

Environmental and Social Monitoring Report

Semi-Annual Report
December 2016

Viet Nam: Central Regions Rural Water Supply and
Sanitation Sector Project

WATER SUPPLY AND SANITATION OF DIEN PHONG, DIEN TRUNG AND DIEN QUANG COMMUNES, DIEN BAN DISTRICT, QUANG NAM PROVINCE

Prepared by The Joint Venture of CDM International Inc., Nippon Koei Co. Ltd. and Vinaconsult JSC for the Asian Development Bank.

CURRENCY EQUIVALENTS

(as of 2 December 2016)

Currency unit	–	dong (VND)
VND1.00	=	\$0000440
\$1.00	=	VND22714

ABBREVIATIONS

ADB	–	Asian Development Bank
AHs	–	affected households
APs	–	Affected Persons
CARC	–	Compensation Assistance Resettlement Committee
CSC	–	Design-Build Construction Supervision Consultant
CPC	–	Commune People's Committee
CPMU	–	Central Project Management Unit
CVWU	–	Communal Vietnam Women's Union
D&B	–	Design and Build
DARD	–	Department of Agriculture and Rural Development, Provincial
DONRE	–	Department of Natural Resources and Environment, Provincial
DPC	–	District People's Committee
EARF	–	Environmental Assessment and Review Framework
EC	–	Environmental Protection Commitment
EMP	–	Environmental Management Plan
EMoP	–	Environmental Monitoring Plan
EO	–	Environmental Officer
FS	–	Feasibility Study
GoV	–	Government of Vietnam
HHs	–	Households
IEE	–	Initial Environmental Examination
LARC	–	Land Acquisition and Resettlement Completion Report
LARP	–	Land Acquisition and Resettlement Plan
lpcd	–	Litters per capita per day
MARD	–	Ministry of Agriculture and Rural Development
MOH	–	Ministry of Health (BYT)
MONRE	–	Ministry of Natural Resources and Environment (BTNMT)
MOU	–	Memorandum of Understanding
NCERWASS	–	National Centre for Rural Water Supply and Environmental Sanitation
NGO	–	Non-governmental Organization
NOL	–	No Objection Letter
O&M	–	Operation and Maintenance
ODA	–	Official Development Assistance
OHS	–	Occupational Health and Safety
OU	–	Operational Unit
PCERWASS	–	Provincial Centre for Rural Water Supply and Environmental Sanitation
PIA	–	Project Implementation Assistance
PPC	–	Provincial People's Committee
PPMU	–	Provincial Project Management Unit
PVWU	–	Provincial Vietnam Women's Union
REA	–	Rapid Environmental Assessment

SAR	– Subproject Appraisal Report
SIEE	– Summary Initial Environmental Examination
SSO	– Subproject Site Office
VND	– Vietnam Dong
VWU	– Vietnam Women's Union
WSCC	– Water and Sanitation Commune Committee
WTP	– Water Treatment Plant

NOTE

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

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

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

MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT
NATIONAL CENTRE FOR RURAL WATER SUPPLY AND
ENVIRONMENTAL SANITATION

CENTRAL REGION RURAL WATER SUPPLY AND
SANITATION SECTOR PROJECT

{ADB Loan No. 2609-VIE (SF)}

Safeguards Monitoring Report

JANUARY ÷ JUNE 2016

WATER SUPPLY AND SANITATION OF
DIEN PHONG, DIEN TRUNG AND DIEN QUANG COMMUNES,
DIEN BAN DISTRICT, QUANG NAM PROVINCE

Consulting Services
For
Project Implementation Assistance

The Joint Venture of
CDM International Inc., Nippon Koei Co. Ltd. and Vinaconsult JSC

October 2016

CENTRAL REGION RURAL WATER SUPPLY AND SANITATION SECTOR PROJECT

{ADB Loan No. 2609-VIE(SF)}

Safeguards Monitoring Report JANUARY ÷ JUNE 2016

**WATER SUPPLY AND SANITATION OF
DIEN PHONG, DIEN TRUNG AND DIEN QUANG COMMUNES,
DIEN BAN DISTRICT, QUANG NAM PROVINCE**

PIA Consultant

CPMU

Esko Toivonen
Team Leader

Le Thieu Son
Director

This report has been prepared based on a combination of information provided by others and by the PIA Consultant. The PIA Consultant has to the extent reasonably possible validated and verified the accuracy of the information in the reports and appendices. To the best of the PIA Consultant's belief and knowledge, the included information is reasonably accurate and correct.

The Joint Venture of
CDM International Inc., Nippon Koei Co. Ltd. and Vinaconsult JSC

October 2016

Internal Quality Control

Project	Central Region Rural Water Supply and Sanitation Sector Project
Project No.	ADB Loan No. 2609-VIE (SF)
Client	National Centre For Rural Water Supply And Environmental Sanitation
Classification	Safeguards Monitoring Report
Name of report	Safeguards Monitoring Report Jul÷ December 2015 for Water Supply and Sanitation Subproject of Dien Phong, Dien Trung and Dien Quang Communes, Dien Ban District, Quang Nam Province
File name	VIE 2609 Dien Ban-QN Safeguards Monitoring Report Jan÷ Jun 2016 EN
Persons in charge	
<i>Prepared by</i>	
	_____ Nguyen Thi Hong Phuong National Environmental Specialist
<i>Date</i> <i>October 2016</i>	_____ Nguyen Thi Hau National Resettlement Specialist
<i>Checked by</i>	
<i>Date</i> <i>October 2016</i>	_____ Nguyen Cong Thanh, Deputy Team Leader
<i>Approved for submission</i>	
<i>Date</i> <i>October 2016</i>	_____ Esko Toivonen, Team Leader
Distribution	
<i>Recipient</i>	CPMU
<i>Hard copy</i>	5 copies in English
<i>Soft copy</i>	VIE 2609 Dien Ban-QN Safeguards Monitoring Report Jan÷ Jun 2016 EN

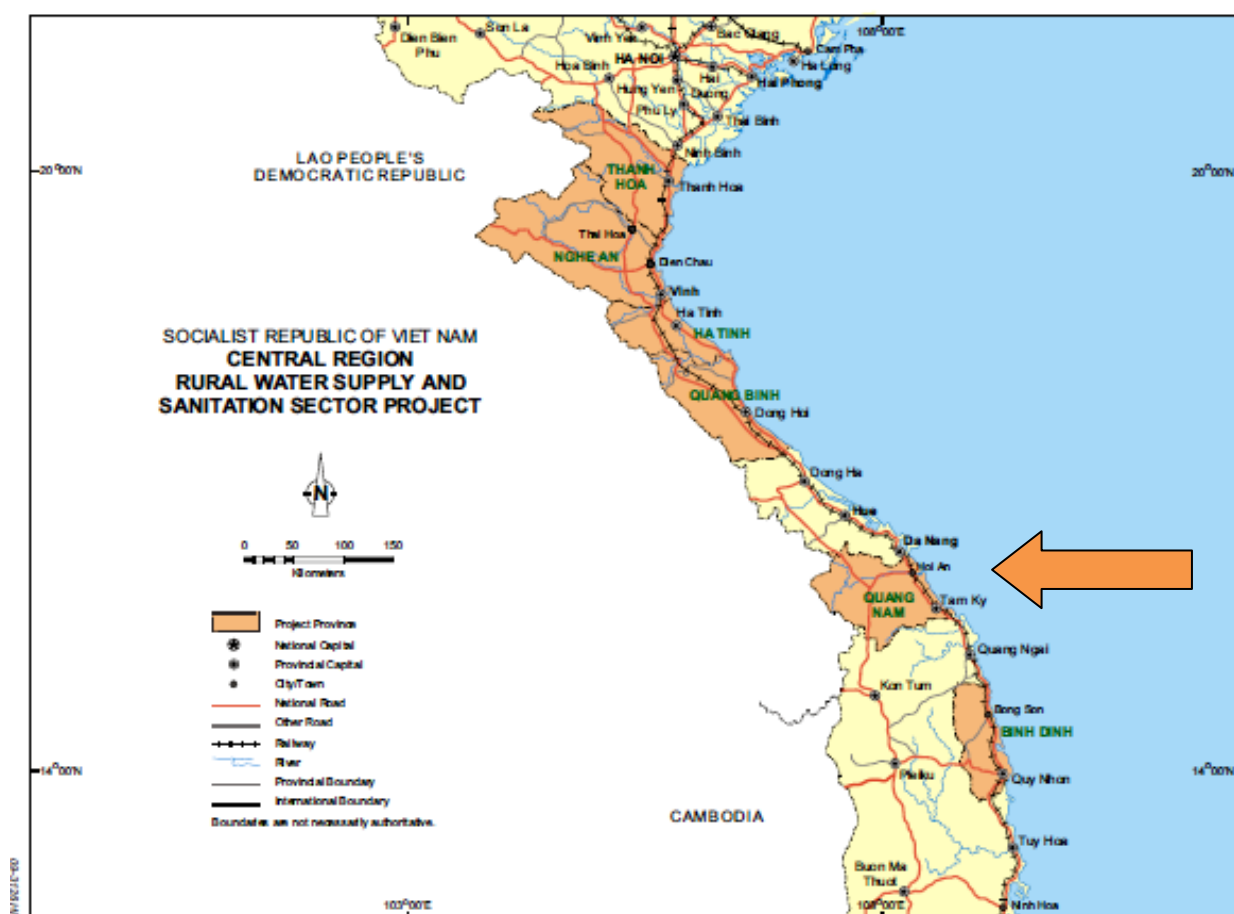


Figure 1 Location map of six Project Provinces of the central coastal region of Vietnam.

Preface

The Government of Vietnam and the Asian Development Bank (ADB) have agreed to implement the Central Region Rural Water Supply and Sanitation Sector Project (Project) scheduled to be completed by 31 December 2016. The Project has a total budget of US\$ 50 million and is expected to provide access to clean water and hygienic sanitation for about 200,000 rural people in 33 communes in the six coastal central region provinces of Vietnam: Thanh Hoa, Nghe An, Ha Tinh, Quang Binh, Quang Nam and Binh Dinh.

The Loan Agreement was signed on 2nd February 2010. On the 26th July 2011, the National Centre for Rural Water Supply and Environmental Sanitation (NCERWASS) of the Ministry of Agriculture and Rural Development (MARD) signed a Contract for Consulting Services for Project Implementation Assistance with CDM International Inc. in a joint venture with Nippon Koei Co. Ltd and national consultant Vinaconsult JSC (PIA Consultant). The PIA Consultant mobilized its team members on 25th August 2011.

This Safeguards Monitoring Report - January ÷ June 2016 covers main findings of the monitoring of safeguards issues of operation activities carried out during the reporting period from January to the end of June 2016. This report is based on review of quarterly records of the Provincial Project Management Unit (PPMU), desk review and observations made by PIA Consultant during supervision missions fielded on 2 to 6 January 2016, 19 to 30 March 2016, and 16 to 18 May 2016 to the Subproject area.

List of Abbreviations

ADB	Asian Development Bank
AH	Affected Household
AP	Affected Person
CARB	Compensation Assistance Resettlement Committee
CSC	Design-Build Construction Supervision Consultant
CPC	Commune People's Committee
CPMU	Central Project Management Unit
CVWU	Communal Vietnam Women's Union
D&B	Design and Build
DARD	Department of Agriculture and Rural Development, Provincial
DPC	District People's Committee
EARF	Environmental Assessment and Review Framework
EC	Environmental Protection Commitment
EIA	Environmental Impact Assessment
EMoP	Environmental Monitoring Plan
EMP	Environmental Management Plan
EO	Environmental Officer
FS	Feasibility Study
GoV	Government of Vietnam
IEE	Initial Environmental Examination
lpcd	liters per capita per day
LARC	Land Acquisition and Resettlement Completion Report
LARP	Land Acquisition and Resettlement Plan
MARD	Ministry of Agriculture and Rural Development
MOH	Ministry of Health
MONRE	Ministry of Natural Resources and Environment
MOU	Memorandum of Understanding
NCERWASS	National Centre for Rural Water Supply and Environmental Sanitation
NGO	Non-governmental Organization
O&M	Operation and Maintenance
ODA	Official Development Assistance
OHS	Occupational Health and Safety
OU	Operating Unit
PCERWASS	Provincial Centre for Rural Water Supply and Environmental Sanitation
PIA	Project Implementation Assistance
PIB	Project Information Booklet
PPC	Provincial People's Committee
PPMU	Provincial Project Management Unit
Project	Central Region Rural Water Supply and Sanitation Sector Project
PVWU	Provincial Vietnam Women's Union

REA	Rapid Environmental Assessment
RWSS	Rural Water Supply and Sanitation
SAR	Subproject Appraisal Report
SIEE	Summary Initial Environmental Examination
SSO	Subproject Site Office
Subproject	Dien Ban District, Quang Nam Batch-2 Subproject
VND	Vietnam Dong
VWU	Vietnam Women's Union
WSCC	Water and Sanitation Commune Committee
WSSS	Water Supply and Sanitation Subproject
WTP	Water Treatment Plant

Contents

Preface

List of Abbreviations

1	INTRODUCTION AND PROJECT OVERVIEW	1
1.1	Introduction.....	1
1.2	Subproject Overview and Progress	2
2	ENVIRONMENTAL PERFORMANCE MONITORING	4
2.1	EMP/EMoP Implementation and Compliance.....	4
2.2	Environmental Monitoring by CSC/PPMU	4
2.3	Monitoring Activities Carried out by PIA Consultant	5
2.4	Key Issues for Further Actions	6
3	INVOLUNTARY RESETTLEMENT PERFORMANCE MONITORING	7
3.1	Compliance with RP Requirements	7
3.2	Resettlement Monitoring by PPMU.....	9
3.3	Monitoring Activities carried out by PIA Consultant.....	9
3.4	Issues for Further Action	9
4	OCCUPATIONAL HEALTH AND SAFETY (OHS) PERFORMANCE MONITORING	9
4.1	OHS for Workers	10
4.2	Public Safety	10
5	INFORMATION DISCLOSURE AND CAPAcITY BUILDING	10
5.1	Public Consultations, Meetings and Information Disclosure.....	10
5.1.1	Environmental Public Consultation and Information Disclosure.....	10
5.1.2	Resettlement Public Consultation and Information Disclosure.....	11
5.2	Training - Capacity Building	11
5.2.1	Environment	11
5.2.2	Resettlement	11
5.3	Press/Media Releases.....	11
6	GRIEVANCE REDRESS MECHANISM.....	11
6.1	Environment.....	12
..... No written grievance has been received. However, the local residents living near the WTP complained about the effluent overflowing from the sludge lagoon to the local residents' paddy field. The PPMU immediately asked PIA Consultant for assistance to find the cause of this issue. During PIA Consultant's		

visit in May 2016, backwashing was found to be not operating well and the volume of backwash water was bigger than that of the sludge lagoon. As a result, unexpected amount of backwash water overflowed to the local residents' paddy field. The OU has been assisted in carrying out the proper backwashing procedure and pump the effluent from the sludge lagoon for aeration to use it as an additional raw water source for the WTP.....12

6.2 Resettlement.....12

7 CONCLUSION AND RECOMMENDATIONS12

List of Figures

Figure 1	Location map of six Project Provinces of the central coastal region of Vietnam.	ii
Figure 2	SIEE disclosure at Dien Quang CPC (May 2015)	23
Figure 3	SIEE disclosure at Dien Trung CPC (May 2015)	23
Figure 4	SIEE disclosure at Dien Phong CPC (May 2015).....	23
Figure 5	Environmental training for WSCCs and HSPs in Tam Ky city (early July 2015, picture 01)...	23
Figure 6	Training course on “Contract and Construction Quality Management” (Nov. 2015)	23
Figure 7	Finishing abstractionwell (Nov. 2015).....	23
Figure 8	Completing clean water tank (Nov. 2015)	24
Figure 9	Installing transmission pipe (Nov. 2015)	24
Figure 10	Installing distribution pipe (Nov. 2015).....	24
Figure 11	Poor HH's latrine (Nov. 2015).....	24
Figure 12	PIA Consultant interview Mr. Ngo Van Hoa officer of Dien Ban CARC.....	25
Figure 13	Mr. Nguyen Van Hien, PPMU staff interview an affected household.....	25

List of Tables

Table 1	Quang Nam Batch-2 Subproject Overview and Progress	2
Table 2	Basic Data of Quang Nam Batch-2 Subproject.....	3
Table 3	Environmental Issues for Further Action.	6
Table 4	Summary of Compliance with RP Requirements.....	7
Table 5	LARP Issues for Further Action.....	9
Table 6	OHS for Further Action.....	10

Annexes

Annex 1 Subproject Compliance with EMP and EMoP Requirements

Annex 2 Photographs

1 INTRODUCTION AND PROJECT OVERVIEW

1.1 Introduction

The water supply and sanitation Batch-2 Subproject located in Dien Phong, Dien Trung and Dien Quang Communes, Dien Ban District, Quang Nam Province (Subproject) is one of the eight Batch-2 Subprojects of the Central Regions Rural Water Supply and Sanitation Sector Project (Project) to be implemented under the Loan Agreement No. 2609 - VIE (SF) between the Socialist Republic of Vietnam (GoV) and the Asian Development Bank (ADB).

The implementation of the Project will result in better health and living conditions of people living in rural areas in the Project provinces of Thanh Hoa, Nghe An, Ha Tinh, Quang Binh, Quang Nam and Binh Dinh. The Project will construct a piped water supply systems, and sanitation facilities and to promote safer hygiene practices by the commune's residents. The Project's components are the following: (i) Operational and sustainable piped water supply system; (ii) Improved household and public sanitation; (iii) Improvement of hygiene awareness; (iv) Strengthened sector planning and implementation capacity; and (v) Improved project management capacity.

In accordance with the Memorandum of Understanding (MOU) agreed between the ADB and the CPMU, the Quang Nam Batch-2 Subproject needs to adhere to preparation of semi-annual safeguards monitoring reports. This semi-annual report covers issues in the second half-year of 2015.

The Subproject is designed to improve rural water supply and sanitation facilities and to promote safer hygiene practices by the rural communes. Water supply includes construction of piped water supply network with treatment facilities.

The Subproject will also include grey water (sullage) disposal and small scale drainage improvements to properly discharge spill and grey water flows that will result from the water supply improvement works.

The Design-Build packages for Water Supply System and Sanitation of the Subproject was signed on January 15, 2015. The construction and sanitation drawing design dossiers have been approved by Quang Nam PPC. The water supply system has been constructed since August 2015 . Construction of drainage system and sanitation package started on August 24, 2015. The construction of the two packages has been completed in this reporting period.

1.2 Subproject Overview and Progress

Table 1 Quang Nam Batch-2 Subproject Overview and Progress

Project Number and Title:	ADB Loan No. 2609-VIE (SF) Central Region Rural Water Supply and Sanitation Sector Project Subproject: Construction of Water Supply and Sanitation for Dien Phong, Dien Trung and Dien Quang Communes, Dien Ban District, Quang Nam Province	
Safeguards Category	Environment	B
	Involuntary Resettlement	B
	Indigenous People	C
Reporting period:	January 2016 - June 2016	
Last report date:	April 2016	
Key sub-project activities since last report:	<p>1) Construction Component</p> <ul style="list-style-type: none"> ❖ The Subproject of Dien Phong, Dien Trung and Dien Quang Communes, Dien Ban District, Quang Nam District includes four construction packages: <ul style="list-style-type: none"> (i) Design-Build package of water supply system (QN2/DB1/NCB, QN2/DB2/NCB and QN2/DB3/NCB) and (ii) Design-Build package of sanitation (QN2/DB4/NCB). <p>2) Progress of Work Main items of water supply component:</p> <ul style="list-style-type: none"> (i) Package No.QN2/DB1/NCB: all items completed; (ii) Package No.QN2/DB2/NCB: completed 100% of transmission pipelines HDPE PN8 D180mm; distribution pipelines HDPE PN8 DN110mm, HDPE PN8 DN90mm, and HDPE PN8 DN63 mm; and service pipelines HDPE PN8 DN40 mm; and (iii) Package No.QN2/DB3/NCB: completed 100% of transmission pipelines, distribution pipelines (galvanized steel pipe DN 90mm, HDPE DN 110mm, and HDPE PN6 DN 63mm), and service pipeline. <p>Main items of sanitation and drainage system component: By the end of this reporting period, the contractor has</p>	

Project Number and Title:	ADB Loan No. 2609-VIE (SF) Central Region Rural Water Supply and Sanitation Sector Project Subproject: Construction of Water Supply and Sanitation for Dien Phong, Dien Trung and Dien Quang Communes, Dien Ban District, Quang Nam Province
	constructed 100% of drainage system, 5/5 public latrines, and 100 household latrine substructures (of which 72 are poor HHs and 28 are near poor female headed HHs).. 3) Changes of Surrounding Environment: The construction of the Subproject is completed. No major negative impacts.
Report prepared by:	PIA consultant

Table 2 Basic Data of Quang Nam Batch-2 Subproject

No.	Contents	Data
1	Water Supply System Component	
	<ul style="list-style-type: none"> Designed Population Capacity Water source Length of Distribution network Number of Service Connections 	<p>20,576 people</p> <p>3,500 m³/day</p> <p>Groundwater from 05 boreholes</p> <p>131.5 km</p> <p>4260 HHs and public places</p>
2	Sanitation Component	
	<ul style="list-style-type: none"> Public Latrines Household's in-kind latrine substructures Drainage system (open ditch) 	<p>5 units</p> <p>250 units</p> <p>2,635 m</p>

2 ENVIRONMENTAL PERFORMANCE MONITORING

2.1 EMP/EMoP Implementation and Compliance

EMP/EMoP Implementation by D&B Contractor

During construction phase, the implementation of the EMP is the responsibility of the D&B Contractor. The D&B Contractor's responsibility includes the appropriate and timely application of the mitigating measures stipulated in the approved EMP/EMoP. The application and implementation of the mitigation measures are to provide the safeguards that will control, reduce if not eliminate unwanted effects during the Subproject implementation.

Regarding raw water quality, during the pre-construction phase, the D&B Contractor conducted raw water quality analysis on 25th April 2015 as part of the Detailed Design phase. The slightly elevated contents of ammonium and irons will be removed by the proposed treatment technology. The results verified that no changes or adjustment to the water treatment process are required but the raw water quality will need regular and close monitoring. Another analysis will be carried out at the end of construction when the WTP is already for operation, to monitor any changes in raw water quality.

EMP/ EMoP Implementation by Operating Unit

During the O&M phase, the plant operating unit (OU) will be responsible for adherence to mitigation measures and activities stipulated in the EMP and EMoP plans. They will primarily focus on safe operation of the WTP and distribution of treated water including (i) testing of raw water quality and treated water quality as well as (ii) monitoring of the quality of waste water and sludge as stipulated in EMoP and (iii) applying the health and safety regulations specified in the EMP. The operators will also need to carry out O&M procedures in accordance with the O&M manual.

2.2 Environmental Monitoring by CSC/PPMU

During Subproject preparation phase, the PPMU/ EO was responsible for ensuring that all EMP and EMoP requirements were included in the bidding documents and the contracts are followed by the contractors. The templates for D&B construction package and CSC package in the bidding documents and the contract documents prepared by PIA Consultant have already included EMP and EMoP compliance requirements and should be used for all of the Subprojects.

During construction phase, the inspection, evaluation and recording of compliance to the EMP and EMoP as implemented by the contractors is among the tasks undertaken by the Construction Supervision Consultant (CSC) in the field with the assistance of the PIA Consultant. The CSC carries out weekly and monthly inspections and maintain records of the D&B Contractor's mitigating measures and activities prescribed in the approved EMP and EMoP of the Subproject. The responsibilities of CSC cover the period to the end of the commissioning stage including certifying of construction materials, equipment and items and final checking and acceptance for handing over for operation.

The inspection and evaluation records have been consolidated by the CSC in their Quarterly Environmental Monitoring Report. The CSC's collation and synthesis of the D&B Contractors' compliance to the requirements of the EMP and EMoP have been

summarized in matrix attached with the report to be submitted to CPMU and PIA Consultant within 15 days after the end of each quarter.

During O&M phase, PPMU's Environmental Officer (EO) will be responsible for monitoring the OU compliance to the EMP and EMoP, as well as consolidating all the records of the plant operator on laboratory analysis and health and safety issues, and quarterly reporting to the CPMU and PIA Consultant within 15 days after the end of each quarter.

2.3 Monitoring Activities Carried out by PIA Consultant

In the first half-year of 2016, the PIA Consultant has provided support to CPMU and PPMUs in terms of environmental documentation preparation, field visits for supervision and assistance and information verification, to ensure all the environment related provisions/requirements are followed.

In preparation for environmental assessment of batch-2 subprojects, PIA Consultant has prepared IEE reports based on (i) the environmental documents prepared by FS consultants and PPMUs and (ii) field visits carried out by PIA Consultant's Environmental Specialists to investigate and validate baseline environmental conditions of the proposed Batch-2 subprojects. The IEE reports of 08 batch-2 Subprojects were issued Conditional Approval from the ADB. The EMPs approved by ADB were also incorporated in the FS reports approved by the PPCs and in the Environmental Protection Commitments registered and accepted by the Subprojects' DPCs.

The templates of the bidding and contract documents with incorporated-EMP/EMoP plans were prepared by the PIA Consultant specialists and delivered to the PPMU. Subsequent monitoring of the PIA Consultant during bidding and contract process indicated that the EMP and EMoP plans and budget requirements were included in the Subproject's bidding and bid documents and budgets, as well as in the Subproject's contract documents.

During the construction, the PIA Consultant has provided support and advices to the CSC and D&B Contractors in implementation of EMP/EMoP and assisted CPMU in compiling monitoring reports for submission to ADB.

During the first half-year of 2016, the PIA Consultant conducted three field trips to the Subproject in January, March, and May 2016. The on-site visits were made to check the progress and quality of the construction works and compliance with contract documents including safeguards issues. Meeting with PPMU, CSC and D-B Contractor staff was held afterward to give them recommendation/advices to the Subproject implementation and to have discussion or find resolution to the rising issues. Specific site visits to monitor the environmental compliance of Pilot Subprojects focused on the following:

- (i) Validating physical progress of the construction works and pipe laying activities on routes of the designed pipeline network and point out non-compliance with the approved EMP and EMoP (e.g. Realignment of pipelines/distribution lines to avoid cultural/ historic structures or cutting down big trees, and relocation of construction sites);
- (i) Examining safety of the construction workers and the public;
- (ii) Inspection of the environmental condition and sanitation of construction sites;
- (iii) Inspection of construction diaries and record keeping at the construction sites;
- (iv) Random spot checking of households and public latrines;

- (v) Checking the Subprojects' construction works; gathering and collation of environmental monitoring reports; and analyzing the compliance of the Pilot Subprojects as defined in the Subproject's EMP and EMoP; and

- (vi) Providing technical assistance to the PPMU on backwashing operation

The collation of the OU's quarterly monitoring reports and PIA Consultant's review on the assessment of the safeguard compliance to the requirements of the EMP and EMoP is summarized in environmental performance matrix of the Subproject attached with this report as an *Annex 1*.

2.4 Key Issues for Further Actions

Table 3 Environmental Issues for Further Action.

Issue	Required Action	Responsibility and Timing	Resolution
Old Issues from Previous Reports			
Elevated levels of ammonium, coliform and total iron found in ground water samples taken on April 25, 2015.	Though the elevated contents of ammonium and iron can be removed by the proposed treatment technology, the PPMU is requested to continue monitoring raw groundwater quality closely.	PPMU has been reminded to conduct raw water quality analysis at the end of construction phase to adjust treatment technology to ensure treated water meets drinking water quality QCVN 01:2009/BYT if necessary.	
New Issues from This Report			
An oral complaint from the local residents about the effluent from the sludge lagoon overflowing to the local residents' paddy field.	PIA Consultant provided assistance to OU on backwashing procedure and required OU to collect the effluent from the sludge lagoon to pump to the aeration and use as raw water for the next treatment process.	PPMU to adjust backwashing procedure and pump the effluent from the sludge lagoon to the aeration to use as an additional raw water source.	

3 INVOLUNTARY RESETTLEMENT PERFORMANCE MONITORING

3.1 Compliance with RP Requirements

The draft LARP of Dien Ban Subproject, Quang Nam Province has been prepared and submitted to ADB as Volume 5 of Subproject Appraisal Report and has been approved on December 2014 .

The detailed engineering designs were approved by local competent authorities on 22, 24, and 25 June 2015. PPMU of Quang Nam conducted detailed measurement survey from 26 to 30 June 2015, conducted socio-economic survey (SES) from 01 to 03 July 2015. Two public consultation meetings were conducted, first meeting was held in the morning in 02 July 2015 with affected households in Dien Quang commune and in afternoon in 02 July 2015 with affected households in Dien Trung commune.

PPMU of Quang Nam has submitted the Updated LARP to ADB as well as disclosed it on the notice board of Dien Trung PC on 27 July 2015. ADB has approved the Updated LARP 25 August 2015. After that, Quang Nam PPMU has cooperated with CARC to carry out compensation payment to AHs.

The approved Updated LARP was disclosed to AHs on 21 January 2016.

Table 4 Summary of Compliance with RP Requirements.

RP Requirements	Compliance status Yes/No/Partial	Comment or Reasons for Compliance, Partial Compliance/Non-Compliance	Issues for Further Action 1
Establishment of personnel in PMU/PIU	Yes	The Compensation Assistance Resettlement Committee (CARC) established according to Decision 2742 QD-UBND dated 14 May 2014.	
Public consultation and socialization process	Yes	<ul style="list-style-type: none"> During preparation of draft LARP, there was 1 public consultation with affected households was held on 10 June 2014 During updating the LARP two public consultation meetings have been conducted. First meeting was held in the morning in 02 July 2015 with affected households in Dien Quang commune and in afternoon in 02 July 2015 with affected households in Dien Trung commune. <p>The socio- economic survey was conducted from 01 to 03 July 2015.</p>	
Land area to be acquired is identified and finalised	Yes	<p>DMS has been conducted from 26 to 30 June 2015 by PPMU and CARC after detailed designs were approved on 22, 24, and 25 June 2015 by PPC of Quang Nam.</p> <ul style="list-style-type: none"> Total of permanently acquired land is 10,024 m², out of which 9,709 m² is public land 	

RP Requirements	Compliance status Yes/No/Partial	Comment or Reasons for Compliance, Partial Compliance/Non-Compliance	Issues for Further Action 1
		<p>managed by CPC of Dien Trung and 315 m² is agricultural land belonging to 06 households</p> <ul style="list-style-type: none"> Total of temporarily acquired land is 21,393m², all is public land is managed by CPC of Dien Phong, Dien Trung, and Dien Quang 	
Land acquisition completed	Yes	The acquired land was handed over and the construction started in August 2015.	
Establishment of Resettlement Site(s)	Not applicable	No relocation required	
Compensation payments for affected assets is completed	Yes	<ul style="list-style-type: none"> - Paid compensations for land and assets on land to 13 AHs (50 APs) was 49,571,300 VND including <ul style="list-style-type: none"> + Land: 14,525,000 VND + Tree and crops: 35,046,000 VND - Paid allowances to CPC of Dien Trung and 13 AHs (50 APs) excluding allowance to vulnerable person was 131,409,793,000 VND 	
Transport assistance for relocating affected households	Not applicable	No relocation required	
Additional assistance to vulnerable affected household	Yes	5 elderly- head of HHs will receive 1,200,000 VND/HH	
Income Restoration Program	Not triggered	No households lose more than 10% of productive agricultural land	
Temporary impacts have been addressed (affected properties restored to at least pre-project	Yes	The pipeline was installed during rest time between two crops seasons to minimize the impacts on crops and households	

RP Requirements	Compliance status Yes/No/Partial	Comment or Reasons for Compliance, Partial Compliance/Non-Compliance	Issues for Further Action 1
conditions)			
Capacity building activities	Yes	Member of PPMU and District CARC of Dien Ban attended to the Training course on “ADB's social safeguard policies on environment and resettlement” from 2 April to 4 April, 2014 in Quang Nam province	
Disclosed the approved Updated LARP	Yes	Disclosed to AHs on 12 January 2016	

3.2 Resettlement Monitoring by PPMU

The construction of water supply system started in August 2015 and PPMU has cooperated with Constructor Supervision Consultant (CSC) to supervise the land acquisition boundary during construction to ensure that the adjacent land area has not been affected.

3.3 Monitoring Activities carried out by PIA Consultant

Up to the reporting period, the PIA Consultant has conducted 3 field trips to check construction sites. The first trip from 2 to 6 January 2016; the second trip from 19 to 30 March 2016 and the third trip from 16 to 18 May 2016 . All construction has been carried out within the land boundaries and no claims have been raised by people in the subproject area.

3.4 Issues for Further Action

Table 5 LARP Issues for Further Action.

Issue	Required Action	Responsibility and Timing	Resolution
Old Issues from Previous Reports			
None			
New Issues from This Report			
None			

4 OCCUPATIONAL HEALTH AND SAFETY (OHS) PERFORMANCE MONITORING

The Occupational, Health and Safety (OHS) performance has been monitored for the public and the workers.

4.1 OHS for Workers

Before construction, the construction site was surveyed and cleared of bombs and unexploded ordnance by Lung Lo Construction Company.

The following issue related to OHS for workers has been identified:

Table 6 OHS for Further Action

Issue	Required Action	Responsibility and Timing	Resolution
Old Issues from Previous Report			
Some workers occasionally did not wear hard hats and protective footwear at construction site.	Contractor to provide PPE and ask workers to wear PPE at work	Contractors to implement as soon as possible CSC to supervise	
New Issues from This Report: none			

4.2 Public Safety

No public safety issues have been identified or reported during this reporting period.

5 INFORMATION DISCLOSURE AND CAPACITY BUILDING

5.1 Public Consultations, Meetings and Information Disclosure

5.1.1 Environmental Public Consultation and Information Disclosure

There are two public consultations on environmental issues to be implemented for each of the Subproject. The 1st public consultation was held during FS and SAR preparation. The 2nd public consultation was held before construction commencement in order to inform the local people of at least: (i) commencement time of construction, (ii) duration of construction, (iii) EMP and EMoP requirements and responsibilities, (iv) introduction of Subproject site office, contact details and telephone numbers of contractors, CSCs and PPMU staff.

The approved IEE report and SIEE report were disclosed on the information boards of the related CPCs and the soft copies of the full IEE reports stored in computers by CPC staff and shall be disclosed to any third party if requested.

During the first half of this year, PPMU conducted 03 public consultation meetings for Dien Quang, Dien Trung and Dien Phong communes on the Subproject implementation progress and its environmental impacts. Representatives from CPC leaders, local mass organizations and beneficiaries as well as affected people were invited to attend the meetings. The participants shared common opinions on negligible environmental impacts of the Subproject and showed their support to the Subproject.

Updates of the Subproject information will also be disseminated to all the beneficiaries through the loudspeaker system of the Subproject communes as well as over activities of the Water and Sanitation Commune Committee (WSCC) members and the Health and Sanitation Promoters (HSPs).

5.1.2 Resettlement Public Consultation and Information Disclosure

One public consultation meeting was carried out during preparation phase on 10 June 2014. During updating of the LARP, two public consultation meetings have been conducted. First meeting was held in the morning of 02 July 2015 with the affected households in Dien Quang commune and in the afternoon of 02 July 2015 with the affected households in Dien Trung commune. The cut-off dated was disclosed on 30 June 2015.

5.2 Training - Capacity Building

5.2.1 Environment

To improve environmental monitoring capacity of commune environmental officers, WSCCs and HSPs for Batch 2 subprojects, PIA consultant organized training courses on environmental monitoring during project implementation for WSCCs and HSPs in Tam Ky city, Quang Nam province on 10th and 11th July 2015. This capacity building activity equipped 21 participants of this Subproject (18 males and 03 females) with solid knowledge about ADB's and GoV's environmental policies and environmental monitoring.

The PPMU staff and CSCs of Thanh Hoa, Nghe An, Quang Nam and Binh Dinh Batch-2 Subprojects attended 2nd training course on "Contract management and Construction quality supervision" organized by PIA Consultant on September 30 and October 1, 2015. There were 22 participants in the course (2 female)– including 3 participants of this Subproject. The training course aimed to improve the trainees' capacity on management of contracts and construction quality, environmental management and monitoring, and preparation of progress reports etc. and also to enable the participants to transfer skills and knowledge to other offices/personnel after the course.

Apart from the above organized training courses, PIA Consultant has delivered on-the-job support via phones, emails and meetings when necessary as well as clarified any queries from CPMU and PPMUs.

5.2.2 Resettlement

PPMU of Quang Nam organized the "Land Acquisition and Resettlement Supervision" course for members of PPMUCARC and affected households to enhance their capable on supervision of land acquisition and resettlement with support of PIA Consultant on 6 and 7 April 2016.

5.3 Press/Media Releases

In order to extend the publicity for the Project information, information on implementation status and lessons learnt from the ADB funded CRRWSSSP Project have been published and updated on the website of the National Centre for Rural Water Supply and Environmental Sanitation (NCERWASS) (<http://ncerwass.mard.gov.vn/>) since January 2014. These publications aim to share experiences of the Project activities and the Project's progress among network of RWSSP, partners and interested stakeholders.

6 GRIEVANCE REDRESS MECHANISM

A Subproject site office has been established, and the Subproject's information including grievance redress mechanisms on environment and resettlement has been disclosed to the public on the notice boards of the CPCs of the Subproject.

6.1 Environment

- 6.2 No written grievance has been received. However, the local residents living near the WTP complained about the effluent overflowing from the sludge lagoon to the local residents' paddy field. The PPMU immediately asked PIA Consultant for assistance to find the cause of this issue. During PIA Consultant's visit in May 2016, backwashing was found to be not operating well and the volume of backwash water was bigger than that of the sludge lagoon. As a result, unexpected amount of backwash water overflowed to the local residents' paddy field. The OU has been assisted in carrying out the proper backwashing procedure and pump the effluent from the sludge lagoon for aeration to use it as an additional raw water source for the WTP. Resettlement

No written grievance has been received and no oral complaints have been raised.

7 CONCLUSION AND RECOMMENDATIONS

EMP/EMoP Implementation

The results of the implementation of the EMP/EMoP have indicated that most of the requirements of the EMP and EMoP have been followed by the contractors and the PPMU. The remaining issue from the previous reporting period is some workers did not wear adequate personal protection equipment at construction sites. PIA Consultant has requested PPMU and CSC to take action towards the Contractor to follow the OHS requirements and make sure that the workers wear personal protection equipment. The new issue detected during this reporting period is the overflow of backwash water from the sludge lagoon to the local residents' paddy field as a result of improper backwashing procedure. PIA Consultant has assisted the OU in backwashing operation and advised the OU to pump the effluent from the sludge lagoon to use as an additional raw water source for the WTP. .

The overall implementation/compliance of the Quang Nam Batch-2 Subproject to the EMP/EMoP is rated as partially satisfactory in this reporting period. In the forthcoming time, the PPMU/CSC shall enforce that the D&B Contractors will do construction of the Subproject facilities in compliance with the approved EMP/EMoP provisions, and to timely conduct raw water sampling and quality analysis.

RP Implementation

Implementation of the resettlement activities of Dien Ban sub-project is appraised as satisfactory and within the project's resettlement framework.

Annex 1 Subproject Compliance with EMP and EMoP Requirements

(i) Summary of Subproject compliance with EMP requirements

EMP Requirements (Mitigation Measures)	Compliance Status (Yes, No, Partial)	Comment or Reasons for Non-Compliance	Issues for Further Action
(1)	(2)	(3)	(4)
I. PRE-CONSTRUCTION PHASE			
1. Preparing bid documents <ul style="list-style-type: none"> Include the EMP and estimated cost of mitigation measures in the Contractor's bid documents 	Yes		
2. Updating EMP <ul style="list-style-type: none"> Update mitigation measures defined in the approved EMP and incorporate them into the detailed design to minimize adverse environmental impacts 	Yes	There are no significant changes in the detailed design compared to the basic design that may materially affect the anticipated environmental impacts or the approved EMP/ EMoP.	
3. Survey of Unexploded bomb(s) in the Subproject area <ul style="list-style-type: none"> Establish safe buffer zone during disarmament, proper fencing, protective barriers, sufficient signal, site supervisors and information disclosure. 	Yes	The Subproject site was cleared of unexploded bombs and ordnance in December 2014.	
II. CONSTRUCTION PHASE			
1. Land clearing, grading and excavation <ul style="list-style-type: none"> Schedule construction during dry months; Supervision and proper implementation of construction activities. 	Yes		

EMP Requirements (Mitigation Measures)	Compliance Status (Yes, No, Partial)	Comment or Reasons for Non-Compliance	Issues for Further Action
(1)	(2)	(3)	(4)
<ul style="list-style-type: none"> • Re-plant trees and re-seeding of indigenous grasses at the end of/or completion of construction activities. • Cover exposed soil from diggings and stock piles and soil during the rainy days. • Disposal sites must be selected and approved before construction • Restoration of existing road right after completion of each construction item • Schedule transport and hauling of construction materials during light traffic hours. Arrange adequate traffic detour, and provide sufficient signal & warning lights. • Regularly spray water on dry and exposed soil in construction site and along the road; • Trailer-truck hauling and transporting construction materials must be covered with canvas • Tires and body of vehicles must be washed with water when returning to public roads from WTP construction site. 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>		

EMP Requirements (Mitigation Measures)	Compliance Status (Yes, No, Partial)	Comment or Reasons for Non-Compliance	Issues for Further Action
(1)	(2)	(3)	(4)
Noise & vibration <ul style="list-style-type: none"> Contractor to maintain equipment and transport vehicles in proper working order and ensure that muffler and other measures are installed to reduce noise in compliance with TCVN 5948:1999/BTNMT As much as possible implement working hours between 07:00 and 17:00; 	<p>Yes</p> <p>Yes</p>		
Emission from construction vehicles, equipment and machinery <ul style="list-style-type: none"> The discharge standards promulgated under the Environmental Protection Law 2005 will be strictly adhered. All vehicles, equipment, and machinery used for construction will conform to the relevant Vietnam standards. All vehicles, equipment and machinery used for construction will be regularly maintained to ensure that pollution emission levels comply with the relevant regulations, namely QCVN 05:2009. 	<p>Yes</p> <p>Yes</p>		
2. Construction camps and workers' activities <ul style="list-style-type: none"> Construction of temporary latrines, at a distance from the proposed wells for the WTP. Regular collection and disposal of garbage to the proper disposal site. Ensure proper handling of oil and fuel materials. Fuel storage will be in proper bounded areas. 	<p>Yes</p> <p>Yes</p>		

EMP Requirements (Mitigation Measures)	Compliance Status (Yes, No, Partial)	Comment or Reasons for Non-Compliance	Issues for Further Action
(1)	(2)	(3)	(4)
<ul style="list-style-type: none"> Fuel storage and refilling areas will be located at least 300 m from all cross drainage structures and important water bodies, or as directed by the consultant. Any spillage oil shall be neutralized by a neutralizer, and reported to the CSC consultant. 	<p>Yes</p> <p>Yes - No spillage of oil occurred</p>		
<p>3. Environment, health and safety</p> <ul style="list-style-type: none"> Ensure proper fencing and protective barriers in construction area. Sufficient signal and information disclosure about the subproject must be conducted. Construction workers and supervisors must be equipped with protective clothes gears in the construction site. Maximize employment of local laborers who will live at home during construction. Disseminate information on the risks of socially and sexually transmitted infections, including HIV transmission, to their employees, temporary laborers, and subcontractors during Subproject implementation. 	<p>Yes</p> <p>Partial</p> <p>Yes</p> <p>Partially</p>	<p>Some workers did not wear PPE at construction site.</p> <p>Though information dissemination on the risks of socially and sexually transmitted diseases have been reported to be carried out, no evidence on information dissemination on printed materials such as fliers or postal and no photos has been received.</p>	<p>Contractors to provide PPE and ask workers to use PPE.</p>

EMP Requirements (Mitigation Measures)	Compliance Status (Yes, No, Partial)	Comment or Reasons for Non-Compliance	Issues for Further Action
(1)	(2)	(3)	(4)
4. Cultural/historical site <ul style="list-style-type: none"> Cam Lau Village temple (provincial relic) and Bien Hoa garden (provincial relic) in Dien Phong commune; Lanh Dong Village temple (provincial relic), Ban Lanh Village temple, Dong Ban Village temple (provincial relic), Lo Gach historic site (provincial relic), Kho Muoi historic site (provincial relic), Pham Phu Thu's Tomb (provincial relic) and Van Phu historic site (provincial relic) in Dien Trung commune; and Chuong Duong Market (provincial relic), Le Dinh Duong's Tomb (provincial relic), Hoang Dieu's Tomb (national relic) and Pham Tuan's Tomb (provincial relic) in Dien Quang commune. <p>Alignment of water pipeline/distribution lines and location of proposed construction sites to avoid encroachment and impairment of the sites.</p>	Yes		
5. Chances of finding social/cultural/religious/archaeological items <p>Chances of finding social/cultural/ religious or archaeological items during excavation and pipe lining</p> <ul style="list-style-type: none"> Immediately inform competent agencies of suspected social/ 	No social/cultural/religious or archaeological items has been found during excavation or pipe lining		

EMP Requirements (Mitigation Measures)	Compliance Status (Yes, No, Partial)	Comment or Reasons for Non-Compliance	Issues for Further Action
(1)	(2)	(3)	(4)
<p>cultural/ religious or archaeological items and stop all excavation activities that may potentially affect the items.</p> <ul style="list-style-type: none"> Set up work stoppage and sign boards to prevent unauthorized trespassing. 			
<p>6. Responses to Natural Disasters and Climate Change</p> <ul style="list-style-type: none"> A responsive plan to mitigate natural disasters during construction needs to be prepared to protect equipment and structure. Installation of pipeline during the flooding season should be avoided. Pipelines must be installed and reinforced properly in the flood-prone areas of the Subproject communes. 	<p>Yes</p> <p>Yes</p>		
III. OPERATION & MAINTENANCE PHASE			
<p>Environmental and Occupational Health and Safety</p> <ul style="list-style-type: none"> Equipped workers with gas masks and protective clothing and gears such as boots, helmets during working. WTP operator will strictly comply with instructions for use and storage of chemicals. If leakage or spillage events happen, the WTP operator will inform to relevant agency to deal with immediately. 	<p>Yes</p> <p>Yes</p>	<p>Operational unit has provided sufficient work wear for workers such as: work safety gear, helmets, boots, gloves, protection mask, etc.</p> <p>Along with ensuring safety, the construction unit has instructed and trained the workers how to operate</p>	

EMP Requirements (Mitigation Measures)	Compliance Status (Yes, No, Partial)	Comment or Reasons for Non-Compliance	Issues for Further Action
(1)	(2)	(3)	(4)
		<p>safety devices and fire protection equipment.</p> <p>Safety equipment in regards of chemical use and fire protection is sufficiently supplied including: ventilation fan for chemical mixing room, chemical shelf, fire extinguisher, back-up water for fire extinguishing, signs, instructions, etc. The WTP uses sodium hypochloride solution produced from salt.</p> <p>Along the pipelines, fire hydrants have been installed and are always ready for using at any time.</p>	

(ii) Summary of Subproject compliance with EMoP requirements

EMoP Requirements (Mitigation Measures)	Compliance Status (Yes, No, Partial)	Comment or Reasons for Non-Compliance	Issues for Further Action
(1)	(2)	(3)	(4)
OPERATION & MAINTENANCE PHASE			
<ul style="list-style-type: none"> Raw (surface) water quality 	Yes	PPMU is conducting the raw water quality analysis at the end of the construction period.	

EMoP Requirements (Mitigation Measures)	Compliance Status (Yes, No, Partial)	Comment or Reasons for Non-Compliance	Issues for Further Action
(1)	(2)	(3)	(4)
<ul style="list-style-type: none"> Treated water quality 	Yes	The treatment technology is being adjusted during this commissioning stage and the treated water is being tested.	
<ul style="list-style-type: none"> Effluent from sludge settling tank of WTP 	Yes	Effluent from sludge settling tank of WTP will be sampled and tested semi-annually.	
<ul style="list-style-type: none"> Sludge from WTP 	Yes	Volume of sludge produced will be measured quarterly.	

Annex 2 Photographs



Figure 2 SIEE disclosure at Dien Quang CPC (May 2015)



Figure 3 SIEE disclosure at Dien Trung CPC (May 2015)

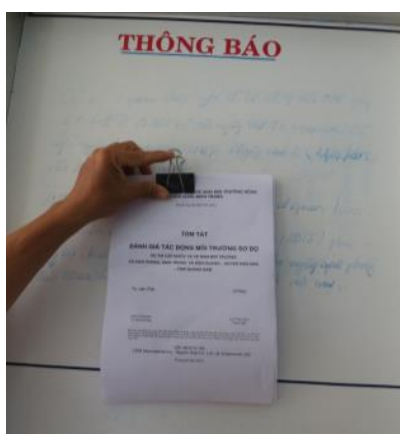


Figure 4 SIEE disclosure at Dien Phong CPC (May 2015)



Figure 5 Environmental training for WSCCs and HSPs in Tam Ky city (early July 2015, picture 01)



Figure 6 Training course on "Contract and Construction Quality Management" (Nov. 2015)



Figure 7 Finishing abstractionwell (Nov. 2015)



Figure 8 **Completing clean water tank (Nov. 2015)**



Figure 9 **Installing transmission pipe (Nov. 2015)**



Figure 10 **Installing distribution pipe (Nov. 2015)**



Figure 11 **Poor HH's latrine (Nov. 2015)**



Figure 12 PIA Consultant interview Mr. Ngo Van Hoa officer of Dien Ban CARC



Figure 13 Mr. Nguyen Van Hien, PPMU staff interview an affected household

