

Due Diligence Report on Land Acquisition and Resettlement

Project Number: 43309-013
September 2018

CAM: Provincial Roads Improvement Project (Loan 2839/8254/3442 and Grant 0278)

REHABILITATION FOR RO HAL DIKE, O TRAV DIKE, BOENG
TRAV DIKE AND DREDGING OF BOENG KRUOS LAKES

KAMPONG LEAENG DISTRICT, KAMPONG CHHNANG PROVINCE

Prepared by Ministry of Public Works and Transport for the Asian Development Bank.

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Ministry of Public Works and Transport

No. 285..... MPWT/PMU3

01 November 2018

Ms. Sunniya Durrani-Jamal
Country Director
Cambodia Resident Mission (CARM)
Asian Development Bank

Ref: ADB Loan No. 2839-CAM (SF)/8254-CAM and Grant 0278-CAM: Climate Resilience for Provincial Roads Improvement Project

Subject: Submission of Due Diligence Report

Dear Country Director,

Project Management Unit 3 (PMU3) of Ministry of Public Works and Transport finalized the Due Diligence Report for the additional works in Kampong Leang District, Kampong Chhnang Province and herewith would like to submit the Report for your review and approval.

Please accept the assurance of our highest consideration.

PHENG Sovicheano
Project Director, PMU3
Secretary of State
Ministry of Public Works and Transport

Cc: Mr. CHHUON Samrith, Deputy Director General, General Department of International Cooperation and Dept Management, MEF
Mr. SANN Ratha, Senior Project Officer, CARM, ADB
Mr. SAR Vutha, Project Manager, PMU3, MPWT

Enclosure (as stated)

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Project Number: 43309-013

November 01, 2018

CAM: Provincial Roads Improvement Project

Climate Resilience Output - Kampong Leaeng District

ACRONYMS

ADB	- Asian Development Bank
AHs	- affected households
DMS	- detailed measurement study
GRC	- grievance redress committee
IRC	- Inter-ministerial Resettlement Committee
km	- kilometer
LARP	- Land Acquisition and Resettlement Plan
m ²	- square meter
m ³	- cubic meter
MEF	- Ministry of Economy and Finance
NGO	- nongovernmental organization
PRSC	- Provincial Resettlement Sub-committee
ROW	- right of way
SPS	- Safeguard Policy Statement

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Climate Resilience Output - Kampong Leaeng District

Due Diligence Report on Land Acquisition and Resettlement

I. INTRODUCTION

1. The Royal Government of Cambodia (RGC) is one of the pilot countries participating in the Pilot Program for Climate Resilience (PPCR). The PPCR is one of the three sub-programs of the Strategic Climate Fund (SCF). The priority sectors for PPCR in Cambodia include water resources, agriculture and infrastructure. In June 2011, the PPCR sub-committee endorsed Cambodia's Strategic Program for Climate Resilience (SPCR) with a funding envelope of up to \$86 million (\$50 million in grants and up to \$36 million in concessional credit). Of this, an allocation of \$17 million (\$10 million loan and \$7 million grant) was endorsed for "Climate-proofing of Roads in Prey Veng, Svay Rieng, Kampong Chhnang and Kampong Speu Provinces" as part of the Asian Development Bank (ADB) funded Provincial Roads Improvement Project (PRIP). This project is one of eight SPCR projects in Cambodia and one of two in the transport sector.
2. This project addresses the need for greater integration between sectors (transport, water, and environment) and the need for training and capacity building in innovative approaches to road design standards for climate proofing, adaptive measures and emergency response systems. There are five outputs of the Provincial Road Improvement Project (PRIP) including:
 - (i). civil works for provincial roads improvement;
 - (ii). road asset management;
 - (iii). road safety and safeguards;
 - (iv). climate resilience; and
 - (v). efficient project management support to the MPWT.
3. This due diligence report on involuntary resettlement (IR) is prepared for proposed output (iv), water storage in Kampong Leaeng district of Kampong Chhnang province.

II. SUBPROJECTS DESCRIPTION

4. Part of Kampong Leaeng district (948 km²) becomes a temporary island at the mouth of Tonle Sap Lake during the flood season. It is the highest ground in the river and lake area and much of it does not flood. The project will work with communities to reduce vulnerability to climate change impacts. There are several reservoirs and dikes constructed in Kampong Leaeng district which hold back flood water after the floods recede. That water is released gradually by farmers to irrigate their crops. Despite the high flood levels, when the water recedes in December, dikes are often breached, and not enough water remains for effective irrigation.
5. The project has improved 3 dikes (Portanorn, Bakdav and Srok dikes) in Kampong Leaeng district and dredged one lake (Khsaet Lake) in Toek Phos. The cancellation of the water supply package under the Project resulted in savings and ADB approved using the savings to rehabilitate the water retention system that includes three dikes (Ro Hal, Boeng Trav and O'Trav dike) using water gates and dredging one lake (Boeng Kruos lake). The three dikes create water reservoirs during the flooding season. These reservoirs cover around 100 ha and irrigate over 2,000 ha enabling two crops per year and doubling rice production in these areas.

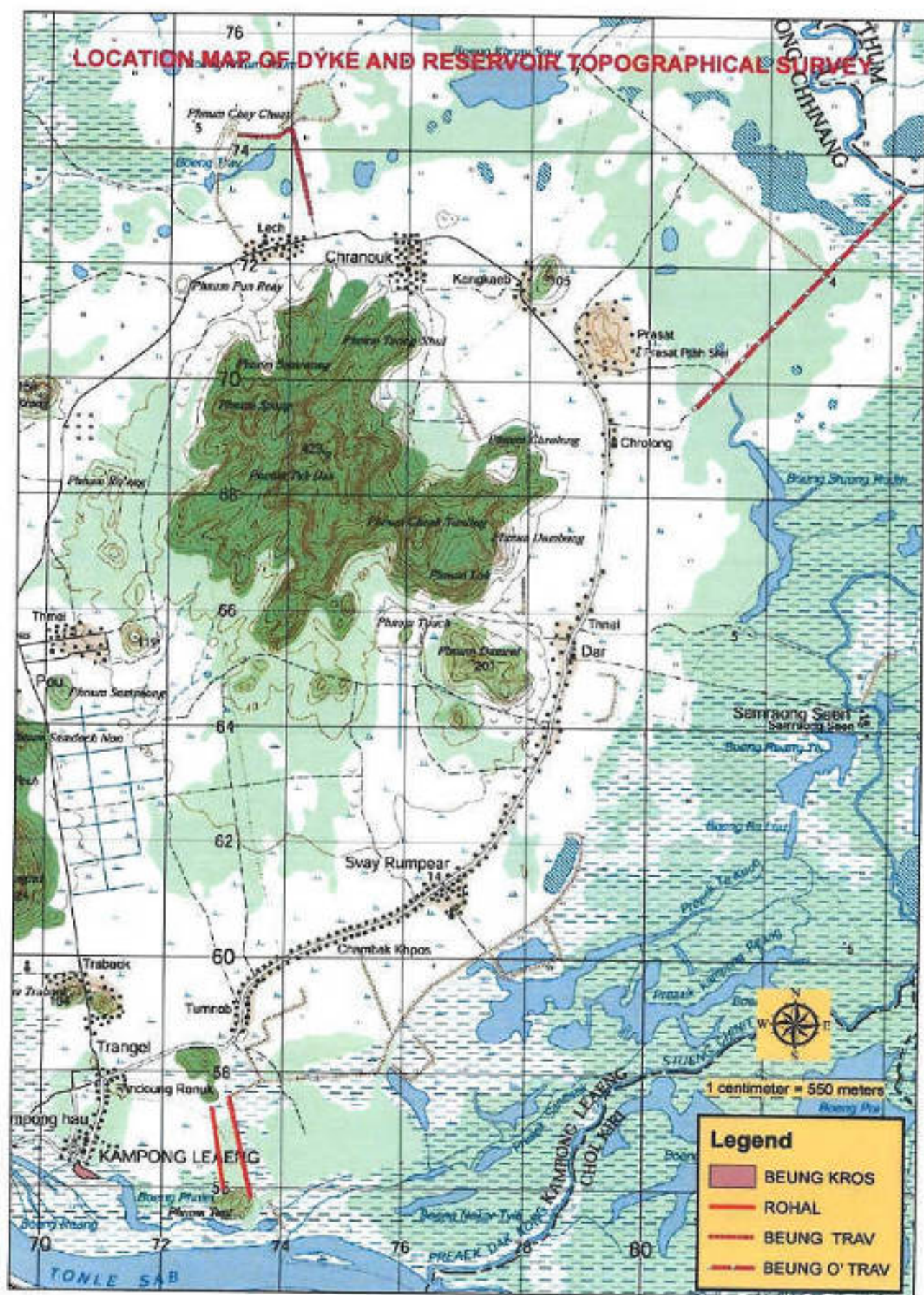


Figure 1 - Location of Proposed Subprojects

II.1. BOENG KRUOS DREDGING

6. The works include:

- Mine/UXO clearance : 6.88 ha
- Pumping to drain water out of the lake : As required
- Dredging by the excavation : 27,370.42 Cu.m
- Disposal and placing of dredged materials : 27,370.42 Cu.m

7. Boeng Kruos lake is a 5.9 ha size natural drainage basin formed by a natural flood water stream that runs into it. The lake retains water after the floods recede and locals pump water from it using mobile pumps to irrigate rice fields. The villagers requested the district authorities to deepen the lake to increase its capacity and improve access to irrigation water during the dry season. Currently farmers lack water during the dry season that impacts rice production.
8. The dredged material will be disposed in the nearby disposal area located at the north of the lake, which is state public land and no resettlement impact is anticipated. Based on community requests the soils will also be used for minor works or for backfilling of residential land as needed.
9. The objectives of this project are to restore original irrigation water sources by providing additional non-irrigation water source to local villagers and farming communities by dredging the lake bed deeper than before about 1 meter.

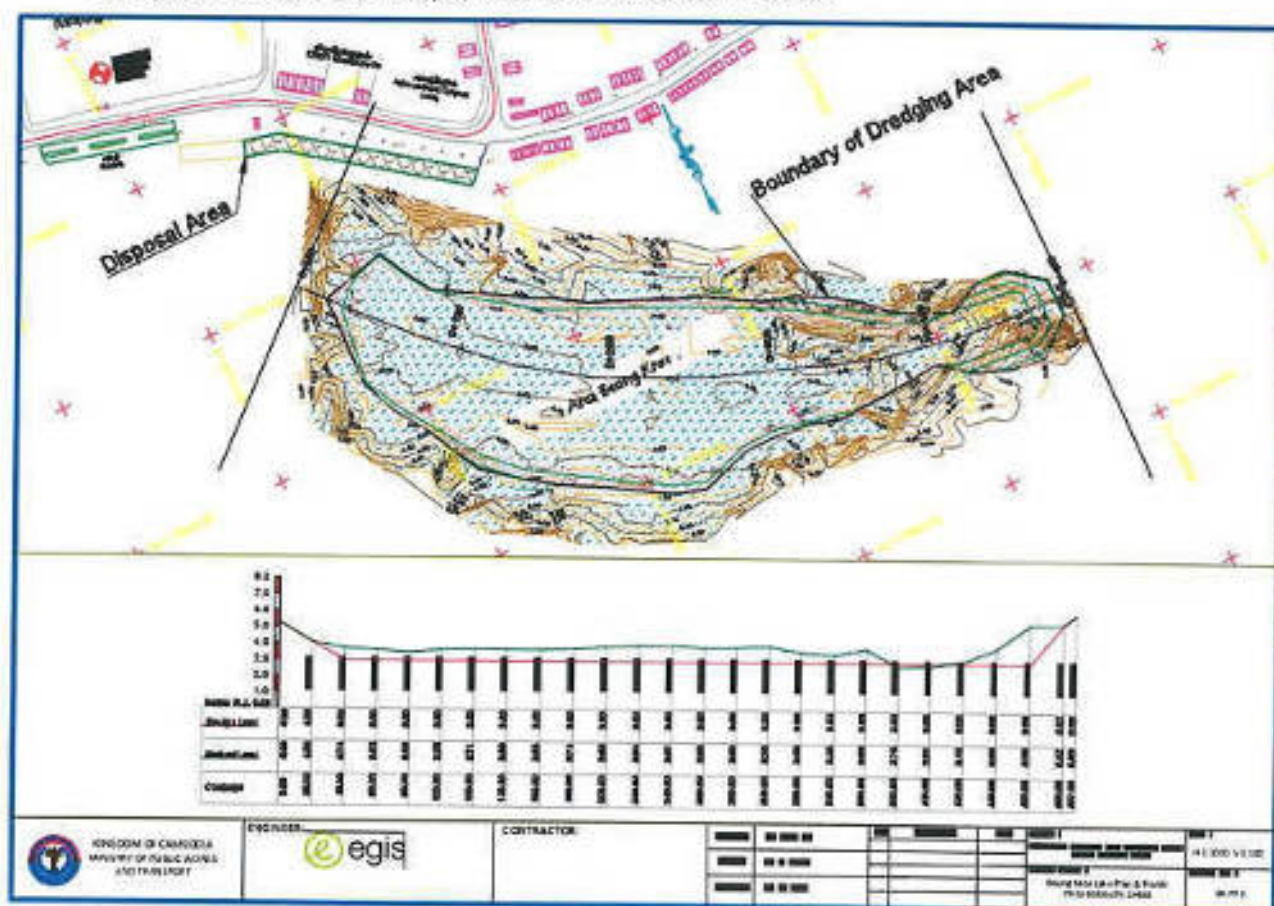


Figure 2- Plan of Boeng Kruos Lake and location of disposal area

II.2. RO HAL DIKE

10. Ro Hal dike was constructed during the French colony period and since then it has been maintained by local communities to their limited ability. Ro Hal dike system consists of two dikes working together - the Khsae Luos (length=1,479m) and Ro Hal (length=1,918m). These dikes were built to retain water after the flood recedes so that local farmers gradually drain it through the existing water gate. There is rice farming on the edge of the natural

reservoir created by the dikes. Currently the gate is broken, and the water from the reservoir between the dikes drains quickly. Farmers pump the water out from few deeper spots where it remains.

11. The villagers requested district authorities to rehabilitate these dikes as they are broken on many sections and this reduces their capacity by half. Rehabilitation of the dikes will enable access to irrigation water during the dry season. Four new water gates will be installed to allow effectively managing the water during the dry season. After rehabilitation of the dikes farmers will no longer need to pump water and will irrigate rice fields by gravity. Farmers using the land within the reservoir, will still continue their farming once water gradually recedes. The reservoirs area is a state-owned land serving for flood control purposes and no ownership is granted over this area. However, farmers are allowed to use the land for agricultural production.
12. The embankment material will be borrowed within the reservoir area that will have no impact on the farmland but will increase the capacity of the reservoir. No impact is anticipated on land and/or assets since the existing width of the dikes is big enough to allow the rehabilitation work. Below is the cross section of the dike showing existing deteriorated dike and sketch of the dikes to be rehabilitated.

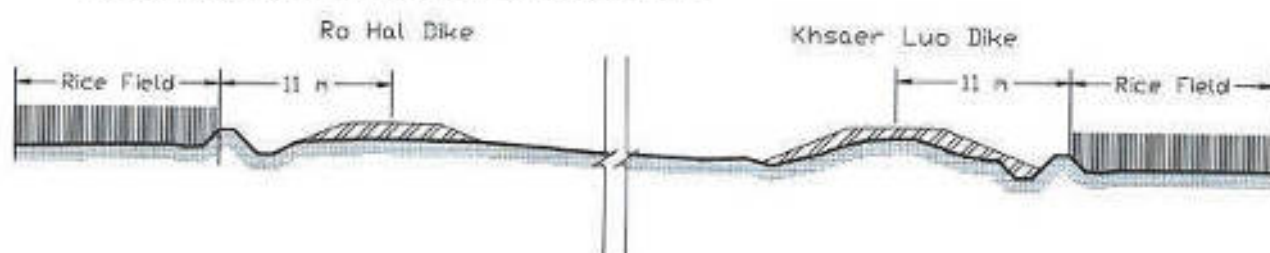


Figure 3 - Cross Section of Ro Hal Dike



Figure 4 - Map of Ro Hal Dike System and location of rice framing

II.3. O'TRAY DIKE

13. O'Trav dike was constructed during the Pol Pot regime and since then it has been maintained by local communities to their limited ability. O'Trav dike system consists of one dike only which runs across two reservoirs and connects to a natural stream at the end. This dike retains water after the flood water recedes and the farmers gradually drain it.

through the existing water gate to irrigate their fields. Due to numerous broken sections, the water drains quickly and farmers whose fields are located further need to pump water up to irrigate their rice fields.

14. The villagers requested district authorities to rehabilitate the dike as it is broken on many sections that reduces the dikes capacity by around half. Rehabilitation of the dike will restore its capacity and will provide regular access to water during the dry season. After rehabilitation water level will be retained and will be enough to irrigate rice fields by gravity. Hence, farmers will no longer need to pump water into their fields.

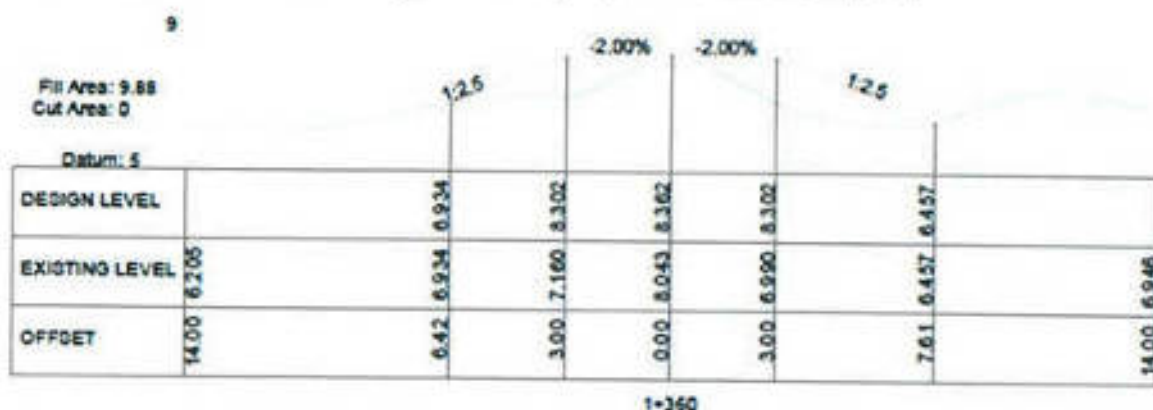


Figure 5 - O' Trav dike Typical Cross Section and Location Map

II.4. BOENG TRAV DIKES

15. Boeng Trav dike system is created by two dikes connected together in the same mountain. The first dike was rehabilitated by the community fund and the second dike called Boeng Trav is proposed for rehabilitation under the project. The dikes retain water after the flood recedes and farmers gradually drain the water using the existing water gate during the dry season. Some farmers located higher than the outstanding water would pump it up to irrigate their rice fields.
16. Boeng Trav dike is divided into three sections: Section A from PK0+000 to PK1+570 (1,570m length), Section B from PK1+570 to PK1+880 (310m length) and Section C from PK1+880 to PK2+471 (591m length). Section B has been rehabilitated by the community last year. The remaining two sections have been proposed for rehabilitation by the villagers

because they are broken on many sections which reduces their capacity almost by half. This rehabilitation of dikes also includes replacement of the existing gate and construction of additional water gate. This will allow restoring the capacity of the reservoir created by the dikes and enabling uninterrupted water supply during the dry season without pumping.

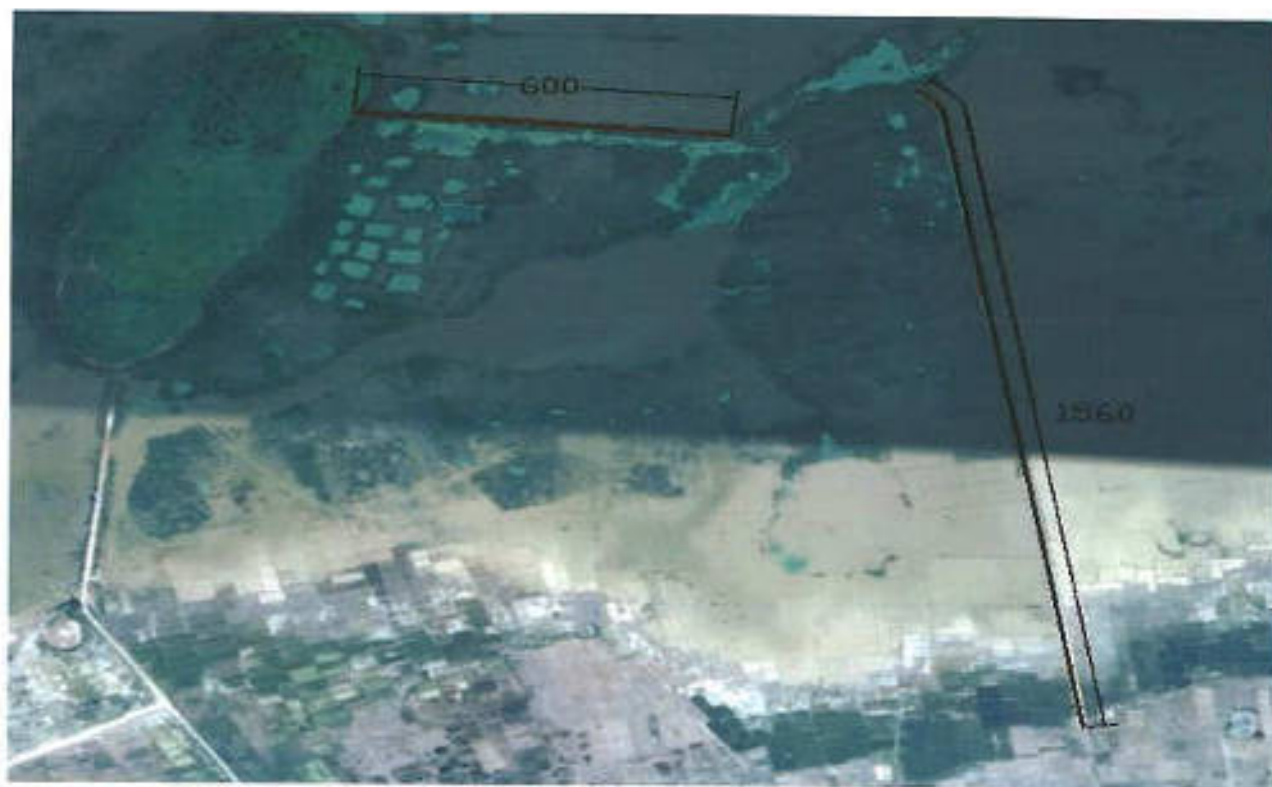


Figure 6 – Location Map of Boeng Trav Dikes

III. INVOLUNTARY RESETTLEMENT IMPACT ASSESSMENT

17. The initial field visit, and assessment of the likely involuntary resettlement impacts was carried out in August 2018. After finalizing the detailed design, another round of field visit and consultations was carried out by MPWT, from 17-24 October 2018. ADB CARM joined the visit on 23 October 2018. Below is the summary of field visits and impact assessments.
18. **Boeng Kruos Dredging.** The dredging works of the Boeng Kruos lake are not expected to entail any physical impact. The dredged soils will be dumped at an embankment located along the road in front of the Kampong Leaeng District Office. During the field visit, no trees, land use or any private property has been observed to be affected by the subproject. The contractors will be strictly monitored to dump the soils on the embankment to avoid any unanticipated impact during the civil works.

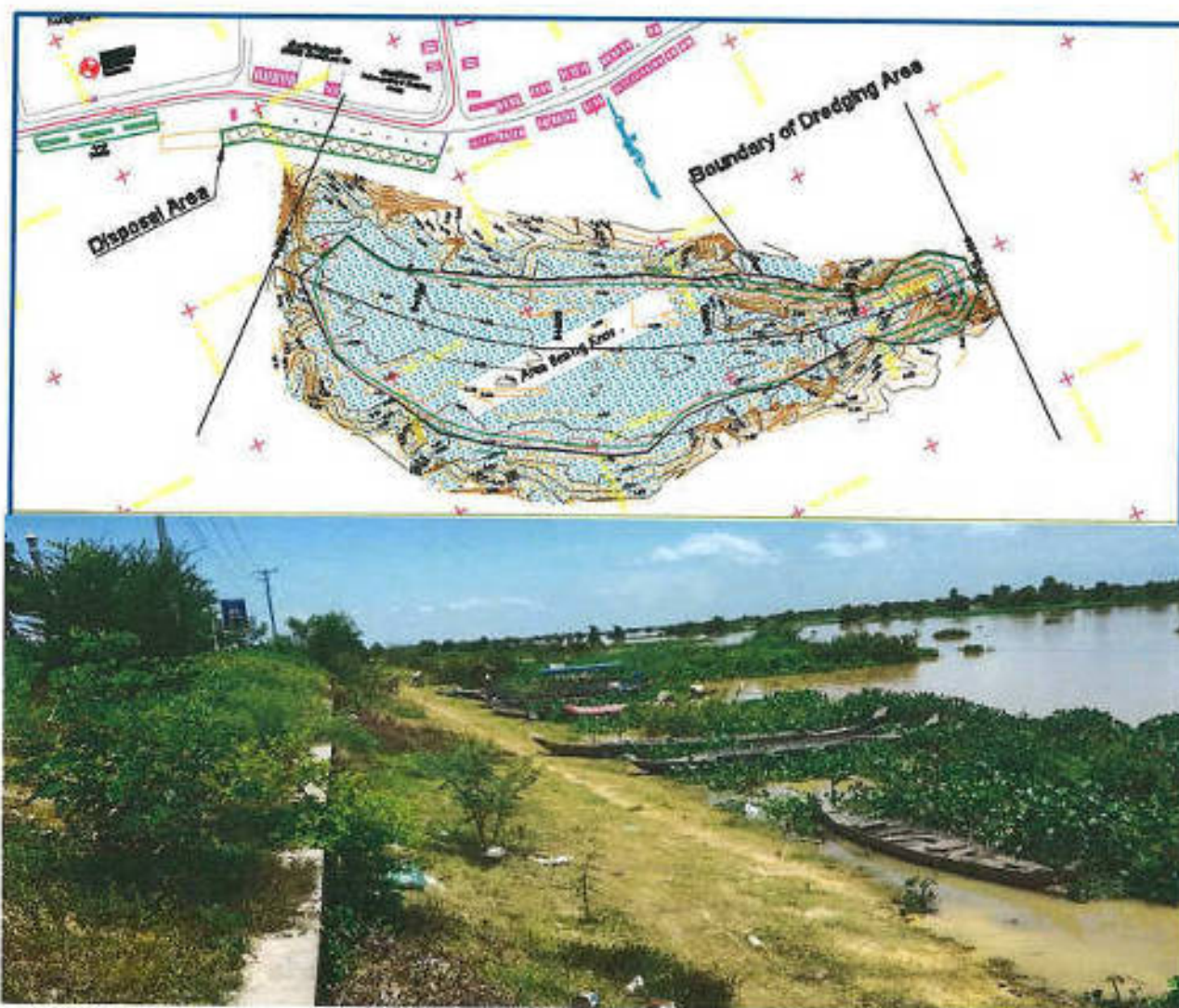


Figure 7 – The embankment area to be used for disposal of the material

19. **Ro Hal Dikes.** The detailed design suggests that the existing dike width and length will be retained without additional expansion/extension. The embankment material will be borrowed within the reservoir area to increase its capacity. Therefore, no resettlement impact is anticipated based on the detailed design. Consultation and demarcation led by the MPWT following detail design, confirmed that no impact on land and/or asset owned/used by individuals or communities is expected resulting from rehabilitation works. As marked in the cross section above, there is water channel before the rice field and no encroachment into the deteriorated dike is observed.
20. The reservoirs created by the dike are state-owned flood control areas, and local communities using land for farming are aware of it. After rehabilitation of the dikes farmers will continue cultivating rice as four additional water gates to be constructed on the dike will allow farmers to better regulate water inside the reservoir.



Figure 8 - Existing Ro Hal Dike

21. **O'Trav Dike.** The O'Trav Dike will be rehabilitated within its existing width which is large enough to avoid impact on the rice fields along both sides of the dike. The embankment material for rehabilitation will be borrowed within the reservoir area. The existing deteriorated dike is wide enough for rehabilitation and no impact on land and/or asset is expected. This was confirmed via detail engineering design on site by MPWT consultant.



Figure 9 - Location of O' Trav Dike

22. **Boeng Trav Dikes.** The detailed design for the dikes covers the existing width and length of the dikes. This allows avoiding any impact on the farmlands. The embankment material will be borrowed within the reservoir area and increase its capacity.
23. The consultation with farmers in the area identified that around 33 farmers use lands adjacent to the dike. MPWT consulted with the local authorities and farmers to identify their farmlands and check their vulnerability status (annex 5).
24. Consultations confirmed that none of the affected households is classified as vulnerable. All these affected households are willing to participate in the project and vote for the construction of the dike.

IV. INFORMATION DISCLOSURE, CONSULTATION AND PARTICIPATION

25. On 23-24 August 2018, the environment and social safeguards team visited the subproject and carried out public consultation with the villagers in four subprojects location. Additional consultations were conducted with the farmers and local authorities following completion of the detailed engineering design for the dikes. MPWT carried out consultation, from 17-24 October 2018, with demarcation on site to show the boundaries of the corridor of impact (COI) and assess impacts as per detail design. The field report is presented in annex 5.
26. In total there are 240 participated in the consultations of which 109 are woman. The table below summarizes details of the conducted consultations.

Table 1 – Summary of conducted Public Consultations per location

Province	Venue	Date	Time	Total Participants	
				Male	Female
Kampong Chhnang	Commune: Chranouk	23.10.2018	13:00-15:00	23	5
	District: Kampong Leaeng Commune: Dar Commune	23.08.2018	9:00 – 10:00	53	19
	District: Kampong Leaeng Commune: Chranouk	02.10.2018	10:15 – 11:30	16	35
	District: Kampong Leaeng Commune: Kampong Hav	02.10.2018	2:00 – 3:00 pm	26	21
	District: Kampong Leaeng Commune: Tragnel	04.10.2018	3:00 – 5:00 pm	13	29
TOTAL				131	109
GRAND TOTAL				240	

27. Topics discussed in all meetings are the following:

- Overview of the subprojects
- Involuntary resettlement impact assessment for the subprojects
- Entitlements for the affected assets as per Resettlement Framework (RF) agreed for the Project
- Dissemination of Project Information Booklet (PIB)
- Grievance redress mechanism
- Discussion of issues and concerns of farmers in the proposed subproject areas

28. The following were the issues raised by farmers and corresponding responses from the social safeguards team during public consultations:

Table 2 – Summary of consultations by issues raised

Nº	Question/opinion	Answer
1	Concerned that during flood people would boat across the road on the dyke, which may cause damage to the dyke.	The study team considered an option. The MWPT will inform engineers to put warning signage to prevent boater from entering the area.
2	Are there additional benefits for the local communities?	The Project will employ local labor force as much as possible.
3	How big is the top width of the dike?	From the typical design, the dimension is 6 meters wide on top and about 7m from the centerline of each side.
4	When the project will be implemented?	Communities will be informed of the project implementation schedule through another consultation
5	Will the project build more water gates in addition to the existing?	The design provides for additional water gates so that farmers can better regulate water and have regular access to water at dry season

29. The safeguards team also informed participants about the existing grievance redress mechanism (GRM) that already exists for the Provincial Improvement Project (PRIP) and that will serve the four subprojects as well.

30. During the consultation, the participants were informed about their entitlement to compensation for the affected assets if any. The participants were also informed that there will be continuous consultations during the project implementation to hear from communities and consider their views and suggestions/concerns.

V. GRIEVANCE REDRESS MECHANISM (GRM)

31. The objective the grievance redress mechanism is to resolve complaints as quickly as possible and at the local level through a process of conciliation; and, if that is not possible, to provide clear and transparent procedures for appeal. Affected households are entitled to lodge complaints regarding any aspect of the impacts under the proposed subprojects.
32. Since these proposed subprojects are under the climate resilience outputs of the provincial road improvement project, the GRM will also be applied. All AHs are made fully aware of their rights during the consultation, and the detailed grievance redress procedures also distributed through PIB. The grievance redress process includes following stages:

First Stage: AHs will present their complaints and grievances verbally or in writing to the village chief, commune chief or MPWT working group or IRC that was already established for PRIP. The receiving agent will be obliged to provide immediate written confirmation of receiving the complaint. If after 15 days the aggrieved AH does not hear from the village and commune chiefs or the working groups, or if he/she is not satisfied with the decision taken in the first stage, the complaint may be brought to the District Office.

Second Stage: The District Office has 15 days within which to resolve the complaint to the satisfaction of all concerned. If the complaint cannot be solved at this stage, the District Office will bring the case to the Provincial Grievance Redress Committee.

Third Stage: The Provincial Grievance Redress Committee meets with the aggrieved party and tries to resolve the situation. Within 30 days of the submission of the grievance, the Committee must make a written decision and submit copies to the MPWT, PDPWT, and the AH.

Final Stage: If the aggrieved AH does not hear from the Provincial Grievance Redress Committee or is not satisfied, he/she can bring the case to Provincial Court. This is the final stage for adjudicating complaints.

VI. CONCLUSION AND RECOMMENDATIONS

33. From the field visit and consultation conducted on the project sites it is concluded that:
 1. Consultation were carried out in all subproject areas to learn the level of impacts and perception of affected farmers. As results of the consultation farmers expressed great need in the project since they expect the benefits through two cropping season and increased rice production;
 2. The proposed four subprojects such as Boeng Kruos Lake, Ro Hal, O' Trav, Boeng Trav dikes have no anticipated resettlement impacts as all the rehabilitation works are expected to be within the existing width and length of the proposed infrastructure (lake and dikes). Contrarily, the farmers can cultivate twice a year to increase their productivity and expected to have better livelihoods after the construction of the dike;
 3. MPWT will monitor that the Contractor strictly follows the corridor of impact as per the detailed engineering design. Any temporary impacts caused by the contractor during construction will be promptly compensated at full replacement cost in accordance with the provisions set forth in the RF agreed for the project. Any payments made by the contractor will need to be documented in the safeguards monitoring reports including the photos and payment receipts.
 4. MPWT will include this DDR as part of the bidding documents and communicates and the list of farmers cultivating the land plots adjacent to the Boeng Trav dike to the selected contractor.
 5. The MPWT will ensure that Bills of Quantities of the selected contractor contains relevant estimated allocations to cover temporary impacts.

SCREENING CHECKLISTS

The following checklists were used in the identification and selection of subprojects for implementation. The objective of the checklists is to ensure that only Category C subprojects are selected according to project selection criteria.

Involuntary Resettlement Impact Categorization Checklist

N°	Involuntary Resettlement Effects	Yes	No	Not Known	Remarks
1.	Will the activity require permanent or temporary land acquisition?		X		Dikes and the lake will use the existing width and length and will not require acquisition of new land
2.	Is the site and land needed for acquisition known?	N/A	N/A	N/A	
3.	Is the ownership status and current usage of land to be acquired known?	N/A	N/A	N/A	
4.	Is the area of land required from each affected HH known?	N/A	N/A	N/A	
5.	Will land be acquired involuntarily?	N/A	N/A	N/A	
6.	Will easement be utilized within an existing Right of Way (ROW)?	X			
7.	Was any facility constructed recently on new land in anticipation of obtaining further assistance for the facility from this ADB project?		X		
8.	Was the land acquired legally under RGC?	X			
9.	Are there any outstanding complaints about the land used or acquired for the existing facilities?		X		
10.	Will the activity require permanent or temporary relocation or displacement of any people (titled or non-titled)?		X		
11.	Are there any non-titled people (squatters) who live at the site or within the COI / Right of Way / public land?		X		
12.	Will there be any loss of housing or accommodation or other residential structures?		X		
13.	Will there be any loss of residential land?		X		
14.	Will there be any loss of vegetable gardens or agricultural plots?		X		The farmers cultivating land within the reservoir will continue their activities as will have better water supply during dry season

Nº	Involuntary Resettlement Effects	Yes	No	Not Known	Remarks
15.	Will there be any losses of crops, fruit trees or private structures?		X		
16.	Will there be loss of income sources and means of livelihoods due to land acquisition?		X		
17.	Will any small or informal businesses have to be moved or closed temporarily or permanently?		X		
18.	Will there be temporary or permanent loss of employment as a result of the closure of any businesses resulting from the renovation?		X		
Involuntary restrictions on land use or on access to legally designated parks and protected areas					
19.	Will people lose access to natural resources, communal facilities and services?		X		
20.	If land use is changed, will it have an adverse impact on social and economic activities?		X		
21.	Will access to land and resources owned communally or by the state be restricted?		X		
Information on Displaced Persons:					
22.	Any estimate of the likely number of persons that will be displaced by the Project? [X] No [] Yes If yes, approximately how many? None				
23.	Are any of them poor, female-heads of households, or vulnerable to poverty risks? [X] No [] Yes				
24.	Are any displaced persons from indigenous or ethnic minority groups? [X] No [] Yes				

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Ministry of Public Works and Transport



កូនសៀវភៅព័ត៌មានគម្រោង

ការបន្ស៊ាំបម្រែបម្រួលអាកាសធាតុនៃគម្រោងកែលម្អផ្លូវខេត្ត

Climate Resilience Provincial Roads Improvement Project
(CR-PRIP)

Loan 2839-CAM (SF) / 8254-CAM and Grant 0278-CAM

ការស្តារហេដ្ឋារចនាសម្ព័ន្ធសម្រាប់ទំនប់រហាល់ អូរត្រាវ បឹងត្រាវ និងការបូមស្តារបឹងក្រូស

**INFRASTRUCTURE REHABILITATION FOR RO HAL DIKE,
O'TRAV DIKE, BOENG TRAV DIKE AND DREDGING OF
BOENG KRUOS LAKE**

ស្រុកកំពង់លែង ខេត្តកំពង់ឆ្នាំង

A. ព័ត៌មានគម្រោង (Project Information)

រាជរដ្ឋាភិបាលកម្ពុជា គឺជាប្រទេសមួយក្នុងចំណោមប្រទេសនានា ដែលចូលរួមក្នុងកម្មវិធីសាកល្បងសម្រាប់ការបន្តទៅនឹងបម្រែបម្រួលអាកាសធាតុ។ ក្នុងប្រទេសកម្ពុជា វិស័យអាទិភាពសម្រាប់គម្រោងសាកល្បងការបន្តទៅនឹងបម្រែបម្រួលអាកាសធាតុ មាន ធនធានទឹក ហេដ្ឋារចនាសម្ព័ន្ធ និងកសិកម្ម។ ធនាគារអភិវឌ្ឍន៍អាស៊ីបានផ្តល់ឥណទានសម្រាប់គម្រោងកែលម្អផ្លូវខេត្តក្នុងខេត្តព្រៃវែង ស្វាយរៀង កំពង់ឆ្នាំង និងកំពង់ស្ពឺ ដែលក្នុងនោះ គម្រោងបន្តទៅនឹងបម្រែបម្រួលអាកាសធាតុត្រូវបានបញ្ចូលជាធាតុមួយនៃ គម្រោង។

គម្រោងនេះ កែលម្អប្រព័ន្ធទប់ទឹក ដោយជួសជុលទំនប់ចំនួនបីកន្លែងគឺ រហាល់បឹងត្រាវ និងទំនប់អូត្រាវ ដោយមានទ្វារទឹកបើកបិទ ព្រមទាំងស្តារដីក្នុងបឹងក្រសឲ្យមានជម្រៅជាងមុន។ ទំនប់ទាំងបីទីតាំងខាងលើ បង្កើតជាអាង ដែលនឹងអាច ស្រោចស្រពលើផ្ទៃដីចំនួនជាង ២០០០ហិកតា ដែលអាចអនុញ្ញាតឲ្យកសិករអាច ធ្វើកសិកម្មបានពីរដងក្នុងមួយឆ្នាំ និងទទួលបានទិន្នផលច្រើនជាង ២ដង។

ទំនប់រហាល់ អូត្រាវ និងបឹងត្រាវ សុទ្ធតែជាទំនប់ចាស់ ដែលបានរងការខូចខាតបាក់ស្រុត។ ដូច្នេះ គម្រោងនេះគឺជាការស្តារទំនប់លើទីតាំងចាស់តែប៉ុណ្ណោះ និងអាចស្មើនឹងកំពស់កាលពីសាងសង់ដំបូង។

The Royal Government of Cambodia (RGC) is one of the pilot countries participating in the Pilot Program for Climate Resilience (PPCR). The priority sectors for PPCR in Cambodia include water resources, agriculture and infrastructure. ADB funded Provincial Roads Improvement Project (PRIP) in Prey Veng, Svay Rieng, Kampong Chhnang and Kampong Speu Provinces with the element of this PPCR.

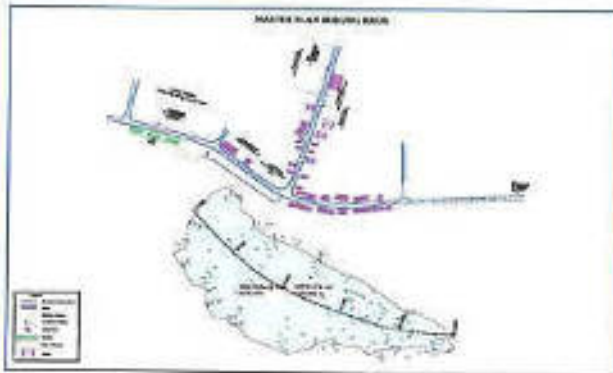
This project rehabilitates the water retention system such as three dikes (Ro Hal, Boeng Trav and Boeng O'Trav dike) using water gates and dredging one lake (Boeng Kruos lake). The three creating water reservoirs that will irrigate over 2000ha allowing 2 crops per year so that rice production could double in these areas.

These 3 dikes are proposed to build on its existing deteriorated dikes. The construction will be on existing width and to its original height.

ទីតាំងគម្រោងទាំងបួន

ទីតាំងបឹងក្រស (Boeng Kruos Lake Location)

កាយដីចេញពីបឹងហើយអាចម៍ដីដាក់តាមប្រាំងមុខសាលាស្រុក



ទំនប់រហាល់ (Ro Hal Dikes)

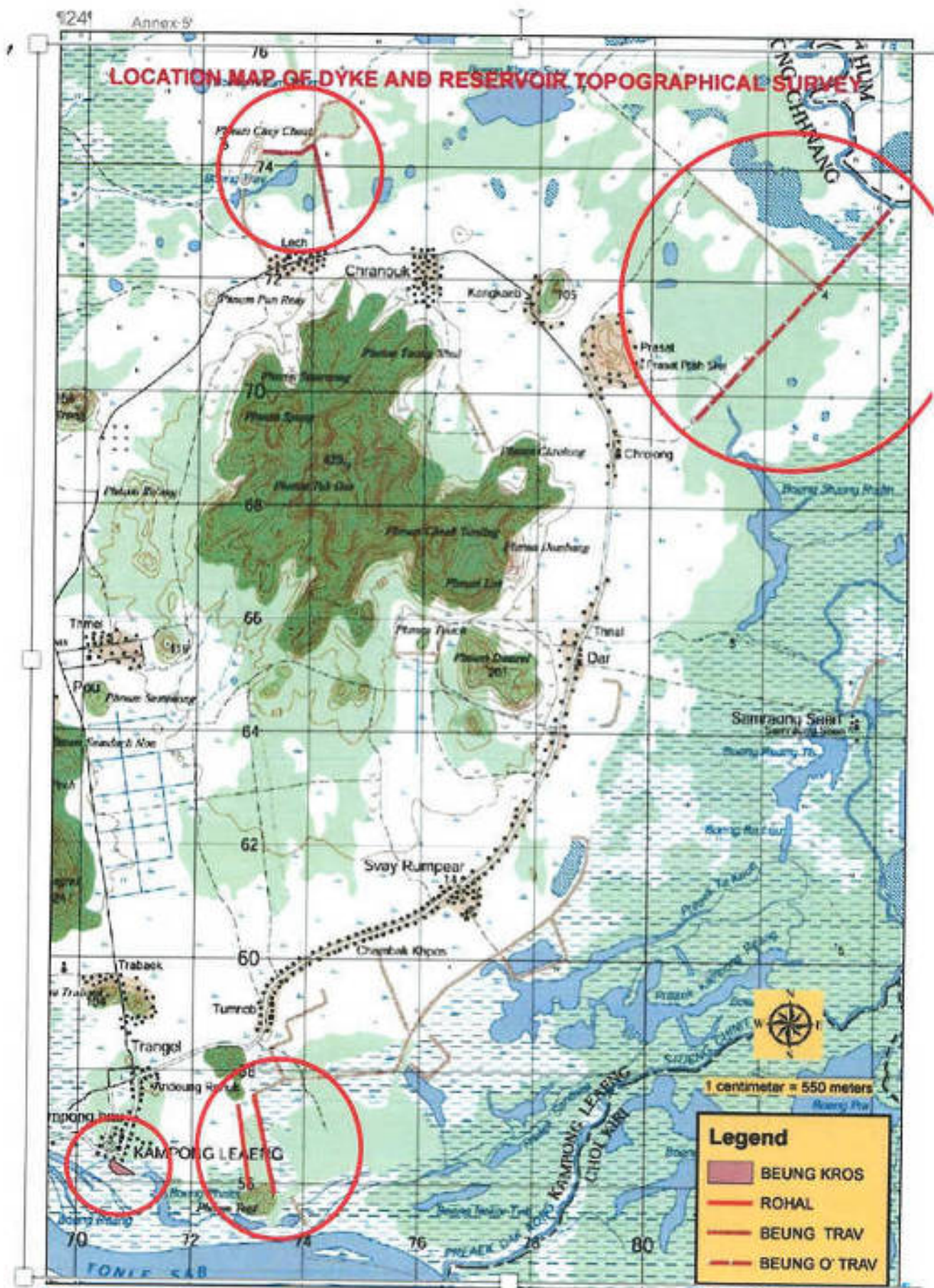
លើកកំពស់ទំនប់សង្វាងសម្រាប់ការធ្វើដំណើរនិងទប់ទឹកផង



ទំនប់អូត្រាវ (O'Trav Dike)



ទំនប់បឹងត្រាវ (Boeng Trav Dike)



B. អំពីទ្រព្យសម្បត្តិដែលប៉ះពាល់ដោយមិនស្ម័គ្រចិត្ត (Land acquisition and IR)

តើគម្រោងត្រូវគិតយ៉ាងដូចម្តេចបើដីរបស់ខ្ញុំនឹងត្រូវប៉ះពាល់?

ដីកម្រិតដែលប៉ះពាល់ដោយសារគម្រោង នឹងទទួលបានសំណងតាមអត្រា តម្លៃជំនួស។ ចំណែកដីដែលស្ថិតនៅក្នុងអាងស្តុកទឹក នឹងមិនទទួលបាន សំណងទេ។ យោងតាមគោលនយោបាយកិច្ចការពារសុវត្ថិភាពរបស់ ធនាគារអភិវឌ្ឍន៍អាស៊ី ចំពោះអ្នកដែលបាត់បង់ផលិតកម្ម (កសិកម្ម) នៅ អាងស្តុកទឹក នឹងទទួលបានប្រាក់ឧបត្ថម្ភសម្រាប់ការមិនបានបន្តប្រើ ប្រាស់ដីផលិតកម្មនោះទៅទៀត។ ប៉ុន្តែប្រជាពលរដ្ឋ អាចធ្វើការបំពាក់ ជូនគម្រោងបាន ប្រសិនបើការបំពាក់នោះមិនប៉ះពាល់ ដល់ជីវភាពរស់ នៅរបស់ខ្លួន។

តើសំណងត្រូវផ្តល់ជូនចំពោះផ្ទះ ដើមឈើ និងដំណាំដែរឬទេ?

ប្រាកដណាស់ ផ្ទះ ដែលប៉ះពាល់ដោយសារគម្រោងនឹងត្រូវទទួលបាន សំណងឧបត្ថម្ភគោលនយោបាយតាមអត្រាតម្លៃជំនួស ដោយមិនមានការ កាត់ចេញនូវតម្លៃ ឬសម្ភារៈដែលនៅសេសសល់ឡើយ។ ចំពោះផ្ទះដែល ប៉ះពាល់ផ្នែកណាមួយ នឹងទទួលបានសំណងសម្រាប់ការបាត់បង់ផ្នែកនោះ រួមនឹងថ្លៃជួសជុល។ រចនាសម្ព័ន្ធផ្សេងទៀត (ដូចជាបង្គោល, អណ្តូង, សាប) នឹងទទួលបានសំណងតាមអត្រាតម្លៃជំនួស។

បើសិនប៉ះពាល់ដល់ជីវភាពរស់នៅ តើគម្រោងអាចជួយខ្ញុំយ៉ាងដូចម្តេចក្នុង ការស្តារជីវភាពឡើងវិញ?

ស្ថិតិនិងការអង្កេតវាស់វែងលម្អិត (DMS) នឹងកត់ត្រា ចំពោះជនដែលប៉ះ ពាល់ដល់ជីវភាពរស់នៅ និងការប៉ះពាល់ផ្សេងៗទៀតដែលអាចកើតចេញ ពីគម្រោង។ គម្រោងនឹងផ្តល់ជូនការឧបត្ថម្ភផ្សេងៗ ដើម្បីឱ្យជនប៉ះពាល់ ទាំងឡាយអាចស្តារជីវភាពរស់នៅឡើងវិញ យ៉ាងហោចណាស់បានដូច មុនពេលគម្រោងទៅដល់។

ចំពោះគ្រួសារងាយរងគ្រោះ (ឧ.ជនដែលបាត់បង់ទឹកថ្លៃក្រីក្រ, ពិការ) គម្រោងនឹងខិតខំជួយកែលម្អជីវភាពរស់នៅ ឱ្យបានយ៉ាងហោចណាស់ ត្រឹមកម្រិតមុនគម្រោងទៅដល់។ ទម្រង់នៃការឧបត្ថម្ភនេះ នឹងរួមមាន:

- (i) ការឧបត្ថម្ភម្តងចំពោះគ្រួសារដែលបាត់បង់ច្រើនជាង ១០នៃដី % ផលិតកម្ម; (ii) ប្រាក់ឧបត្ថម្ភសម្រាប់សោយហិរយដឹកជញ្ជូន; (iii)

ប្រាក់សម្រាប់ការវិនិយោគបណ្តុះបណ្តាលមុខរបរចំពោះហាងតូប/ ដែលប៉ះពាល់; (iv) សក្តានុពលទម្រង់ដ៏ទៃទៀតនៃវិធានការស្តារប្រាក់ ចំណូលឡើងវិញ ដែលនឹងត្រូវកំណត់ពេលធ្វើបច្ចុប្បន្នភាពផែន ការដោះស្រាយផលប៉ះពាល់ ដោយមានការពិគ្រោះយោបល់ជាមួយជនប៉ះពាល់ និង(v) មានការឧបត្ថម្ភបន្ថែមចំពោះគ្រួសារងាយរងគ្រោះ។

បើសិនខ្ញុំមិនយល់ព្រម ឬបញ្ហាកើតឡើងក្នុងពេលអនុវត្តគម្រោង ដូច ជាសំណង បច្ចេកទេស និងបញ្ហានានាដែលកើតចេញពីគម្រោង តើខ្ញុំ មានសិទ្ធិប្តឹងក្តីដែរឬទេ?

What if my land will be affected by the project?

Acquired privately owned land will be compensated at replacement cost. Land within the existing state reservoirs will not be compensated. However, based on ADB SPS 2009, those losing use of productive (farming) land within the reservoirs will be entitled to assistance for loss of land use of productive land. But farmers can contribute to the project if that contribution will not affect their livelihood or economic status.

Does compensation apply to my affected houses or structures, crops and trees?

Yes. Houses and structures that will be affected by the Project shall be compensated at replacement cost without deduction for depreciation or salvageable materials. Partially affected houses will be compensated for the lost affected portion as well as repair costs. Other structures (e.g. fences, wells, pavement) will also be compensated at replacement cost.

If in case our livelihoods are affected, how can the Project help me restore my livelihood and living standards?

The census and DMS will take note of the livelihoods of affected persons and any impacts the Project may have. The Project will provide various forms of assistance to enable affected people to restore their livelihoods and living conditions to at least pre-project levels.

Vulnerable households (e.g. those classed as poor, disabled, etc.), the Project will seek to improve living standards at least before project start. Such forms of assistance will include: (i) one-time assistance allowance to households losing more than 10% of the productive assets the type and severity of impact; (ii) cash assistance to cover transportation costs; (iii) cash grant for temporary disruption to business income for affected shops/stalls; (iv) potentially other forms of income restoration measures to be determined during updating of the resettlement plan in consultation with those affected; and (v) additional special assistance to vulnerable households.

If I disagree or problems arise during project implementation such as compensation, technical, and other project-related issues,

បើប្រជាពលរដ្ឋដែលប៉ះពាល់មានមន្ទិល ឬមិនពេញចិត្តចំពោះកញ្ចប់សំណងដែលផ្តល់ជូន ឬក៏ដោយហេតុផលណាមួយ សំណង មិនពិត ដូចការព្រមព្រៀងប្រជាពលរដ្ឋដែលប៉ះពាល់មានសិទ្ធិដាក់បណ្តឹងតវ៉ាបន្ត។ យន្តការដោះស្រាយបណ្តឹងតវ៉ាត្រូវដំណើរការជា ៤ ដំណាក់កាលដូចតទៅ៖

ដំណាក់កាលទី១: គ្រួសារដែលប៉ះពាល់នឹងបង្ហាញបណ្តឹងតវ៉ា និងសាទុក្ខ ដោយផ្ទាល់មាត់ ឬជាលាយលក្ខណ៍អក្សរ ដល់ប្រធានភូមិមេឃុំ ឬក្រុមការងារក្រសួងសាធារណការ ឬគណៈកម្មការអន្តរក្រសួងដោះស្រាយផលប៉ះពាល់ (IRC) ដែលបានបង្កើតឡើងរួមមកហើយក្នុងគម្រោងកែលម្អផ្លូវខេត្ត។ អ្នកទទួលពាក្យបណ្តឹង បញ្ជាក់ជាលាយលក្ខណ៍អក្សរពីការទទួលបានការតវ៉ានេះ។ ក្រោយ ១៥ ថ្ងៃមក គ្រួសារដែលប៉ះពាល់មិនបានឮដំណឹង ពីប្រធានភូមិ ឬមេឃុំ ឬពីក្រុមការងារទេ ឬក៏បើគាត់មិនពេញចិត្តនឹងការសម្រេចចិត្តទេ បណ្តឹងតវ៉ាអាចត្រូវបានបញ្ជូនទៅមន្ទីរស្រុក ។

ដំណាក់កាលទីពីរ: មន្ទីរស្រុកមានពេល ១៥ ថ្ងៃសម្រាប់ដោះស្រាយការតវ៉ាឱ្យមានដល់ការពេញចិត្តរបស់គ្រប់ភាគីពាក់ព័ន្ធ។ បើបណ្តឹងតវ៉ាមិនអាចដោះស្រាយបាននៅដំណាក់កាលនេះទេ មន្ទីរស្រុកនឹងនាំយកករណីនេះទៅគណៈកម្មការដោះស្រាយបណ្តឹងតវ៉ាខេត្ត ។

ដំណាក់កាលទីបី: គណៈកម្មការដោះស្រាយបណ្តឹងតវ៉ាខេត្តជួបជាមួយភាគីតវ៉ា ហើយដោះស្រាយ។ ក្នុងរយៈពេល ៣០ ថ្ងៃ បន្ទាប់ពីដាក់ពាក្យបណ្តឹងតវ៉ាមក គណៈកម្មការត្រូវធ្វើការសម្រេចចិត្តជាលាយលក្ខណ៍អក្សរ ហើយបញ្ជូនច្បាប់ចម្លងទៅក្រសួងសាធារណការនិងដឹកជញ្ជូន (MPWT), (PDPWT), និងគ្រួសារដែលប៉ះពាល់។

ដំណាក់កាលចុងក្រោយ: ប្រសិនបើគ្រួសារដែលប៉ះពាល់ដែលតវ៉ាមិនបានឮដំណឹងអ្វីពីគណៈកម្មការដោះស្រាយបណ្តឹងតវ៉ាខេត្ត ឬមិនពេញចិត្តទេនោះ គាត់អាចនាំយកករណីនេះទៅតុលាការខេត្ត។ នេះគឺជាដំណាក់កាលចុងបញ្ចប់សម្រាប់ការវិនិច្ឆ័យបណ្តឹងតវ៉ានេះ។

do I have the right to voice my complaint?

If the affected person is not satisfied with the compensation package offered or, if for any reason, the compensation does not materialize according to the agreed schedule, the affected person has the right to lodge a complaint. The grievance redress mechanism consists of a four stages process as follows:

First Stage: AHs will present their complaints and grievances verbally or in writing to the village chief, commune chief or MPWT working group or IRC that was already established for PRIP. The receiving agent will be obliged to provide immediate written confirmation of receiving the complaint. If after 15 days the aggrieved AH does not hear from the village and commune chiefs or the working groups, or if he/she is not satisfied with the decision taken in the first stage, the complaint may be brought to the District Office.

Second Stage: The District Office has 15 days within which to resolve the complaint to the satisfaction of all concerned. If the complaint cannot be solved at this stage, the District Office will bring the case to the Provincial Grievance Redress Committee.

Third Stage: The Provincial Grievance Redress Committee meets with the aggrieved party and tries to resolve the situation. Within 30 days of the submission of the grievance, the Committee must make a written decision and submit copies to the MPWT, PDPWT, and the AH.

Final Stage: If the aggrieved AH does not hear from the Provincial Grievance Redress Committee or is not satisfied, he/she can bring the case to Provincial Court. This is the final stage for adjudicating complaints.

ព័ត៌មានបន្ថែម និងមតិយោបល់:

1. មន្ទីរសាធារណការ និង ដឹកជញ្ជូន (PDPW), អនុគណៈកម្មការដោះស្រាយផលប៉ះពាល់ខេត្ត
2. អង្គភាពគ្រប់គ្រងគម្រោងទី៣, គម្រោងកែលម្អផ្លូវខេត្ត: ជាន់ទី៤, ផ្លូវនរោត្តមកែងផ្លូវលេខ១០៦, ភ្នំពេញ (023 724565)
3. គណៈកម្មការអន្តរក្រសួងនិងហិរញ្ញវត្ថុក្រសួងសេដ្ឋកិច្ច/ (023 4266 82)
4. ធនាគារអភិវឌ្ឍន៍អាស៊ី: ភ្នំពេញ (023) 215 805



ANNEX 3: PUBLIC CONSULTATION MEETING

Minutes of the Public Consultation Meeting of the Project

Date: August 23rd, 2018

Location: Dar Commune

Starting time: 09:00 am

End time: 10:00 am

1. Objective of the meeting

The objective of the meeting was to inform people on the proposed subprojects and obtain opinions of the public about the proposed development of the dredging and dikes rehabilitation under climate resilience project as one output of the PRIP, its potential environmental and social impacts, rights/entitlement to compensation and grievance redress mechanism.

2. Opening remarks and Presentation of the subproject sites

The district governor of Kompong Laeng District opened the meeting by welcoming the participants and explained briefly about the aim of the project and today's meeting. And the safeguards team provide detail information of the project, typical cross section, involuntary resettlement impacts and grievance redress mechanism to all participants.

3. Participations

People area happy to hear about the project since this is the bottom up proposal. They welcomed to the project and wish this project can be implemented very soon. And in addition, they express their willingness to contribute if required.

4. Q&A session

After the presentation, a Q&A session was held, which is summarized in table below. There was just a concern and a question were raised by the participants, once their concerns were answered, nobody expressed any objection towards the Project.

Summary of the Q&A session

N°	Question/opinion	Answer
1	He concerned that during flood people would boat across the road on the dyke, which may cause damage to the dyke.	The study team considered an option. The MWPT will inform engineers to put warning signage to prevent boater from entering the area.
2	What will be the benefits for the local residents?	The policy of the Project is to employ local labor force as much as possible.

5. Closing remarks

The district governor thanked the audience for participating in the meeting.



Date: August 23rd, 2018
Location: Chra Nuok Commune
Starting time: 10:15 am
End time: 11:30 am

1. Q&A session

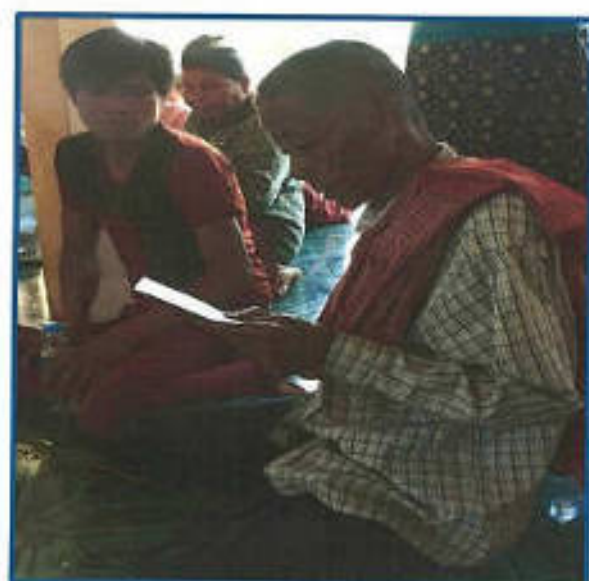
After the presentation, a Q&A session was held, which is summarized in table below. There was just a concern and questions were raised by the participants, once their concerns were answered, nobody expressed any objection towards the Project.

Nº	Question/opinion	Answer
1	How big does the road that will be built along the dyke?	Its standard dimension is 6 meters in total followed by its offsets 14 meters in total.
2	I am not sure how big is Boeng Trav Dyke so I have no idea if our land is affected by the project?	As you can see in the picture (the map was showed), the proposed locations were separated in to two sections, the first section has 1,560m length and the second section has 600m length



Date: August 23rd, 2018
 Location: Tra Ngel Commune
 Starting time: 2:00pm
 End time: 3:00 pm

Nº	Question/opinion	Answer
1	If possible, a few new water gates should be built or the old existing 5 gates should be repaired so that people can be easily take water for farming.	MPWT officer considered an option that he will talk to engineers we can build or repair these water gates.
2	We are happy to hear about the project and as we benefit from this, we are willing to donate to the project if required.	On behalf of MPWT, the study team express sincere thank you to farmer. However, there is a need to carry out further study on the vulnerability of the affected households and the area to be donated to the project whether or not the livelihood can be affected by the donation.



ANNEX 4: LIST OF PARTICIPANTSProvincial Road Improvement Project
Climate Change Output**List of discussion with local authorities and people in Dar Commune**

No	Name	Sex	Institution	Position	Phone
1	Som Chanthorn	M	Kampong Hav District	District Governor	097 996 070 3
2	Yim Chamnan	-	Consultant	Environment Specialist	
3	Em Sereivuth	-	MPWT-PMU3	Counterpart	016 988 908
4	Sea Hom	F	Dar Commune	Villager	
5	Mon Ros	M	-	-	
6	Phai Phun	-	-	Chief of Commune	
7	Chim Chon	-	-	1 st Deputy of Commune	
8	But Thorn	-	-	2 nd Deputy of Commune	
9	Nhib Vuthea	-	-	Clerk of Commune	092 637 441
10	Chay Chuy	-	-	Assistant	
11	Tong Sophal	-	Chror Iong Village	Vice of Village	
12	Kem Kuon	-	Brasat Village	Chief of Village	
13	Tun Moa	-	-	Vice of Village	
14	Suong San	-	Koy Village	Chief of Village	
15	Ea Chum	-	-	Vice of Village	
16	Heng Heang	-	-	Villager	
17	Lean Robare	-	Chror Iong Village	-	
18	Han Hein	-	Brasat Village	-	
19	Chin Phea	-	-	-	
20	Phorn Uon	-	-	-	
21	Chen Chhet	-	-	-	
22	Chay Chet	-	-	-	
23	Khit Komsort	-	-	-	
24	Choa Them	-	-	-	
25	Yun Thim	-	-	-	
26	Mom Mon	-	-	-	
27	Orng Chrim	-	-	-	
28	En Leang	-	-	-	
29	Norn Ny	-	-	-	
30	Pea Pov	-	-	-	

No	Name	Sex	Institution	Position	Phone
31	Nhorn Chhim	-	-	-	
32	Ty Tem	-	-	-	
33	Han Lut	F	-	-	
34	Nhim Ol	M	-	-	
35	Bun Sambath	-	-	-	
36	Lim Lot	-	-	-	
37	Horn Uon	-	-	-	
38	Chay Ty	-	-	-	
39	Yi Moa	F	-	-	
40	Dim Vet	M	Koy Village	-	
41	Sin Seang	-	-	-	
42	Nov Pok	-	-	-	
43	Chhem Chheang	-	-	-	
44	Sin Ly	F	-	-	
45	Thim Khim	-	-	-	
46	Ho Im	-	-	-	
47	Sim Sok	-	-	-	
48	Mon Seang	-	-	-	
49	Ngim Vy	-	-	-	
50	Norn Neang	M	-	-	
51	Khin Khon	-	Chror Iong Village	-	
52	Nem Sory	-	-	-	
53	Yin Vin	-	-	-	
54	Khai Khorn	-	-	-	
55	Yan Phally	-	-	-	
56	Pum Pon	-	-	-	
57	Nhil Thouen	-	-	-	
58	Phom Heak	-	-	-	
59	Youen Rom	-	-	-	
60	Thlork Phon	F	-	-	
61	Sok Sophorn	-	-	-	
62	Phai Then	M	-	-	
63	Lam Sok	F	-	-	
64	Kev Ho	-	-	-	
65	Mang Sophal	-	-	-	
66	Chey Kunthea	-	-	-	

No	Name	Sex	Institution	Position	Phone
67	Ho Rom	-	-	-	
68	Chin Mab	-	-	-	
70	Chhon Thai	-	-	-	
71	Lach Yeng	-	-	-	
72	Mon Mot	M	-	-	

List of discussion with local authorities and people in Chranouk Commune

No	Name	Sex	Institution	Position	Phone
1	Sum Phan	M	Kandal Village	Chief of Village	
2	Din Dorn	-	-	Villager	
3	Sim Nai	F	Chranouk Commune	Deputy of Commune	
4	Thek Thea	M	Chranouk Village	Villager	
5	Tum Phal	-	-	-	
6	Man Mouen	-	-	-	
7	Ut Vorn	-	-	-	
8	Kheng Nhanh	F	-	-	
9	Net Souen	-	-	-	
10	Duch Nit	-	-	-	
11	Seang Chheang	-	-	-	
12	Tim Hon	-	-	-	
13	Phuong Houen	-	-	-	
14	Heng Nouen	-	-	-	
15	Heng Un	-	-	-	
16	Vin Han	-	-	-	
17	Nhuon Yan	-	-	-	
18	Hom Yet	-	-	-	
19	Be Nim	-	-	-	
20	Din Leang	-	-	-	
21	Chea Ouen	-	-	-	
22	Khul Sorn	-	-	-	
23	Nhik Him	M	-	-	
24	Khuon Heab	F	-	-	
25	Seng Sivut	-	-	-	
26	Chung Sihuat	-	-	-	
27	Vin Han	-	-	-	
28	Neang Kimnai	-	-	-	

No	Name	Sex	Institution	Position	Phone
29	Som Soleang	-	-	-	
30	Phong Som aul	M	-	-	
31	Ky Ik	-	-	-	
32	Hok Hom	-	-	-	
33	Phat Yum	F	-	-	
34	Ken Kort	M	Elech Village	-	
35	Tea Eng	-	-	-	
36	Meas My	-	-	-	
37	Mon Sarum	-	-	-	
38	Rin Saram	F	-	-	
39	Chhorn Huoy	-	-	-	
40	Huon Lai I	-	-	-	
41	Sum Hoy	-	-	-	
42	Mouen Men	-	-	-	
43	Horm Im	-	-	-	
44	Souen Srun	-	-	-	
45	Phok Ly	-	-	-	
46	Toum Nhork	-	-	-	
47	My Som At	-	-	-	
48	But Heb	-	-	-	
49	Sun Houe	-	-	-	
50	Chorn Cham	M	-	-	
51	Van Khorn	-	-	-	

List of discussion with local authorities and people in Kampong Hav Commune

No	Name	Sex	Institution	Position	Phone
1	Siv Som ouen	M	Kengtasok Village		086 096 898 2
2	Lun Sopha	-	Tra Ngel Village	Villager	081 969 455
3	Pech Chhouen	F	Ondong ronuk Village	-	
4	Long Sokkha	M	Kengtasok Village	-	010 315 625
5	Chhuon Sina	F	Kampongbeng Village	-	097 680 909 4
6	Va Lay	M	-	-	015 242 280
7	Lok Lita	F	-	-	017 790 818
8	Chhin Mith	M	-	-	077 454 420
9	Khib Burong	-	Ondong ronuk	-	

No	Name	Sex	Institution	Position	Phone
			Village		
10	Morb Sopheap	-	Kampong beng Village	-	
11	Sem Savy	-	Tra Ngel Village	-	
12	Tit Bunsong	-	Kampong beng Village	-	089 613 235
13	Chea Chheangheng	-	-	-	089 643 710
14	Meas Nat	-	Tra Ngel Village	-	096 762 023 3
15	Seb Vuthy	-	Kengtasok Village	-	097 653 290 3
16	Rith Sokhary	F	Kampong beng Village	-	
17	Hem Tum	-	Ondong ronuk Village	-	
18	Sorn Sophal	-	Kengtasok Village	-	
19	Im Moa	-	Kampong beng Village	-	
20	Kim Sary	-	-	-	
21	Chhun Neang	-	-	-	
22	Prum Kan	-	Ondong ronuk Village	-	
23	Kev Sokhom	-	-	-	
24	Thou Vannary	-	Kampong beng Village	-	
25	Em Sokkhin	-	Tra Ngel Village	-	
26	Chin Saret	-	-	-	
27	Yim Chorn	M	Kampong beng Village	-	
28	Nuv Sopheap	-	Ondong ronuk Village	-	
29	Kong Somnourn	-	Kengtasok Village	-	
30	Chan Kimyeng	F	Kampong beng Village	-	
31	Chit Virak	M	Tra Ngel Village	-	
32	Teng Yon	-	-	-	
33	Chit Saream	F	-	-	
34	Tim San	-	-	-	
35	Chin Sara	-	-	-	
36	Nou Nakry	-	-	-	
37	Mom Sitharith	M	Kampong beng	-	097 918 916 0

No	Name	Sex	Institution	Position	Phone
			Village		
38	Seang Mach	F	Tra Ngel Village	Vice of Village	097 923 397 4
39	Pheang Sopheap	M	Kengtasok Village	-	
40	Som Buong	-	Ondong ronuk Village	-	
41	Som Sopheang	-	Kampong beng Village	-	010 616 229
42	Pheng Sokea	-	-	-	012 213 569
43	Yim Thouen	-	Kengtasok Village	Deputy1 of Commune	011 284 883
44	Sok Vin	-			092 915 736
45	Kong Sophak	-	Kengtasok Village	Clerk of Commune	089 418 449
46	Nem Saven	-	-	Consultant of Commune	087508 360
47	Seng Cheng	F	Kampong beng Village	Villager	

List of discussion with local authorities and people in Tra Ngel Commune

No	Name	Sex	Institution	Position	Phone
1	Ou Kimthy	M	Tra Nhel Commune	Chief of Commune	017 624 015
2	Moa Sarong	-	-	Clerk of Commune	097 617 795 0
3	Pech Sombath	F	Trataing Meas Village	Chief of Village	
4	Sim Mon	M	-	Vice of Village	
5	Hum Bun Ann	-	-	Villager	
6	Sim Seak	-	-	-	
7	Thlang Lorn	-	-	-	
8	Suos Cheng	-	-	-	
9	Suy Sophal	F	-	-	
10	Sim Sokhouen	-	-	-	
11	Pen Sova	-	-	-	
12	Nhin Sarith	-	-	-	
13	Neal Theary	-	-	-	
14	Thlang Set	-	-	-	
15	Lach Sary	-	-	-	
16	Chheang Srey	-	-	-	
17	Sim Moa	-	-	-	
18	Un Somaly	-	-	-	

No	Name	Sex	Institution	Position	Phone
19	Im Ut	-	-	-	
20	Bun Phally	-	-	-	
21	Chum Channy	-	-	-	
22	Chhuon Sin	-	-	-	
23	Soue In	-	-	-	
24	Nang Heak	-	-	-	
25	Mon Koueng	-	-	-	
26	Kheng Bunthorn	M	-	-	
27	Kheng Him	F	-	-	
28	Mut Savy	M	-	-	
29	Sim Sarat	-	-	-	
30	Ven Chomrouen	F	-	-	
31	Lim Dib	M	-	-	
32	Morb Thon	-	-	-	
33	Pring Sompors	F	-	-	
34	Pring Socheat	-	-	-	
35	Sok Veassna	-	-	-	
36	Non Chantha	M	-	-	
37	Him Mach	F	-	-	
38	Yorn Nhim	-	-	-	
39	Meas Sophanny	-	-	-	
40	Mon Vet	-	-	-	
41	Chheng Yim	-	-	-	
42	Nhin Sarim	-	-	-	

Field Report

I. Purpose

A project team consists of Mr. Soeng Hun (Hydrologist/detailed design team leader from DED Consultant) and Mr. Pech Heng (PMU3 counterpart) together with representatives from local community visited the sites from 17-18 October 2018 to demarcate the dike alignment boundary of Ro Hal dike and Boeng Trav dike to determine the impact from the dike improvement to the farmers.

The two dikes submerge under flood level as shown in the following pictures:



Figure 10-Ro Hal dikes on 18-Oct-18



Figure 11 – Boeng Trav dike on 18-Oct-18

A second field visit was conducted from 22 to 24 October 2018 with participation of ADB's environmental specialist to finalize the demarcation of the impacts on farmer's agricultural lands.

Below pictures show water recedes we observed during the two day site visit.

✓



Figure 12 – Ro Hal dike on 22-Oct-2018

The water level reduced significantly but it still be difficult for the demarcation. Even though the flood water was still high, the demarcation was carried smoothly with participation from anticipated APs. The methodology of the demarcation is explained in the following section II.

II. Methodology of the Demarcation

Based on the actual site conditions, the demarcation process was carried out in the following steps:

Step 1: Set up the centerline of the dike by bamboo sticks at every 50m interval



Step 2: Install wooden sticks in front of APs' lands on both sides of the dikes.



Step 3: Measure and record the distance from the dike centerline to front side of the APs' lands



Step 4: Compare the designed width of the new dike with the distance received from the Step 3 to find out the affected width.



Step 5: The affected width multiplied by the land width of the affected land to get the total affected area

Step 6: Confirmed with every owner of the land on the impacts whether such impacts are acceptable to them. If yes, the land beneficiary/owner is to provide a stamp-print on the Inventory donation forms completed with the related information as provided in

attachments A.

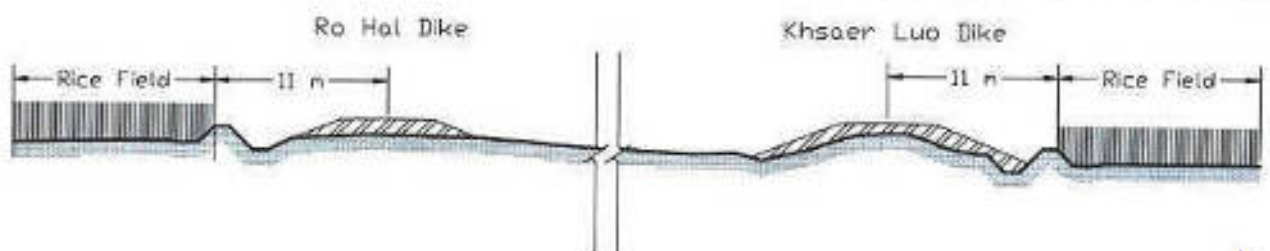


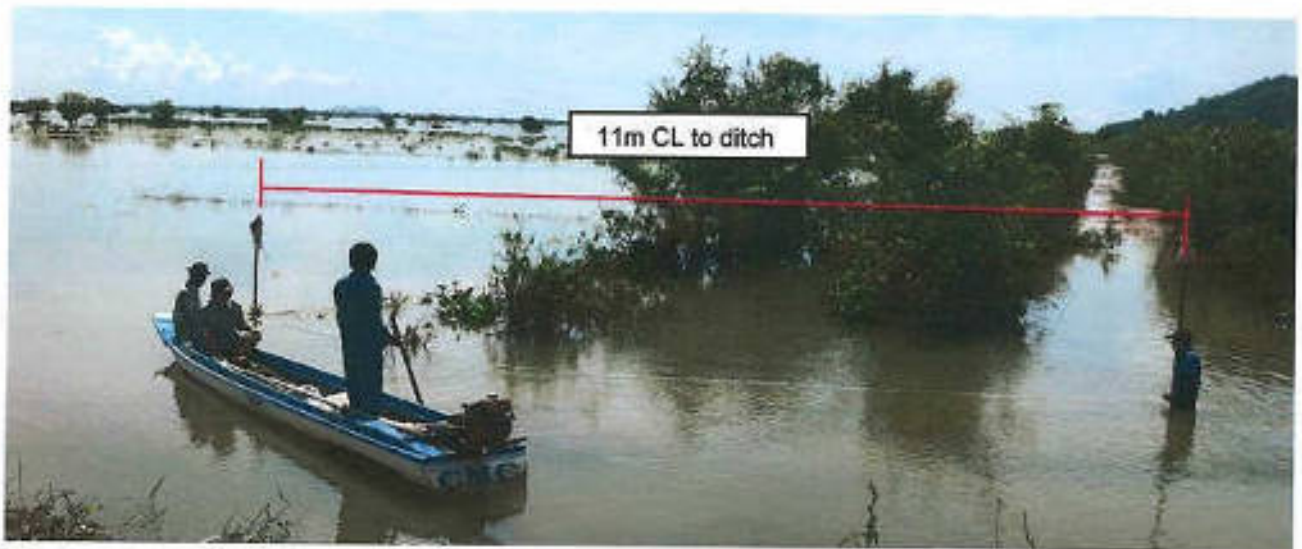
III. Outcome of Demarcations

After the demarcations of Ro Hal dike and Boeng Trav dike, the summary results are as follow:

III.1. Ro Hal dike

Ro Hal dike was separated in to two sections, the first section called Ro Hal dike about 1,918m length and the second section called Ksaer Luos dike with the length of 1,479m. The two dikes run parallelly and connect between two dikes as shown in the following picture:

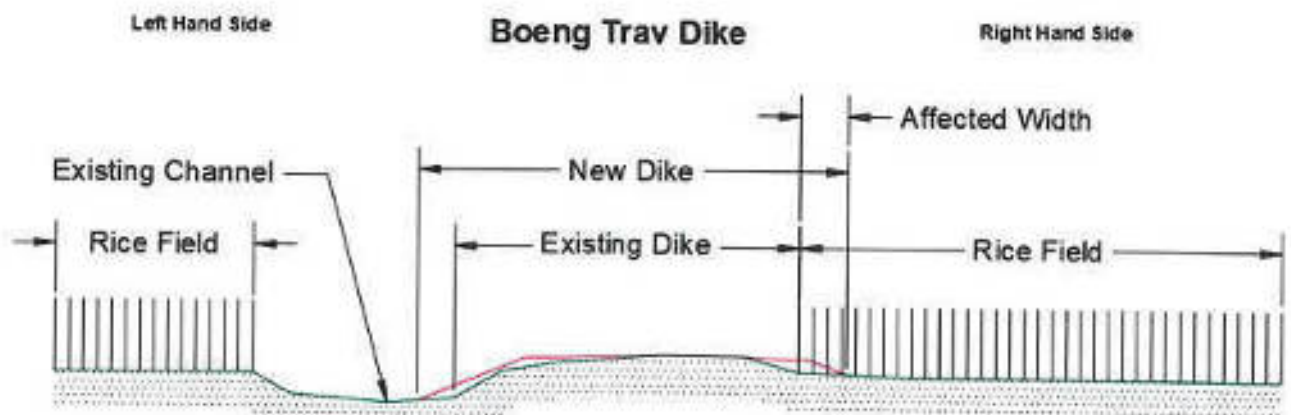




The demarcation of Ro Hal dike shows no impact on lands (out of 81 land holders, List or land holders is attached in Attachment B), was found because all lands were limited by a line of ditch which is located at the 11m offset from the centerline of the dikes.






III.2. Boeng Trav Dike

The rice fields along the Boeng Trav dike were extended up to the toe slope of the dike so the rice fields along the dike will be affected by the dike construction. The demarcation reveals that there are 21 out of 33 farmers that their lands would be affected and those 21 APs were recorded and they agreed to donate voluntarily to the Project without any compensation and they provided their sump-prints as shown in the following figures:








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1	ខឿន ឡូតិ (Doeun Lot)	5	2	3	ទេ	១៥	ទេ	90 m ²	10,000 m ²	0.90%	គ្រូបង្គោល	
2	វ៉ែន ប៉ូច (Vam Poch)	4	1	3	ទេ	11	ទេ	46 m ²	70,000 m ²	0.07%	គ្រូបង្គោល	
3	ឈន សៀក (Chhorn Seak)	3	2	1	ទេ	11	ទេ	79 m ²	5,000 m ²	1.58%	គ្រូបង្គោល	
4	ហ៊ឹម ចាន់ធី (Him Chanthy)	5	2	3	ទេ	11	ទេ	64 m ²	50,000 m ²	0.13%	គ្រូបង្គោល	
5	បូ ផា (Bo Pha)	4	1	3	ទេ	11	ទេ	100 m ²	10,000 m ²	1.00%	គ្រូបង្គោល	






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6	ស៊ីម ឡាង (Sim Lang)	4	3	1	ទាវ	1	ទ	119 m ²	50,000 m ²	0.59%	គ្រូសាង	
7	ជួន ចាម (Chuan Cham)	5	3	2	ទ	៣៩	ទ	223 m ²	50,000 m ²	0.45%	គ្រូសាង	
8	រឿន រឹម (Roeun Rim)	5	3	2	ទ	៣៩	ទ	231 m ²	60,000 m ²	0.39%	គ្រូសាង	
9	ប៉ាន់ លឹម (Pann Lim)	6	1	5	ទាវ	1	ទ	41 m ²	10,000 m ²	0.41%	គ្រូសាង	
10	លឿន ចេ៖ (Loeun Chae)	6	3	3	ទ	៣៩	ទ	58 m ²	15,000 m ²	0.39%	គ្រូសាង	






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11	សែក ជីវ (Saek Jiv)	5	3	2	ទេ	១៥	ទេ	241m ²	30,000m ²	0.80%	គាត់	
12	ស៊ូ ឈិន (Sou Chhin)	5	2	3	ទេ	៥៥	ទេ	65m ²	60,000m ²	0.11%	គាត់	
13	ហ៊ឹម ស៊ីថុល (Him Sithol)	៤	៥	1	ទេ	១៥	ទេ	163m ²	10,000m ²	1.63%	គាត់	
14	ខន បូណា (Korn Bona)	៤	2	2	ទេ	1	ទេ	44m ²	5,000m ²	0.88%	គាត់	
15	ឈិត ស្រេង (Chhet Sreng)	4	2	2	ទេ	១៥	ទេ	51m ²	20,000m ²	0.26%	គាត់	






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16	អេង ចន្ទា (Eng Chantha)	6	4	2	ទេ	៧៦	ទេ	116 m ²	70,000 m ²	0.17%	គ្រាន់	
17	ពៅ វិណា (Pov Vina)	5	3	2	ទេ	៧៦	ទេ	214 m ²	20,000 m ²	1.07%	គ្រាន់	
18	វ៉ន អែម (Vorn Em)	5	2	3	ទេ	៧៦	ទេ	172 m ²	10,000 m ²	1.72%	គ្រាន់	
19	ឡេង ផល្លី (Leng Phally)	6	4	2	ទេ	៧៦	ទេ	205 m ²	30,000 m ²	0.68%	គ្រាន់	
20	សំ យី (Sam Yi)	4	2	2	ទេ	៧៦	ទេ	351 m ²	20,000 m ²	1.43%	គ្រាន់	






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21	អា អឿន (Ao Eoun)	5	1	4	ទេ	៧៦	ទេ	287 m ²	20,000 m ²	443%	កក្កដា	
22	ហ៊ាន់ គាំង (Ngann Kaing)	4	2	2	ទេ	៧៦	ទេ	-	10,000 m ²	-	កក្កដា	
23	ឌុច ឌឿន (Duch Dosun)	4	2	2	ទេ	៧៦	ទេ	-	50,000 m ²	-	កក្កដា	
24	សូយ វ៉ាសនា (Soy Veasna)	4	2	2	ទេ	៧៦	ទេ	-	40,000 m ²	-	ឧសភា	
25	ទោម ញឹក (Tom Nhoek)	4	2	2	ទេ	៧៦	ទេ	-	20,000 m ²	-	ឧសភា	




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26	លន់ អឿន (Lun Oeun)	5	3	2	បាទ	៧៥	ច	-	50,000m ²	0%	៣៣៣៣	
27	ជីវ ស្រស់ (Chiv Srors)	3	2	1	ច	៧៥	ច	-	10,000m ²	0%	១	
28	ចាប ផល្លី (Chab Phally)	6	2	4	ច	៧៥	ច	-	30,000m ²	0%	១	
29	សាន ណៃ (San Nai)	5	2	3	ច	៧៥	ច	-	50,000m ²	0%	១	
30	ហៃ ថាង (Hai Thang)	3	2	1	បាទ	៧៥	ច	-	50,000m ²	0%	១	

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31	ស្រេង ស៊ីវ៉ាន (Sreng Syvorn)	6	2	4	ទេ	៣៩	ទេ	-	200,000m ²	0%	គ្រូស្រី	
32	ទីម សុគតន់ (Tim Sok Kun)	6	4	2	ទេ	៣៩	ទេ	-	70,000m ²	0%	គ្រូស្រី	
33	ឆង់ ហាន់ (Chhorng Han)	6	4	2	ទេ	៣៩	ទេ	-	10,000m ²	0%	គ្រូស្រី	

ធ្វើនៅ ឃុំ ត្រពាំង ថ្ងៃទី ២៤ ខែ កុម្ភៈ ឆ្នាំ ២០១៨



ឈ្មោះ លេខ

បញ្ជាក់ដោយមេភូមិ (Certified by Chief of Village): គ្រូស្រី


 គ្រូស្រី

មេឃុំ (Chief of the Commune):

ទំព័រ 7 នៃ 7

Attendance List

ព្រះរាជាណាចក្រកម្ពុជា
ជាតិ សាសនា ព្រះមហាក្សត្រ
សាលាបច្ចេកទេស
បណ្តុះបណ្តាល
ថ្ងៃទី ២៣ ខែ តុលា ឆ្នាំ ២០១៩

ល/រ	គោត្តនាម និសិទ្ធិ	ភេទ	ឈ្មោះបច្ចេកទេស	ហត្ថលេខា
1	ស្រី ឈន់ ឡាន	ប្រុស	ជំនាញ បច្ចេកទេស	
2	ស្រី ឈន់	ប	ក្រុមប្រឹក្សាបច្ចេកទេស	
3	ស្រី ឈន់	ស	ក្រុមប្រឹក្សា ប	
4	ស្រី ឈន់	ប	បេតិកភណ្ឌ	
5	ស្រី ឈន់	ប	បេតិកភណ្ឌ	
6	ស្រី ឈន់	ស	បេតិកភណ្ឌ	
7	ស្រី ឈន់	ប	បេតិកភណ្ឌ	
8	ស្រី ឈន់	ប	បេតិកភណ្ឌ	
9	ស្រី ឈន់	ស	បេតិកភណ្ឌ	
10	ស្រី ឈន់	ប	បេតិកភណ្ឌ	
11	ស្រី ឈន់	ប	បេតិកភណ្ឌ	
12	ស្រី ឈន់	ប	បេតិកភណ្ឌ	
13	ស្រី ឈន់	ប	បេតិកភណ្ឌ	
14	ស្រី ឈន់	ប	បេតិកភណ្ឌ	
15	ស្រី ឈន់	ប	បេតិកភណ្ឌ	
16	ស្រី ឈន់	ប	បេតិកភណ្ឌ	
17	ស្រី ឈន់	ប	បេតិកភណ្ឌ	
18	ស្រី ឈន់	ប	បេតិកភណ្ឌ	
19	ស្រី ឈន់	ប	បេតិកភណ្ឌ	
20	ស្រី ឈន់	ប	បេតិកភណ្ឌ	
21	ស្រី ឈន់	ប	បេតិកភណ្ឌ	
22	ស្រី ឈន់	ប	បេតិកភណ្ឌ	
23	ស្រី ឈន់	ប	បេតិកភណ្ឌ	
24	ស្រី ឈន់	ប	បេតិកភណ្ឌ	
25	ស្រី ឈន់	ប	បេតិកភណ្ឌ	
26	ស្រី ឈន់	ប	បេតិកភណ្ឌ	
27	ស្រី ឈន់	ប	បេតិកភណ្ឌ	
28	ស្រី ឈន់	ប	បេតិកភណ្ឌ	

Inventory of Land Owners along the Boeng Trav dike

ល.រ.	ឈ្មោះអ្នកកាន់ដី	ប្រវែងដីកាន់ (ម៉ែត្រ)	ប្រភេទដី (ប្រភេទដី)
1	ស្រី ឈ្មោះ	150 ម៉ែត្រ	1 ប្រភេទ
2	ស្រី ឈ្មោះ	40 "	4 "
3	ស្រី ឈ្មោះ	45 "	0.5 "
4	ស្រី ឈ្មោះ	50 "	0.5 "
5	ស្រី ឈ្មោះ	60 "	1 "
6	ស្រី ឈ្មោះ	50 "	2 "
7	ស្រី ឈ្មោះ	100 "	5 "
8	ស្រី ឈ្មោះ	40 "	6 "
9	ស្រី ឈ្មោះ	15 "	1 "
10	ស្រី ឈ្មោះ	20 "	1.50 "
11	ស្រី ឈ្មោះ	100 "	3 "
12	ស្រី ឈ្មោះ	20 "	6 "
13	ស្រី ឈ្មោះ	50 "	1 "
14	ស្រី ឈ្មោះ	15 "	0.5 "
15	ស្រី ឈ្មោះ	15 "	2 "
16	ស្រី ឈ្មោះ	60 "	4 "
17	ស្រី ឈ្មោះ	100 "	2 "
18	ស្រី ឈ្មោះ	40 "	1 "
19	ស្រី ឈ្មោះ	80 "	3 "
20	ស្រី ឈ្មោះ	120 "	2 "
21	ស្រី ឈ្មោះ	100 "	2 "
22	ស្រី ឈ្មោះ	30 "	1 "
23	ស្រី ឈ្មោះ	100 "	5 "

J	24	ឡាន វ៉ាណា	100.	4 11
	25	បោង ត្រាវ	100.	2 11
	26	សង់ គោក	40	5
	27	ស្រែ ត្រាវ	47	1.0
	28	បាង រូស្យ	300.	3 11
	30	សាង រូស	20	5
	31	ស្រែ បាង	20	5
	32	ឡាន ស្រែ	100	26
	33	ស្រែ ឡាន	100.	7
	34	សាង បាង	100	1.
			=	

IV. Conclusion

From the demarcations and consultation with land holders along the dikes of Ro Hal and Boeng Trav dikes, it is concluded that

- Rehabilitation of Ro Hal and Khae Luo dikes has no significant impacts to the rice fields, buildings, trees etc.
- Boeng Trav dike has a minor impact to rice field land use as the farmers plant their crops up to the toe slope of the dike. Considering the requirement of additional volume of retaining water to extend the rice field cultivation and production, the 21 affected APs did provide their land donation voluntarily for the rehabilitation of this dike without any claim for compensation.

V. Attachment

V.1. Attachment A-Calculation Sheet of Affected Areas

Boeng Treu Dike										
U.I. No	Name of AP	Location	Total Length	LHS	RHS	Affected Area (m ²)	Total Affected Area (m ²)	Total Land of AH	Percentage of Affected Area	Remark
1	ដីធ្លី ឡូត (Doeun Lot)	0+000	150.000	-	0.700	-	90	10,000	0.90%	
		0+020		-	0.160	8.600				
		0+040		-	0.530	6.900				
		0+060		-	1.000	15.300				
		0+080		-	0.890	18.900				
		0+100		-	0.520	14.100				
		0+120		-	0.400	9.200				
		0+140		-	0.600	10.000				
		0+150		-	0.745	6.725				
2	វាល ប្រាស (Vorn Poch)	0+160	40.000	-	0.890	8.175	46	70,000	0.07%	
		0+180		-	1.400	22.900				
		0+190		-	1.565	14.825				
3	ឈូក ឆៀល (Chhorn Seak)	0+200	45.000	-	1.730	16.475	79	5,000	1.58%	
		0+220		-	1.820	35.500				
		0+235		-	1.785	27.038				
4	បឹង ចាន់ធី (Him Chanthy)	0+240	50.000	-	1.750	8.838	64	50,000	0.13%	
		0+260		-	0.850	26.000				
		0+275		-	1.140	14.925				
		0+280		-	1.430	6.425				
		0+285		-	1.770	8.000				
5	បូ ផា (Bo Pha)	0+300	60.000	-	2.110	29.100	100	10,000	1.00%	
		0+320		-	1.430	35.400				
		0+340		-	1.330	27.600				
		0+345		-	1.720	7.625				
6	ស៊ីម ឡាង (Sim Lang)	0+360	50.000	-	2.110	28.725	119	20,000	0.59%	
		0+380		-	2.820	49.300				
		0+395		-	2.580	40.500				
7	ជួន ចាម (Chuan Cham)	0+400	100.000	-	2.340	12.300	223	50,000	0.45%	
		0+420		-	0.930	32.700				
		0+440		-	2.670	36.000				
		0+460		-	3.740	64.100				
		0+480		-	1.120	48.600				
		0+495		-	2.745	28.988				
8	រំលីង រឹម (Roeun Rim)	0+500	70.000	-	4.370	17.788	231	60,000	0.39%	
		0+520		-	4.490	88.600				
		0+540		-	2.160	66.900				
		0+560		-	2.410	45.700				
		0+565		-	2.610	12.550				
9	ប៉ាន លីម (Pann Lim)	0+580	15.000	-	2.810	40.650	41	10,000	0.41%	
10	លើង ចេ: (Loeun Chee)	0+600	20.000	-	3.000	58.100	58	15,000	0.39%	
11	ស្រែក ជីវ (Seek Jiv)	0+620	100.000	-	3.020	60.200	241	30,000	0.80%	
		0+640		-	2.150	51.700				
		0+660		-	1.600	37.500				
		0+680		-	2.200	38.000				
		0+700		-	3.180	53.800				
12	ស្រី ឈីន (Sou Chhin)	0+720	20.000	-	3.300	64.800	65	60,000	0.11%	
13	បឹង ស៊ីតុល (Him Sithol)	0+740	50.000	-	3.400	67.000	163	10,000	1.63%	
		0+760		-	3.150	65.500				
		0+770		-	2.990	30.700				
14	ក្រណា ប្រាម (Korn Bona)	0+780	15.000	-	2.830	29.100	44	5,000	0.88%	
		0+785		-	3.215	15.113				
15	ឈ្នាញ ឆ្រែង (Chhet Sreng)	0+800	15.000	-	3.600	51.113	51	20,000	0.26%	

Boeng Trav Dike

Ref. No.	Name of AP	Location	Total Length	LHS	RHS	Affected Area (m ²)	Total Affected Area (m ²)	Total Land of AH	Percentage of Affected Area	Remark
16	ឃុំចាន់ថា (Eng Chantha)	0+820	60.000	-	2.500	61.000	116	70,000	0.17%	
		0+840		-	1.120	36.200				
		0+860		-	0.750	18.700				
17	ឃុំវិល (Pov Vina)	0+880	100.000	-	0.520	12.700	214	20,000	1.07%	
		0+900		-	2.700	32.200				
		0+920		-	3.290	59.900				
		0+940		-	3.200	64.900				
		0+960		-	1.250	44.500				
18	ឃុំវ៉ាន់ (Vorn Em)	0+980	70.000	-	2.640	38.900	172	10,000	1.72%	
		1+000		-	3.370	60.100				
		1+020		-	2.170	55.400				
		1+030		-	1.415	17.925				
19	ឃុំស្រែច័ង្ក (Leng Phelly)	1+040	80.000	-	0.660	10.375	205	30,000	0.68%	
		1+060		-	3.180	38.400				
		1+080		-	3.120	63.000				
		1+100		-	3.120	62.400				
		1+110		-	3.140	31.300				
20	ឃុំសំយ៉ា (Sam Yi)	1+120	120.000	-	3.160	31.500	351	20,000	1.76%	
		1+140		-	3.300	64.600				
		1+160		-	3.350	66.500				
		1+180		-	1.920	52.700				
		1+200		-	2.900	48.200				
		1+220		-	3.000	59.000				
		1+230		-	2.750	28.750				
21	ឃុំអូរឃ្មុំ (Ao Eoun)	1+240	100.000	-	2.500	26.250	287	20,000	1.43%	
		1+260		-	2.960	54.600				
		1+280		-	3.000	59.600				
		1+300		-	3.490	64.900				
		1+320		-	2.120	56.100				
		1+330		-	2.980	25.500				

V.2. Attachment B-Inventory List of Ro Hal and Khsae Luo dikes

ការបោះឆ្នោតសម្រាប់ កម្ពុជា
ស្ថានភាពសម្រាប់ កម្ពុជា

លេខសម្គាល់សម្រាប់ កម្ពុជា

ល.រ	ឈ្មោះសម្ភារៈ	ឈ្មោះ	ប្រភេទ/កម្រិត/ទំហំ	ចំនួន/តម្លៃ
1	ស្រូវ ខ្ពស់	ស្រូវ	12 m	1 st 61A
2	ស្រូវ ទាប	ស្រូវ	18 m	2 nd 21A
3	ស្រូវ ក្នុង	ស្រូវ	11 m	1 st 31A
4	ស្រូវ ខ្ពស់	ស្រូវ	22 m	2 nd 12A
5	ស្រូវ ខ្ពស់	ស្រូវ	71 m	1, 79A
6	ស្រូវ ខ្ពស់	ស្រូវ	26 m	1, 45A
7	ស្រូវ ខ្ពស់	ស្រូវ	20 m	1, 65A
8	ស្រូវ ខ្ពស់	ស្រូវ	20 m	1, 21A
9	ស្រូវ ខ្ពស់	ស្រូវ	38 m	3, 36A
10	ស្រូវ ខ្ពស់	ស្រូវ	22 m	2, 25A
11	ស្រូវ ខ្ពស់	ស្រូវ	31 m	2, 12A
12	ស្រូវ ខ្ពស់	ស្រូវ	22 m	1, 35A
13	ស្រូវ ខ្ពស់	ស្រូវ	10 m	0, 45A
14	ស្រូវ ខ្ពស់	ស្រូវ	10 m	1, 45A
15	ស្រូវ ខ្ពស់	ស្រូវ	27 m	1, 81A
16	ស្រូវ ខ្ពស់	ស្រូវ	11 m	1, 66A
17	ស្រូវ ខ្ពស់	ស្រូវ	22 m	2, 96A
18	ស្រូវ ខ្ពស់	ស្រូវ	27 m	2, 99A
19	ស្រូវ ខ្ពស់	ស្រូវ	10 m	0, 51A
20	ស្រូវ ខ្ពស់	ស្រូវ	33 m	4, 16A
21	ស្រូវ ខ្ពស់	ស្រូវ	22 m	1, 98A
22	ស្រូវ ខ្ពស់	ស្រូវ	10 m	3, 50A
23	ស្រូវ ខ្ពស់	ស្រូវ	6 m	1, 18A
24	ស្រូវ ខ្ពស់	ស្រូវ	6 m	1, 19A
25	ស្រូវ ខ្ពស់	ស្រូវ	6 m	1, 18A
26	ស្រូវ ខ្ពស់	ស្រូវ	61 m	6, 27A
27	ស្រូវ ខ្ពស់	ស្រូវ	23 m	2, 81A

28	ပုံစံ အမှတ်	ပုံစံ	38 m	4, 27 A
29	ပုံစံ အမှတ်	ပုံစံ	17 m	1, 69 A
30	ပုံစံ အမှတ်	ပုံစံ	23 m	4, 12 A
31	ပုံစံ အမှတ်	ပုံစံ	10 m	1, 47 A
32	ပုံစံ အမှတ်	ပုံစံ	12 m	1, 61 A
33	ပုံစံ အမှတ်	ပုံစံ	11 m	4, 91 A
34	ပုံစံ အမှတ်	ပုံစံ	18 m	1, 59 A
35	ပုံစံ အမှတ်	ပုံစံ	21 m	3, 19 A
36	ပုံစံ အမှတ်	ပုံစံ	24 m	5, 12 A
37	ပုံစံ အမှတ်	ပုံစံ	10 m	1, 50 A
38	ပုံစံ အမှတ်	ပုံစံ	33 m	3, 12 A
39	ပုံစံ အမှတ်	ပုံစံ	11 m	1, 70 A
40	ပုံစံ အမှတ်	ပုံစံ	10 m	1, 50 A
41	ပုံစံ အမှတ်	ပုံစံ	23 m	2, 35 A
42	ပုံစံ အမှတ်	ပုံစံ	22 m	2, 20 A
43	ပုံစံ အမှတ်	ပုံစံ	16 m	1, 90 A
44	ပုံစံ အမှတ်	ပုံစံ	8 m	9, 40 A
45	ပုံစံ အမှတ်	ပုံစံ	19 m	1, 60 A
46	ပုံစံ အမှတ်	ပုံစံ	53 m	4, 11 A
47	ပုံစံ အမှတ်	ပုံစံ	10 m	1, 50 A
48	ပုံစံ အမှတ်	ပုံစံ	23 m	3, 98 A
49	ပုံစံ အမှတ်	ပုံစံ	20 m	2, 00 A
50	ပုံစံ အမှတ်	ပုံစံ	13 m	1, 59 A
51	ပုံစံ အမှတ်	ပုံစံ	6 m	2, 75 A
52	ပုံစံ အမှတ်	ပုံစံ	6 m	6, 19 A
53	ပုံစံ အမှတ်	ပုံစံ	5 m	1, 25 A
54	ပုံစံ အမှတ်	ပုံစံ	12 m	1, 41 A
55	ပုံစံ အမှတ်	ပုံစံ	12 m	2, 41 A
56	ပုံစံ အမှတ်	ပုံစံ	16 m	2, 56 A
57	ပုံစံ အမှတ်	ပုံစံ	19 m	3, 16 A
58	ပုံစံ အမှတ်	ပုံစံ	10 m	1, 46 A
59	ပုံစံ အမှတ်	ပုံစံ	10 m	1, 46 A
60	ပုံစံ အမှတ်	ပုံစံ	10 m	1, 41 A

61	အောက်ပိုင်း အောက်	အောက်	21m	1, 28A
62	အောက်ပိုင်း အောက်	အောက်	15m	3, 59A
63	အောက်ပိုင်း အောက်	အောက်	27m	1, 16A
64	အောက်ပိုင်း အောက်	အောက်	43m	4, 32A
65	အောက်ပိုင်း အောက်	အောက်	44m	1, 60A
66	အောက်ပိုင်း အောက်	အောက်	12m	1, 47A
67	အောက်ပိုင်း အောက်	အောက်	12m	4, 57A
68	အောက်ပိုင်း အောက်	အောက်	17m	3, 59A
69	အောက်ပိုင်း အောက်	အောက်	27m	3, 96A
70	အောက်ပိုင်း အောက်	အောက်	23m	3, 32A
71	အောက်ပိုင်း အောက်	အောက်	45m	1, 49A
72	အောက်ပိုင်း အောက်	အောက်	14m	1, 38A
73	အောက်ပိုင်း အောက်	အောက်	12m	2, 93A
74	အောက်ပိုင်း အောက်	အောက်	23m	4, 89A
75	အောက်ပိုင်း အောက်	အောက်	80m	3, 26A
76	အောက်ပိုင်း အောက်	အောက်	53m	4, 42A

အောက်ပိုင်း အောက် 185, 28A
 အောက်ပိုင်း အောက် 185, 28A

အောက်ပိုင်း အောက်

အောက်ပိုင်း အောက်

✓

ឈ្មោះ: វ៉ាន់ ណាត្រី កម្ពុជា
ឈ្មោះ សញ្ជាតិ លេខ ថ្ងៃខែឆ្នាំកំណើត

ឈ្មោះ សញ្ជាតិ លេខ ថ្ងៃខែឆ្នាំកំណើត

ល.រ	ឈ្មោះកូនកង	ឈ្មោះ	ថ្ងៃខែឆ្នាំកំណើត	ថ្ងៃខែឆ្នាំកំណើត
1	វ៉ាន់ ណាត្រី	កូន	112 m	2 ⁴ 24 ^A
2	វ៉ាន់ ណាត្រី	កូន	140 m	3 ⁴ 10 ^A
3	វ៉ាន់ ណាត្រី	កូន	200 m	3 ⁴ 50 ^A
4	វ៉ាន់ ណាត្រី	កូន	260 m	5 ⁴ 15 ^A
5	វ៉ាន់ ណាត្រី	កូន	120 m	4 ⁴ 12 ^A

សរុប: 18⁴ 12^A

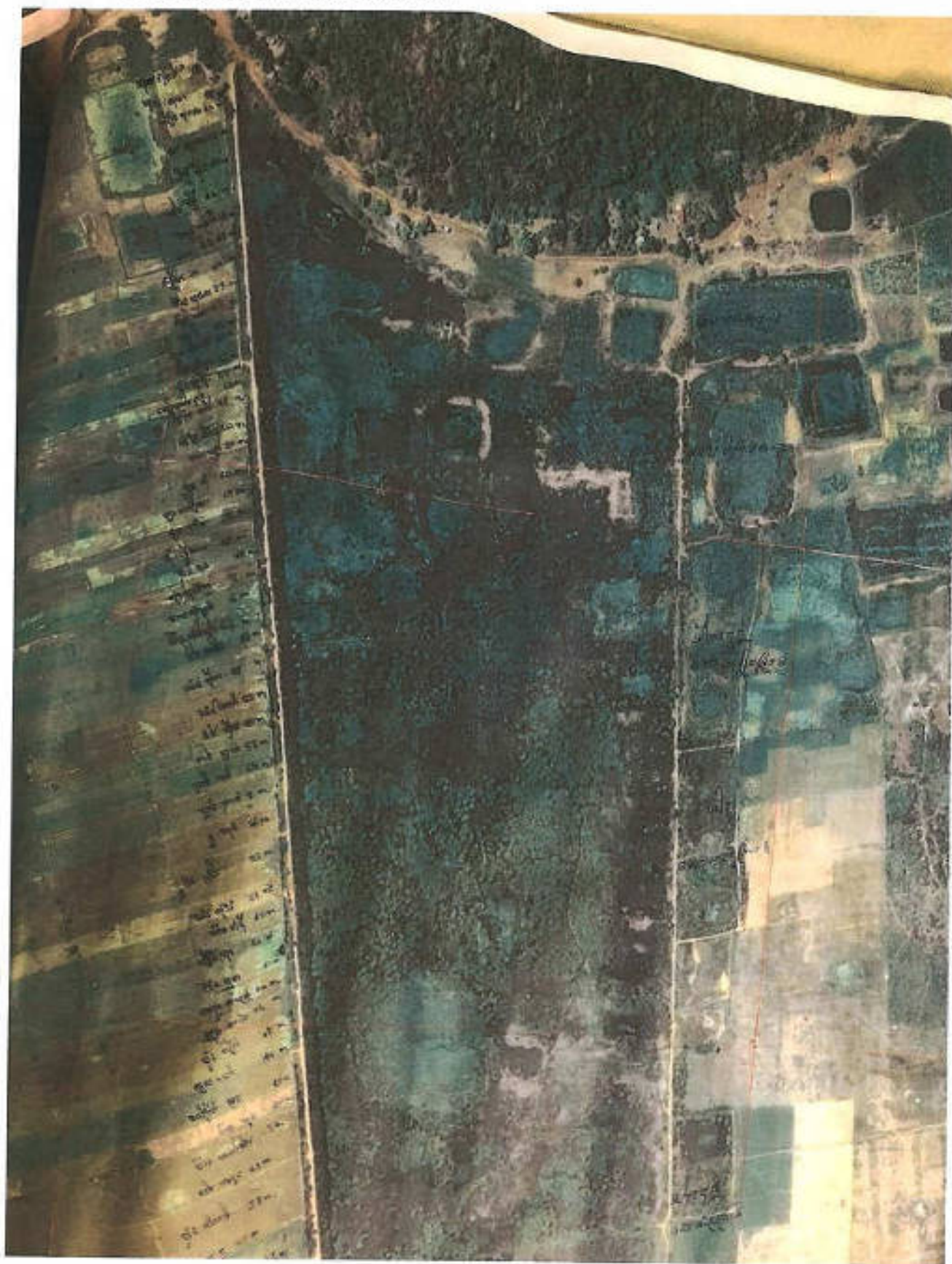
ថ្ងៃខែឆ្នាំកំណើត: 21-10-2018

ថ្ងៃខែឆ្នាំកំណើត: 21-10-2018

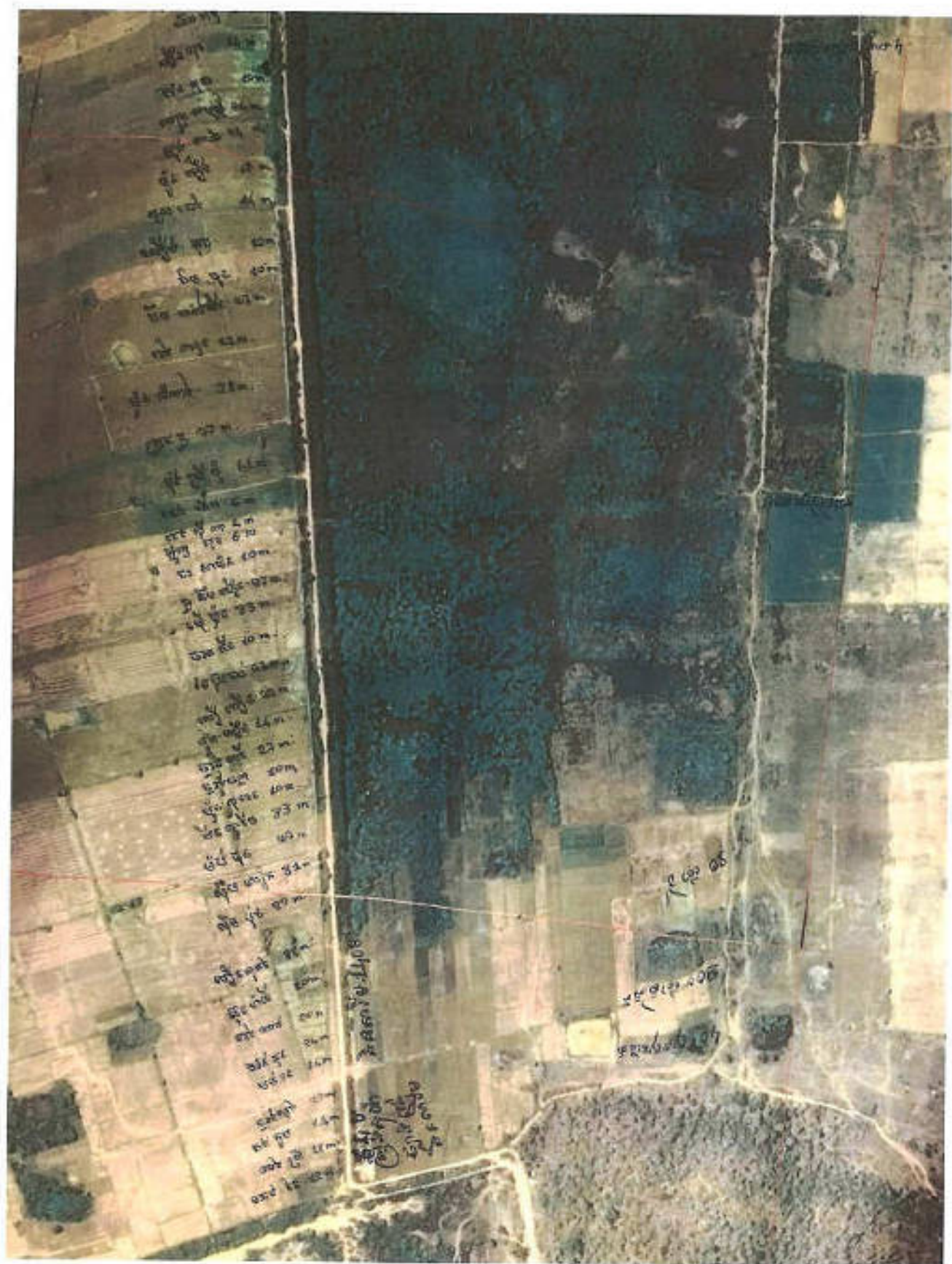
ឈ្មោះ: វ៉ាន់ ណាត្រី

V.3. Attachment C- Inventory List on Maps

V.3.1. Ro Hal and Ksae Luo Dike



✓



V.3.2. Boeng Trav Dike

