

Initial Environmental Examination

June, 2016

VIE: INTEGRATED RURAL DEVELOPMENT SECTOR PROJECT IN THE CENTRAL PROVINCES (Additional Financing)

Subproject: Upgrading East-West Hoi Tom Dike System,
Combined With Production Road, Thua Thien Hue Province

CURRENCY EQUIVALENTS

(as of 15 September 2014)

| | | |
|---------------|---|-----------------------|
| Currency unit | – | Vietnamese Dong (VND) |
| VND 1.00 | = | \$0.0000472 |
| \$1.00 | = | VND 21,175 |

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:

- i. Irrigation, drainage and flood control infrastructure including river embankments, sluices and salinity intrusion control structures;
- ii. Rural roads including bridges and culverts.

3. As part of IRDPCP 2nd phase, Upgrading of East-West Hoi Tom Dike, combined with production road Subproject will be constructed in 3 communes, included Phong Chuong, Dien Loc communes of Phong Dien District and Quang Thai commune of Quang Dien District of Thua Thien-Hue City

4. This Initial Environmental Examination/Commitment on Environmental Protection (IEE/CEP) document has been prepared to meet the environmental safeguards requirements of the ADB¹ and GOV². 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

| DATA ITEM | SUBPROJECT DATA |
|--|--|
| GENERAL INFORMATION | |
| Subproject Name | Upgrading of East-West Hoi Tom Dike, Combined With Production Road |
| Subproject Type | Flood protection |
| Project owner | Thua Thien Hue DARD (Thua Thien Hue DARD will assign the responsibility for management of implementation of the subproject to Thua Thien Hue PPMU) |
| Address of Project owner | No. 7, Dong Da Street, Hue city, Thua Thien Hue province |
| Name and Title of Head of Project owner | Mr. Ho Dang Vang – Director of Department of Agriculture and Rural Development |
| Telephone, fax and email details of Project owner | Tel: 054.3834957 Fax: 054.3834922 Email: duanptnth.hue@gmail.com |
| Name of Environmental Officer of PPMU | Mr. Diep Minh Phong |
| Telephone, fax and email details of PPMU Environmental Officer | Tel: 0905979676 Email: duanptnth.hue@gmail.com Tel: 0905979676 |
| SUBPROJECT DESCRIPTION | |
| New project or rehabilitation project | Rehabilitation project |
| Surface water or ground water | Surface water |
| Identification of water source | Hoi Tom wetland, O Lau river |
| Identification of drainage basin area | At present, 540ha of whole agricultural land in the subproject area is surrounded by East – West Hoi Tom dike system and West O Lau dike section. East – West Hoi Tom Dike System has a length of 7.85 km, in which 5.72 km in east bank, 2.13 km in west bank from a degraded earth dyke, cross section is small, crest level of the dike is low, so it could only confront with small & early flooding, inundation is not protected. Objective of the subproject is to ensure 540 ha of agricultural land will not be affected by small and early floods, then promote development of agricultural product in Phong Chuong, Dien Loc communes of Phong Dien district and Quang Thai commune of Quang Dien district. |
| Type of Subproject | East – West Hoi Tom dike system started at the Hoi Lon, ended at Hoi Tom Bridge. First stage of IRDCPP constructed West Hoi Tom dike section from Hoi Lon to Hoa Xuan 2 bridge with 3.3 km of length. The subproject of this stage will rehabilitate a protection dyke system with a length of 7.85 km, in which 5.72 km in east bank, |

Initial Environmental Examination (IEE)/Commitment on Environmental Protection (CEP)

Upgrading East-West Hoi Tom dike system, combined with production road subproject, Thua Thien Hue province
Integrated Rural Development in Central Provinces Project

| DATA ITEM | SUBPROJECT DATA |
|---|---|
| | 2.13 km in west bank from degraded earth dyke to 3 face-concrete dyke and road routes for construction and management with total length of 2,7 km, road type will be macadam. |
| Purpose of the subproject | The subproject will contribute to poverty reduction for local people in Phong Chuong, Dien Loc communes of Phong Dien district and Quang Thai commune of Quang Dien district through upgrading of dyke system to prevent small & early flooding, and solving inundation problems for 540ha of two rice crops and extending cultivated land for 45 ha of vacant land. |
| Width of dike surface & road | Wide of the dike surface is 3m; Wide of construction/management road is 3m. |
| Length and Height of the dike | Hoi Tom surrounding dike: Total length: 7.85km (East Hoi Tom: 5.72 km, West Hoi Tom: 2.13 km) Dyke level: 1.20m; |
| Number of culverts | New construction of 7 open culverts, repairing of 1 open culvert. |
| Length of management road | Upgrading of 3 construction routes with length of 2.6 km, width of 3 m, embanked by macadam |
| Supplementary items | <i>East Hoi Tom bank:</i> <ul style="list-style-type: none"> - 4 open culverts for drainage (3 culvert with B=2.5m & 1 culvert with B=2.0m) - 15 circular culvert for taking irrigation water (D=60-100cm) <i>West Hoi Tom bank</i> <ul style="list-style-type: none"> - 3 open culverts for drainage (2 new culvert with B=2.5m & 1 repaired culvert with B=2.5m) - 6 circular culvert for taking irrigation water (D=60-100cm) - New Hoi Moi bridge: Length = 8m, wide = 3.5m for road traffic |
| CONSTRUCTION ACTIVITIES | |
| Construction commencement date (month/year) | September 2016 |
| Construction completion date (month/year) | September 2018 |
| Number of construction workers | Approximately 80 peoples |
| Construction camps required (Yes/No) | Yes |
| Construction in wet season (Yes/No) | Yes (the construction will also be implemented in the dry days in the rainy season to meet the deadline) |
| Number and condition of construction vehicles and equipment | 2 excavators, 1 grader, 1 crane, 4 bitumen plants, 4 compactors, 7 trucks of ≥ 7 ton type, etc. |
| Location and square of disposal site and sources of materials | <u>Permanent disposal site:</u> Weathered soil to be reused to fill field side surrounding dyke, which will be used as rice field protection. And unused soil will be disposed at Dien Loc commune (see Annex 6: Agreement on Location of disposal site for West-East Hoi Tom dike system Subproject -Dien Loc CPC) <u>Temporary gathering site:</u> This location will be located at the |

| DATA ITEM | SUBPROJECT DATA |
|---|--|
| | <p>CPC's yard, public house or renting house in local sites;</p> <p><u>Sources of materials:</u></p> <p><i>Sand:</i> will be bought in Phong Thu commune-Phong Dien district, about 20 km far from the Site.</p> <p><i>Soil:</i> will be exploited from borrow pit in Phong An commune-Phong Dien district, which is existing borrow pit & is under exploiting, keep distance about 20-25 km far from construction site (Decision No. 2679/QĐ-UBND dated 12 December, 2013 on approval of the borrow pit exploitation).</p> <p><i>Macadam, stones:</i> will be bought at Truong Son company, 39 km to the Site.</p> <p>Other construction material (steel, cement ...) will be provided from services in Hue City, 47 km to the Site.</p> |
| Quantity of excavated soil & filling soil | <p>Excavated soil of all types: 23,569m³ (included 16,544m³ of weathered soil to fill surrounding field side dyke).</p> <p>Filling soil of all types: 73,302m³ (included 16,544 m³ of weathered soil that to be used to fill surrounding dyke). Almost of excavated soil (about 80%) can be reused for re-filling main dyke, rice field surrounding dyke slope and management/ access road.</p> <p>Excavated soil (not included 16,544m³ of weathered soil) =7020m³ (as whole weathered soil will be used to fill dyke)</p> <p>Discarded soil quantity: 1,404 m³ (20% of excavated soil 7,020 m³). Discarded soil will be dumped at disposal site in Dien Loc commune, about 100m to Hoa Xuan bridge with store volume about 3,000m³, about 0.5 – 2.0 km to the site that approved by Dien Loc CPC and at local peoples gardens (see Annex 6: Agreement on Location of disposal site for West-East Hoi Tom Dike system subproject -Dien Loc CPC).</p> |
| Cut/fill balance and management measures for excess spoil | As the dike will be both excavated and filled, the excavated soil will be re-used for filling purposes in other structures (including the dike, supplementary structures and access road). |
| OPERATION & MAINTENANCE ACTIVITIES | |
| Subproject capacity (household/hectare) | This objective will be achieved through protecting 540 ha of paddy field for 2 rice crops and extending cultivated land for 45 ha of wasteland. The improved levee dyke system will be used as inner field road. |
| Periodic maintenance | <p><i>Annual maintenance:</i> will be done every year to ensure timely repair of damages (such as sinking, falling, erosion, etc) and to prevent damages from rainfall. If necessary, the communities will be mobilized to support small operation and maintenance activities like dredging; weeding, pruning.</p> <p><i>Major maintenance:</i> will take place every 5 years. Major maintenance's budget will be provided through Government and provincial fund (following the Decree 154/2007/ND-CP of the Government on water fee & Operation and Protection of Hydraulic structures). Phong Dien and Quang Dien DPC will be responsible for the Subproject's Operation and Maintenance Organization.</p> |

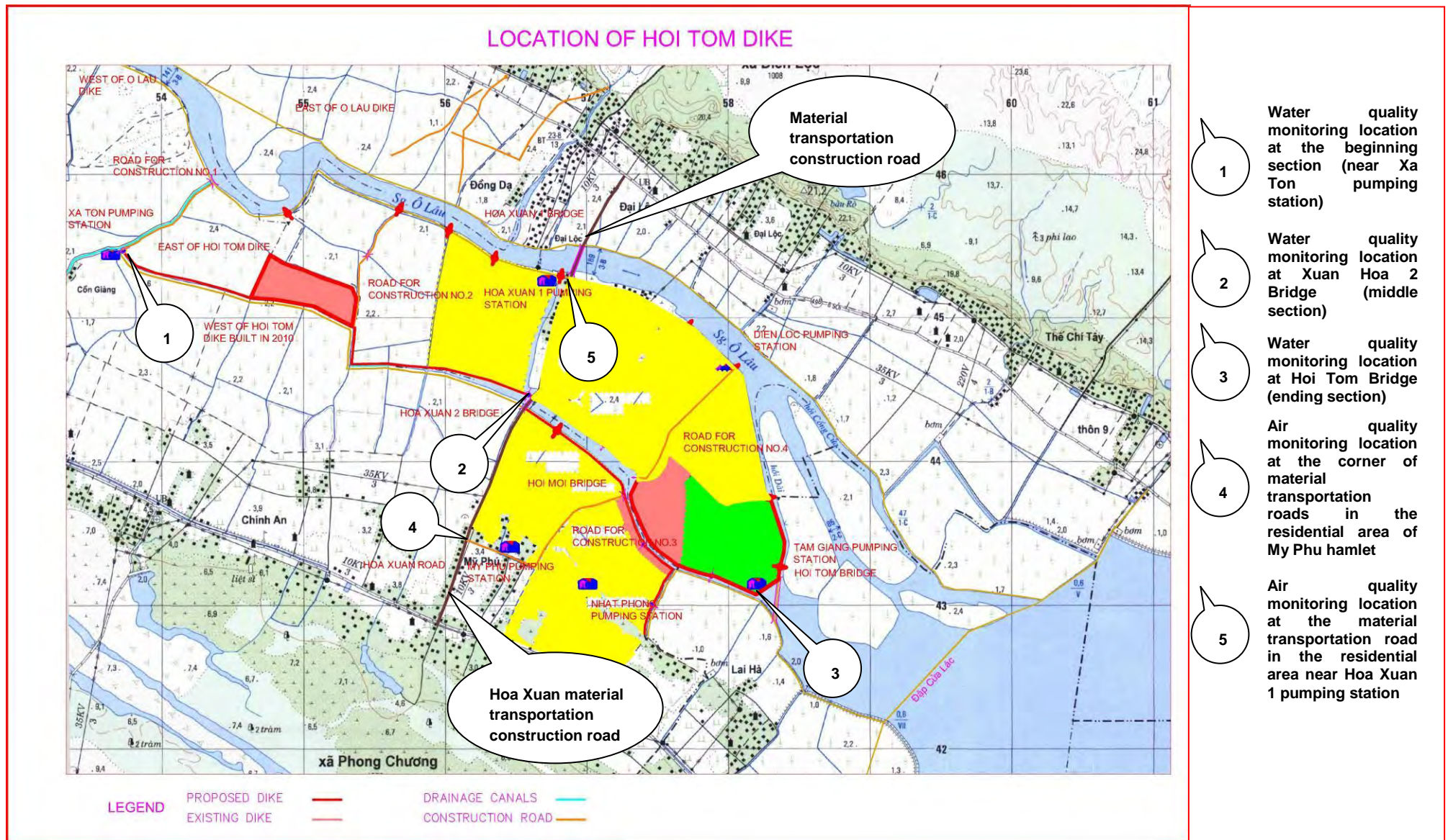
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Upgrading East-West Hoi Tom dike system, combined with production road subproject, Thua Thien Hue province
Integrated Rural Development in Central Provinces Project

| DATA ITEM | SUBPROJECT DATA | |
|---|--|--------------------------------|
| RESETTLEMENT AND LAND ACQUISITION³ | | |
| Number of Affected People (APs) | 10 Households | |
| Number of severely affected APs | None | |
| Number of APs that must relocate | None | |
| Total land area to be acquired (m ²) | Temporary = 0 | Permanent = 616 m ² |
| Agricultural land area to be acquired (m ²) | Temporary = 0 | Permanent = 616 m ² |
| Forestry land area to be acquired (ha) | Temporary = 0 | Permanent = 0 |
| Aquaculture land to be acquired (ha) | Temporary = 0 | Permanent = 0 |
| Residential land to be acquired (ha) | Temporary = 0 | Permanent = 0 |
| Garden land to be acquired (ha) | Temporary = 0 | Permanent = 0 |
| Other land to be acquired (ha) | Temporary = 0 | Permanent = 0 |
| SUBPROJECT COST | | |
| Total subproject cost (VND and US\$) | 67.070.262.000 VND/ US\$ 3.167,427 (at E.R. of 1US\$= 21, 175 VND) | |

³ This data should be extracted from the subproject Resettlement Plan

Figure 1: Map of the subproject location



3. DESCRIPTION OF EXISTING ENVIRONMENT

Table 2. Environmental baseline

| DATA ITEM | SUBPROJECT DATA |
|--|---|
| PROJECT LOCATION | |
| Commune (s): | Phong Chuong |
| District: | Phong Dien |
| Province | Thua Thien Hue |
| PHYSICAL ENVIRONMENT CONDITIONS | |
| Air quality | According to monitoring results at 3 locations of 4 parameters which conducted by Hue Province's Centre of Environmental and Natural Resources Monitoring, which is hired by Hue PPMU to prepare EIA as per Vietnamese government (Decree 18/2015 /ND-CP) in March 2015 indicated that air quality of the subproject area is still good condition, as all values measured are much lower than maximum allowed limits of parameters of QCVN 05:2013/BTNMT, such as dust: 0.085-0.091 mg/m ³ , SO ₂ : 0.036-0.045 mg/m ³ , NO ₂ : 0.035-0.052 mg/m ³ (See more details in Annex 7); |
| Noise and vibration | According to the survey, the project area is surrounded by water area and quite separated from residential areas. Noise is mainly caused by the main activities of local people, such as transporting, farming, aquaculture, etc. It is observed that noise and vibration level is still quite below permission value stated in QCVN 26:2010/BTNMT and QCVN 27:2010/BTNMT. Additionally, 03 samples have been collected and analyzed by Hue Province's Centre of Environmental and Natural Resources Monitoring in March 2015. The related result indicated that noise level of the subproject area is acceptable as lower than allowed limits by QCVN 26:2010/BTNMT, such as noise : 50-56 dBA (See more details in Annex 7) |
| Climate and natural disasters | The rainy season occurs from September to December and the dry season occurs from January to August. There is no rainfall data in the subproject area. According to Physical Environment of Thua Thien Hue province in the website www.thuathienhue.gov.vn , the average rainfall is about 2500 - 2.700mm /year, the annual average temperature is 25 ⁰ C. According to the statistic from Hydrology and Meteorology Center, the rainy season is also the period for water rising with two storms per year, which cause flood, dike erosions, reduction of agricultural production, roads deterioration. The annual storms also prevent transportation, reduce economic activities and impacts on other social services (such as education and health), etc. |
| Topography and soils | The subproject area is characterized mostly by irrigated paddy fields and it is generally flat. The foundation soil has a bad quality which is mostly ferarit soil, sandy soil, alkaline soil. |
| Water bodies | The Subproject is bordered by O Lau and Bo river: O Lau river rises from Tay Tri Thien mountain with elevation of 905m, length of main river is 66 km, catchment area is 900 km ² , flowing through Truong Son forests, then to Pho Trach, after that join to My Chanh river at Phuoc Tich , and ruining to Van Trinh, finally discharges in to Tam Giang Lagoon at Cua Lac Estuary Bo river is left tributary of Huong river, flowing from Truong Son mountain through A Luoi, Huong Tra, Phong Dien, Quang Dien district, then discharges to Huong river at Sinh T junction about 9 km to the North; and Huong river continuously flowing and discharges in to Tam Giang Lagoon |

| DATA ITEM | SUBPROJECT DATA |
|-----------------------------|---|
| Underground water | <p>There is an underground water-table at a depth of about 4 – 6m from the average ground surface level. The water-table level decreases in the dry season and rises to up to 10m below ground surface in rainy season. This water has been so far used mainly for domestic consumption. Water from the drilled holes reach from 3.4l/s up to 21.291/s (e.g., equivalent with 300 – 1.800m³/day). Its quality is good with the degree of mineralization obtained equal to 0.11 – 0.98g/l.</p> <p>There is another underground water-table at a depth of about 15m from the average ground surface level, with a depth of 145.8m. The water-table level decreases in the dry season and rises up to 10 m below ground surface in rainy season.</p> |
| Water quality | <p><u>Surface water quality:</u></p> <p>Though field survey of LIC Safeguard Consultants in March 2014, it is observed that water from O Lau river, Hoi Tom (Tom Lagoon) and canals in the subproject area are still not polluted by agriculture production activities or other water waste sources.</p> <p>In addition, 3 samples of surface water have been collected, analyzed and checked against 14 parameters by Hue Province's Centre of Environmental and Natural Resources Monitoring in March 2015. The results indicated that the quality of surface water in these areas is good for irrigation purpose; except for Oil & Grease that exceed the allowed limit as established by National Technical Regulation on surface water quality QCVN 08:2015/BTNMT, column B1 (Oil & Grease <0.3 mg/m³) (See more details in Annex 7)</p> <p><u>Underground water quality:</u></p> <p>The indicators of ground water quality are mostly within the allowed limits specified in the Vietnamese standard QCVN 09:2015/ BTNMT and Criteria 505 BYT/QD. However, total contents of coliform, COD in some wells are higher than the allowed level in the Vietnamese standard QCVN 09:2015/ BTNMT and Vietnam Criteria 505 BYT/QD (as recorded, total coliform is 540 MPN/100ml and COD is 4.4 mg/l). Some of wells are polluted by alum or salinity.</p> |
| Flooding | <p>Floods occurred in Hue rivers in general, in O Lau river particularly is as small floods which occurs in May to June, early floods occurs in August to September, major floods occurs in October to December. These floods caused eroding existing Hoi Tom dike and flooding cultivated land inside of Hoi Tom dike.</p> |
| Terrestrial flora and fauna | <p>While there are varieties of plants in the subproject area, no rare or endemic species were recorded. Currently, there are no rare animals recorded in the subproject area:</p> <p><u>Terrestrial flora:</u> mainly agricultural plants (mostly rice, and corn), vegetables (peanuts plants, Arachi hypogea, bean, etc); decorative plants in residents gardens, a variety of trees such as Acacia auriculiformis, Eucalyptus, and Rubber and other wild brushwood. Meanwhile, there are no big or rare trees to be found.</p> <p><u>Terrestrial fauna:</u> mainly domestic animals, such as cows, buffaloes, chicken, pigs, etc. The livestock recorded by the Statistic office in the Phong Chuong commune indicates that in the subproject area there are 7,630 pigs, 1,020 buffalos, 217 cows, 90 goats. Moreover, there are some species of bird such as stork, kingfisher, etc.</p> <p>In general, there are no rare or endangered species recorded in the Vietnamese Red Book (of Forestry department) in the subproject area.</p> |

| DATA ITEM | SUBPROJECT DATA |
|--------------------------------------|--|
| Aquatic flora and fauna | <p>Aquatic flora includes some algae species in Hoi Tom such as cambomba Ceae, Allium ramosum and other surface plants.</p> <p>Aquatic fauna includes:</p> <ul style="list-style-type: none"> + Zooplankton: mostly mosquitoes (Anopheles) and crustaceans in different stages (Nauplius, Mysis, Copepod, etc.) + Zoobenthos: not relevant diversity, mostly prawns, Nipponense, Somanialthelphusma, Lynemaswinhoeni, etc. <p>Aquaculture:</p> <ul style="list-style-type: none"> + Includes natural freshwater fishes such as carp, tilapia, mullet, otopterus. In addition, there are some common fishes in rivers and streams in Thua Thien Hue province. + Moreover, feed fishes such as snapper, grouper, hypophthalmichthys, black carp, unisexed tilapia, etc. in Hoi, rivers, streams, ponds and in the resident gardens to develop household economies. <p>In the subproject area, there are no rare or endangered species recorded in Vietnamese Red Book.</p> |
| Protected areas | <p>There is no natural or cultural heritage in the subproject area. The Phong Dien Natural Reserve area is located in Phong My commune, Phong Dien district which is 31 km far from the subproject area.</p> |
| SOCIAL ENVIRONMENT CONDITIONS | |
| UXO | <p>UXO have carried out and completed by No 97 UXO Clearance Company of Truong Son Corporation – Ministry of National Defense & Completed in November 2015</p> |
| Land use | <p>Land is mainly used for agricultural production, aquaculture cultivation and local people have good skills in intensive farming.</p> <p>The surrounding areas are mostly paddy fields and aquaculture fields</p> |
| Nearest residential land | <p>Each village has its own cultural centre and the commune has a culture house. Hoi Tom dike located on the Hoi Tom wetland which is 1 km away from the residential area. Generally, most of it is rural land.</p> |
| Infrastructure | <p>The subproject will upgrade the dike system, which construct 6 new drains combined with the culverts for ships' passing. There is a nearby pump station which will help control the water for the aquaculture areas along the dike.</p> <p>Transportation infrastructure in the subproject area mainly includes inter-village and commune roads (Hoa Xuan road), provincial road No. 4 and two roads along O Lau River surround the project area. Besides, National road 49B connects from dike systems with coastal communes and Tam Giang lagoon. Among these roads, Xuan Hoa road, provincial road No 4 will be used as material transportation roads during construction phase.</p> <p>The subproject area is 1 km away from the residential area, therefore it will not impact to the electricity, and telecom systems.</p> |
| Agriculture and aquaculture | <p>Agriculture: rice, maize, peanut, bean, etc.</p> <p>Aquaculture: aquatic product farming over the wetland, stream</p> |
| Population | <p>Direct beneficiaries: 7,727 people in Phong Chuong commune; 6,155 peoples in Dien Loc commune and 5,398 peoples in Quang Thai commune through improving access for agricultural product trading.</p> <p>Average population density: 220 – 412 people/km² (in Phong Chuong, Dien</p> |

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Integrated Rural Development in Central Provinces Project

| DATA ITEM | SUBPROJECT DATA |
|--------------------------------|---|
| | Loc, Quang Thai commune). |
| Ethnic minorities | There are no Ethnic minority groups in the subproject area |
| Livelihoods | <p>Agriculture and aquaculture is the main livelihood of local people in Phong Chuong commune (including: rice cultivation, aquaculture cultivation and small business).</p> <ul style="list-style-type: none">- Average income: 5.61 million VND per capita/year.- Highest income: 36 million VND per capita/year;- Lowest income: 2.4 million VND per capita/year. <p>Poverty status: There are 3.5% of the population (57 households) live under the poverty level, which are mainly the policy households (e.g., the household needing support from the Government) and households of people with disability/lonely people or headed by women (According to the Poverty Standard 2006-2010 of MOLISA (revised): the person lives under the poverty level when his/her income is less than 300,000 VND/person/month)</p> |
| Physical and cultural heritage | National historical monument: tomb of well-known mandarin - Nguyen Tri Phuong is located nearby in Dai Phu village, Phong Chuong commune. However, this monument is not located in the subproject area. |
| Public health | Diarrhea and dengue are the most common diseases in the project area, due to the poor sanitary and environmental conditions. There is 0.1% of the population which live with disease, with unsafe food as the cause in some cases. |

4. ENVIRONMENTAL IMPACT SCREENING

Table 3. Environmental impact screening

| IMPACT | POTENTIAL IMPACT | | | | BRIEF DESCRIPTION OF IMPACT LOCATION AND SCALE |
|---|------------------|------------------------------|-----------------------------|-------------------------------|---|
| | YES / NO? | IS IT MINOR OR SIGNIFICANT ? | IS IT POSITIVE OR NEGATIVE? | IS IT TEMPORARY OR PERMANENT? | |
| Pre-Construction Stage Impacts | | | | | |
| Impact of UXO | Yes | Minor | Negative | Temporary | The unexploded ordnance (UXO) removal was carried out by No 97 UXO Clearance Company of Truong Son Corporation – Ministry of National Defense which is completed in November 2015 (see the detail Acceptance Minute in Annex 7) |
| Effects on households by land acquisition | Yes | Minor | Negative | Permanent | <p>Description: No HHs will be relocated, but land acquisition is needed. It is estimated that there will be 616 m² of rice land to be acquired permanently</p> <p>Location: Dien Loc commune-Phong Dien district – Thua Thien –Hue province</p> <p>Objects:10 Household will be lost their agricultural land</p> <p>Affect level: Minor, no households must relocate or loss of residential land in the subproject area. Only 10 households will be affected due to their agricultural land 616 m² will be acquisition by the project. And no households will be lost more than 10% of total agricultural land holding area.</p> |
| Construction Stage Impacts | | | | | |

Initial Environmental Examination (IEE)/Commitment on Environmental Protection (CEP)

Upgrading East-West Hoi Tom dike system, combined with production road subproject, Thua Thien Hue province

Integrated Rural Development in Central Provinces Project

| IMPACT | POTENTIAL IMPACT | | | | BRIEF DESCRIPTION OF IMPACT LOCATION AND SCALE |
|--|------------------|------------------------------|-----------------------------|-------------------------------|--|
| | YES / NO? | IS IT MINOR OR SIGNIFICANT ? | IS IT POSITIVE OR NEGATIVE? | IS IT TEMPORARY OR PERMANENT? | |
| Dust, vegetation clearing, noise, water quality or other impacts from development of borrow areas for construction materials | Yes | Minor | Negative | Temporary | <p>Description: During the material exploitation, such as sand will be bought in Phong Thu commune- Phong Dien district, soil will be exploited from borrow pit in Phong An commune– Phong Dien district, macadam, stones will be bought at Truong Son Company, and steel, cement will be bought in Hue city. The exploitation of sand and stones, operation of borrow pits could create dust, noise, water quality pollution and loss of vegetation. Event most exploiting activities is belong to third parties (as suppliers), but checking the compliance of these suppliers need to be implemented to ensure minimize negative impacts at these locations.</p> <p>Location: includes the borrow pit in Phong An commune is about 25 km from the subproject site; Sand mine in in Phong Thu commune, about 20 km far from the site, and macadam, stones at Truong Son Company, 39 km to the site.</p> <p>Objects: The workers who working on these sites and local people in the subproject area in Phong Chuong, Dien Loc, Quang Thai Communes</p> <p>Impact level: Minor. Impacts are not significant as the residential areas are quite far from the quarry and borrow area. Moreover, the impacts can be controlled by applying noise and air pollution mitigation measures as EMP requirement</p> <p>Impact duration: Estimate 24 months</p> |

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| IMPACT | POTENTIAL IMPACT | | | | BRIEF DESCRIPTION OF IMPACT LOCATION AND SCALE |
|---|------------------|------------------------------|-----------------------------|-------------------------------|--|
| | YES / NO? | IS IT MINOR OR SIGNIFICANT ? | IS IT POSITIVE OR NEGATIVE? | IS IT TEMPORARY OR PERMANENT? | |
| Erosion or sedimentation caused during the site clearance or earthwork activities | Yes | Minor | Negative | Temporary | <p>Description: Embanking earth can deposit and/or move downstream, increase sediment of ponds' bottom and affect the aquaculture ponds. The construction activities, especially excavating, filling/embankment work and storing materials, taken place in Hoi Tom dyke could increase sediment of ponds' bottom and affect the aquaculture ponds. Upgraded roads could create debris and/or cause materials falling into ponds along the upgraded roads, if they are not collected, it could cause to increasing sedimentation in the ponds may affect the affect the aquaculture ponds.</p> <p>Location: The ponds around and canal along the dike in Phong Chuong, Dien Loc , Quang Thai communes</p> <p>Objects: Cultivated land, rice fields and aquaculture areas closed by the subproject canals in Phong Chuong , Dien Loc, Quang Thai Communes and local peoples in beneficiary area</p> <p>Impact level: The impact level is low due to excavated volume soil is designed to fill embankment and managed/ production road.& this will only occur temporarily during the construction period,</p> <p>Impact duration: Estimate 24 months</p> |

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| IMPACT | POTENTIAL IMPACT | | | | BRIEF DESCRIPTION OF IMPACT LOCATION AND SCALE |
|--|------------------|------------------------------|-----------------------------|-------------------------------|--|
| | YES / NO? | IS IT MINOR OR SIGNIFICANT ? | IS IT POSITIVE OR NEGATIVE? | IS IT TEMPORARY OR PERMANENT? | |
| Pollution of waterways, aquatic environments or groundwater from waste, chemicals, effluent or disturbance of contaminated soils | Yes | Minor | Negative | Temporary | <p>Description: In the process of excavating, dredging foot of the dyke, foundation holes of sluices on the dyke and filling field side dyke slope, run off water will generate particulate matters and cause impacts on surrounding water bodies by unsolved matters. Moreover operation of construction machineries and the process of pumping out water to dry foundation holes for the dike construction and sluices on the dike, oil and grease leakage will generate water pollution. And, living of workers on the sites also could be an importance pollutant source since they may discharge untreated domestic wastewater to surrounding water bodies. Generally, surface water in the subproject area including O Lau river, ditches, Tam Giang lagoon, irrigation canals could be polluted due to construction activities, include: (i) domestic waste water from worker camps; (ii) grease from construction machine maintenance and (iii) runoff water passing through due to from constructional areas (iv) discarded soil and/or sludge from excavation, embankment and materials storage.</p> <p>Location:</p> <ul style="list-style-type: none"> - Along the dike alignment and around the surrounding ponds in Phong Chuong, Dien Loc, Quang Thai Communes; - Lau river & ditches & Tam Giang Lagoon <p>Objects:</p> <ul style="list-style-type: none"> - Water quality of O Lau river & ditches & Tam Giang Lagoon - Cultivated land, rice fields closed by the subproject canals in Phong Chuong, Dien Loc, Quang Thai Communes - Local peoples in beneficiary area in Phong Chuong, Dien Loc, Quang Thai Communes to be affected indirectly due to water quality may polluted and affected to their agricultural production & aquaculture <p>Impact level: Minor. Machine oil and grease pollution on the canal and facilities is insignificant as: (i) construction activities are mainly manual, small number of construction machines (see project description); (ii) construction activities are scattered on a 7.85 km of the length of the dike; (iii) excavation and earthing activities are requested to be implemented during dry seasons .</p> <p>Impact duration: Temporary impacts, estimate 24 months</p> |

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| IMPACT | POTENTIAL IMPACT | | | | BRIEF DESCRIPTION OF IMPACT LOCATION AND SCALE |
|--|------------------|------------------------------|-----------------------------|-------------------------------|--|
| | YES / NO? | IS IT MINOR OR SIGNIFICANT ? | IS IT POSITIVE OR NEGATIVE? | IS IT TEMPORARY OR PERMANENT? | |
| Clearing or resource extraction from areas of sensitive vegetation | No | No | No | No | There is only grass on the dike, terrestrial flora in Hoi are alga, seaweed, Halodule and Zooplankton, etc. Around the dike, there are agriculture and aquaculture areas. Therefore, there are no sensitive vegetation in the subproject area. |
| Dust, exhaust or noise emissions from construction equipment | Yes | Minor | Negative | Temporary | <p>Description: The construction activities will generate dust, air pollutants, particularly in dry/sunny days. Dust could also be generated from excavation activities and operation of trucks (both transporting materials and discarded soil, solid waste to disposal site in Dien Loc commune), and operation of mobile mixing concretes and other construction equipment.</p> <p>Location: Along the materials transport route as Xuan Hoa Road connected to National Road No.1A through Provincial Road No.4 and No. 6 and construction area.</p> <p>Objects: The effected objects will be workers on the site and local peoples in the subproject area living near the upgraded road in Phong Chuong, Dien Loc, Quang Thai Communes & along transport route of National Road No.1A through Provincial Road No.4 and No. 6.</p> <p>Impact level : Minor, due to i) very small number of light duty equipment and will be mobilized on the site such as truck 7 tons, excavator 0.4-0.8 m³, compactor 9 tons , bulldozer 75CV; ii) the quality of machine must be registered, controlled and maintained periodically, iii) residents areas are located keeping distance from the construction site.</p> <p>Impact duration: 24 months estimated</p> |
| Increased flooding duration or area | No | No | No | No | Upgrading dike will not involve in blocking or intervention of any water ways in the subproject areas, therefore it will not create any risk of increasing flood time and area during construction phase. |

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Integrated Rural Development in Central Provinces Project

| IMPACT | POTENTIAL IMPACT | | | | BRIEF DESCRIPTION OF IMPACT LOCATION AND SCALE |
|--|------------------|------------------------------|-----------------------------|-------------------------------|--|
| | YES / NO? | IS IT MINOR OR SIGNIFICANT ? | IS IT POSITIVE OR NEGATIVE? | IS IT TEMPORARY OR PERMANENT? | |
| Disruption to traveling of local peoples to visit fishing ponds & agricultural production area | Yes | Minor | Negative | Temporary | <p>Description: During the upgrading of the dike process include build up level of dike surface, build new pits, drill holes, transport materials, equipment arrangement, will limit the movement of local people on the dike route to visit shrimp/ fishing ponds and agricultural production, as well as on internal roads.</p> <p>Location: Along the dike alignment, especially where closed to rice fields, shrimp/ fishing ponds and at location which will build a bridge and upgrading the culverts</p> <p>Objects: Local peoples in the subproject area</p> <p>Impact level: Minor, there are not many local people travelling on the dike, so there will be only a temporary impact on a small scale, mainly in the harvest of fisheries, and of agricultural products.</p> <p>Impact duration: Estimate 24 months estimated</p> |
| Impacts on infrastructure such as electricity, water supply, transport infrastructure | Yes | Minor | Negative | Temporary | <p>Description: The construction site is located far from residential areas and no public infrastructure such as water supply pipes, electricity lines/ poles are found in the surrounding areas, thus no impacts could be generated on public and telecommunication infrastructure. The most importance impacts on public infrastructure are roads which will be used for transport activities. Several inter communes roads and National road No.1A, Provincial road No.4 and No.6 which may be affected due to construction activities, therefore, adequate compensation need to be implemented for any impacts.</p> <p>Location: communes roads, Xuan Hoa road, National road No.1A, Provincial road No.4 and No.6;</p> <p>Object: Local people who living close to transport routes and road users on these roads;</p> <p>Impact level: Minor, due to i) the volume of material and waste need to be transport is not quite large; ii) only light duty transport vehicles (truck 7 ton) will be mobilized on the site</p> <p>Impact duration: Estimate 24 months estimated</p> |
| Effects on nearby heritage such as graves, pagodas etc. | No | No | No | No | As the results from site survey and public consultation, there is no national or local heritage such as pagodas, temples, gravestones located nearby the road. And the dike is surrounded by water, far from residential area, so there are no pagoda, temple were recorded in the surrounding areas |

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|---|------------------|------------------------------|-----------------------------|-------------------------------|--|
| | YES / NO? | IS IT MINOR OR SIGNIFICANT ? | IS IT POSITIVE OR NEGATIVE? | IS IT TEMPORARY OR PERMANENT? | |
| Effects on social aspect due to workers at site | Yes | Minor | Negative | Temporary | <p>Description: It is estimated 80 workers will be mobilized on the site, the presence of workers from other regions may create high risks of social evil such as gambling, theft, drug, prostitution, etc. or conflict appear with local people. Construction workers can cause disease transmission such as sore eyes, cholera, flu and respiratory problems due to insanitation living condition. There is also a risk of sexually transmitted diseases including HIV/AIDS need to be considered.</p> <p>Location: construction site and camps in Phong Chuong, Dien Loc, Quang Thai communes.</p> <p>Objects: Local peoples in the Phong Chuong, Dien Loc, Quang Thai communes and workers on the sites.</p> <p>Impact level: Minor, these impacts are assessed as insignificant because (i) workers will need to be registered with local police to manage labours from other places , (ii) the contractors are requested to hire local people as much as possible and iii) number of workers to be limited 80 peoples approximately</p> <p>Impact duration: 24 months estimated</p> |
| Employment or livelihood benefits from the employment of local people | Yes | Medium | Positive | Temporary | <p>Description: Although contractors usually prefer to use their own experienced skilled workers in construction works, they will be solicited to employ local unskilled labour force for temporary and intermittent activities. They should prioritize poor households, female-headed households and women if they need a job, to increase their income. Creating more jobs is to contribute to hunger elimination and poverty alleviation for the community.</p> <p>Location: adjacent areas along dike route in Phong Chuong commune</p> <p>Objects: Local peoples in the subproject area</p> <p>Impact level: Medium as unskilled labour force to be small (total proposed workers about 80 only) for this project , unskilled workers will be mobilized temporary & intermittent, and total construction duration only around 24 months (including preparation construction & completed construction time)</p> <p>Impact duration: 24 months estimated</p> |

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| IMPACT | POTENTIAL IMPACT | | | | BRIEF DESCRIPTION OF IMPACT LOCATION AND SCALE |
|--|------------------|------------------------------|-----------------------------|-------------------------------|--|
| | YES / NO? | IS IT MINOR OR SIGNIFICANT ? | IS IT POSITIVE OR NEGATIVE? | IS IT TEMPORARY OR PERMANENT? | |
| Health or safety risks to local people or construction workers | Yes | Minor | Negative | Temporary | <p>Description: The main sources of health risks include: i) construction machines and equipment are arranged along the canal cause obstructing the travelling of the residents and endangering the traffic, especially at nights; ii) there will be the risk of unsafe traffic conditions on the commune road due to operation of transport vehicles; iii) dust and noise from material transport will have impacts on daily life of residents living in the subproject area; and iv) there will be the risk of site incidents due to the improper use of equipment;</p> <p>Location: Resident areas along material transport road (Xuan Hoa Road , inter-commune road) and along the dike alignment;</p> <p>Objects: Local peoples in the subproject area and workers working at site;</p> <p>Impact level: Minor , the above risks are insignificant because i) construction site is located far from residential areas; ii) few number of construction equipment will be mobilized on the site; iii) travel demand on dike alignment is quite low, only concentrated during harvest time; vi) material/waste transport will be carried out by light duty vehicles and during day time; (iv) the contractor will be requested to conduct training courses on labour safety for workers prior to the subproject commencement.</p> <p>Impact duration : 24 months estimated.</p> |

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| IMPACT | POTENTIAL IMPACT | | | | BRIEF DESCRIPTION OF IMPACT LOCATION AND SCALE |
|---|------------------|------------------------------|-----------------------------|-------------------------------|---|
| | YES / NO? | IS IT MINOR OR SIGNIFICANT ? | IS IT POSITIVE OR NEGATIVE? | IS IT TEMPORARY OR PERMANENT? | |
| Generate a big quantity of dredged soil which can be reused | Yes | Minor | Positive | Temporary | <p>Description: During the upgrading of the dike, it is possible to generate excess spoils by removing old surface dike, however, spoils can also be re-used by the contractor to backfill upgraded dyke, surrounding dyke in rice field side and management/ access road. Excavated soil of all types is 23,569m³ (included 16,544 m³ of weathered soil to fill surrounding dyke in rice field side). Large volume of excavated soil of all types will be reused for re-filling upgraded dyke, rice field side 's surrounding dyke slope and management/ access road (through The Hoi Tom SIR/Design Consultant). Only 1,404 m³ of discarded soil which will be dumped at disposal site in Dien Loc commune, about 100 m to Hoa Xuan Bridge (for 3,000m³), about 0.5 – 2.0km to the site that approved by Dien Loc CPC and at local peoples gardens (see Annex 6: Agreement on location of disposal site for West-East Hoi Tom Dike system subproject -Dien Loc CPC)</p> <p>Location: Along 7,85 km of the dike alignment to be upgraded</p> <p>Objects: The Contractor and local residential households</p> <p>Impact duration: 24 months estimated</p> |

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| IMPACT | POTENTIAL IMPACT | | | | BRIEF DESCRIPTION OF IMPACT LOCATION AND SCALE |
|---|------------------|------------------------------|-----------------------------|-------------------------------|--|
| | YES / NO? | IS IT MINOR OR SIGNIFICANT ? | IS IT POSITIVE OR NEGATIVE? | IS IT TEMPORARY OR PERMANENT? | |
| Causing waste disposal problems from solid waste generated by construction activities or waste generated from construction worker's camps | Yes | Moderate | Negative | Temporary | <p>Description: Domestic wastes including solid waste and wastewater in construction camp, if they will not be collected, transported and treated in properly manner, it may cause air, soil and surface water pollution during storage and transferring and even sweep into field of local people. They are (a) non-toxic waste may be i) construction waste (soil, sand, stone and estimated volume is 1,404 m³) and ii) domestic waste from worker camps is about 8.76 tons (0.3 kg/person day 4 x 365 days x 80 workers) and (b) Toxic wastes can be oil mops/ duster cloth, fuel boxes, chemical boxes. If these wastes are not collected, treated appropriately, they may cause soil, water pollution.</p> <p>Location: Worker camp, construction site and disposal areas.</p> <p>Objects: The affected objects could be listed as: air quality in & around worker camps; water quality of shrimp hatching ponds nearby worker camps in Phong Chuong, Dien Loc, Quang Thai communes and workers living in the camps.</p> <p>Impact level: Moderate as the amount of solid waste and hazardous waste generated during construction phase is small and scattered depending on allocation of workers but project located in the aquaculture area and surrounded by water areas, thus which may cause negative impacts on aquaculture and agriculture if appropriate mitigation measure will not be complied with discarded soil quantity is 1,404m³ will be disposed in approved disposal sites.</p> <p>Impact duration: 24 months estimated.</p> |

⁴ as stated by National Environmental Report 2011, for rural solid waste

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| IMPACT | POTENTIAL IMPACT | | | | BRIEF DESCRIPTION OF IMPACT LOCATION AND SCALE |
|--|------------------|------------------------------|-----------------------------|-------------------------------|--|
| | YES / NO? | IS IT MINOR OR SIGNIFICANT ? | IS IT POSITIVE OR NEGATIVE? | IS IT TEMPORARY OR PERMANENT? | |
| Affect irrigation water supply system for agriculture production | Yes | Minor | Negative | Temporary | <p>Description: Upgrading of East-West Hoi Tom Dike, combined with production road and repairing culverts requires pumping out of water for dry construction foundation, meaning of stop water supply to irrigate for agricultural production of cultivated land used water through repaired culverts</p> <p>Location: the rice fields of Hoi Tom area.</p> <p>Objects:</p> <ul style="list-style-type: none"> • Rice fields irrigated by O Lau river and small channels through Culverts need to repair • Local peoples/farmers using water supply from O Lau river through Culverts to be repaired <p>Impact level: Irrigation schedule could be changed flexibly to construction time will be mainly in dry season from Jan to August, in which from Jan to May is spring-winter rice crop. The contractor will build divert canal to transfer water directly to rice field by pumping. Regarding to construction method, coffer dam will be built & pumping out water for dry construction foundation. Therefore this impact could be mitigated and impact level is considered at small level.</p> <p>Impact duration: As per crop water supply schedule and construction time; expected within 10 months</p> |

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| IMPACT | POTENTIAL IMPACT | | | | BRIEF DESCRIPTION OF IMPACT LOCATION AND SCALE |
|--|------------------|-----------------------------|-----------------------------|-------------------------------|--|
| | YES / NO? | IS IT MINOR OR SIGNIFICAN ? | IS IT POSITIVE OR NEGATIVE? | IS IT TEMPORARY OR PERMANENT? | |
| Environmental impacts due to inappropriate environmental recovery responsibility | Yes | Minor | Negative & Positive | | <p>Description: If after construction work has been completed, the sites are not cleaned up, construction waste, waste soil and unused material could also impact on the water, air environment in the surrounding areas, cause the degradation of public facilities and sanitation issues residential areas which located close to construction site and disposal areas. The risk of soil erosion and sedimentation may also occur if the site will not recovered by vegetable and trees. Moreover, accident could be happened if the excavated holes will not be backfilled. However, the recovery areas might limited because the surrounding areas do not have significant plants, and local infrastructures need to be recovered as soon as possible to ensure continuous transportation;</p> <p>Location:</p> <ul style="list-style-type: none"> ▪ Along the dike alignment and around the surrounding ponds in Phong Chuong, Dien Loc, Quang Thai Communes ▪ Along 3 upgraded management road routes; ▪ On the disposal areas close to Xuan Hoa bridge and on the Phong Loc commune <p>Objects: i) Borrow areas; ii) Land and water near the dike and disposal, borrow areas; iii) People who living near the proposed road and camp sites, disposal and borrow areas..</p> <p>Affected level: The impacts will be at minor level, due to i) borrow areas and other mines is operation which have sufficient licenses, ii) excavation activities is limited in the ROW which will be backfilled after completing, iii) the limited number of workers and equipment will be mobilized on the sites and iv) disposal area will be handed over to commune.</p> <p>Impact duration: Temporary during construction phases.</p> |
| Impacts in operation stage | | | | | |
| Inundation of sensitive vegetation from operation of culvert including upstream or downstream inundation | No | No | No | No | <p>After the subproject construction, the upgrading protection dyke/levee system, and 6 culverts to be opened or closed by wood stop logs will prevent minor & early & major flood, solving inundation situation of 540 ha for 2 rice crops, expanding 45 ha of cultivated land . So, the subproject doesn't cause inundation of sensitive vegetation from the operation of culvert</p> |

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| IMPACT | POTENTIAL IMPACT | | | | BRIEF DESCRIPTION OF IMPACT LOCATION AND SCALE |
|---|------------------|------------------------------|-----------------------------|-------------------------------|---|
| | YES / NO? | IS IT MINOR OR SIGNIFICANT ? | IS IT POSITIVE OR NEGATIVE? | IS IT TEMPORARY OR PERMANENT? | |
| Changes to living conditions and public health from the upgrading dyke | Yes | Significant | Positive | Permanent | The subproject will improve living condition for 19, 280 peoples of 3620 households through improvement of incomes from agricultural & aquaculture products and by preventing damages from floods. The main beneficiaries include: residential area in Phong Chuong, Dien Loc communes, Phong Dien district and Quang Thai commune, Quang Dien district |
| Improved productivity from preventing damages from floods. | Yes | Significant | Positive | Permanent | The subproject will protect paddy rice of 2 crops per year from floods, and improve productivity by providing for a stable agricultural and aquaculture production in the areas of Phong Chuong, Dien Loc communes of Phong Dien district and Quang Thai commune of Quang Dien district |
| Changes in land use from conversion to agricultural land | No | No | No | No | The subproject (including upgrading the dike, building culverts, preventing flooding) will only develop agriculture production, therefore, the practice of land use will not be change. |
| Affect water quality by increasing the amount of fertilizer or pesticide use or use chemicals to treat water or wastewater volume increases | Yes | Minor | Negative | Permanent | <p>Description: After the upgrading protection dyke/levee system, 6 culverts to be opened or closed by wood stop logs which will help to prevent minor & early & major flood, solving inundation situation of 540 ha for 2 rice crops, expanding 45 ha of cultivated land . Consequently, the demand of pesticides or chemical fertilizers will be increased. The amount of pesticides on field surface will affect the quality of agricultural land and irrigation water, possibly groundwater. The risk of human health will increase if the management of pesticides is not reasonable.</p> <p>Location: Aquaculture and Agricultural area near Hoi Tom dike in Phong Chuong, Dien Loc communes of Phong Dien district and Quang Thai commune of Quang Dien district.</p> <p>Objects: Water quality of the Hoi Tom dike & O Lau river, local people of Phong Chuong, Dien Loc communes, Phong Dien district and Quang Thai commune, Quang Dien district.</p> <p>Impact level: Minor. This impact is expected to be small as the water level of O Lau river in flood season (at this period culverts gates will be opened to drain inner field water) is much bigger than discharged water volume, hence O Lau river water can be selfdiluted. Additionally, famers were & will be trained & applied IPM method.</p> |

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|--|------------------|------------------------------|-----------------------------|-------------------------------|--|
| | YES / NO? | IS IT MINOR OR SIGNIFICANT ? | IS IT POSITIVE OR NEGATIVE? | IS IT TEMPORARY OR PERMANENT? | |
| Risks from natural disasters | Yes | Average | Positive | Permanent | The subproject objective is to reduce the risks from natural disasters through dike upgrading. The upgraded dyke/levee system and 6 culverts which will help to prevent minor & early & major flood, solving inundation situation of 540 ha for 2 rice crops. The beneficial area include aquaculture and agricultural area near Hoi Tom dike in Phong Chuong, Dien Loc communes of Phong Dien district and Quang Thai commune of Quang Dien district |
| Changes to local accessibility through upgrading dyke system as inner-road | Yes | Significant | Positive | Permanent | The dike will be combined to be the access road (inter-field road) which connects Phong Chuong – Dien Loc-Quang Thai areas, providing better access for local people of these communes. The ending point of the dike will link with the Phong Chuong-Dien Loc –Quang Thai inter-commune road, which passes through the communes’ centers and markets. Hence, 3,618 households, in which 1,642 HHs of Phong Chuong commune, 1210 HHs of Dien Loc commune, and 768 HHs of Quang Thai commune will benefit from the subproject. |
| Blockage of protection dikes/levee causing flooding | No | No | No | No | As the culverts aim to be boat passing ones, the blockage of protection dikes will not happen |
| Changes to inner field water quality by of culvert’s O&M methods caused salinity, alum instructions and sediment | No | No | No | No | The dike and the culverts for boat passing will be upgraded to mitigate the negative impacts of floods. These works will not make any changes to inner field water quality by intakes’ O&M methods caused salinity, alum instructions and sediment. |

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|--------------------------------------|------------------|------------------------------|-----------------------------|-------------------------------|--|
| | YES / NO? | IS IT MINOR OR SIGNIFICANT ? | IS IT POSITIVE OR NEGATIVE? | IS IT TEMPORARY OR PERMANENT? | |
| Effects on employment or livelihoods | Yes | Significant | Positive | Permanent | Through its objects as improve the agricultural and aquaculture productive in cultivation areas of Phong Chuong, Dien Loc communes of Phong Dien district and Quang Thai commune of Quang Dien district. The subproject will help to reduce poverty through improvement of incomes from agricultural products and by preventing damages from floods. Moreover, the linkage road will provide new access for the local people to the centers, markets and other social services. Therefore, the subproject is expected to improve livelihoods and reduce poverty. |
| Impacts on ethnic minorities | No | No | No | No | There is no impact as there are no ethnic minority groups were identified in the subproject area. |
| Erosion or shifting of dikes | No | No | No | No | Shifting just occurs on embankment slope, the main causes are inundation in rainy season and destruction by the low awareness of people. Hence, these causes are expected to be reduced after subproject completion. |
| Solid or liquid waste generation | Yes | Minor | Negative | Permanent | <p>Description: Solid and liquid wastes are generated from fishing, animal and plants dead bodies flow from the upper streams that affecting to water quality of Hoi Tom /Tom Lagoon</p> <p>Location: culverts, dike surrounding areas</p> <p>Objects: Local peoples in beneficiary area</p> <p>Impact level: Minor, this situation is expected to be controlled by the detailed O&M.</p> |

5. OUTLINE ENVIRONMENTAL MANAGEMENT PLAN (EMP)

5.1 Environmental Mitigation Plan

Table 4. Environmental mitigation plan

| Potential impact | Mitigation measure | Responsibility | Cost |
|--|---|--|--------------------------|
| Pre-Construction | | | |
| High risk of environmental degradation due to inappropriate construction materials management planning | <p>As planed in design documents, the main construction material will be taken from existing quarries as:</p> <p><i>Sand</i>: will be bought in Phong An Commune-Phong Dien District, about 20 km far from the Site</p> <p><i>Fill Soil</i> : will be exploited from borrow pit in Phong Thu Commune , which is existing borrow pit & is under exploiting with Decision No 2679/QĐ-UBND on 12 December ,2013 on approval of the borrow pit exploitation)</p> <p><i>Macadam, stones.</i>: will be bought at Truong Son Company, 39 km to the Site,</p> <p>Which have been operated under the permission of local authorities of Phong Dien District</p> <p><i>Other construction material</i> (steel, cement...) will be provided from services in Hue City , 47 km to the Site .</p> <p>In case that, above material sources will be change, an appropriate material management plan should including the following:</p> <ul style="list-style-type: none"> ▪ 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 | Design Consultant, Thua Thien-Hue PPMU | Included in the contract |
| High risk of environmental degradation due to inappropriate spoil and waste disposal plans | <ul style="list-style-type: none"> ▪ Re-use of waste materials & spoil disposal locations (in Dien Loc commune, about 100 m to Hoa Xuan bridge) 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: Discarded soil will be dumped at Disposal site in Dien Loc Commune, about 100 m to Hoa Xuan Bridge as agreed by Dien Loc CPC; ▪ Plan to temporary management of discharged soil and domestic waste on the construction | Design Consultant, Thua Thien – Hue PPMU | Included in the contract |

| Potential impact | Mitigation measure | Responsibility | Cost |
|---|--|---------------------|---|
| | sites; <ul style="list-style-type: none"> ▪ Agreement with the local authorities in Phong Chuong, Dien Loc communes of Phong Dien District and Quang Thai commune of Quang Dien District; ▪ Environmental recovery plan since construction activities completed; ▪ Waste materials transportation manner plans and schedules; ▪ Establishment of complaints management system for duration of the works. | | |
| Effects on households from loss of residential or agricultural / aquaculture land | Implement mitigation measures outlined in the subproject Resettlement Plan | Thua Thien-Hue PPMU | Included in resettlement report |
| Construction Stage | | | |
| Dust, vegetation clearing, noise, water quality or other impacts from borrow area, mines for construction sites | <ul style="list-style-type: none"> ▪ Preferred building materials from commercial activities currently licensed and approved for the environment (such as soil exploited from Phong Thu borrow pit Macadam, stones will be bought at Truong Son Company) ▪ Cover trucks that transport materials purchased from the mines (along transport route of National Road No.1A through Provincial Road No.4 and No. 6 & Communes roads in Phong Chuong, Dien Loc, Quang Thai communes ▪ Ensure that all facilities and equipment maintenance are adequate ▪ Construction vehicles, machines and equipment need 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; ▪ In soil pit in Phong Thu Commune , Contractor should follow environmental protection issues, including: <ul style="list-style-type: none"> - 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; | Contractor | No marginal cost Included in the civil work contract |

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| Potential impact | Mitigation measure | Responsibility | Cost |
|---|--|-------------------|--|
| | <ul style="list-style-type: none"> - Water should be regularly sprayed within borrow areas in Phong An commune to reduce dust generation. | | |
| <p>Erosion or sedimentation caused during the site clearance or earthwork activities</p> | <ul style="list-style-type: none"> ▪ Install sediment traps around the temporary excavated material areas at the ponds around the dike in Phong Chuong, Dien Loc, Quang Thai Communes to collect sediment before it enters waterways, if necessary; ▪ Construct temporary drainage canal for reducing effects on residential area in Phong Chuong, Dien Loc, Quang Thai communes; ▪ Undertake progressive re-vegetation of land clearance areas along the 7.85 km of length of dike to be upgraded and 2.6 km of management road; ▪ Avoid excavation activities during the rainy season where possible. | <p>Contractor</p> | <p>No marginal cost</p> <p>Included in the civil work contract</p> |
| <p>Pollution of waterways, aquatic environments or groundwater from waste, chemicals, effluent or disturbance of contaminated soils</p> | <ul style="list-style-type: none"> ▪ Storage of chemicals (oil, etc.) for construction in a secure area with a concrete roof to avoid rain water and flooding; ▪ Ensure vehicles and equipment are maintained in good condition; ▪ Use mobile sanitary toilets following regulations of Ministry of Health and washing facilities at construction camps (Circular No 27/2011/TT – BYT promulgating on National technical regulation on Hygienic conditions for Latrines/QCVN 01: 2011/BYT on National technical regulation on Hygienic conditions for Latrines); ▪ Regularly collecting waste land to avoid sedimentation, as muddy water of the region and the Hoi Tom; ▪ Hazardous materials spilling out unexpectedly to be cleaned, reported and monitored; ▪ Wash construction vehicles and equipment onsite (along the 7.85 km of length of dike to be upgraded and 2.6 km of management road and O Lau river & ditches & Tam Giang Lagoon) shall not allow to avoid pollution by lubricating oil from washing; ▪ Waste water and wasted lubricating oil should be controlled in accordance with relevant regulations on wastewater and hazardous wastes; ▪ The wastewater and solid waste will not be allowed to through on surrounding water bodies such as canal along the dike, ponds in Phong Chuong, Dien Loc, Quang Thai communes and O Lau river & ditches & Tam Giang Lagoon; | <p>Contractor</p> | <p>No marginal cost</p> <p>Included in the civil work contract</p> |

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| Potential impact | Mitigation measure | Responsibility | Cost |
|--|---|----------------|--|
| Dust or fumes from the equipment | <ul style="list-style-type: none"> ▪ Regularly collect and dispose-off the wastes. ▪ Cover all trucks carrying raw materials to and from the construction area and along the transport routes as: Xuan Hoa Road connected to National Road No.1A through Provincial Road No.4 and No. 6 and construction area and inter commune roads; ▪ Ensure equipment and vehicle maintenance is in good condition; ▪ Watering the construction sites of road section in dry & low humidity days, increasing the frequency of watering when passing through communities at least one time/day. The location, which needs to be watered, will be determined by CSC; ▪ Mobile concrete batching plants to be arranged a distance of 500m away from residential areas of Phong Chuong, Dien Loc and Quang Thai communes; ▪ Equipment need to meet standards of exhaust, noise, and vibration as regulated by the Government and they need to be properly maintained; ▪ All material storage areas shall be located at least 50 meters from any residence in Phong Chuong, Dien Loc and Quang Thai communes. | Contractor | <p>No marginal cost</p> <p>Included in the civil work contract</p> |
| Noise generated from equipment | <ul style="list-style-type: none"> ▪ Ensuring that construction equipment and vehicle maintenance is in good condition; ▪ Inform communities near the construction of schedule and time of execution; ▪ Operation schedule of noise generated equipment/vehicles need to be avoid the rest time of local people, especially in the location close to residential areas along the transport route of Xuan Hoa Road connected to National Road No.1A through Provincial Road No.4 and No. 6 and construction area; ▪ Provide adequate protective equipment for workers who run noise generated machines. | Contractor | <p>No marginal cost</p> <p>Included in the civil work contract</p> |
| Disruption to traffic or property access | <ul style="list-style-type: none"> ▪ Install traffic signals at site to regulate and limited speed of vehicles or signals of work Site, especially at the intersections where closed to rice fields, shrimp/ fishing ponds in Phong Chuong, Dien Loc and Quang Thai communes; ▪ Inform the community about construction schedule through informal public consultation or any local people meetings and notice board in Phong Chuong, Dien Loc and Quang Thai CPCs ▪ Construction activities should be done section by section, to minimize temporary acquired areas on roads; ▪ Training for drivers of sub-project as well as worker to work safety and could warning people | Contractor | <p>No marginal cost</p> <p>Included in the civil work contract</p> |

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| Potential impact | Mitigation measure | Responsibility | Cost |
|--|---|---|--|
| | <p>passing nearby;</p> <ul style="list-style-type: none"> At least 01 worker will monitor the in and out of construction sites of vehicles as well as warning people to ensure traffic safety; | | |
| Effects on social aspect due to workers at site | <ul style="list-style-type: none"> Consider house leasing in locality in comparison with site camps; Ensure site camp area are kept in a clean and hygienic condition by arranging camps at suitable place, cleaning periodically, applying sanitary regulations, etc; workers will need to be registered with local police to manage labours from other places; Rules for construction workers in the implementation of sanitation and of relationships with people at work site and at accommodation; Distribute guidance leaflets to workers or invite workers to disseminate about the prevention of infectious diseases and diseases that may occur in the areas of the shack camp. Recommend workers use bed curtains, and keep sanitary accommodations clean to prevent diseases caused by insects such as dengue, malaria that can then spread to the community. Consultation with competent staff in planning local housing for workers in the local community Implement HIV/AIDS and trafficking awareness and prevention campaign; | <p>Contractor</p> <p>PCs at all level, bureau of social evil prevention Center of HIV/AIDS prevention and Center of Contingency Medical/Committee of HIV/AIDS prevention at commune/ward levels and at other levels/NGO</p> | <p>No marginal cost</p> <p>Included in the contract</p> <p>Relevant programs under local budget such as HIV/AIDS and social evils prevention</p> |
| Health or safety risks to local people or construction workers | <ul style="list-style-type: none"> Provide sufficient labor safety to workers such as safety clothes & shoes, helmets, mufflers, gloves, safety belt etc. and train workers how to use and patrol regularly to ensure compliance; 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; Collaborate with commune clinic center to receive additional support; Install information signs about the project, the labor regulations at site of West-East Hoi Tom Subproject in Phong Chuong, Dien Loc, Quang Thai Communes; Regularly testing general and occupational health, for workers as regulated by Labour Law, Clause 152 & by Ministry of Health (Circular No. 14/2013/TT-BYT on Guiding Medical Examination) Avoid overloading the vehicles; Limit construction activities in the area during flood season from September to December. | Contractor | <p>No marginal cost</p> <p>Included in the civil work contract</p> |
| Causing waste | <ul style="list-style-type: none"> Establish temporary latrines which meet | Contractor | No |

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| Potential impact | Mitigation measure | Responsibility | Cost |
|---|---|---|--|
| disposal problems from solid waste generated by construction activities or waste generated from construction worker's camps | <p>regulations of Health Ministry (QCVN 01: 2011/BYT on National technical regulation on Hygienic conditions for Latrines) and</p> <ul style="list-style-type: none"> ▪ Supply enough safety water to camps. ▪ Generated solid waste has to be regularly removed to at Disposal site in Dien Loc commune, about 100 m to Hoa Xuan Bridge, about 0.5 – 2.0 km to the site that approved by Dien Loc CPC and dumped at local peoples gardens after obtaining agreement between households, local authorities and contractors; ▪ Sign a contract with local waste collectors in Phong Chuong, Dien Loc, Quang Thai communes to weekly collect solid waste at worker camps and dispose to dump sites ▪ Collect solid wastes and temporary store at a safety place before transporting to disposal sites; ▪ Provide regulations about sanitary and garbage regulations where, and how to handle garbage and common rules for the workers. Update daily and directly supervise waste collection implementation. | | <p>marginal cost</p> <p>Included in the civil work contract</p> |
| Affect irrigation water supply system for agriculture production | <ul style="list-style-type: none"> ▪ Upgrading of East-West Hoi Tom Dike, combined with production road and repairing culverts need to be implemented in dry season with application of construction time when irrigation activities are not done ▪ The Contractor need coordinate with irrigation authority (Phong Dien & Quang Dien irrigation exploitation management enterprise), commune's irrigation staff and cultivation households in water supply area affected by repairing sluices to reach agreement on water supply time (when construction suspension), construction time (should be implemented at the time when irrigation activities are not done); ▪ If construction time could not avoid water supply time, divert canal must be built to transfer water for rice fields under the subproject area ▪ Commune's irrigation staff, irrigation exploitation enterprise or relevant authorities need early inform households and contractor on water supply schedule so that they can make plan on their own initiative; ▪ Hue PPMU and the Contractor need 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 | Thua Thien-Hue PPMU/ Contractor; Irrigation management enterprises of Phong Dien & Quang Dien district, commune authorities and local residents in Phong Chuong, Dien Loc communes of Phong Dien District and Quang Thai commune of Quang Dien District | <p>No marginal cost</p> <p>Included in the civil work contract</p> |
| Sanitation issues, soil erosion and sedimentation if site clearance | <ul style="list-style-type: none"> ▪ Drainage fixtures, curbs, road shoulders and ditch slopes been finished out to prevent hazard to local peoples in Phong Chuong , Dien Loc, Quang Thai Communes during their use; | Contractor | No marginal cost |

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| Potential impact | Mitigation measure | Responsibility | Cost |
|---|--|--------------------------|-------------------------------------|
| activities will not be appropriate implemented | <ul style="list-style-type: none"> ▪ Ground surfaces in the Subproject area should be graded to drain water; ▪ All construction debris, tree cuttings, excess dirt, rubble and scrap should be removed from the construction zone; ▪ All borrow pits in Phong An commune is about 25 km from the subproject site, need to be filled in and graded to drain, underground tanks (including septic tanks) need to remove and holes need to backfill; ▪ All waste products, equipment yards and worker camps, including oil waste, scrap materials and equipment, building materials and domestic waste need to remove from the construction site; ▪ All points of access (drives, walks) in Phong Chuong, Dien Loc communes of Phong Dien District and Quang Thai commune of Quang Dien District and utilities (power, communications) to public and private property need to restore to original condition. | | Included in the civil work contract |
| Operation Stage | | | |
| Affect water quality by increasing the amount of fertilizer or pesticide use or use chemicals to treat water or wastewater volume increases | <ul style="list-style-type: none"> ▪ Combine with the extension service to ensure that farmers are trained on methods for proper use of water ▪ Construction of collection or people recommended order for collection of chemical compounds such as packages of fertilizers, pesticides used to cover water treatment devices in waterproofing and safety, away from the area and water or flooding ▪ Apply IPM program for local farmers in Phong Chuong, Dien Loc communes of Phong Dien district and Quang Thai commune of Quang Dien district | Phong DPC/ Thien DARD | Dien Thua Hue Local budget |
| Solid or liquid waste generation | <ul style="list-style-type: none"> ▪ Periodically clean up garbage on the dike and on the farm in Phong Chuong, Dien Loc communes of Phong Dien district and Quang Thai commune of Quang Dien district ▪ Construction of a waste collection system ▪ Enhancing the people awareness on management and collecting of solid and liquid waste on the dike through trainings | Phong DPC | Dien Local budget |

5.2 Environmental Monitoring Plan

5.2.1 Environmental effects monitoring

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 | | | | | | |
| Minimizing noise generation | Noise levels | In the residential areas closes to the dyke Hoi Tom and materials transporting routes : Xuan Hoa road | Observation and community consultation using equipment to measure noise dB (A), if that is the big noise levels was observed | Monthly or when community's feedback is raised | Construction Supervision Consultant (CSC) | Supervision contractor |
| | | | | Every 3 months during construction duration or if there is feedback about high noise levels from the community | Construction Supervision Consultant (CSC)/ Environmental Officer at PPMU | Included in the contract with Supervision contractor |
| | | | | Every 6 months during construction period or when community's feedback is raised | Monitoring consultant on environment al safeguard policies of LIC team | Included in separated contract with CPMU |
| Minimizing dust generation | Dust levels | In the residential areas closest to the dyke Hoi Tom and materials transporting routes (about 15 km) | Observation and community consultation ; using equipment to measure dust level (TSP mg/m ³) if high dust level was observed | Monthly or since community's feedback is raised | Construction Supervision Consultant (CSC) | Included in civil work contract |
| | | | | Every 3 months during construction duration or if there is feedback about high noise levels from the community | Construction Supervision Consultant (CSC)/ hold Environmental Supervision Consultant | Included in the contract with Supervision contractor |

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| Mitigation Measure | Parameters | Location | Methods | Frequency | Responsibility | Cost |
|--------------------------|---|---|--|--|--|--|
| | | | | 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 water quality | Sediment loads, rubbish, oil or other visible pollutants | The agricultural production's area, ponds around dyke | Visual Observation ; Sampling and analysis if water pollution was observed | Every 3 months during construction or when community's feedback is raised | Construction Supervision Consultant (CSC)/ hold Environmental Supervision Consultant | Included in the contract with Supervision contractor |
| | | | | Based on requirement of water supply | Local people, Community monitoring committee Local irrigation staff (commune) | Local budget Without marginal cost |
| Operation Stage | | | | | | |
| Water quality | Sedimentation, rubbish, lubricating oil and solid waste or Indexes BOD, COD, pH, TSS, salinity, in accordance with QCVN 08:2008 if required | The agricultural production's area, ponds around dyke | Observation and community consultation Or sampling methods following Vietnamese standard when receiving feedback from communities | Twice a year for the first 2 years (once during the rainy season and once during the dry season) | Phong Dien Irrigation Management Company /Sub-project owner | Local budget |
| Waste and liquid | Conditions and cleanliness of the area sub-projects; area containing waste temporarily | At some point in the field, pond's area and around the dyke | Observations | Every 6 months in the first five years of operation | Phong Dien Irrigation Management Company /Sub-project owner | Local budget |

5.2.2 Environmental Compliance Monitoring

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 |
|--|--|---|---|--|--|---|
| Pre-Construction Stage | | | | | | |
| Construction materials management plan | Confirm construction materials sources that agreed by local authorities | Locations of quarries, borrow pit, and others | Review documents and consulted with local authorities | Before beginning construction activities | Thua Thien-Hue PPMU | Included in the design contracts |
| Spoil and Waste Disposal Plan | Confirm spoil and waste disposal sites agreed by local authorities | Locations of disposal sites | Review documents and consulted with local authorities | Before beginning construction activities | Thua Thien-Hue PPMU | Included in the design contracts |
| The mine detection | Confirm the mine detection's result | The affected area | Observations | Before beginning construction activities | Thua Thien-Hue PPMU | There are separate bidding packages |
| Construction Stage | | | | | | |
| Dust, vegetation clearing, noise, water quality controls | Condition and capacity of controls, Implementing of mitigation measures in Table 4 | Throughout construction site | Observation, Document review and public consultation | Weekly, monthly and after heavy rain events | Environmental Consultant in CSC team and PPMU safeguard staff Local Community Monitoring Boards | Included in CSC contracts PPMU operation budgets Local budget |
| | | | | Once every 6 months during construction or in case of at any time if necessary | Monitoring consultant on environmental safeguard policies/LIC and CPMU safeguard staff | Included in contract with CPMU; CPMU operation budget |

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| Mitigation Measure | Parameters | Location | Methods | Frequency | Responsibility | Cost |
|--|---|------------------------------|---|--|--|---|
| Erosion and sediment controls | Condition and capacity of controls; Implementing of mitigation measures in Table 4 | Throughout construction site | Observation, Document review and public consultation | Weekly, monthly and after heavy rain events | Environmental Consultant in CSC team and PPMU safeguard staff Local Community Monitoring Boards | Included in CSC contracts PPMU operation budgets Local budget |
| | | | | Once every 6 months during construction or in case of at any time if necessary | Monitoring consultant on environmental safeguard policies/LIC and CPMU safeguard staff | Included in contract with CPMU; CPMU operation budget |
| Construction equipment and vehicles | Noise and exhaust generation; covering trucks; oil/fuel leaks; Implementing of mitigation measures in Table 4 | Throughout construction site | Observation, document review and public consultation, interview workers on the site | Weekly and monthly | Environmental Consultant in CSC team and PPMU safeguard staff Local Community Monitoring Boards | Included in CSC contracts PPMU operation budgets Local budget |
| | | | | Once every 6 months during construction or in case of at any time if necessary | Monitoring consultant on environmental safeguard policies/LIC and CPMU safeguard staff | Included in contract with CPMU; CPMU operation budget |
| Ensure traffic safety of local peoples to visit fishing ponds & agricultural production area | Install traffic signals ; Worker to be Monitored at Site to ensure traffic safety; Implement mitigation measures in | Throughout construction site | Observation, Document review and public consultation | Weekly and Monthly | Environmental Consultant in CSC team and PPMU safeguard staff Local Community Monitoring Boards | Included in CSC contracts PPMU operation budgets Local budget |

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| Mitigation Measure | Parameters | Location | Methods | Frequency | Responsibility | Cost |
|-----------------------------|--|------------------------------|---|--|--|---|
| | Table 4 | | | Once every 6 months during construction or in case of at any time if necessary | Monitoring consultant on environmental safeguard policies/LIC and CPMU safeguard staff | Included in contract with CPMU; CPMU operation budget |
| Site camp conditions | Cleanliness; waste disposal facilities; general conditions And Implement mitigation measures in Table 4 | All site camps | Observation, interview workers on the site and documents review | Weekly and Monthly | Environmental Consultant in CSC team and PPMU safeguard staff Local Community Monitoring Boards | Included in CSC contracts PPMU operation budgets Local budget |
| | | | | Once every 6 months during construction or in case of at any time if necessary | Monitoring consultant on environmental safeguard policies/LIC and CPMU safeguard staff | Included in contract with CPMU; CPMU operation budget |
| Waste disposal | Site cleanliness and site conditions; temporary waste storage area Implement mitigation measures in Table 4 | Throughout construction site | Observation, document review and public consultation, interview workers on the site | Weekly and Monthly | Environmental Consultant in CSC team and PPMU safeguard staff Local Community Monitoring Boards | Included in CSC contracts PPMU operation budgets Local budget |
| | | | | Once every 6 months during construction or in case of at any time if necessary | Monitoring consultant on environmental safeguard policies/LIC and CPMU safeguard staff | Included in contract with CPMU; CPMU operation budget |
| Development of borrow areas | Relevant environmental approvals obtained for new sites | Throughout construction area | Study the relevant documents | Before earth work | Environmental Consultant in CSC team and PPMU safeguard staff | Included in CSC contracts PPMU operation |

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| Mitigation Measure | Parameters | Location | Methods | Frequency | Responsibility | Cost |
|--|--|------------------------------|---|--|--|---|
| | | | | | Local Community Monitoring Boards | budgets Local budget |
| Social disturbance | Provision of sign boards, relation with local authorities and implement mitigation measures in Table 4 | Throughout construction site | Observation, document review and public consultation | Weekly and Monthly | Environmental Consultant in CSC team and PPMU safeguard staff Local Community Monitoring Boards | Included in CSC contracts PPMU operation budgets Local budget |
| | | | | Once every 6 months during construction or in case of at any time if necessary | Monitoring consultant on environmental safeguard policies/LIC and CPMU safeguard staff | Included in contract with CPMU; CPMU operation budget |
| Safety for workers | Provision of PPE for workers and use of PPE by workers Implement mitigation measures in Table 4 | Throughout construction site | Observation, document review and public consultation, interview workers on the site | Weekly and Monthly | Environmental Consultant in CSC team and PPMU safeguard staff Local Community Monitoring Boards | Included in CSC contracts PPMU operation budgets Local budget |
| | | | | Once every 6 months during construction or in case of at any time if necessary | Monitoring consultant on environmental safeguard policies/LIC and CPMU safeguard staff | Included in contract with CPMU; CPMU operation budget |
| Control impacts on irrigation activities | Sufficient water for irrigation Implement mitigation measures in Table 4 | Throughout construction site | Observation, document review and public consultation, interview workers on the site | Weekly and Monthly | Environmental Consultant in CSC team and PPMU safeguard staff Local Community Monitoring Boards | Included in CSC contracts PPMU operation budgets 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 and CPMU safeguard staff | Included in contract with CPMU; CPMU operation budget |
| Site clearance activities | Vegetable recovery on the sites and Implement mitigation measures in Table 4 | Throughout construction area | Observation, public consultation, interview workers on the site | Completed Construction | Environmental Consultant in CSC team and PPMU safeguard staff Local Community Monitoring Boards | Included in CSC contracts PPMU operation budgets Local budget |
| Operation Stage | | | | | | |
| Water quality | Environmental water conditions around Hoi Tom pond | Store water areas | Sampling | 6 monthly for first two years of operation. | Division of industry and Trade, Phong Dien District, Hue province | Local budget |
| Waste disposal | Site cleanliness and site condition; temporary waste storage area | Throughout construction area | Observation | 6 monthly for first five years of operation. | Division of industry and Trade, Phong Dien District, Hue province | Local budget |

5.3 EMP Implementation Arrangements

Table 7. EMP Implementation

| Organization | Roles and Responsibilities | | |
|--------------|---|---|---|
| | Subproject Preparation | Subproject Implementation | Subproject Operation |
| CPMU | Provide advice to PPMU's Safeguards Officer on IEE/CEP and IEE/EIAR preparation Review and provide "no-objection" on IEE/CEPs or | Provide advice to PPMU's Safeguards Officer on EMP implementation during construction Monitor progress during construction | Provide advice to Hue PPMU Safeguards officer on EMP implementation during first year of operation Monitor progress during |

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| Organization | Roles and Responsibilities | | |
|---|---|--|--|
| | Subproject Preparation | Subproject Implementation | Subproject Operation |
| | IEE/EIARs submitted by PPMUs | Consolidate PPMU environmental reporting | first year of operation Consolidate PPMU environmental reporting |
| Hue PPC | Sign-off on environmental assessment documents prior to submission for approval Approval of any subprojects requiring EIAR that are not subject to MONRE's approval | Project owner with ultimate responsibility for environmental performance | Project owner is responsible for environmental performance during operation stage including implementation of EMP during operation |
| Hue 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 |
| Hue PPMU | Recruit consultant for overall responsibility about IEE/CEP or IEE/EIAR preparation and submission for approval Ensure staffs 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 Cooperate with CPMU for environmental monitoring reporting | 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 O&M procedures |
| DPC | Approval of subproject CEPs in accordance with GOV's regulations | Monitoring implementation of EMP through their own internal monitoring system | Monitoring implementation of EMP through their own internal monitoring system |
| 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' activities 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 Boards (CSBs) and local | Involvement in consultation and participation activities to identify and develop subprojects | Involvement in environmental monitoring activities under the direction of SSTs | Involvement in environmental monitoring activities under the direction of SSTs |

Initial Environmental Examination (IEE)/Commitment on Environmental Protection (CEP)

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Integrated Rural Development in Central Provinces Project*

| Organization | Roles and Responsibilities | | |
|--------------------------------|---|--|----------------------|
| | Subproject Preparation | Subproject Implementation | Subproject Operation |
| community members ⁵ | Responsibility to comment on environmental assessment documentation upon disclosure | | |
| 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; Implement all mitigation measure stated in the approved IEE | n/a |

⁵ 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 | Site Environmental Performance Report indicating compliance with Site EMP and monitoring results | Monthly | Construction contractor | Subproject Support Teams |
| | EMP Compliance Report indicating compliance with subproject EMP and monitoring results | Quarterly | Subproject Support Teams | Thua Thien – Hue PPMU |
| | EMP Compliance Report indicating compliance with subproject EMP and monitoring results | Bi-annually or twice during construction depending on construction duration | Thua Thien –Hue PPMU | CPMU And CPMU combine all subprojects to submit to ADB |
| | Subproject Environmental Report indicating overall subproject environmental performance and EMP compliance | At completion of subproject | CPMU | ADB, AFD, |
| 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. | Division of industry and Trade, Phong Dien District, Hue province | DONRE |

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 | | | | |

| Item | Marginal Costs for Pre-Construction | Marginal Costs for Construction | Marginal Costs for Operation | Marginal Costs Sub-Total |
|---|--|---|--|--|
| 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/QĐ-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 environmental monitoring capability | n/a | Included in a separate contract with CPMU | Local budget | n/a |
| Public disclosure | Defined in consultancy contract on IEE | Included in operation budgets of PPMU and CPMU | n/a | Public disclosure |
| TOTAL <i>(intensify the capability and public disclosure)</i> | | | | |

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 | 10 /03/ 2014 |
| | Dates of meetings (if requested) | 20/03/2014 |
| | Minutes of meeting attached (Yes / No) | Yes |
| Public meetings | Date(s) held | 20/03/2014 |
| | Location(s) held | PC's meeting hall of Dien Loc, Phong Chuong communes – Phong Dien district and Quang Thai commune – Quang Dien district |

| CONSULTATION METHOD | DETAILS OF ACTIVITIES | |
|---------------------|--|--|
| | 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 57 people Man: 41 people Women: 16 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? | Required Follow-up Actions? |
|---|--|--|
| Subproject design | Local residents of Phong Chuong, Dien Loc and Quang Thai communes; | In the surveying and detailed design period, the consulting firm is expected to coordinate with local authorities to find suitable water inlets and outlets |
| Dust or exhaust generated from construction machines | Local people of Phu My hamlet | When transporting construction materials, implement strictly dust suppression measures such as watering of exposed surfaces and covering the trucks with canvas; |
| Traffic disturb when transporting material and constructing the production/management road, | Local people | Do not transport materials at rush hours (6 am to 7 am; 11 am -12 pm; 5 pm- 6pm) The Contractors are supposed to slow down when transporting materials by the residential area. It is necessary to erect construction signposts and speed limit signs |
| Affect drainage | Local people | Contractor should build temporary drainage systems to avoid local food in the construction area and its surround |

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 | Include in operation budget of PPMUs |
| 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 | Include in operation budget of PPMUs, civil work contracts and CSC contracts |

7. CONCLUSION AND RECOMMENDATIONS

East-West Hoi Tom flood protection dike system subproject aims to improve livelihood and reduce poverty for total 19,280 peoples of 3 communes, in which 7,727 peoples in Phong Chuong commune through protection of the annual floods. Especially, it is expected to promote the living standard of 326 households living under the poverty line in the commune; 6,155 peoples from Dien Loc commune and 5398 peoples from Quang Thai commune through protection of the annual floods, get benefit from cheaper and abundant agricultural products. Besides, the subproject will also improve access for people from these communes to center, economic and social services. The subproject's environmental assessment was implemented and there are the following main potential environmental impacts of subproject in construction and operation stage:

- (i) Risk for the health and safety of the local people and workers;
- (ii) Solid and liquid waste pollution attributable to soil and stone banking and excavation, construction material mixing (during construction and O&M period), discharged gasoline and oil and workers' camps (during construction period);
- (iii) Increase of productivity due to the flooding protection goal after the construction.

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

- (i) Provide protection equipment to the workers, including working comforters and gloves, protection belts, etc; trainings to use these equipment are required. The functional agencies need to supervise regularly the working safety activities for workers and local people; restrict access by local people in the construction site by Construction sign and barrier. Awareness on the risks during construction period should be provided on the local radio; the Contractor must protect people and workers by avoiding overload volume for vehicles during material transportation time; and limit the construction activities in the rainy season;

- (ii) Control to minimize waste/liquid disposal, exhaust pollution during construction; periodic cleaning of the dike as well as subproject area; build the disposal collecting system; build the awareness for local people on disposal collecting;
- (iii) Ensuring the sufficient water supply for cultivation activities of local people in the subproject areas;

To ensure the compliance of the mitigation activities, following monitoring measures should be implemented

- (i) For the Contractor: The contractor must have methods and commit to conducting reduction of negative environmental impacts at subproject area and the surrounding residential areas; observe and monitoring of air quality, and water according to local people's opinions; and prepare a detail plan of environmental monitoring and provide enough staffs to meet the requirement and regulation on EMP in the field;
- (ii) The regulations on EMP in the field;
- (iii) In operation phase, the Subproject functional manager (in this subproject is Phong Dien CPC) must supervise periodically the water quality following the Vietnam Criteria QCVN;
- (iv) PPMU strengthen the environmental compliance monitoring, check the erosion and sediment, material storage, maintenance of equipments, vehicles, machines, condition of camps, disposal treatment, drainage system in construction and operation phase; cooperate with local authorities to set up and carry out EMP.

Recommendations:

Based on the study, all negative impacts on environment will only be generated from the construction stage and will not occur in the operation stage. It is expected to limit the negative environmental problems after the subproject implementation such as flooding, erosion, etc. and the new system (dike and culverts, etc) will have a positive impact to the environment.

According to the IEE, the FS consultant and the PPMU have following suggestions:

- (i) As no significant environmental impact will happen, it is recommended that no further environmental assessment is warranted;
- (ii) The functional authorities can approve the IEE for this subproject to create the basis for the next implementation steps, to ensure implementation progress and the effectiveness of the project.
- (iii) Information disclosure if approved IEE on local authorities and local people need to be implemented to ensure local people and authorities fully aware on environmental mitigation measure implementation and promote commune based monitoring;

| | | | |
|-----------------------------|--|-------------------|--|
| 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
- Environmental mitigation measure to include into bid documents Subproject of Hoi Tom Dyke System combined with production road
- Agreement on Location of disposal site for West-Eats Hoi Tom dike Subproject
- Results of Environmental Monitoring
- Acceptance Minute on UXO Completion

Annex 1: Some proposed environmental monitoring locations (Air /Noise monitoring and traffic disturb monitoring points)



Photo 1: Water quality monitoring location at Xuan Hoa 2 Bridge (middle section)



Photo 2: Water quality monitoring location at the beginning section (near Xa Ton pumping station)



Photo 3: Water quality monitoring location at Hoi Tom Bridge (ending section)



Photo 4: Air quality monitoring location at the corner of material transportation roads in the residential area of My Phu hamlet




Photo 5: Air quality monitoring location at the material transportation road in the residential area near Hoa Xuan 1 pumping station



Photo 6: Grass in the subproject area

Annex 2. Public consultation

Meeting minutes at public consultation and lists of attendance in the public consultation meeting at Dien Loc commune



CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM
Độc lập – Tự do – Hạnh phúc
Điền Lộc, ngày 20 tháng 03 năm 2014

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

BIÊN BẢN LÀM VIỆC

Hôm nay, ngày 20 tháng 03 năm 2014, tại UBND xã Điền Lộc 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... TR. Văn Kế Giới |
| - Ông/Bà... Nguyễn Thị Thu Trang | Chức vụ... TR. Văn Mai Trường |
| - Ông/Bà... Dương Đức Chiến | Chức vụ... TR. Văn T.Đ.C |

II. Đại diện Ban QLDA tỉnh

| | |
|-----------------------------|------------------------|
| - Ông/Bà... Tôn Thất Khanh | Chức vụ... Cán bộ PPMU |
| - Ông/Bà... Diệp Minh Phụng | Chức vụ... Cán bộ PPMU |
| - Ông/Bà..... | Chức vụ..... |

III. Đại diện địa phương

| | |
|-------------------------------|------------------------------|
| - Ông/Bà... Hoàng Trại | Chức vụ... Chủ tịch UBND xã |
| - Ông/Bà... Trần Đình Khôi | Chức vụ... Chủ nhiệm HTX N/N |
| - Ông/Bà... Trần Nguyễn Hoàng | Chức vụ... Địa Chính xã |

Nội dung làm việc:

- 1> phổ biến thông tin về dự án bao gồm: thiết kế dự án, mục tiêu, mục đích của dự án.
- 2> tư vấn về TĐ.C, môi trường và tư vấn về giới phổ biến thông tin về các vấn đề của dự án.
- 3> Ghi nhận các ý kiến của người dân và lãnh đạo địa phương về việc thực hiện dự án tại địa phương.

Initial Environmental Examination (IEE)/Commitment on Environmental Protection (CEP)

Upgrading East-West Hoi Tom dike system, combined with production road subproject, Thua Thien Hue province
Integrated Rural Development in Central Provinces Project

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.....

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


Diệp Minh Phong

Đại diện UBND xã



CHỦ TỊCH
Hoàng Trạch

Đại diện tư vấn


Đông Đức Chiến

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



Điền Lộc, ngày 20 tháng 3 năm 2014

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

BIÊN BẢN HỢP 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 cấp nước tưới cho đồng ruộng
Xã: Điền Lộc, huyện Phong Điền, tỉnh TT-Huế, Hoi Tom

I. Thành phần tham dự:

- | | |
|----------------------------|-------------------------------|
| - Ông/Bà: Tôn Thất Khanh, | Chức vụ: Cán bộ Ban QLDA Tỉnh |
| - Ông/Bà: Hoàng Hồng Hanh, | Chức vụ: Tư vấn kỹ thuật |
| - Ông/Bà: Dương Đức Chiến | Chức vụ: Tư vấn kỹ thuật |
| - Ông/Bà: Hoàng Tài | Chức vụ: Chủ tịch UBND |
| - Ông/Bà: Trần Đình Khai, | Chức vụ: Chủ nhiệm HTX NN |
| - Ông/Bà: Nguyễn Khắc Lộc | Chức vụ: thôn Nhứt Đông |
| - Ông/Bà: Trần Thị Thủy | Chức vụ: thôn Nhứt Tây |
- Đại diện những hộ bị ảnh hưởng người, trong đónữ, 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

1. Ban C&SC đã được thành lập và cũng sẽ tham gia vào quá trình thực hiện Dự án: giám sát quá trình thi công, quá trình vận hành.
2. Hội phụ nữ nhất trí ủng hộ, việc thực hiện Dự án tại địa phương và sẵn sàng tuyên truyền, vận động thành viên trong Hội tham gia vào quá trình giám sát Dự án.
3. Cần bồi dưỡng, tập huấn về Kiến thức, Kỹ năng giám sát cho ban C&SC của địa phương để có thể giám sát Dự án tốt hơn.

III. 2. Các vấn đề về môi trường

1. Hệ thống đê Đông Tây Hoi Tom ảnh hưởng không đáng kể đến môi trường và cuộc sống của người dân. Do đó, những tác động đến môi trường là không lớn.
2. Trong quá trình thi công, các đơn vị Tư vấn, nhà thầu cần phải có các biện pháp tránh và giảm thiểu về bụi, tiếng ồn và rác thải ra nguồn nước.
3. Nên thông báo trước thời gian thi công, để người dân có kế hoạch di dời sản xuất để tránh thiệt hại cho người dân tại địa phương.

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

- 1) Do Dự án là việc nâng cấp hệ thống đê Đông Tây Hoi Tân không có thu hồi đất và T.Đ.C nên việc thực hiện Dự án có nhiều thuận lợi triển khai.
- 2) Lãnh đạo địa phương và các hộ được tham vấn đều mong muốn Dự án nhanh chóng thực hiện để cải tạo và nâng cao hiệu quả Sản xuất hàng năm.

IV. Kết luận

- 1) Lãnh đạo địa phương và người dân, đều nhất trí ủng hộ việc thực hiện Dự án. Nếu Trung ương cấp thu hồi một phần nhỏ diện tích đất nông nghiệp, các hộ dân nhất trí hiến đất để thực hiện Dự án.
- 2) Do Dự án thực hiện cải tạo lại hệ thống đê cũ, nên không có sự ảnh hưởng và tác động tiêu cực đến môi trường.
- 3) Ban QLDA mong muốn được tập huấn và nâng cao năng lực giám sát để giám sát tốt hơn.

Cuộc họp các bên thống nhất và kết thúc vào lúc 15h ngày 20 tháng 3 năm 2014

Đại diện cộng đồng



Đại diện UBND xã



CHỦ TỊCH
Huỳnh Tuấn

Đại diện Ban QLDA tỉnh



Diệp Ninh Phong

Đại diện tư vấn



Đặng Đức Chiến



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

Điền Lộc, ngày 20 tháng 3 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: Nâng cấp hệ thống đê kè hợp giao thông môi trường Đông Tây Hoi Tom
Xã: Điền Lộc, huyện Phong Điền, tỉnh Thừa Thiên Huế

| STT | Họ và tên | Giới tính | Địa chỉ | Ký tên | Ghi chú |
|-----|-----------------|-----------|-----------|--------|---------|
| 1 | Nguyễn Khắc Lộc | | Nhất Đông | LPL | |
| 2 | Trần Đình Vũ | | Nhì Đông | Vu | |
| 3 | Lê Văn Thanh | | Nhất Đông | Thanh | |
| 4 | Lê Quang Kiên | | Nhất Tây | Kien | |
| 5 | Trần Đình Ty | | Nhì Đông | Ty | |
| 6 | Hồ Văn Trường | | Giáp Nam | Trường | |
| 7 | Lê Quang Tử | | Nhì Đông | Tu | |
| 8 | Lê Phi Tuấn | | Nhất Tây | Tuan | |
| 9 | Nguyễn Đức Nam | | Nhất Tây | Nam | |
| 10 | Trần Đình Khôn | | Nhất Tây | Khôn | |
| 11 | Trần Trại | | Nhất Tây | Trại | |
| 12 | Lê Quang Vinh | | Nhất Đông | Vinh | |
| 13 | Nguyễn Văn Phúc | | Nhất Đông | Phuc | |
| 14 | Hồ Ty | | Nhất Đông | Ty | |
| 15 | Trần Đình Thắng | | Nhì Tây | Thang | |
| 16 | Hương Trại | | Giáp Nam | Trại | |

Initial Environmental Examination (IEE)/Commitment on Environmental Protection (CEP)

Upgrading East-West Hoi Tom dike system, combined with production road subproject, Thua Thien Hue province
Integrated Rural Development in Central Provinces Project

| STT | Họ và tên | Giới tính | Địa chỉ | Ký tên | Ghi chú |
|-----|------------------|-----------|-----------|--------------|---------|
| 17 | Trần Thị Kim Yến | Nữ | Nhị Đông | <u>Kye</u> | |
| 18 | Trần Thị Thuý | " | Nhị Tây | <u>Thu</u> | |
| 19 | Lê Thị Lành | " | Nhất Tây | <u>Lan</u> | |
| 20 | Lê Thị Hiền | " | Nhị Tây | <u>Thien</u> | |
| 21 | Trần Thị Mui | " | Nhất Tây | <u>Mui</u> | |
| 22 | Lê Thị Đức Hằng | " | Nhất Đông | <u>Hang</u> | |
| 23 | Lê Thị Túy | " | Nhất Tây | <u>Tuy</u> | |
| 24 | Đường Thị Lâm | " | Nhất Đông | <u>Lam</u> | |
| 25 | Võ Thị Linh | " | Nhất Tây | <u>Linh</u> | |
| 26 | Lê Thị Liên | " | Nhị Đông | <u>Lien</u> | |
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Initial Environmental Examination (IEE)/Commitment on Environmental Protection (CEP)

Upgrading East-West Hoi Tom dike system, combined with production road subproject, Thua Thien Hue province
Integrated Rural Development in Central Provinces Project

| STT | Họ và tên | Giới tính | Địa chỉ | Ký tên | Ghi chú |
|-----|-----------|-----------|---------|--------|---------|
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Đại diện cộng đồng

Đại diện UBND xã



CHỦ TỊCH
Hương Trại


Đại diện Ban QLDA tỉnh

Diệp Minh Phong

Đại diện tư vấn

Dương Đức Chiến

Meeting minutes at public consultation and lists of attendance in the public consultation meeting at Phong Chuong commune



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

Phong Chuong ngày 20 tháng 03 năm 2014

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

BIÊN BẢN LÀM VIỆC

Hôm nay, ngày 20 tháng 03 năm 2014, tại UBND xã Phong Chuong 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 Trần Văn Anh | Chức vụ | Chuyên gia tài chính |
| - Ông/Bà Hoàng Hồng Hải | Chức vụ | Chuyên gia giới |

II. Đại diện Ban QLDA tỉnh

| | | |
|--------------------------|---------|--------------------|
| - Ông/Bà Diệp Minh Phong | Chức vụ | C.B. Ban QLDA tỉnh |
| - Ông/Bà Trần Thất Khang | Chức vụ | C.B. Ban QLDA tỉnh |
| - Ông/Bà..... | Chức vụ | |

III. Đại diện địa phương

| | | |
|--------------------------|---------|-------------------|
| - Ông/Bà Nguyễn Thế Giáp | Chức vụ | CT UBND |
| - Ông/Bà Hồ Văn Tiến | Chức vụ | C.B. Địa chính xã |
| - Ông/Bà..... | Chức vụ | |

Nội dung làm việc:

Đại diện Ban QLDA tỉnh và tư vấn thiết kế
thiết lập nội dung và quy mô hàng mục các
công trình thuộc dự án
Đại diện tư vấn chỉ dẫn an toàn trao
đổi những vấn đề liên quan
Người dân tham gia đóng góp ý kiến
kính đạo xã tổng kết và nêu ý kiến
về cuộc tham vấn

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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


Diệp Minh Trọng

Đại diện UBND xã


Nguyễn Thế Giáp

Đại diện tư vấn


Đoàn Văn Đình

CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc



Phong Châu, ngày 20 tháng 03 năm 2014

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

BIÊN BẢN HỢP 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 đê, kết hợp giao thông đường ray
Xã: Phong Châu, huyện Phong Điền, tỉnh Thừa Thiên Huế

I. Thành phần tham dự:

| | |
|---------------------------|--------------------------------|
| - Ông/Bà: Vũ Hoàng Lan | Chức vụ: Chuyên gia Môi trường |
| - Ông/Bà: Dương Văn Anh | Chức vụ: Chuyên gia Tài chính |
| - Ông/Bà: Hoàng Hiệp Hải | Chức vụ: Chuyên gia Giới |
| - Ông/Bà: Đặng Xuân Phong | Chức vụ: CB Ban QLDA tỉnh |
| - Ông/Bà: Trần Thất Khánh | Chức vụ: CB Ban QLDA tỉnh |
| - Ông/Bà: Nguyễn Thế Hiệp | Chức vụ: CT UBND xã |
| - Ông/Bà: Hồ Văn Điền | Chức vụ: CB địa chính xã |

- Đại diện những hộ bị ảnh hưởng người, trong đónữ, 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

Người dân mong muốn được tham gia nhiều hơn vào các công việc của ban quản lý công trình. Mong muốn phát huy vai trò của ban quản lý công trình để phát huy hiệu quả dự án.

III. 2. Các vấn đề về môi trường

Lo ngại về ô nhiễm môi trường công trình cũ và khai hoang các công trình lân cận tác động không nhỏ đến đời sống người dân. Người dân yêu cầu các cơ quan chức năng phải tuân thủ nghiêm chỉnh quy định liên quan trong quá trình thi công.

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

Dù kinh nghiệm ảnh hưởng đến đất đai, cây cối của các hộ là không lớn. Người dân yêu cầu tổ chức thực hiện theo đúng quy định liên quan nhằm đảm bảo quyền lợi cho người bị ảnh hưởng.

IV. Kết luận

Các bên tham vấn thống nhất chủ trương thực hiện dự án. Yêu cầu các bên tham vấn tuân thủ theo những quy định liên quan. Mong muốn dự án tiến hành sớm để người dân sinh sống không bị ảnh hưởng.

Cuộc họp các bên thống nhất và kết thúc vào lúc ngày 20 tháng 03 năm 2014

Đại diện cộng đồng

Đại diện UBND xã



Đại diện Ban QLDA tỉnh

Đại diện tư vấn

Diệp Minh Phong

Đoàn Văn Đình



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

Phong Chương, ngày 30 tháng 03 năm 2014

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


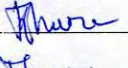

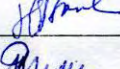
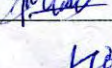

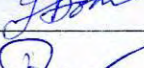
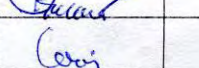
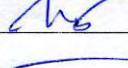
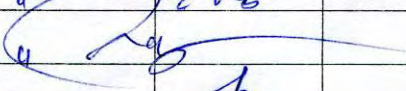

DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP
(Tham vấn cộng đồng về chính sách an toàn: Môi trường, Tái định cư, Giới và Dân tộc thiểu số)

Tên tiểu dự án: Nâng cấp đê và giao thông nội đồng Đông Tây - Hoi Tom
Xã: Phong Chương, huyện: Phong Điền, tỉnh: Thừa Thiên Huế

| STT | Họ và tên | Giới tính | Địa chỉ | Ký tên | Ghi chú |
|-----|---------------------|-----------|---------------------------|--------------------|-------------|
| 1 | Ngô Thị Linh Nhâm | | Nhất Phong - Phong Chương | <i>[Signature]</i> | |
| 2 | Lê Thị Bích Liên | | Chĩnh An - Phong Chương | <i>[Signature]</i> | |
| 3 | Nguyễn Thị Vui | | Mỹ Phú | <i>[Signature]</i> | |
| 4 | Ngô Thị Quý và Châu | | Mỹ Phú - Phong Chương | | Cán bộ TNMT |
| 5 | Trần Thị Quý | | Chĩnh An, Phong Chương | <i>[Signature]</i> | |
| 6 | Trần Thị Xứ | | Mỹ Phú, Phong Chương | <i>[Signature]</i> | |
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Initial Environmental Examination (IEE)/Commitment on Environmental Protection (CEP)

Upgrading East-West Hoi Tom dike system, combined with production road subproject, Thua Thien Hue province
Integrated Rural Development in Central Provinces Project

| STT | Họ và tên | Giới tính | Địa chỉ | Ký tên | Ghi chú |
|-----|----------------|-----------|---------------|---|---------|
| 7 | Ngô Văn Chinh | Nam | xã Phong Châu |  | |
| 8 | Lê Thế Hùng | Nam | " |  | |
| 9 | Trần Thuần | " | " | Thuần | |
| 10 | Ngô Thanh Đạt | " | " |  | |
| 11 | Ngô Hữu Thành | " | " |  | |
| 12 | Ngô Văn Phúc | " | " |  | |
| 13 | Ngô Hữu Hải | " | " | Hải | |
| 14 | Phùng Đăng Căn | " | " | Đăng | |
| 15 | Ngô Văn Đào | " | " |  | |
| 16 | Lê Xuân | " | " |  | |
| 17 | Hồ Tấn | " | " |  | |
| 18 | Nguyễn Cường | " | " | Cường | |
| 19 | Lê Tuấn | " | " |  | |
| 20 | Trần Ngọc Đạt | " | " |  | |
| 21 | Vũ Thanh Hùng | " | " |  | |
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Initial Environmental Examination (IEE)/Commitment on Environmental Protection (CEP)

Upgrading East-West Hoi Tom dike system, combined with production road subproject, Thua Thien Hue province
Integrated Rural Development in Central Provinces Project

| STT | Họ và tên | Giới tính | Địa chỉ | Ký tên | Ghi chú |
|-----|-----------|-----------|---------|--------|---------|
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Đại diện cộng đồng

Đại diện UBND xã



Nguyễn Thế Giáp

Đại diện Ban QLDA tỉnh

Đại diện tư vấn

Diệp Minh Phong

Đoàn Văn Anh

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



CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

Quang Thai, ngày 20 tháng 03 năm 2014

DỰ ÁN PHÁT TRIỂN NÔNG THÔN TỔNG HỢP CÁC TỈNH MIỀN TRUNG

(Loan 2357-VIE)

BIÊN BẢN LÀM VIỆC

Hôm nay, ngày 20 tháng 03 năm 2014, tại xã Quang Thai chúng tôi gồm:

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

- Ông/Bà Vũ Hoàng Lan, Chức vụ: Tư vấn môi trường
- Ông/Bà Hoàng Hồng Khanh, Chức vụ: Tư vấn chất
- Ông/Bà Trần Văn Anh, Chức vụ: Tư vấn Tài chính

II. Đại diện Ban QLDA tỉnh

- Ông/Bà Diệp Minh Phong, Chức vụ: CB Ban QLDA tỉnh
- Ông/Bà, Chức vụ:
- Ông/Bà, Chức vụ:

III. Đại diện địa phương

- Ông/Bà Phan Nông, Chức vụ: PCI UBND xã
- Ông/Bà Hoàng Văn Khang, Chức vụ: Cán bộ địa phương
- Ông/Bà, Chức vụ:

Nội dung làm việc:

Ban QLDA tỉnh và tư vấn thiết kế tỉnh
bây giờ đang cuộc họp và những thông
tin cơ bản của dự án.
Tư vấn chính sách an toàn thực phẩm
những thông tin liên quan đến chất
lượng an toàn.
Người dân tham gia phát biểu ý
kiến và đánh giá xã hội lập thành
sau này sẽ tham vấn.

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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


Diệp Minh Phong

Đại diện UBND xã



Shan Nông

Đại diện tư vấn

Hoàng Văn
Vũ Hoàng Lân



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

Quảng Trị, ngày 20 tháng 03 năm 2014

DỰ ÁN PHÁT TRIỂN NÔNG THÔN TỔNG HỢP
CÁC TỈNH MIỀN TRUNG - KHOẢN VAY BỎ SUNG
BIÊN BẢN HỢP 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 giao thông đường Tây Hoi Tom.
Xã: Quảng Trị, huyện: Quảng Trị, tỉnh: TT Huế

I. Thành phần tham dự:

- | | |
|---------------------------|-----------------------------|
| - Ông/Bà: Vũ Hoàng Lâm | Chức vụ: Tư vấn Môi trường |
| - Ông/Bà: Hoàng Hết Hân | Chức vụ: Tư vấn Giới |
| - Ông/Bà: Trần Văn Sinh | Chức vụ: Tư vấn Tái định cư |
| - Ông/Bà: Diệp Minh Đông | Chức vụ: CB Ban QLDA tỉnh |
| - Ông/Bà: Phan Nông | Chức vụ: DCT UBND xã |
| - Ông/Bà: Hoàng Văn Khang | Chức vụ: CB Địa chính xã |
| - Ông/Bà: | Chức vụ: |

- Đại diện những hộ bị ảnh hưởng người, trong đónữ, 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

Người dân đồng tình ủng hộ và mong muốn dự án sớm khai triển. Bà con mong muốn được tuyên truyền nâng cao ý thức là người tiêu dùng. Người dân mong muốn được tham gia các lớp tập huấn để dự án tổ chức.

III. 2. Các vấn đề về môi trường

Theo người dân, tác động của dự án về vấn đề môi trường là "khả năng có thể" chấp nhận được. Người dân sẽ tạo điều kiện thuận lợi nhất cho việc triển khai dự án. Tuy nhiên, trong quá trình xây dựng cần làm sạch trong tài xế khi vận chuyển vật liệu xây dựng, phù hợp với người dân địa phương để tránh tác hại.

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

Mức độ tác động đến tài sản, đất đai, cây cối ở mức nhẹ, không ảnh hưởng nhiều đến đời sống bà con.

Người dân đồng ý bồi đắp hồ để an toàn mang muối dư thừa khỏi sân.

Không có người DTTS trên địa bàn dự án.

IV. Kết luận

Các bên tham gia đều thấy nhất trí trong việc xây dựng dự án. Người dân và lãnh đạo xã đều nhận thức được rằng, dự án mang lại nhiều hiệu quả to lớn.

Cuộc họp các bên thống nhất và kết thúc vào lúc ngày 20 tháng 08 năm 2014

Đại diện cộng đồng



Diệp Đình Phong

Đại diện UBND xã



Phạm Nông

Đại diện tư vấn


Vũ Hoàng Lân

Photos of public consultation meeting



Photo 7: Public Consultation in Dien Loc Commune, 20 March 2014



Photo 8: Public Consultation in Phong Chuong, 20 March 2014

Annex 3. Data source

- 1- *SIR - Upgrading East-West Hoi Tom dike system, combined with production road subproject, Thua Thien Hue province;*
- 2- *Basic design explanation of Upgrading East-West Hoi Tom dike system, combined with production road subproject, Thua Thien Hue province;*
- 3- *Annual statistic data, Phong Dien district; 2013;*

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 |
|---|-----|----|---------|
| 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? | | | |

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| | | | |
|--|--|--|-----|
| 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: _____

| | <u>Yes</u> | <u>No</u> | <u>Remarks</u> |
|---|------------|-----------|----------------|
| 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: _____

| | <u>Yes</u> | <u>No</u> | <u>Remarks</u> |
|---|------------|-----------|----------------|
| 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: _____

| | <u>Yes</u> | <u>No</u> | <u>Remarks</u> |
|---|------------|-----------|----------------|
| 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? | | | |

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| | | | |
|-------------------------------|--|--|-----|
| 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: _____

| | <u>Yes</u> | <u>No</u> | <u>Remarks</u> |
|--|------------|-----------|----------------|
| 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? | | | |

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| | | | |
|--|--|--|-----|
| 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: _____

| | <u>Yes</u> | <u>No</u> | <u>Remarks</u> |
|--|------------|-----------|----------------|
| 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: _____

| | <u>Yes</u> | <u>No</u> | <u>Remarks</u> |
|---|------------|-----------|----------------|
| 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? | | | |

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| | | | |
|---|--|--|-----|
| 50. 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? |
| | | | | |
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| | | | | |
|--|--|--|--|--|
| | | | | |
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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? |
| | | | | |
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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 Upgrading East-West Hoi Tom dike system, combined with production road

| Sub-project Activity | Potential impacts | Proposed Mitigation Measure |
|---|---------------------------------------|---|
| <p>Earthworks</p> <p>Concrete embankment</p> <p>Waste and material transportation</p> | <p>Noise and vibration generation</p> | <ul style="list-style-type: none"> ▪ 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 Dien Loc, Phong Chuong, Quang Thai Communes. ▪ 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 |
| | <p>Dust and exhaust generation</p> | <ul style="list-style-type: none"> ▪ 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 Dien Loc, Phong Chuong, Quang Thai Communes ▪ 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. ▪ 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. |

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| Sub-project Activity | Potential impacts | Proposed Mitigation Measure |
|---|---|--|
| | | <ul style="list-style-type: none"> ▪ 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. |
| <p>Sludge excavation, Worker camp establishment, Waste generation</p> | <p>Odour generation and in-sanitation condition</p> | <ul style="list-style-type: none"> ▪ 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. ▪ Whole of excavated soil of all types to be reused for re-filling upgraded dyke, surrounding dyke in rice field side and management/ access road ▪ 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: <ul style="list-style-type: none"> + 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 Dien Loc, Phong Chuong, Quang Thai Communes |
| <p>Excavate activities and worker camp establish on sites...</p> | <p>Water quality impacts</p> | <ul style="list-style-type: none"> ▪ 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 matters in runoff water entering the surrounding water bodies and existing canals; ▪ Provide adequate facilities in the site including latrines, holding 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 |

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| Sub-project Activity | Potential impacts | Proposed Mitigation Measure |
|---|--|--|
| | | on the sites in all construction drains; <ul style="list-style-type: none"> ▪ 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 | <ul style="list-style-type: none"> - 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 | <ul style="list-style-type: none"> ▪ All solid waste should be reused for leveling low areas where applicable; ▪ Construction waste shall to be transported by adequate manners to places under permission from Commune authorities in Dien Loc, Phong Chuong, Quang Thai Communes and dumped at local peoples gardens ▪ Equip dustbins and mobility septic tanks to work sites ((it is proposed that there will be one dustbin provided at each construction site) ; ▪ Domestic waste and garbage from worker camps need to be collected by hygienic manner through survive provision of Thua Thien-Hue 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 ▪ 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 | <ul style="list-style-type: none"> ▪ 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 PPMU and have necessary approval/permit from |

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| Sub-project Activity | Potential impacts | Proposed Mitigation Measure |
|---|--|--|
| | | <p>DONRE and local authorities;</p> <ul style="list-style-type: none"> ▪ 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- <i>Hazardous chemicals – Code of practice for safety in production, commerce, use, handling and transportation</i>; ▪ 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. |
| <p>Transport vehicle activities Construction machinery operation Worker concentration</p> | <p>Community Disturbance and Traffic safety</p> | <ul style="list-style-type: none"> ▪ 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/hour 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; |
| <p>Poor management at worksites</p> | <p>Health and safety for the construction workers and the nearby community</p> | <ul style="list-style-type: none"> ▪ Constructor need to work with CS, PPMU 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. ▪ 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. |
| <p>Excavation, transport activities</p> | <p>Impacts to public facilities</p> | <ul style="list-style-type: none"> ▪ 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 |

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| Sub-project Activity | Potential impacts | Proposed Mitigation Measure |
|---|---|---|
| | | these canals; <ul style="list-style-type: none"> ▪ 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 | <ul style="list-style-type: none"> ▪ 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 | <ul style="list-style-type: none"> ▪ 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 night 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 sanitation condition | <ul style="list-style-type: none"> ▪ 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; ▪ Supplemental temporary drainage plans must be revised and approved by PPMU, and Construction Supervision before construction works started. |
| All construction activities | Cultural heritage impacts | <ul style="list-style-type: none"> ▪ 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. |
| | Odour | Before construction is completed, the contractor will move all |

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| Sub-project Activity | Potential impacts | Proposed Mitigation Measure |
|-----------------------------|---|---|
| Environmental recovery | generation, unsafely and sanitation condition to local people | construction wastes and unused materials from the sites to approved sites Monitoring environmental recovery at: <ul style="list-style-type: none">▪ Construction waste disposal location▪ Material soil pit and borrow areas▪ Working sites Reinstate and ensure good condition for any effected public facilitates . |

ANNEX 6 Agreement on Location of disposal site for West-Eats Hoi Tom dike Subproject

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM
Độc Lập - Tự Do - Hạnh Phúc

BIÊN BẢN THAM VẤN CỘNG ĐỒNG

(THÔNG NHẤT VỊ TRÍ BÃI THẢI VÀI BÃI ĐÚC TẮM ĐẠN)

DỰ ÁN: DỰ ÁN PHÁT TRIỂN NÔNG THÔN TỔNG HỢP CÁC TỈNH MIỀN
TRUNG, TỈNH THỪA THIÊN HUẾ

TIÊU DỰ ÁN: NÂNG CẤP HỆ THỐNG ĐÊ KẾT HỢP GIAO THÔNG NỘI VÙNG
ĐÔNG TÂY HỐI TÔM.

Địa điểm: Huyện Phong Điền và Quảng Điền, tỉnh Thừa Thiên Huế

Hôm nay, ngày / /2016 tại công trình: Nâng cấp hệ thống đê kết hợp
giao thông nội vùng Đông Tây Hối Tôm. Đoạn từ Hối Lớn đến cầu Hòa Xuân
qua địa phận xã Phong Chương và Điền Lộ, đại diện chủ đầu tư, Ban Quản lý
dự án và các bên liên quan đã làm việc tại hiện trường để rà soát những vấn đề
liên quan đến công tác thiết kế bản vẽ thi công.

I. Thành Phần Tham Gia Gồm:

1. Đại diện Sở Nông nghiệp và PTNT tỉnh Thừa Thiên Huế

- Ông: Chức vụ:
- Ông: Chức vụ:

2. Đại diện Chủ đầu tư: Ban Quản lý dự án Phát triển nông thôn tổng hợp
các tỉnh miền Trung - Khoản vay bổ sung tỉnh Thừa Thiên Huế

- Ông: Chức vụ:
- Ông: Chức vụ: Cán bộ kỹ thuật

3. Đại diện Tư vấn thiết kế: Công ty Cổ phần Tư vấn XD & MT HQT.

- Ông: Lê Hoàng Nguyên Chức vụ: Giám đốc
- Ông: Lê Đức Hạnh Chức vụ: CBKT

4. Đại diện đơn vị hưởng lợi:

a. Đại diện UBND xã Phong Chương:

- Ông: Chức vụ:
- Ông: Chức vụ:
- Ông: Chức vụ:
- Ông: Chức vụ:
- Ông: Chức vụ:

b. Đại diện UBND xã Điền Lộ:

- Ông: ..Lê Văn Thống..... Chức vụ: Chủ tịch.....

- Ông: Trần Đình Khiết..... Chức vụ: Gi. đốc. Hồ X. Điện lực
- Ông: Chức vụ:
- Ông: Chức vụ:

II. Nội Dung Làm Việc:

Sau khi kiểm tra, xem xét, đánh giá hiện trạng hạng mục công trình: Nâng cấp hệ thống đê kết hợp giao thông nội vùng Đông Tây Hối Tôm. Đoạn từ Hối Lớn đến cầu Hòa Xuân Các bên đi đến thống nhất các nội dung sau:

- * Thống nhất vị trí đê thời dài và vị trí mặt bằng thi công...
chức tại lại.
- * Vị trí đê tại lại; Ngang cầu Hòa Xuân (phía đê...
cầu) > diện tích khoảng 1.000 m²
- * Vị trí đê dài thời; cách cầu Hòa Xuân (phía...
đê sông Cầu) > khoảng 100 m. Từ lại ng. đê thời...
khoảng 300 m

III. Kết Luận:

1. Biên bản này được các bên thông qua, là cơ sở để chủ đầu tư chỉ đạo đơn vị tư vấn thiết kế hoàn thiện hồ sơ thiết kế BVTC-DT.
2. Biên bản kết thúc vào lúc h cùng ngày.
3. Các bên thống nhất cùng ký tên./.

Biên bản được lập thành 05 bản có nội dung và giá trị pháp lý như nhau, mỗi bên giữ 01 bản.

CÁC BÊN THAM GIA CÙNG THÔNG NHẤT KÝ TÊN

ĐẠI DIỆN CHỦ ĐẦU TƯ

ĐẠI DIỆN TƯ VẤN THIẾT KẾ



Nguyễn Đức Hạnh

**ĐẠI DIỆN UBND XÃ PHONG
CHƯƠNG**

ĐẠI DIỆN UBND XÃ ĐIỀN LỘC



CHỦ TỊCH



Nguyễn Văn Cường

Trần Anh Kiệt

ANNEX 7 RESULTS OF ENVIRONMENTAL MONITORING

The results analyzed and measured Noise and Microclimate of Hoi Tom Subproject Area

| Parameters Results | Noise dBa | Temperature °C | Humidity % | Wind speed m/s |
|-----------------------|--------------|-------------------|---------------|-------------------|
| K _{DHT1} | 56.1 | 34.2 | 56 | 1.1 |
| K _{DHT2} | 54.8 | 35.1 | 62 | 1.4 |
| K _{DHT3} | 49.6 | 36.7 | 60 | 1.1 |
| QCVN 26:2010/BTNMT | 70 | | | |

Note :

DHT1: At the dike, near Hoa Xuan Bridge 2

DHT2: Hoi Nay Bridge – Phong Chuong Commune

DHT3: At Pumping Station –near Hoi Tom Bridge

Source : Hue Province's Centre of Environmental and Natural Resources Monitoring ,
March 2015

The results analyzed and measured air quality of Hoi Tom Subproject Area

| Parameters Results | Dust mg/m ³ | SO ₂ mg/m ³ | NO ₂ mg/m ³ | CO mg/m ³ |
|-----------------------|---------------------------|--------------------------------------|--------------------------------------|-------------------------|
| K _{DHT1} | 0.091 | 0.036 | 0.0379 | 2.614 |
| K _{DHT2} | <0.085 | 0.045 | 0.0518 | 2.953 |
| K _{DHT3} | <0.085 | 0.038 | 0.035 | 2.584 |
| QCVN 05:2013/BTNMT | 0.300 | 0.350 | 0.200 | 30 |

Note

DHT1: At the dike, near Hoa Xuan Bridge 2

DHT2: Hoi Nay Bridge – Phong Chuong Commune

DHT3: At Pumping Station –near Hoi Tom Bridge

Source : Hue Province's Centre of Environmental and Natural Resources Monitoring ,
March 2015

Initial Environmental Examination (IEE)/Commitment on Environmental Protection (CEP)

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Results of analyzed and measured surface water quality of Hoi Tom Subproject Area

| No | Parameter | Unit | Results | | | QCVN:2008/BTNMT | | | |
|----|---------------------------------|---------------|---------------------|---------------------|--------------------|-----------------|-------|-------|-------|
| | | | NM _{DHT1} | NM _{DHT2} | NM _{DHT3} | A1 | A2 | B1 | B2 |
| 1 | Temperature | °C | 29.8 | 30.5 | 30.7 | | | | |
| 2 | pH | | 7.0 | 6.6 | 7.2 | 6-8.5 | 6-8.5 | 5.5-9 | 5.5-9 |
| 3 | DO | mg/l | 5.1 | 4.4 | 5.8 | ≥ 6 | ≥5 | ≥4 | ≥2 |
| 4 | Turbidity | NTU | 12 | 21 | 2 | | | | |
| 5 | TSS | mg/l | 2.5 | 3.5 | <2 | 20 | 30 | 50 | 100 |
| 6 | COD | mg/l | 13.56 | 17.86 | <7 | 10 | 15 | 30 | 50 |
| 7 | BOD ₅ | mg/l | 5.13 | 4.95 | <1.1 | 4 | 6 | 15 | 25 |
| 8 | NH ₄ ⁺ -N | mg/l | 0.06 | 0.61 | 0.02 | 0.1 | 0.2 | 0.5 | 1.0 |
| 9 | NO ₃ ⁻ | mg/l | 0.02 | 0.12 | <0.017 | 2 | 5 | 10 | 15 |
| 10 | PO ₄ ³⁻ | mg/l | 0.025 | 0.025 | 0.05 | 0.1 | 0.2 | 0.3 | 0.5 |
| 11 | Cl | mg/l | 18.4 | 18.4 | 8.5 | 250 | 400 | 600 | |
| 12 | Fe | mg/l | 0.77 | 0.77 | 0.43 | 0.5 | 1 | 1.5 | 2.0 |
| 13 | Oil&Grease | mg/l | <0.3 | <0.3 | <0.3 | 0.01 | 0.02 | 0.1 | 0.3 |
| 14 | Coliform | MPN/100 ml | 2.9*10 ² | 3.4*10 ³ | 93 | 2500 | 5000 | 7500 | 10000 |

Note :

DHT1: Hoa Xuan Bridge

DHT2: Hoi Nay –near by Hoi Nay Bridge – Phong Chuong Commune

DHT3: Hoi Tom Bridge

Source : Hue Province's Centre of Environmental and Natural Resources Monitoring ,
 March 2015

ANNEX 8 ACCEPTANCE MINUTE ON UXO COMPLETION

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

BIÊN BẢN
NGHIỆM THU KHỐI LƯỢNG CÔNG VIỆC HOÀN THÀNH VÀ BÀN GIAO
ĐƯA VÀO SỬ DỤNG

Gói thầu TDA02-RPBM: Rà phá bom mìn, vật nổ dự án thành phần: Nâng cấp hệ thống đê kết hợp giao thông nội đồng Đông Tây Hới Tôm
Địa điểm: Huyện Phong Điền và huyện Quảng Điền, tỉnh Thừa Thiên Huế
Thuộc Dự án Phát triển nông thôn tổng hợp các tỉnh miền Trung – Khoản vay bổ sung

1 Đối tượng nghiệm thu:

Nghiệm thu khối lượng công việc rà phá bom mìn, vật nổ.

2 Thành phần trực tiếp nghiệm thu:

a) Chủ đầu tư: Ban QLDA Phát triển nông thôn tổng hợp các tỉnh miền Trung – Khoản vay bổ sung tỉnh Thừa Thiên Huế.

- | | |
|-----------------------------|--------------------------|
| - Ông: Trương Văn Giang | Chức vụ: Giám đốc |
| - Ông: Nguyễn Hữu Xuân Khôi | Chức vụ: Cán bộ kế hoạch |
| - Ông: Diệp Minh Phong | Chức vụ: Cán bộ CSAT |

b) Đại diện đơn vị thi công: Trung tâm DTXLBMVN và XD 97 - Chi nhánh Tổng công ty Xây dựng Trường Sơn.

- | | |
|---------------------|-------------------------|
| - Ông: Lê Viết Quân | Chức vụ: Giám đốc |
| - Ông: Phạm Anh Duy | Chức vụ: Chỉ huy trưởng |

c) Đại diện đơn vị kiểm tra giám sát: Bộ chỉ huy Quân sự tỉnh Thừa Thiên Huế.

- | | |
|-------------------------|--------------------------|
| - Ông: Nguyễn Hồng Sơn | Chức vụ: Chỉ huy trưởng |
| - Ông: Nguyễn Viết Tình | Chức vụ: Cán bộ giám sát |

3 Thời gian nghiệm thu:

- Bắt đầu: 7h30 ngày 12 tháng 11 năm 2015.
- Kết thúc: 9h30 ngày 12 tháng 11 năm 2015.
- Tại: hiện trường dự án.

4 Căn cứ nghiệm thu:

- Quyết định số 96/2006/QĐ-TTg ngày 04/5/2006 của Thủ tướng Chính phủ về việc quản lý và thực hiện công tác rà phá bom mìn, vật nổ; Thông tư số 146/2007/TT-BQP ngày 11/9/2007 của Bộ Quốc phòng về việc Hướng dẫn thực hiện Quyết định số 96/2006/QĐ-TTg ngày 04/5/2006;

- Quyết định số 95/2003/QĐ-BQP ngày 07/08/2003 của Bộ Quốc phòng về quy trình kỹ thuật dò tìm, xử lý bom mìn, vật nổ;

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- Quyết định số 198/QĐ-BTL ngày 10/8/2015 của Bộ Tư lệnh Quân khu 4 về việc tổ chức thực hiện rà phá bom mìn, vật nổ dự án Nâng cấp hệ thống đê kết hợp giao thông nội đồng Đông Tây Hới Tôm;

- Quyết định số 1576/QĐ-BTL ngày 29/9/2015 của Bộ Tư lệnh Quân khu 4 về việc phê duyệt phương án kỹ thuật thi công và kết quả thẩm định dự toán rà phá bom mìn, vật nổ dự án Nâng cấp hệ thống đê kết hợp giao thông nội đồng Đông Tây Hới Tôm;

- Quyết định số 698/QĐ-SNNPTNT ngày 02/10/2015 của Sở Nông nghiệp và Phát triển nông thôn Thừa Thiên Huế về việc phê duyệt dự toán hạng mục rà phá bom mìn, vật nổ dự án thành phần Nâng cấp hệ thống đê kết hợp giao thông nội đồng Đông Tây Hới Tôm;

- Hợp đồng số HĐ/02RPBM ngày 15/10/2015 giữa Ban Quản lý dự án Phát triển nông thôn tổng hợp các tỉnh miền Trung – Khoản vay bổ sung tỉnh Thừa Thiên Huế và Tổng công ty Xây dựng Trường Sơn về việc rà phá bom mìn, vật nổ dự án thành phần Nâng cấp hệ thống đê kết hợp giao thông nội đồng Đông Tây Hới Tôm;

- Giấy ủy quyền số 01/UQ-TCT ngày 02/01/2014 của Tổng giám đốc Tổng công ty Xây dựng Trường Sơn;

- Biên bản bàn giao mặt bằng trước khi rà phá bom mìn, vật nổ;

- Kết quả thi công do Trung tâm DTXLBMVN và XD 97 - Chi nhánh Tổng công ty Xây dựng Trường Sơn thực hiện và nhật ký thi công đã được các bên xác nhận;

- Nhật ký thi công - kèm theo ảnh chụp;

- Biên bản nghiệm thu kỹ thuật và kiểm tra chất lượng theo xác suất;

- Biên bản xác nhận số lượng bom, đạn;

- Biên bản hủy vật nổ;

- Cam kết an toàn mặt bằng đã rà phá bom mìn, vật nổ;

- Bản vẽ mặt bằng hoàn công đã rà phá bom mìn, vật nổ.

5 Chất lượng công việc thi công:

- Đúng quy trình, phương án kỹ thuật được Bộ Quốc phòng phê duyệt, đúng tiến độ, nội dung Hợp đồng hai bên đã ký.

- Xử lý hết tín hiệu, đảm bảo tuyệt đối an toàn cho người và trang bị khi tham gia thi công.

6 Khối lượng nghiệm thu:

| TT | Hạng mục công việc | Đvt | Khối lượng | | |
|----------|---------------------------------------|--------|------------|----------|------------|
| | | | Hợp đồng | Thi công | Nghiệm thu |
| I | Trên cạn | | | | |
| 1 | Dò tìm trên cạn đến độ sâu 0,3 m. Mật | Ha | 11,08 | 11,27 | 11,08 |
| 2 | Đào xử lý TH đến độ sâu 0,3 m. Đất C1 | T/hiệu | 2.548,0 | 2.593 | 2.548,0 |
| 3 | Dò tìm trên cạn từ độ sâu 0,3m - 3 m | Ha | 11,08 | 11,27 | 11,08 |

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| | | | | | |
|---------------------|---|---------|--------|--------|--------|
| 4 | Đào đất xử lý TH đến độ sâu 3m. Đất | m3 | 152,35 | 158,85 | 152,35 |
| II Dưới nước | | | | | |
| 1 | Dò tìm dưới nước đến độ sâu 0,5m. Nước sâu >0,5m - 5m | Ha | 2,32 | 2,32 | 2,32 |
| 2 | Dò tìm dưới nước từ độ sâu 0,5m - 3m. Nước sâu >0,5m - 5m | Ha | 2,32 | 2,32 | 2,32 |
| 3 | Đánh dấu tín hiệu đến các độ sâu dò tìm. Nước sâu >0,5m - 5m | T/hiệu | 315 | 318 | 315 |
| 4 | Lặn xử lý tín hiệu đến độ sâu 0,5m. Nước sâu >0,5m - 5m | T/hiệu | 302 | 303 | 302 |
| 5 | Lặn xử lý tín hiệu từ độ sâu >0,5m - 1m. Nước sâu >0,5m - 5m | T/hiệu | 12 | 13 | 12 |
| 6 | Lặn xử lý tín hiệu từ độ sâu >1m - 3m. Nước sâu >0,5m - 5m | T/hiệu | 1 | 2 | 1 |
| III | Tiêu hủy vật nổ tìm được | Toàn bộ | 1 | 1 | 1 |

Kết luận:

Chấp nhận nghiệm thu khối công việc hoàn thành rà phá bom mìn, vật nổ.

Chấp nhận nghiệm thu hoàn thành công trình để đưa vào sử dụng./.

ĐẠI DIỆN CHỦ ĐẦU TƯ *Klor*



Trương Văn Giang

ĐẠI DIỆN ĐƠN VỊ THI CÔNG *nh*



Trung tá: **Lê Viết Quân**

ĐẠI DIỆN ĐƠN VỊ TƯ VẤN GIÁM SÁT *lat*



Đại tá Nguyễn Hồng Sơn