, unsafety and sanitation condition to local people	Before construction is completed, the contractor will move all construction wastes and unused materials from the sites to approved sites Monitoring environmental recovery at: ▪ Construction waste disposal location ▪ Material soil pit and borrow areas ▪ Working sites Reinstate and ensure good condition for any effected public facilitates.