

Updated Initial Environmental Examination

December 2015

CAM: Technical and Vocational Education and Training Sector Development Program (TVETSDP) – Additional Financing

Prepared by the Directorate General of Technical Vocational Education and Training (DGTVET).

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MINISTRY OF LABOUR AND VOCATIONAL TRAINING
Technical and Vocational Education and Training Sector Development Project (TVETSDP)
ADB Loan No. 3167-CAM

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Date: 23 December 2015	Page: 1

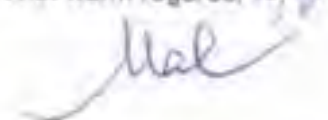
Our Reference: TVETSDP/ADB Loan No. 3167-CAM/MLVT/15/015

Subject: ADB Loan No. 3167 Technical and Vocational Education and Training Sector Development Project
-Initial Environmental Examination

Dear Ms. Ayako Inagaki,

We are pleased to submit the Initial Environmental Examination (IEE) dated December 2015 for the proposed TVETSDP-Additional Financing Project. The document has been prepared based on ADB's Safeguard Policy Statement 2009. We understand that the IEE will be publicly disclosed on ADB's website.

With warm regards,



Pok Pann
Under Secretary of State, MLVT and
Deputy Director of TVETSDP, MLVT

cc: **Mr. Chhuon Samrith**, Director, Department of Cooperation and Debt Management, MEF
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CURRENCY EQUIVALENTS

(as of 16 November 2015)

Currency Unit	=	Riel (KHR)
KHR 1.00	=	\$0.000247
US\$1.00	=	4,045 KHR

ABRREVIATIONS

ADB	–	Asian Development Bank
AFD	-	Agence Française de Développement
AP		affected person
APSARA	–	Authority for the Protection and Management of Angkor and the Region of Siem Reap
CHSP	–	Community Health and Safety Plan
DGTVET	–	Directorate General of Technical Vocational Education and Training
EIA	–	Environment Impact Assessment
EMoP	–	Environmental Monitoring Plan
EMP	–	Environment Management Plan
GRC	–	Grievance Redress Committee
GRM	–	Grievance Redress Mechanism
IEE	–	Initial Environment Examination
MLVT	–	Ministry of Labour and Vocational Training
MoEYS	–	Ministry of Education, Youth and Sports
OHSP	–	Occupational Health and Safety Plan
PCU	–	Project Coordination Unit
PDLVT	–	Provincial Department of Labour and Vocational Training
PPE	–	Personal Protective Equipment
PTC	–	Provincial Training Center
RGC	–	Royal Government of Cambodia
ROW	–	right-of-way
RTC	–	Regional Training Center
SPS	–	ADB's Safeguard Policy Statement 2009
TVET	–	Technical Vocational Education and Training
TVETSDP	–	Technical Vocational Education and Training Sector Development Program
TVETSDP-AF	-	Technical Vocational Education and Training Sector Development Program-Additional Financing

WEIGHTS AND MEASURES

°C	–	Celsius (Centigrade)
km	–	kilometer
km ²	–	square kilometer
m	–	meter
m ²	–	square meter

NOTE

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

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EXECUTIVE SUMMARY

1. The Royal Government of Cambodia (RGC) has requested a loan from Asian Development Bank (ADB) in the amount of \$23 million to finance the proposed Technical Vocational Education and Training Sector Development Program (TVETSDP) which will support the government to address equity and quality issues facing the technical vocational education and training (TVET) system through: (i) increased access to TVET programs, particularly for women and the poor; (ii) improved quality and relevance of the TVET system; and (iii) strengthened governance and management of TVET delivery. The Project supports RGC's commitment toward the development of high-quality, skilled and capable human resources in order to meet the immediate and long-term needs of economic growth and socio-economic development. The Executing Agency is the Ministry of Labour and Vocational Training (MLVT) and the implementing agency is the Directorate General of TVET (DGTVE). The loan for TVETSDP was approved by ADB on 26 September 2014.

2. During the preparation stage of TVETSDP, the Agence Française de Développement (AFD) expressed interest in co-financing to the investment part of the program. However, the scope and administration of the co-financing was not finalized by the time of ADB's loan approval. After the loan effectiveness, MLVT and AFD agreed to provide additional financing. On 17 June 2015, the AFD Board of Directors approved additional co-financing through a \$15.0 million equivalent loan, to be administered by ADB. Building on the existing program design, the proposed additional co-financing will scale-up activities under the investment part of TVETSDP.

3. This IEE, which was prepared originally for the TVETSDP, has been updated to include the additional works to be undertaken under the proposed additional financing (referred to as TVETSDP-AF in this IEE). This initial environment examination (IEE) report directly relates to the increased access to TVET programs, particularly for women and the poor and improved quality and relevance of the TVET system with the implementation of the following construction and rehabilitation activities:

- (i) construction of three women dormitories with water and sanitation packages in the provincial training centers (PTCs) of Koh Kong, Banteay Meanchey and Chantiers-Ecoles de Formation Professionnelle in Siem Reap under TVETSDP, and three dormitories with water and sanitation packages in the provincial training centers (PTCs) of Kratie, Battambang Prey Kounkhla and Kandal under the proposed TVETSDP-AF;
- (ii) construction of nine workshops with specialized equipment packages at PTCs of Banteay Meanchey, Kampong Cham, Kampong Speu, Kampong Thom, Kandal, Koh Kong, Pursat, Siem Reap and Sihanoukville under TVETSDP, and nine workshops with specialized equipment packages at Prey Veng PTC, Tbong Khmum PTC, Kratie PTC, Kep PTC, Japan Vocational Center (JVC), Kampong Chhnang PTC, Battambang Prey Koun Khla PVC, Pailin PTC and Odor Meanchey PTC under the proposed TVETSDP-AF;
- (iii) construction of additional building including workshops and classrooms at the Battambang Institute of Technology under TVETSDP, and building in Tbong Khmum PTC, Siem Reap CEFPTC and Cambodia-India Entrepreneurship Development Institute (CIEDI) under the proposed TVETSDP-AF; and
- (iv) rehabilitation of the DGTVE building.

4. The proposed civil works are on existing public TVET institutions. The locations of the public TVET institutions are government-owned land except for Chantiers-Ecoles de Formation Professionnelle in Siem Reap, where the land ownership for the proposed new location has been transferred by Apsara Authority to the Ministry of Labor, Vocation and Training (MLVT). There are no protected areas, environmental sensitive areas, wetlands, mangroves, estuaries, cultural heritage site or historical monuments in or near the Project's location.

5. The Ministry of Environment (MoE) does not require the Project to undertake an environment impact assessment (EIA). However, based on the ADB's Rapid Environment Assessment Checklist and Safeguards Policy Statement 2009, the environmental categorization of the project is category B, requiring the preparation of initial environment examination (IEE).

6. The final technical design (i.e. number of bed, number of floor-level, total floor area) of the dormitory, workshop and building is not yet identified. To ensure the structural integrity of the new structures, the design should comply with applicable national and international standards. Also, the technical design of the workshops, dormitory, additional building and rehabilitation activities shall take into consideration the following: (i) 2012 School Construction Guidelines of Cambodia; (ii) provision of water supply which will meet applicable national and international drinking water quality standards; (iii) construction of sanitation facilities should not be located near source of drinking water (at least 30 meters from the source of drinking water) and consistent with applicable national and international guidelines (i.e. World Health Organization's Water, Sanitation and Hygiene Standards for Schools in Low-cost Settings); and (iv) design considerations should be consistent with the Master Plan of the public TVET institutions. This IEE will be updated, if necessary upon completion of the technical design of the Project.

7. The anticipated impacts on the physical and biological environment are temporary, localized, relatively in small area and can be easily avoided or minimized with the implementation of mitigation and monitoring measures which are detailed in the environmental mitigation plan ((EMP) and environmental monitoring plan (EMoP), respectively. The following are the anticipated impacts and the corresponding mitigation measures during the construction phase of the Project:

(i) air pollution from the dust emissions from on-site excavation, movement of earth materials and emission from movement of heavy equipment and construction vehicles which will be mitigated by good construction practices such as water spraying on road surface and work areas, covering all materials during transportation, proper maintenance of construction vehicles and equipment, and washing truck-tires particularly trucks carrying soil from an excavated site and construction areas;

(ii) water pollution from run-off or soil erosion from stockpiled construction materials and wastewater from domestic sewage of construction workers and accidental spillage of oil and other lubricants from washing of construction equipment, which will be mitigated by covering exposed soils, construction of temporary silt traps, and provision of adequate and on-site sanitation facilities;

(iii) noise pollution from the construction activities resulting to disturbance of classes and nuisance to the community, which will be mitigated with continuous consultation with the officials of the training centers and the community on the schedule and time of construction activities and the use of noise suppression on construction equipment;

(iv) generation of solid wastes, which will be mitigated by the provision of waste bins in the construction site and the proper segregation, temporary storage, collection and disposal of solid wastes will be strictly observed;

(v) occupational health and safety in the construction site causing harm and danger to the lives and welfare of workers, which will be mitigated with the implementation of occupational and health safety plan including the provision of personal protective equipment to all workers;

(vi) community health and safety such as the disruption of normal traffic patterns, traffic accident, damage or degradation of national roads from the transport of materials and risks from unauthorized entry to the construction resulting to accidents. This will be mitigated by the implementation of community health and safety plan which will include recruitment of duly licensed drivers, the provision of fence to enclose the area of civil works and posting warning signs and information in the construction area.

8. During the operation and maintenance of the workshop, dormitory and building, the public TVET institutions will ensure the implementation of proper segregation, temporary storage, collection and disposal of solid waste, provision of adequate drinking water supply and sanitation facilities, implementation of occupational health and safety to all trainees and staff, and emergency response plan during fire, earthquake and other incidents.

9. Public consultations involving the stakeholders of the project was conducted through consultation meetings and key informant interviews. The concerns and recommendations of the stakeholders were incorporated in the EMP. A grievance redress mechanism (GRM) is also established to address and facilitate complaints in a timely and transparent manner during the construction phase of the project.

10. Results of the initial environment examination show that the construction of dormitory, workshop and building at the public TVET institutions and rehabilitation of the DGTvet building will not result to significant adverse environmental impacts. The anticipated impacts during the construction phase of the project are temporary, localized and in relatively small area which can be easily mitigated with the implementation of EMP and EMoP. Also, based on the result of the social perception survey conducted in the public TVET institutions and the local community in the training centers, the Project is acceptable and will create positive social impacts to women, indigenous people and the poor by increasing their access to education, thus improving their quality of life.

I. INTRODUCTION

A. Project Overview

11. The Royal Government of Cambodia (RGC) has requested a project loan from Asian Development Bank (ADB) in the amount of \$23 million to finance the proposed Technical Vocational Education and Training Sector Development Program (TVETSDP) which will support the government to address equity and quality issues facing the technical vocational education and training (TVET) system through: (i) increased access to TVET programs, particularly for women and the poor; (ii) improved quality and relevance of the TVET system; and (iii) strengthened governance and management of TVET delivery. The Project supports RGC's commitment toward the development of high-quality, skilled and capable human resources in order to meet the immediate and long-term needs of economic growth and socio-economic development¹. The loan for TVETSDP was approved by ADB on 26 September 2014.

12. During the preparation stage of TVETSDP, the Agence Française de Développement (AFD) expressed interest in co-financing to the investment part of the program. However, the scope and administration of the co-financing was not finalized by the time of ADB's loan approval. After the loan effectiveness, MLVT and AFD agreed to provide additional financing. On 17 June 2015, the AFD Board of Directors approved additional co-financing through a \$15.0 million equivalent loan, to be administered by ADB. Building on the existing program design, the proposed additional co-financing will scale-up activities under the investment part of TVETSDP.

13. This IEE, which was prepared originally for the TVETSDP, has been updated to include the additional works to be undertaken under the proposed additional financing (referred to as TVETSDP-AF in this IEE).

14. This initial environment examination (IEE) report directly relates to the increased access to TVET programs, particularly for women and the poor and improved quality and relevance of the TVET system with the implementation of the following project activities:

- (i) construction of three women dormitories with water and sanitation packages in the provincial training centers (PTCs) of Koh Kong, Banteay Meanchey and Chantiers-Ecoles de Formation Professionnelle in Siem Reap under TVETSDP, and three dormitories with water and sanitation packages in the provincial training centers (PTCs) of Kratie, Battambang Prey Kounkhla and Kandal under the proposed TVETSDP-AF;
- (ii) construction of nine workshops with specialized equipment packages at PTCs of Banteay Meanchey, Kampong Cham, Kampong Speu, Kampong Thom, Kandal, Koh Kong, Pursat, Siem Reap and Sihanoukville under TVETSDP, and nine workshops with specialized equipment packages at Prey Veng PTC, Tbong Khmum PTC, Kratie PTC, Kep PTC, Japan Vocational Center (JVC), Kampong Chhnang PTC, Battambang Prey Koun Khla PVC, Pailin PTC and Odor Meanchey PTC under the proposed TVETSDP-AF;
- (iii) construction of additional building including workshops and classrooms at the Battambang Institute of Technology under TVETSDP, and building in Tbong

¹ Royal Government of Cambodia, Rectangular Strategy for Growth, Employment, Equity and Efficiency Phase III, Phnom Penh, September 2013.

Khmum PTC, Siem Reap CEFP PTC and Cambodia-India Entrepreneurship Development Institute (CIEDI) under the proposed TVETSDP-AF; and
(iv) rehabilitation of the DGTVET building.

15. The executing agency of the Project is the Ministry of Labour and Vocational Training (MLVT) and the implementing agency is the Directorate General of TVET (DGTVET).

B. Scope and Objective of the IEE

16. The Ministry of Environment (MoE) does not require the Project to undertake an environment impact assessment. However, using the ADB's Rapid Environment Assessment Checklist (Appendix 1), the Project is classified as category B, requiring the preparation of an Initial Environment Examination (IEE) report.

17. The objectives of the IEE are to:

- (i) assess the existing environmental and socioeconomic conditions of the project areas including the identification of environmentally sensitive areas;
- (ii) identify likely impacts of the proposed project on the physical, biological and socioeconomic environment;
- (iii) propose appropriate mitigation and monitoring measures that could be incorporated in the environmental management plan (EMP) to avoid or minimize the identified potential impacts of the project.

18. The information in the IEE report are based on secondary sources of information, field visits, consultations and social perception survey to stakeholders using key informant interviews. Also, this IEE will be updated, if necessary when the technical design details (i.e. number of beds, number of rooms and total level/floor of dormitories and building) of the civil works were completed.

II. POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

19. This chapter discusses the policy, legal and administrative framework as well as the institutional set-up relevant to the environmental and social assessment of the project.

A. ADB Policy

1. Safeguard Policy Statement

20. This report has been prepared in accordance with the ADB's Safeguard Policy Statement, 2009 (SPS) which governs the environmental and social safeguards of ADB's operations. Environmental Safeguard Requirements 1 of the SPS outlines the requirements the borrowers/clients are required to meet when delivering environmental safeguards for projects supported by ADB. These requirements include assessing impacts, planning and managing impact mitigations, preparing environmental assessment reports, disclosing information and undertaking consultation, establishing grievance redress mechanism (GRM), and monitoring and reporting. SR1 also includes specific environmental safeguard requirements pertaining to biodiversity conservation and sustainable management of natural resources, pollution prevention and abatement occupational health and safety, and conservation of physical cultural resources.

2. Screening and categorization

21. At an early stage of the project, ADB screens and categorizes proposed projects based on the significance of potential project impacts and risks. Screening and categorization is undertaken to (i) reflect the significance of potential impacts or risks that a project might present; (ii) identify the level of assessment and institutional resources required for the safeguard measures; and (iv) determine disclosure requirements. A project's category is determined by the category of its most environmentally sensitive component, including direct, indirect, cumulative, and induced impacts in the project's area of influence. The nature of the environmental assessment required for a project depends on the significance of its environmental impacts, which are related to the type and location of the project; the sensitivity, scale, nature, and magnitude of its potential impacts; and the availability of cost-effective mitigation measures. Projects are screened for their expected environmental impacts, and are assigned to one of the following four categories:

- (i) **Category A.** Projects could have significant adverse environmental impacts. An EIA is required to address significant impacts.
- (ii) **Category B.** Projects could have some adverse environmental impacts, but of lesser degree or significance than those in category A. An IEE is required to determine whether significant environmental impacts warranting an EIA are likely. If an EIA is not needed, the IEE is regarded as the final environmental assessment report.
- (iii) **Category C.** Projects are unlikely to have adverse environmental impacts. No EIA or IEE is required, although environmental implications are reviewed.
- (iv) **Category FI.** Projects involve a credit line through a financial intermediary or an equity investment in a financial intermediary. The financial intermediary must apply an environmental management system, unless all projects will result in insignificant impacts.

22. The REA checklist for the preparation of IEE was completed and verified by international national environment specialist during the site visits on June 5-12, 2014 in the public TVET institutions. The main purpose of the site visits are the following:

- (i) assessment of the existing location and the surrounding environment of the public TVET locations and identify if there are sensitive areas, archaeological sites and historical sites located in or near the project area;
- (ii) identify potential environmental and socioeconomic impacts on the proposed construction of dormitories, workshops, additional building and rehabilitation of the DGTvet building;
- (iii) consultation with the officials and staff of MLVT, DGTvet, PTCs, and Commune Council about the project; and
- (iv) conduct social perception survey through key informant interviews to stakeholders.

3. Public Disclosure

23. ADB will post the below safeguard documents on its website as well as disclose relevant information in accessible manner in local communities;

- (i) For environment category A projects, draft EIA report at least 120 days before Board consideration;
- (ii) Final or updated EIA and/or IEE upon receipt; and
- (iii) Environmental monitoring reports submitted for the project

B. Cambodia Environmental Laws and Guidelines

24. Implementation of the project will be governed by the environmental acts, rules, policies and regulations of the Royal Government of Cambodia. These regulations impose restrictions and guidelines on the activities to minimize and/or mitigate likely impacts to the environment. The project will involve construction activities and civil works in existing location of the public TVET institutions and is considered as a rehabilitation and/or expansion project.

1. Environmental Laws

25. The Law on Environmental Protection and Natural Resources Management (No: NS/RKM/1296/36) was enacted in 1996 and is the main law for protection of the environment in Cambodia. Article 6 of the law requires that environmental impact assessment (EIA) be undertaken for proposed projects with the Ministry of Environment designated as the authority to review EIAs prior to submission to the Government for approval.

26. The Sub-Decree on Environmental Impact Assessment and Process (Sub-Decree 72, 11 August 1999) supports the Law of Environmental Protection and Natural Resources and sets out institutional responsibilities, impact assessment requirements and the procedures for undertaking the environmental assessment process. The annex to the sub-decree lists all projects (public or private) for which environmental assessment is required. The project which involves the construction of dormitories, workshops, one school building and rehabilitation activities is not required to undertake an EIA because only buildings that have a height greater than or equal to 12m or floor and floor area greater than or equal to 8,000m² requires an EIA.

27. Further, the project is not required to have a construction permit to be issued by the Ministry of Land Management and Urban Planning. The construction activities are on existing location of public TVET institutions which are government-owned land except for the proposed new location of Chantiers-Ecoles de Formation Professionnelle in Siem Reap. Chapter 1, Article 2 of the Sub-Decree ANK/BK No. 86 (December 1997) indicates that reconstruction, renovation, expansions and floor additions of existing building shall be subjected to construction permit, which applies to public and private facilities of more than 3 000m² of floor space and extension including existing buildings of a surface of more of 3 000m² (cultural, sports, education, administration, tourist, health, energy, water).

28. The details on the process and timeline on the request for the transfer of ownership of the new location of Chantiers-Ecoles de Formation Professionnelle in Siem Reap to MLVT is not covered in the scope of the IEE report.

29. Other environmental laws and regulations applicable during the construction activities in the public TVET institutions are the following:

- (i) Sub-Decree ANK/BK No. 42 (July 2000) - The Control of Air Pollution and Noise Disturbance. The general provisions in this sub-decree states its purpose to protect the quality of the environment quality and public health from air pollutants and noise

disturbance through monitoring, curbing and mitigating activities. It applies to all movable sources and immovable sources of air pollution and noise disturbance. Immovable source refers to sources with a permanent location such as a factory, enterprise, warehouse, construction site, incinerator, loud speakers, handicraft, and all kinds of farms.

(ii) Sub-Decree ANK/BK No. 36 (April 1999) - Solid Waste Management: The general provisions of this sub decree set is to regulate the solid waste management with proper technical manner and safe way in order to ensure the protection of human health and the conservation of bio-diversity applicable to all activities related to disposal, storage, collection, transport, recycling, dumping of garbage and hazardous waste.

(iii) Sub-Decree ANK/BK No. 27 (April 1999) - Water Pollution Control: This sub decree applies to all sources of pollution and all activities that cause pollution of the public water areas. Effluent standard for pollution sources discharging wastewater to public water areas or sewer are regulated. Source of pollution refers to any type of places such as dwelling house, public administrative building, premise, transport facilities, business areas or service places from which effluent, pollutants or hazardous substances are directly or indirectly discharged into public water areas or public drainage systems.

2. Heritage Legislation

a. The APSARA Authority

30. The Authority for the Protection and Management of Angkor and the Region of Siem Reap (APSARA), was established in 1995. It is in charge of research, protection and conservation of cultural heritage of the Angkor Protected Landscape (APL), as well as urban and tourist development. In December 1995, the World Heritage Committee confirmed Angkor's permanent inscription on the list of World Heritage Sites in Danger.

31. There are several royal decrees related to the establishment and authority of the APSARA Authority and the protection of the cultural heritage of Angkor:

(i) *Royal Decree NS/RKT/0295/12 establishing a National Authority for the Protection and Management of Angkor and the Region of Siem Reap, named APSARA* (1995, amended in 1998 by Decree NS/RKT/0199/18).

(ii) *Royal Decree 001/NS establishing Protected Cultural Zones in the Siem Reap/Angkor Region and Guidelines for their Management*. The decree establishes management zones within Siem Reap (Zone 1: Monumental Sites; Zone 2: Protected Archaeological Reserves; Zone 3: Protected Cultural Landscapes; Zone 4: Sites of Archaeological, Anthropological or Historic Interest; and Zone 5: The socio-economic and cultural development zone of the Siem Reap/Angkor Region).

b. The Heritage Law

32. The primary legislation of Cambodia pertaining to cultural heritage is the 1996 law on the Protection of Cultural Heritage (NS/RKM/0196/26). Both the looting and export of antiquities without a permit are criminalized. Section 7 of the law also includes procedures for chance discoveries of cultural property during construction.

3. Laws on Nature Reserves

33. Royal Decree “Protected Natural Areas” issued in November 1993 gives protection to environment, land, forests, wetlands and coastal zones. The decree covers twenty-three (23) locations representing 18% of Cambodia’s total area and is under the jurisdiction of the Ministry of Environment.

4. Laws on Wildlife

34. The “Joint Prakas of the Ministry of Environment and Ministry of Agriculture on Prohibition of Hunting and Catching Wildlife Animals, 1996” specifically bans hunting of animals and birds for food. All contractor’s workers must observe this law.

5. Protected Area Law

35. In 2008, Cambodia introduced the Protected Area Law (No. NS/RKM/0208/07), which explicitly defines protected areas as (i) national parks; (ii) wildlife sanctuaries; (iii) protected landscapes; (iv) multiple use areas; (v) Ramsar sites; (vi) biosphere reserves; (viii) natural heritage sites; and (ix) marine parks. None of the public TVET institutions are located in or near the defined protected areas.

6. Applicable Guidelines from MLVT

36. The MLVT has the following guidelines which will be implemented during the construction phase of the Project:

(i) MLVT Prakas² No. 075/11 K.B/BR.K (March 2011) - Sanitation at the Construction Site: The Prakas sets to ensure that the sanitation and safety conditions are fulfilled for the workers at the construction site by owner, director, contractor or sub-contractor of construction establishment or construction company and responsible person to construction site. Article 3 and 4 set to provide workers with shelter, sanitation facilities and safe potable water for drinking and washing.

(ii) MLVT Prakas No. 076/11 K.B/BR.K (March 2011) - The Protection of Risk Resulting From Climate Change at Construction Site. Articles of this Prakas required safety measures and break times for worker at the construction site during extreme weather events.

(iii) MLVT Prakas No. 077/11 K.B/BR.K (March 2011) - Providing of Information at the Construction Site. This Prakas states requirements for owner or responsible person of a construction site to provide information, i.e. name and address of the owner of enterprise, construction establishment, Construction Company, name and address of architect, nature of construction, i.e. road, railway, bridge, dam, canal, residential building, industrial building, and commercial building, date for the start of the construction and estimated time to finish the construction works, and estimated number of workers to be employed for construction activities.

(iv) MLVT Prakas No. 078/11 K.B/BR.K (March 2011) - Stock of Materials, Waste Disposal and Clearance at Construction Site. This Prakas provides safety guidelines and

² Prakas is a Khmer term, which means guidelines and information from the Ministry.

requirements for the safe storage of construction of materials and hazardous substances/objects that can pose health and safety risks to workers.

7. School Construction Guidelines of Cambodia

37. The school construction guidelines was developed by the Ministry of Education, Youth and Sport (MoEYS) in May 2012 with the support from Asian Disaster Preparedness Center (ASPC), United Nations Development Programme (UNDP) and European Commission Human Aid Department (ECHO) is a framework of guiding principles for the design, planning and implementation of school construction in Cambodia, for improving existing school buildings, for maintenance and to make school facilities safe and suitable environments for learning and resilient to the natural hazards predominant in Cambodia³.

8. International Environmental Conventions

38. There are many international environment conventions that Cambodia is a party but are not applicable for this project. The project will involve construction activities on existing location of public TVET facilities and are not located or situated in or near protected areas, cultural heritage and archaeological sites, and historical monuments.

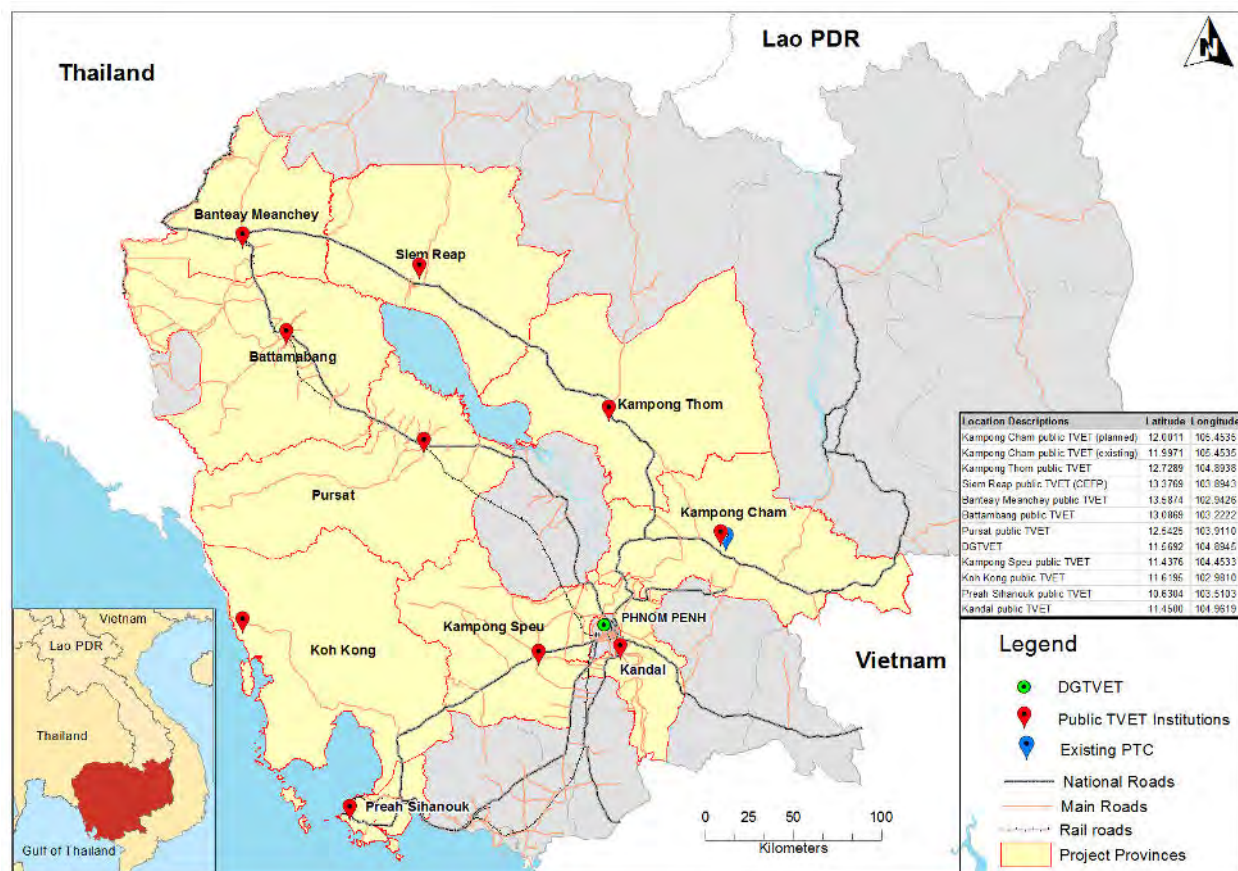
III. DESCRIPTION OF THE PROJECT

A. The Study Area

39. The locations of the construction and rehabilitation activities of the Project are in the following provinces: Phnom Penh, Banteay Meanchey, Battambang, Kampong Cham, Kampong Speu, Kampong Speu, Kampong Thom, Kandal, Koh Konh, Pursat, Siem Reap, Preah Sihanouk, Preyveng, Tbong Khmum, Kratie, Kep, Pailin, and Odor Meanchey. Figure 1 shows the exact location of the public TVET institutions and DGTVET building.

40. The locations of the proposed construction of dormitories, workshops, additional building and rehabilitation activities are located on existing public TVET institutions and new provincial development sites like Tbong Khmum and Siem Reap, which are government-owned land. The ownership of the Siem Reap site has been transferred by the Apsara Authority to the Ministry of Labor, Vocation, Education and Training dated 17 August 2015 (letter number 578/15). The transfer of land ownership for the proposed new location in Tbong Khmum is still on process. All proposed subprojects are located on land owned by government. There are no protected areas, biodiversity areas, wetlands, mangroves, or estuaries, cultural heritage site or historical monuments in or near the project's locations. Also, there are no natural forest areas within or near the public TVET institutions and DGTVET building.

³ Ministry of Education, Youth and Sport, School Construction Guidelines of Cambodia, May 2012.



No	Project locations	Village	Commune	District / Town	Province
01	DGT VET Building	-	-	Tuol Kouk	Phnom Penh
02	Banteay Meanchey PTC	Keap	Teuk Tla	Serey Saophoan	Banteay Meanchey
03	Battambang Institute of Technology	Romchek 4	Ratanak	Battambang	Battambang
04	Kampong Cham PTC*	7	Kampong Cham	Kampong Cham	Kampong Cham
05	Kampong Speu PTC	Tompoung	Kaheng	Samraong Tong	Kampong Speu
06	Kampong Thom PTC	Archar Leak	Archar Leak	Stueng Saen	Kampong Thom
07	Kandal PTC	Preak Tnout	Takhmao	Takhmao	Kandal
08	Koh Kong PTC	1	Smachmeanchey	Koh Kong	Koh Kong
09	Pursat PTC	Chamkachek	Phthesprey	Pursat	Pursat
10	Siem Reap PTC*	Chongkoesour	Slakrom	Siem Reap	Siem Reap
11	Sihanouk PTC	2	3	Preah Sihanouk	Preah Sihanouk
12	Preyveng PTC**	Lek Mouy (1)	Kampong Leav	Preveng	Preveng
13	Tbong Khmum PTC**	Nikum Leu	Sra Lop	Tbong Khmum	Tbong Khmum
14	Kratie PTC**	O'Reusey Pi	O'Reusey	Kratie	Kratie
15	Kep PTC**	Thmey	Preythom	Kep	Kep
16	Battambang Prey Konkhla PTC**	Andong Pring	O'marl	Battambang	Battambang
17	Pailin PTC**	O'Tapuk Krom	Tul Lvea	Pailin	Pailin
18	Odor Meanchey PTC**	Borey Rathabal	Samrong	Samrong	Odor Meanchey
19	Siem Reap PTC**	Prey Kuy	Ampil	Siem Reap	Siem Reap
20	Kampong Chhnang PTC**	Tulkralagn	Kampong Chhnang	Kampong Chhnang	Kampong Chhnang
21	Cambodia-India Entrepreneurship Development Institute (CIEDI)-PP**	Chong Thnal Khang Lech	Teuk Thla	Sensok	Phnom Penh

22	JVC (Japan Vocational Center)-PP**	Prek Samrong	Chroy Changva	Chroy Changva	Phnom Penh
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DGTNET = Directorate General of Technical Vocational Education and Training; PTC = Provincial Training Center
Note: *New PTC location 2014 ** New PTC location 2015

Figure 1: Location Map of the Project

B. Existing Conditions in the Public TVET Institutions

1. Land Area

41. The proposed civil works are on existing public TVET institutions, except Siem Reap and Tbong Khmum which are located in new provincial development sites. The locations of the public TVET institutions are government-owned land. There is enough available space or land area for the proposed construction of women dormitories in Banteay Meanchey, Koh Kong, Kratie, Battambang, Kandal and Siem Reap, eight teen workshops with equipment package in Banteay Meanchey, Kampong Cham, Kampong Speu, Kampong Thom, Kandal, Koh Kong, Pursat, Siem Reap, Sihanouk PTCs, Kratie, Preyveng, Tbong Khmum, Kep, Kampong Chhnang, Battambang BIT, Battambang Prey Kounkhla, Pailin, Phnom Penh- JVC, and Ordor Meanchey, additional building for classroom in Battambang Institute of Technology, and additional building in Tbong Khmum, CIEDI in Phnom Penh and Siem Reap CFP PTC (Salakarathan). Table 1 shows the land area and the existing number of buildings and rooms in the public TVET institutions. The rooms at the training centers are used for lecture, practical training classes or workshop, administration office, meeting or conference area, equipment storage area (i.e. machines for auto-mechanic, computers), library, and temporary dormitory for students and staff.

Table 1: Land Area of the public TVET institutions

Public TVET Institutions	Land Area, m²	Number of Buildings	Number of Rooms
Banteay Meanchey PTC	7, 408	4	9
Battambang Institute of Technology	130, 000	8	16
Kampong Cham PTC (existing)	2, 500	2	17
Kampong Cham PTC (new)	7, 000		
Kampong Speu PTC	14, 375	2	9
Kampong Thom PTC	20, 640	5	14
Kandal PTC	36, 000	5	18
Koh Kong PTC	5, 000	2	8
Pursat PTC	9, 360	4	10
Sihanouk PTC	7,352	2	15
Tbong Khmum	17,000	0	0
Odor Meanchey	4,000	3	13
Kratie	4,725	2	7
Prey Veng	2,584	2	10
Siem Reap	20,070	-	-

m²= square meter

42. Buildings at the public TVET institutions are made of cement concrete with steel reinforcement and burnt clay brick. Most of the buildings have one-floor level except for Kampong Cham and Sihanouk PTCs, which have two-level buildings. The number of rooms in

one building range from 3-6 classrooms. Lighting in the workshop and lecture rooms is from the natural light through the windows and other lighting fixtures (i.e. fluorescent, bulbs). Also, electric fans and air conditioning unit (i.e. Koh Kong PTC) are provided for proper ventilation. However, some PTCs need to improve the ventilation of their classrooms to improve the learning environment in the public TVET institutions. Figure 2 shows the typical buildings and rooms in the public TVET institutions and Figure 3 shows the proposed new location of Siem Reap PTC. The master plans which show the layout of the existing public TVET institutions are shown in Appendix 2.

43. The total number of trainees and staff, water supply and sanitation, electricity supply and solid waste management in the public TVET institutions were incorporated in the discussion of the baseline environment condition in Chapter IV.



Building at Pursat PTC



Lecture room in Battambang Institute of Technology



Lecture and workshop area in Sihanouk PTC



Sewing workshop in Kampong Cham





Temporary dormitory for staff in Banteay Meanchey

Temporary dormitory for students in Koh Kong



Classic and Body Practice Room in JVC, Phnom Penh



Building in Odor Meanchey



Building of class room in Kratie



Room for Motorbike Repair, Kampong Chhnang

Figure 2: Existing buildings, rooms and temporary dormitory in Public TVET institutions



Figure 3: Proposed new location of Siem Reap PTC

2. Training and programs at the public TVET institutions

44. There are a total of 44 TVET institutions in Cambodia: (i) 36 public TVET; (iii) seven private TVET; and (i) one managed by a non-government organization (NGO)⁴. Trainings and programmes in the TVET system can be conducted in the center, community and enterprise (i.e. factory or business center). The following are the type of trainings and programmes provided at the public TVET institutions included in the project⁵:

(i) TVET programmes at upper secondary level

After compulsory education which consists of a 6-year primary education followed by a 3-year lower secondary school, students can enroll in the formal TVET programmes or continues to the 3-year secondary general education⁶. Upper secondary TVET programmes are offered at different levels (each lasting one year) in various areas, including vehicle repairing, general mechanics, computer technology, agricultural mechanics, electricity, electronics, repairing of cooling mechanics. One year training leads to Certificate I for semi-skilled worker; two year programme for certificate II for skilled worker; and three-year programme for certificate III for highly skilled workers. Completing the three-year program is equivalent to high school diploma.

⁴ The complete list of the TVET institutions may be accessed at the National Training Board website. <http://www.ntb.gov.kh/institutions.htm>

⁵ United Nations Education, Scientific and Cultural Organization, International Center for Technical and Vocational Education and Training (UNESCO-UNEVOC) World TVET Database, last accessed on 22 June 2014, <http://www.unevoc.unesco.org/go.php?q=World+TVET+Database&ct=KHM>

⁶ For information on the education system in Cambodia, please refer to the UNESCO-UNEVOC website.

(ii) TVET programmes at higher education level

The formal TVET system also offers training for students who completed grade 12 leading to certificate or High Technical Diploma Level. The trainings last from one to three years.

There are also TVET institutions which offer college degree programs such as Bachelor in Engineering (i.e. Battambang Institute of Technology).

(iii) Short courses or TVET non-formal system

The provincial training centers are the providers on non-formal TVET. These courses are short-term lasting from one-to four months and focusing on basic agriculture, construction, motor repair skills, dress-making, hairdressing-beauty, basic computer, basic English language for tourism, basic accounting, duck and pig raising. The target students for the informal trainings are the less privileged students and mainly designed to address social dislocation and poverty reduction.

45. TVET is funded by the government, international organizations, donor and other stakeholders. The funds are allocated by the National Training Board⁷ through the National Training Fund.

C. Need for the Project

46. The project will address challenges in the TVET system of the need to be responsive to social equity issues by assisting the poor to be skilled laborers which will enhance their family income and to meet the needs of the labor market for skilled workers. Also, implementation of the TVETSDP project will address the following challenges presented by the PTC staff and directors, and local authorities during the site visit and assessment:

- (i) not enough rooms for lecture classes and practical training. It was observed that there are cases when one room is used for two training programs- lecture class of one training program and the other half is for the workshop area of other training program. Also, some rooms are used as temporary dormitory for students and staff;
- (ii) decrease in the number of trainees because most of the trainees live far from the centers and they cannot sustain to travel everyday for the duration of the training; and
- (iii) some of the workshops and rooms do not have enough and up to date equipment and materials to enhance the skills of the trainees. Also, there is a need to enhance and improve the skills and competency of the teachers.

D. Proposed TVETSDP and TVETSDP-AF projects

47. The following are the proposed development in the TVETSDP and TVETSDP-AF project:

- (i) construction of three women dormitories with water and sanitation packages in the provincial training centers (PTCs) of Koh Kong, Banteay Meanchey and Chantiers-Ecoles de Formation Professionnelle in Siem Reap under TVETSDP,

⁷ The National Training Board (NTB) is an apex body for TVET policy formation and for the approval of strategies in the implementation of policies.

and three dormitories with water and sanitation packages in Kratie PTC, Battambang PVC (Prey Kounkhla) and Kandal under TVETSDP-AF;

- (ii) construction of nine workshopswith specialized equipment packages at PTCs of Banteay Meanchey, Kampong Cham, Kampong Speu, Kampong Thom, Kandal, Koh Kong, Pursat, Siem Reap, Sihanoukville under TVETSDP, and nine workshop with specialized equipment packages at PTCs of Preyveng, Tbong Khmum, Kratie, Kep, Janpan Vocational Center (JVC), Kampong Chhnang, Battambang Preykoun Khla, Pailin, and Odor Meanchey (Table 2) under TVETSDP-AF;
- (iii) construction of additional building including workshops and classrooms at the Battambang Institute of Technology under TVETSDP, and construction of additional building at PTCs of Tbong Khmum, **Cambodia-India Entrepreneurship Development Institute** (CIEDI), and Siem Reap CEFP PTC under TVETSDP-AF; and
- (iv) rehabilitation of the DGTVET building (Table 2).

Table 2: Types of the Proposed TVETSDP and AFD Projects

	TVETSDP	TVETSDP-AF
Dormitories	Siem Reap CEFP VTC	Prey konkla VTC
	Kohkong PTC	Kratie PTC
	Banteaymeanchey PTC	Kandal PTC
Workshop	Kampongcham PTC	Prey konkla VTC
	Kampongspeu PTC	Kratie PTC
	Kampongthom PTC	Preyveng PTC
	Kandal PTC	Tbongkhmom PTC
	Siem Reap CEFP VTC ¹	Outdormeanchey PTC
	Kohkong PTC	Kep PTC
	Pursat PTC	Kompongchhang PTC
	Sihanoukville PTC	JVC ³
	Banteaymeanchey PTC	Pailin PTC
	BIT ²	
Classroom	BIT	
Building		Tbongkhmom PTC
		CIEDI ⁴
		Siem Reap CEFP PTC (Salakarathan)
Upgrading18 TVET Institutes		Kampongcham PTC
		Kampongspeu PTC
		Kampongthom PTC
		Kandal PTC
		Siem Reap CEFP VTC
		Kohkong PTC
		Pursat PTC
		Sihanoukville PTC
		Banteaymeanchey PTC
		Prey konkla VTC
		Kratie PTC
		Preyveng PTC

	Tbongkhmom PTC
	Outdormeanchey PTC
	Kep PTC
	Kompongchhang PTC
	JVC
	Pailin PTC

Note: PTC-Provincial Training Center, VTC-Vocational Training Center, ¹-Chantires-Ecoles de Formation Professionnelle (CEFP) calling Salakarthan, ²-Battambang Institute of Technology (BIT)

Note:³-Japan Vocational Center(JVC), ⁴- Cambodia-India Entrepreneurship Development Institute(CIEDI)

E. Implementation Schedule

48. The proposed implementation of the construction of dormitory, workshop, buildings at the public TVET institutions and the rehabilitation of DGTVET building is on 2016-2018.

IV. DESCRIPTION OF THE ENVIRONMENT

49. The data and information presented in the description of the environment are collected through comprehensive literature survey, discussions and interview with stakeholders, and field visits and assessment to the public TVET institutions and DGTVET building.

A. Physical Resources

1. Geography

50. Cambodia shares international borders with Thailand on the west; the Lao People's Democratic Republic to the north; and the Socialist Republic of Vietnam on the east and southeast. It is bounded on the southwest by the Gulf of Thailand. It has 435 km of coastline and a land area of 181, 040 km² (World Bank Group, 2011).

51. Based on the location map (Figure 1) of the Project, the public TVET institutions are situated mostly in the western provinces of Cambodia while the DGTVET Building is in the capital city of Phnom Penh. Phnom Penh has the least land area among all project locations (Table 3). The public TVET institutions are mostly located near or at the district/town centers of a province. The provinces of Kampong Thom, Siem Reap, Banteay Meanchey, Battambang, and Pursat surround the Tonle Sap Lake. And the Kampong Thom Province has the largest land area, followed by the Pursat Province.

Table 3: Land area of the provinces in the project location

No	Province	Capital	Land Area (km ²)
01	Phnom Penh	Phnom Penh	678
02	Banteay Meanchey	Serey Sophoan	6,679
03	Battambang	Battambang	11,748
04	Kampong Cham	Kampong Cham	9,799
05	Kampong Speu	Chbar Mon Town	6,970
06	Kampong Thom	Stueng Saen	15,061
07	Kandal	Takhmao	3,212
08	Koh Kong	Khemarak Phumin	10,045
09	Pursat	Pursat	12,692

10	Siem Reap	Siem Reap	10,299
11	Preah Sihanouk	Preah Sihanouk	2,537
12	Preyveng	Preyveng	4,883
13	Tbangkhmum	Tbong Khmum	-
14	Kratie	Kratie	11,094
15	Kep	Kep	336
16	Kampong Chhnang	Kampong Chhnang	5,521
17	Pailin	Pailin	1,062
18	Odor Meanchey	Samrong	4,873

km² = square kilometers

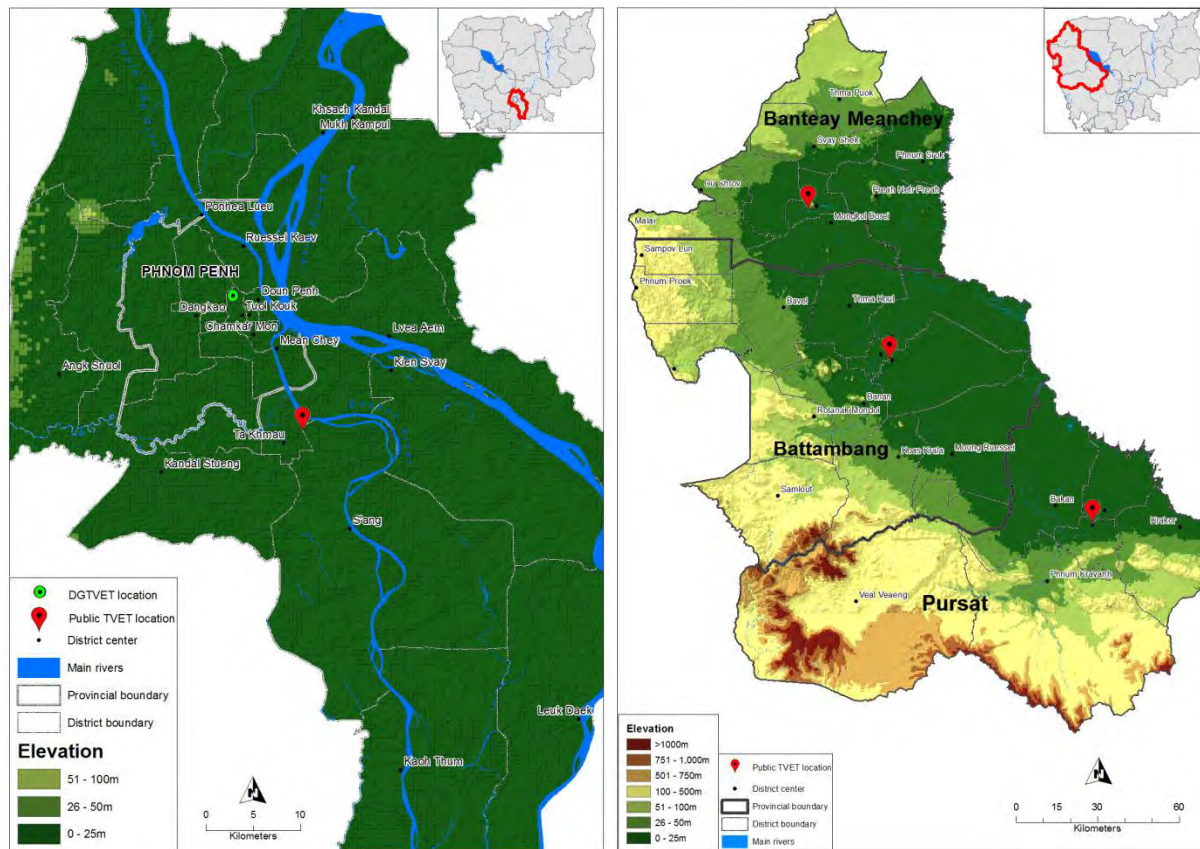
Adapted from: Council for the Development of Cambodia (CDCa). 2014. Municipality info.
<http://www.cambodiainvestment.gov.kh/municipality-info.html>

2. Topography

52. Cambodia is topographically divided into two distinct parts: (i) the central plains and the flat coastal areas; and (ii) the mountainous ranges and high plateau surrounding the low lying land. It is also naturally classified into four environmental regions, i.e. Plain, Tonle Sap, Coastal, and Plateau and Mountainous. The capital city Phnom Penh and the provinces of Kandal and Kampong Cham are situated in the Plain Region; Kampong Speu Province in the Plateau and Mountain Region; Preah Sihanouk, Kep and Koh Kong in the Coastal Region; and the Kampong Thom, Siem Reap, Banteay Meanchey, Battambang, Kampong Chhnang, and Pursat provinces in the Tonle Sap Region (UNEP, 2014).

53. The DGT VET Building in Phnom Penh and Kandal PTC both lay at an elevation of 0-25m relative to the mean sea level; the characteristic elevation of almost the entire capital city and Kandal Province. The Battambang Institute of Technology (BIT) and the PTCs in Banteay Meanchey, Kampong Chhnang and Pursat lay at a similar elevation. Just at the north of the Banteay Meanchey PTC, about 100m, are mountain ridges with elevation of up to 500m (Figure 4).

54. The PTCs of Kampong Cham, Kampong Thom, and Siem Reap lay at a significantly higher elevation (26-50m). In the adjoining provinces of Koh Kong, Kampong Speu, and Preah Sihanouk, the PTCs lay at an increasing elevation which starts from 0-25m, 26-50m, and up to 100-500m, respectively (Figure 5). The location of Preah Sihanouk PTC, highest elevation among all Public TVET Institutions under the project, has an observable falling slope to the southwest.



3. Geology

55. The DGTVEET Building in Phnom Penh lay on land of alluvial plain deposits, while Kandal PTC is on a floodplain and nearby geology of organic deposits (swamps). On the other hand, the Banteay Meanchey PTC is on a land of pediments. Pediments characteristically occur at a base of a mountain, and mountain ridges are nearby to the north of the PTC. For the BIT and Pursat PTC, these are situated on lands of deltaic deposits (Figure 6).

56. The geology of the PTCs in the coastal region, the Koh Kong, Kep and Preah Sihanouk, are of coastal plain deposits and sandstone, respectively. The Kampong Speu geology is of terrace alluvial deposits and the Siem Reap PTC is of alluvial fans⁸. The Kampong Cham PTC geology is of terrace laterite deposits while the Kampong Thom PTC is of lake bed deposits and very close to floodplains (Figure 7). Kampong Thom PTC representatives mentioned that the PTC land was in the flat area with 0.2m to 0.3m flood before; however, the issue was addressed by filling the land in the year 2003, and embankments or fills were done to reclaim the land.

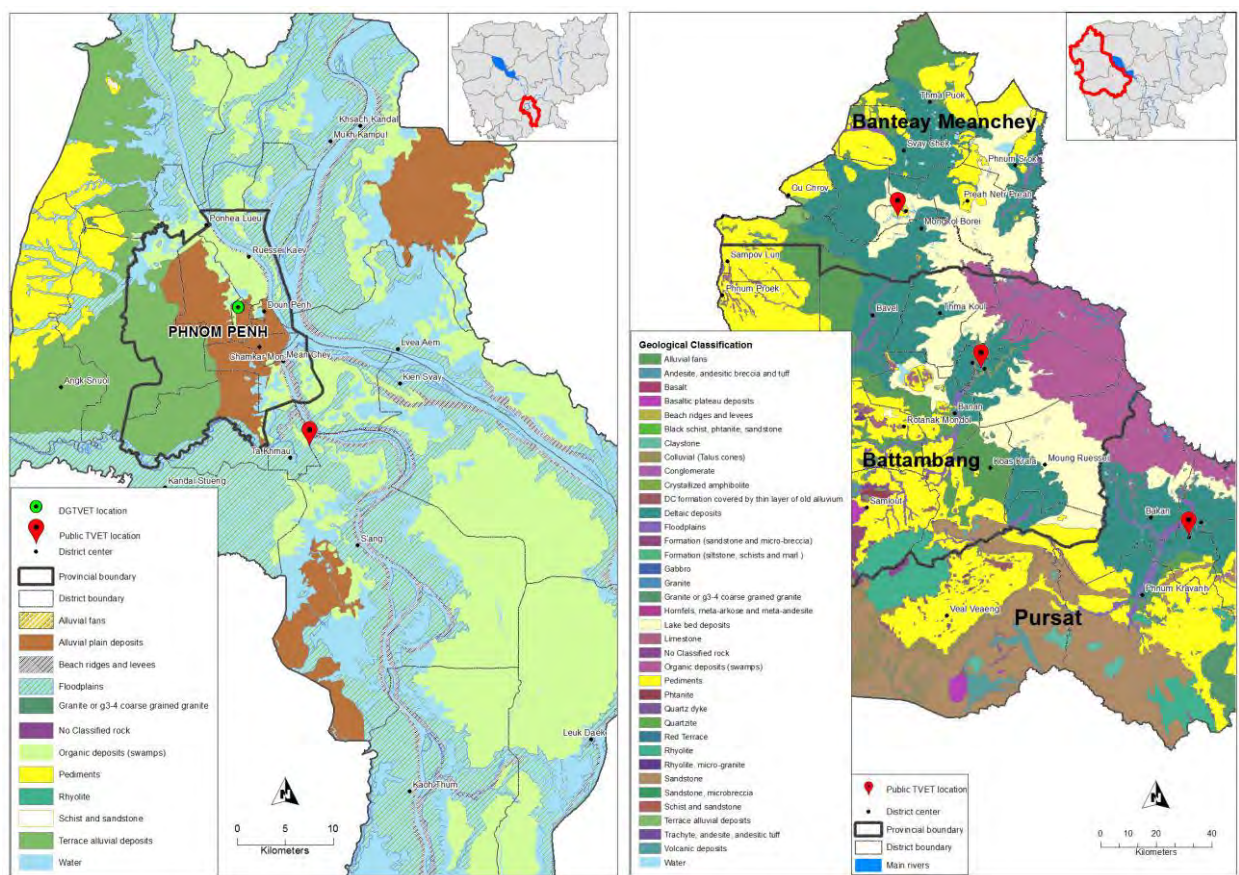


Figure 6: Geology of the capital city Phnom Penh and the provinces of Kandal, Banteay Meanchey, Battambang, and Pursat

⁸ Alluvial means sediments which crossed and built up by streams that deposited over time and may have formed into terraces or fan shapes.

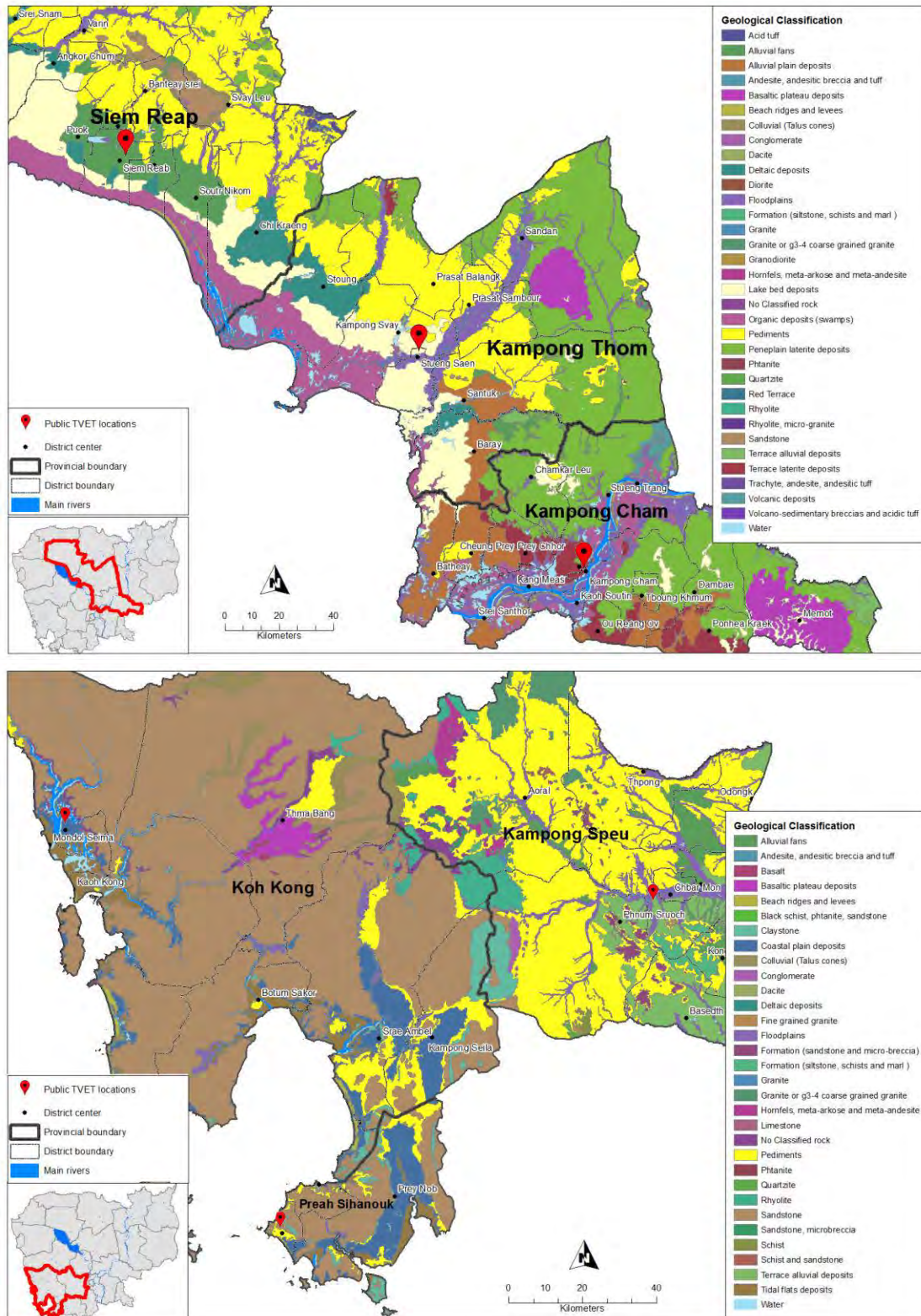
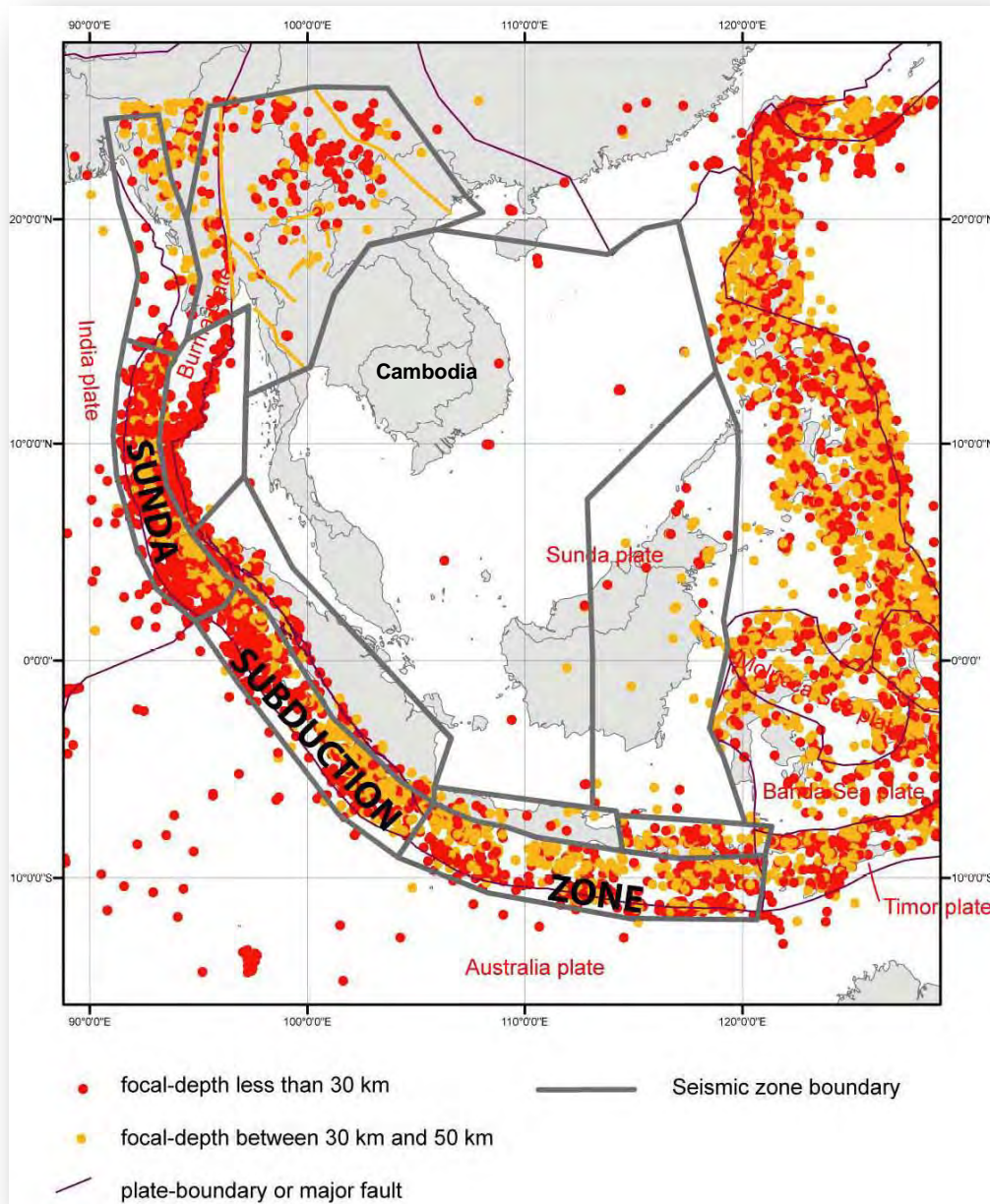


Figure 7: Geology of Kampong Cham, Kampong Thom, Siem Reap, Kampong Speu, Koh Kong, and Preah Sihanouk provinces

4. Seismicity

57. The whole country of Cambodia is located on a large stable core of the Sunda Plate and is characterized by low seismicity and strain rates (Figure 8). Therefore, it is of low seismic hazard.



Adapted from: M. Petersen et. al. 2007. *Documentation for the Southeast Asia Seismic Hazard Maps*.
http://earthquake.usgs.gov/hazards/products/images/SEASIA_2007.pdf

**Figure 8: Shallow-depth earthquakes in Southeast Asia
(Focal depth < 50 km; 1964 – 2005)**

5. Climate

58. The climate of Cambodia is tropical monsoon and it has a dry season (November to April) and rainy season (May to October). Between 1,200 and 2,000 mm of annual rainfall across the country is brought by the northwest monsoon. The heaviest rainfall (over 3,000 mm per year) is experienced in the west along the coastal lowlands; Koh Kong Province receiving up to 5,270 mm/yr (Table 4). Record of flooding at about 3 km from the Koh Kong PTC has been experienced. Dry weather from December to April is brought by the northeast monsoon. Significant variations in rainfall from year to year are common. The relative humidity ranges from 65-70% (January and February) to 85-90% (August and September). The temperature accordingly changes regionally and seasonally. April is the warmest month (above 38°C), January the coldest (22°C), and the average annual temperature is 27°C. The northern provinces of Banteay Meanchey and Siem Reap experience the lower temperatures most of the year, compared to other project locations (UNEP, 2014).

Table 4: Records of temperature and rainfall in the project locations

No	Province	Temperature/Average (°C)	Rainfall (mm/yr)
01	Phnom Penh	25 - 33 / 29	1,493.7
02	Banteay Meanchey	14 - 36 / 25	1,520.6
03	Battambang	20.1 - 34	1,656.9
04	Kampong Cham	24 - 33	1,393
05	Kampong Speu	20.3 - 37.7 / 29	765 -1,512
06	Kampong Thom	18.1 - 33 / 30.2	1,647.7
07	Kandal	29 - 32 / 30	1,238.9
08	Koh Kong	19.5 - 35.5 / 22.5	2,000 - 5,269
09	Pursat	23.5 - 36 / 32.5	1,487.42
10	Siem Reap	15.5 - 32.6	1,823
11	Preah Sihanouk	24.6 - 32.1 / 30.9	2,000 - 3,000
12	Prey Veng	23.7-32.9/28.36	1,350
13	Tbangkhmum	-	-
14	Kratie	13-40/27	1,989.9
15	Kep	17-35/26	2,216.02
16	Kampong Chhnang	23.5-36/32	1,643
17	Pailin	23-33/27	1,131
18	Odor Meanchey	24-32/28	1,519

mm/yr = millimeter per year; °C = degrees Celsius

Adapted from: Council for the Development of Cambodia (CDCa). 2014. Municipality info. <http://www.cambodiainvestment.gov.kh/municipality-info.html>

59. The mean wind speed in the country is low (2 m/s). The month of December has strong steady wind from the north. Typhoons rarely cause damage in Cambodia, unlike in the neighboring country Vietnam. Annual evaporation is at 2,000-2,200 mm; the highest being March to April (200-240 mm) and lowest in September to October (120-150 mm) (UNEP, 2014).

6. Water Resources

60. Cambodia has many rivers and water bodies. The Mekong, Tonle Sap and Bassac are the main rivers which flow across the country from north to south. The Mekong River runs through Cambodia with a total length of 486 km and about 86% of the country's land lay on Mekong catchments area. The Tonle Sap Lake is the largest freshwater lake in Southeast Asia with a size of about 2,600 km² in dry season and increases to 13,000 km² in wet season. Thus, there is access to substantial surface water resources from the inflow from upstream countries and the internally generated flow. For the groundwater resource, this is extensive and abundant in the country and is estimated to contain 17.6 billion m³ (UNEP, 2014)

61. The Tonle Sap River is about 4 km to the east of the DGT VET Building in Phnom Penh, and the merging area of the Tonle Sap and Mekong Rivers is 5 km to the southeast. From the merging area, a tributary to the south is the Bassac River which leads further to Kandal Province. The Bassac River is about 1.5 km north of Kandal PTC. On the other hand, the BIT and the PTCs of Banteay Meanchey and Pursat are all far from the Tonle Sap Lake (more than 30 km away). About 1 km to the east of the Pursat PTC is the Pursat River that is about 100 m wide (based on the estimated distance in GIS mapping).

62. In front of the Kampong Cham PTC is a man-made lake, called the Tonle Om Lake. To its east, about 500 m far, is the Boeng Kok Lake. Much farther to the east, at 1.5 km, is the Mekong River. The Stung Sen River (about 100 m wide), a main tributary to the Tonle Sap Lake, is about 1 km to the south of Kampong Thom PTC. The Siem Reap River is about 2.7 km to the west of the Siem Reap PTC. About 30 m to the south of the Koh Kong PTC is a 100 m wide river, and 120 m to the west is the Prek Kaoh Pao River which is about 1.75 km in width. And at about 1 km to the west of the Kampong Speu PTC is a river and 750 m to the southwest is a lake (based on the estimated distance in GIS mapping).

7. Land Use

63. The land use of the PTC locations and nearby communities in Koh Kong and Preah Sihanouk are grasslands. For PTCs of Kampong Speu, Tbong Khmom, and Siem Reap, the land use is agricultural land; similar with the BIT and all other PTCs. The exemptions are the DGT VET Building in Phnom Penh capital city, and the PTCs of Kandal, Kampong Chhang, Kratie, Preyveng, Odor Meanchey and Pursat which are in urban, built-up areas (Figures 9 and 10). The whole of Phnom Penh capital city is an urban, built up area and this extends to the southeast into some areas of Kandal Province. These areas are the only urban, built up areas in Kandal, while the nearby surrounding areas are agricultural land. The case is similar with the location of Pursat PTC, agricultural lands immediately surrounds the only urban, built-up area in Pursat Province.

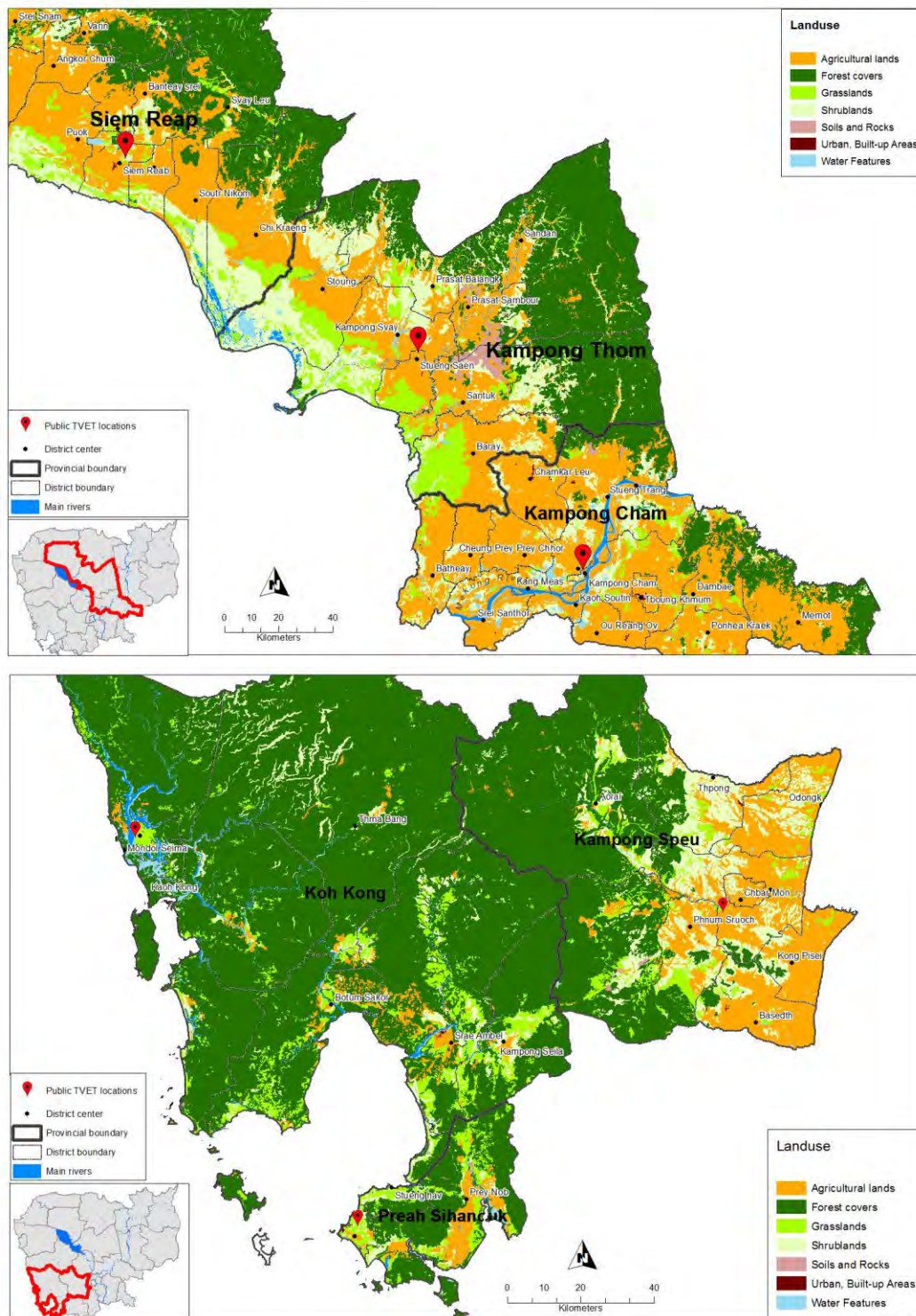


Figure 9: Land use maps of Kampong Cham, Kampong Thom, Siem Reap, Kampong Speu, Koh Kong, and Preah Sihanouk provinces

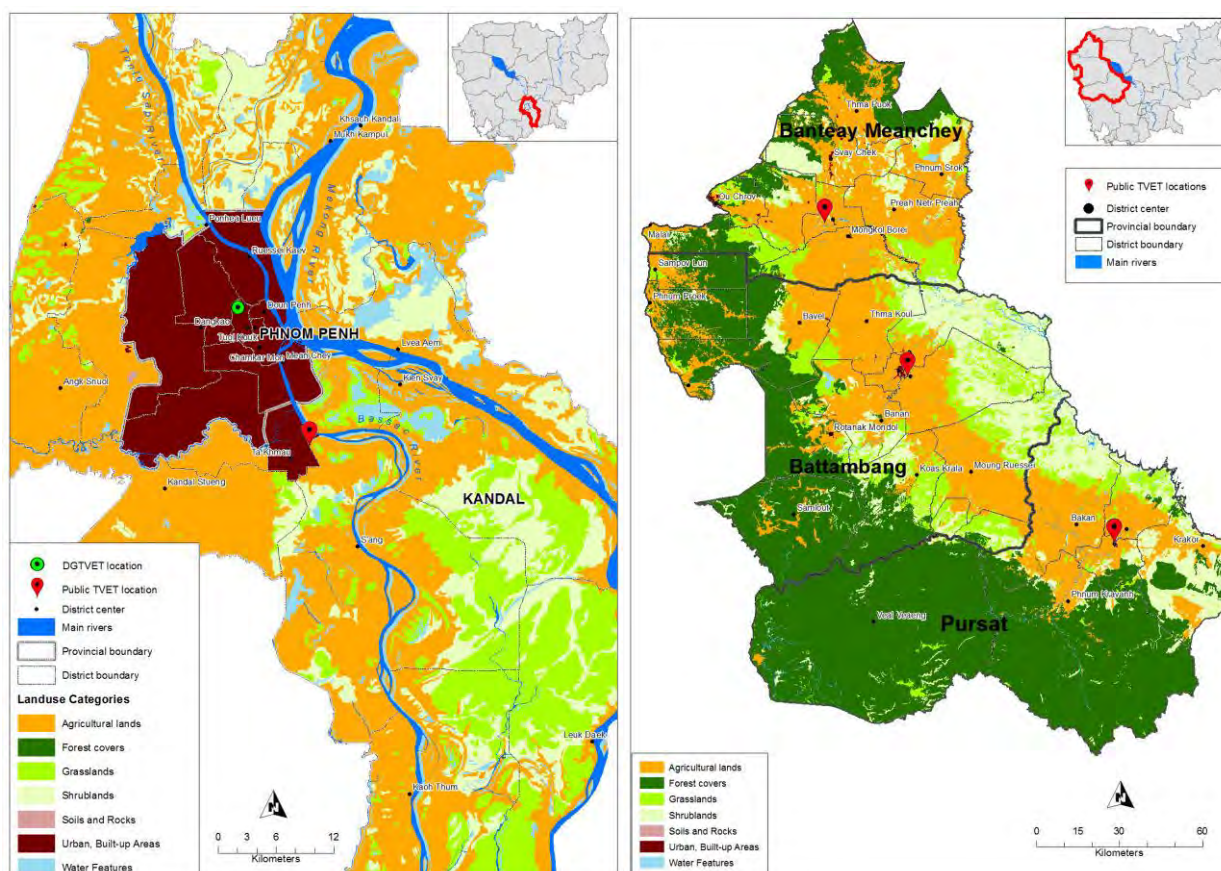


Figure 10: Land use maps of the capital city Phnom Penh and the provinces of Kandal Banteay Meanchey, Battambang, and Pursat

8. Ambient Air Quality and Noise

64. Main roads and access roads to all project locations are paved roads that are mostly asphalt. The dirt road leading to the PTCs of Kampong Speu and Tbong Khmumis an exception where dust is generated when wind blows or whenever vehicles traverse the road; a common scenario in the rural areas of Cambodia. Within the premises of all the public TVET institutions, dust generation is minimal and only becomes pronounced in big areas of dry unpaved land, i.e. in the PTCs of Banteay Meanchey, Kampong Thom, Pursat, and Kandal.

65. The public TVET institutions and DGTVE building are located near schools and/or government buildings. Noise from vehicles, local community, and institution activities is not significant.

B. Biological Environment

1. Forest Area

66. The lands of all the public TVET institutions have been developed for several years, at least eight (8) years ago, thus there are no more forest covers. Also, there are no forest covers in the lands for the new building locations for the PTCs of Siem Reap and Kampong Cham,

exception of Tbong Khmum which is located in a new provincial development site where there are existing trees planted by the government in 1987. The site has been approved by government to be used the land for provincial development including provincial administration offices, provincial departments, public institution or public development purpose.

2. Flora

67. The flora within the premises and the vicinity of the Public TVET institutions and the nearby local communities are commonly found in Cambodia. These are the palm and coconut trees; fruit trees such as banana, papaya, and Jamaican cherry (*Muntingia calabura* L.); flame tree; acacia tree; *Leucaena leucocephala* (Lam) de Wit; *Terminalia catappa*; flowering plants such as bougainvillea and birds of paradise, among other common plants. Mango trees are also commonly found and even Kampong Thom PTC has a mango orchard. There is also a lotus pond and rice field (i.e. used for the agriculture-related training) within the premises of Kampong Speu PTC.

3. Fauna

68. Farm and pet animals found in the surrounding community of the TVET institutions are cows and dogs. Cows usually graze farm lands and dogs are in the residential lands. Dogs are also found inside the premises of Kampong Speu PTC which has a more rural setting. Some ducks are also raised in the institutions with available lands and ponds, i.e. Pursat PTC and Kandal PTC. There are also fish ponds in the BIT, Kandal and the Kampong Thom PTCs.

C. Socioeconomic Environment

1. Population

69. Phnom Penh, having the least land area among all project locations, is the second most populated. In terms of population density, it is the highest being the capital city, followed by Kandal. The province of Koh Kong is the least dense and is followed by its adjacent province Pursat (Table 5).

70. In the Public TVET Institutions, the Kandal PTC has the most number of staff (78) and Siem Reap PTC with the least (24). The number of trainees range from a few hundreds to more than ten thousand (Kampong Cham PTC). The percentage of female trainees in public TVET institutions for the year 2013 range from 18% to 71%. Battambang Institute of Technology has the lowest number of percentage of 18% and Pursat PTC has the highest percentage for female trainees of 71%. However, not all of the trainees go to the centers for the training programmes. Some are in the enterprises and in their communities. Thus the directly affected persons during project construction are only the trainees under center-based programs and the teachers and staff in the public TVET institutions.

Table 5: Population statistics in the Project Area and Public TVET institutions

No	Province	Population	Population Density	Public TVET Institution			
		(persons) ^a	(persons/km ²) ^a	staff members ^b	trainees (F)	trainees (M)	Total trainees
01	Phnom Penh	1,307,713	1,927				
02	Banteay Meanchey	697,069	104	40	371	369	740
03	Battambang	1,093,793	93	56	56	250	306
04	Kampong Cham	1,884,500	187	39	7,898	5,438	13,336
05	Kampong Speu	793,769	114	52	3,479	2,711	6,190
06	Kampong Thom	702,711	46	62	3,897	1,965	5,862
07	Kandal	1,155,030	360	78	4,587	5,013	9,600
08	Koh Kong	107,481	12	38	874	1,826	2,700
09	Pursat	438,720	34	47	2,289	911	3,200
10	Siem Reap	951,852	92	24	509	341	850
11	Preah Sihanouk	196,851	230	66	1,532	1,042	2,574

km² = square kilometer; F=female; M=male; TVET = Technical and Vocational Education Training

Note: ^aAs of 2011; ^bAs of 2014; ^cAs of 2013

Adapted from: Council for the Development of Cambodia (CDCa). 2014. Municipality info.
<http://www.cambodiainvestment.gov.kh/municipality-info.html>

2. Education

71. For the provinces under the project, Kampong Cham province has the most number of schools (1,286) followed by Battambang (940) and Siem Reap (911) (Table 6). The PTCs in the coastal region, Preah Sihanouk and Koh Kong, have the least number of schools.

Table 6: Education Statistics in the Project Area (2012-2013)

No	Province	No. of Schools
01	Phnom Penh	353
02	Banteay Meanchey	731
03	Battambang	940
04	Kampong Cham	1,286
05	Kampong Speu	507
06	Kampong Thom	709
07	Kandal	685
08	Koh Kong	143
09	Pursat	467
10	Siem Reap	911
11	Preah Sihanouk	138
12	Preyveng	810
13	Tbong Khmum	-
14	Kratie	353
15	Kep	45
16	Kampong Chhnang	426
17	Pailin	83
18	Odor Meanchey	277

Adapted from: Ministry of Education, Youth and Sport of the Kingdom of Cambodia. 2013. *The Education Statistics and Indicators 2012-2013 Book*. <http://www.moeys.gov.kh/images/moeys/indicator-and-statistic/325/emis-2012-2013-en.pdf>

72. As of 2012, literacy rate for the youth (15-24 years) in Cambodia is high. For males, it is at 97.6 % and 99.3% for the females (UNICEF, 2012). Literacy rates in Phnom Penh capital city is understandably more than 80% in all locations. But for literacy rates in other provinces, it is only more than 80% in villages near and within the centers of districts and town proper. In the outskirts, literacy rates reach below 60%. And this value is much lower, less than 50%, in the outskirt villages of Siem Reap and Kampong Cham provinces (UNESCO, 2011).

73. Within the vicinity of the Public TVET Institutions are nearby educational institutions which may be a primary school, secondary school, college, or university. The BIT is just across the street from the University of Battambang. The Sihanouk PTC is surrounded by schools in three of its sides (Pedagogic Primary School, Hun Sen City Primary School, and Dormitory of Training School). The Kampong Thom PTC is also just near the Hun Sen Aknouvoat Primary School and Kampong Thom High School. This is a common scenario in all locations of PTCs, they are usually at district or town centers; thus collocated with schools.

3. Health

74. The Ministry of Health of Cambodia has an established a network of health centers and referral hospitals based on Operational Districts defined by geographic, economic and public health considerations. Operational Districts have different package activities provided at health centers and referral hospitals. Health centers and health posts provide minimum level primary health care services mainly for rural populations. In 2010, only 43% of health centers in the country provided the full minimum package of services. Referral hospitals in the province can be of provincial and district referral type which varies on number of staff, beds, medicines, equipment and clinical activities. The referral hospitals are expected to support primary care and have resources and expertise available for the district health services (WHO and MOH, 2012).

75. All project locations have health facilities under the Operational Districts which may consist of referral hospitals, health centers and health posts, and private hospital/clinics. Health centers are accessible within one to three (1-3) kilometers from the public TVET institutions. Accessibility to referral hospitals for some institutions is near, but mainly health centers are the nearest and most accessible near the public TVET institutions (Table 7).

Table 7: Health facilities in the Project Area

No	Province	Referral Hospital	Health Center / Health Post	Private Hospital/Clinic
01	Phnom Penh	5	17	-
02	Banteay Meanchey	4	52/11	-
03	Battambang*	4	76	7
04	Kampong Cham	10	137	-
05	Kampong Speu	-	3	-
06	Kampong Thom	3	60	-
07	Kandal*	6	94	5
08	Koh Kong	1	11	-
09	Pursat	1*	4	-
10	Siem Reap*	4	72	2/2
11	Preah Sihanouk*	1	12	-/4

Adapted from: Ministry of Health (MOH). 2009. Provincial Health Departments.
http://www.moh.gov.kh/?page_id=318&lang=en

Source:

*Council for the Development of Cambodia (CDCa). 2014. Municipality Info.
<http://www.cambodiainvestment.gov.kh/municipality-info.html>

76. In the TVET institutions and surrounding local community, common colds and cough are the usual illnesses experienced. In Kampong Speu PTC, there are common cases of stomachache and allergies. In Tek tla Commune in Banteay Meanchey Province, diabetes, hypertension, and typhoid fever were reported. And in the highlands of the Smachmeanchey Commune in Koh Kong Province, far from the PTC, there were registered cases of malaria.

4. Water Supply and Sanitation

77. All the Public TVET Institutions and the local community have access to water supply from water companies except for BIT. It is a common practice to boil the water for drinking purposes. BIT prefers to utilize water from the ground, ponds and rainwater harvesting areas within its premises for everyday use. For drinking, they buy bottled water. Rainwater harvesting is common in the local communities in Cambodia, especially in rural areas. Big jars of clay are usually sighted along the main road in the provinces (Figure 11).



Rainwater harvesting in BIT



Along the road in Kampong Speu Province

Figure 11: Jars used for rainwater harvesting in Cambodia

78. Surface water from a local stream is utilized by the local community of Kaheng Commune in Kampong Speu Province. In other local communities, groundwater is accessed and is boiled prior to drinking (Kandal, Battambang, Tbong Khmum, Pailin, Kratie, Kep and Siem Reap). Some of the TVET Institutions also have access to groundwater, i.e. BIT, Kampong Thom, and Kampong Speu PTCs. However, the latter does not utilize the use of groundwater due to scare of chemical contamination.

79. Toilets within the public TVET institutions are mostly the type with septic tank and pit latrines supplemented with sand and stones. The Kampong Thom PTC has the most number of toilets, about three (3) toilets per building, and those with less than one (1) per building are the BIT and Pursat PTC. All institutions have separate toilets for men and women; but only BIT, Koh

Kong PTC, Kampong Cham PTC and Kratie PTC have toilets exclusive for staff and teachers (Table 8).

Table 8: Sanitation facility in the Project Area

No.	Province	Public TVET Institution				Commune / Village
		Type of Facility	No.	Separate toilet for Male and Female trainees	Separate toilet for trainees and staff	Type of facility (common)
01	Banteay Meanchey	Septic tank	4	Yes	No	Septic tank
02	Battambang	Pit latrine (mod)*	10	Yes	Yes	Septic tank; Sewer system
03	Kampong Cham	Septic tank	8	Yes	Yes	Septic tank
04	Kampong Speu	Pit latrine (mod)	2	Yes	No	Pit latrine (mod)
05	Kampong Thom	Pit latrine (mod)	17	Yes	No	Pit latrine
06	Kandal	Septic tank	5	Yes	No	Septic Tank
07	Koh Kong	Pit latrine (mod)	4	Yes	Yes	Ventilated improved pit latrine
08	Pursat	Pit latrine	2	Yes	No	Septic tank; land treatment
09	Siem Reap	Septic tank	2	Yes	No	Septic tank
10	Preah Sihanouk	Pit latrine (mod)	2	Yes	No	Sewer system
11	Preyveng	Septic tank	6	Yes	No	Septic tank
12	Kratie	Septic tank	8	Yes	Yes	Septic tank
13	Tbong Khmum	-	-	-	-	-
14	Kep	Septic tank	4	Yes	No	Septic tank
15	Kampong Chhnang	Septic tank		Yes	No	Septic tank
16	Pailin	Septic tank	4	Yes	No	Septic tank
17	Odor Meanchey	Septic tank	3	Yes	No	Septic tank

Note: *Pit latrine (mod) means modified pit latrine supplemented with sand and stones inside; identified as a common practice in the project locations



Existing toilet in PTC Pailin



Existing toilet in PTC Prey Veng



Existing toilet in Kratie

Existing toilet in PTC Odor Meanchey

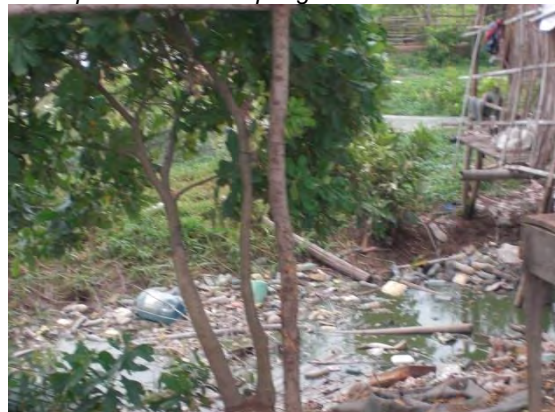
80. However, most of the toilets in the institutions use standing open water containers, which are probable breeding places of mosquitoes. Cleanliness and good housekeeping is also an issue. Further, solid wastes are not properly managed in some locations. Most of the institutions outsource companies to collect their solid wastes, while others prefer to manage their own wastes. Open burning is one of the means practiced (BIT and the PTCs of Kampong Speu, Pursat, Kandal, Prey Veng, and Sihanouk). Although trash bins are a common sighting in the premises, garbage heaps (mixture of recyclable and non-recyclable) are present on vacant areas. Some of these are situated near the toilets or temporary dormitories (Figure 12).



In the premises of Kampong Cham PTC



In the premises of Pursat PTC



In the premises of Kandal PTC



In the premises of Kandal PTC



Figure 12: Solid waste management in the public TVET institutions

5. Electric Supply

81. All project areas have access to electricity that is mostly supplied by the state-owned energy supplier Electricité du Cambodge (EDC) and for some by Independent Power Producers (IPP). Despite access to electricity, the use of firewood and kerosene/gas for cooking is a common practice in most of the local communities in the project locations. And this is common as well to households all over the country, where 83.6% use firewood for cooking (NIS, 2008). This explains why heaps of firewood for sale is a common sight along the streets in provincial and even national roads. A departure from this is the local communities in Kampong Cham, Kampong Thom, and Banteay Meanchey which use electricity for their cooking needs, in combination with other methods. The Kampong Speu PTC has its own generator which it uses whenever necessary.

6. Economy

82. Cambodia is well-known for its garment and footwear industries. Most of its footwear factories are located in Phnom Penh capital city (26 factories), and in the neighboring areas of Kampong Speu (6 factories) and Kandal (4 factories). Project locations known for their weaving industries are the provinces of Siem Reap, Banteay Meanchey, Kampong Cham, Kampong Thom, Kandal, and also Phnom Penh. And locations considered as important rice growing areas in the country are the Kampong Cham, Battambang, Banteay Meanchey, and Siem Reap provinces (MOC, 2013).

83. Aside from footwear, garment industry (55 factories) is one of the major industries in Kandal Province (CDCa, 2014). Because of its proximity to Phnom Penh, it serves as an economic belt of the capital. It has the Goldfame Pak Shun Special Economic Zone (SEZ) in Sa Ang District (CDCb, 2014). Within the vicinity of the Kandal PTC is a mix of commercial and residential areas since it is along the National Road #21. Putting up small businesses in the locality is the main livelihood of the community, and these provide employment opportunities to other local residents.

84. The major industries in Kampong Cham are rubber processing, agricultural products/food processing, garments and footwear, and electricity (CDCa, 2014). In the local community, businesses are abundant due to its proximity with other schools, institutions, and government offices. There are retail stores, gasoline stations, bricks construction supply, rice warehouses, firewood sold along the street, and other repair and service shops.

85. Major industries in Kampong Thom are food and beverage industries, rice milling facilities for overseas markets, tapioca starch processing facilities, animal feed plants, cassia paper plants, and water supply industries (CDCa, 2014). The local community where Kampong Thom PTC is has businesses which range from gasoline stations, cassava farm, bamboo weaving, retail stores and shops, construction supply for steel, furniture shops, and many others. For the immediate local community of the PTC, rice farming is the main source of living.

86. Major industries in Siem Reap province are tourism, handicraft, services, agro industry, food processing, wood processing, construction, and ceramics (CDCa, 2014). For the new location of the Siem Reap PTC, the immediate vicinity outside the area it will be located still has

no commercial development. However, about 1km away is the center of services and shops that cater to the tourism industry.

87. Aside from rice industry, Banteay Meanchey has a flourishing cassava industry. Most people in the province are doing farming. Vast hectares of rice field are sighted along the highway, including construction supply for bricks and gravel. The economic activities leading to the border with Thailand, where the Poi Pet O'Neang SEZ is, are local businesses and services, transport and tourism industry, and import and export industry (CDCb, 2014). While small businesses, services, and retail stores and shops are in the local community of the Banteay Meanchey PTC, rice farming is still the main source of livelihood.

88. In Battambang Province, aside from its rice industry, major industries are hotels, hospitals, and transportation (CDCa, 2014). The province also has a rich tourism sector; thus businesses in relation to this are abundant. The BIT is located in Battambang Town so gasoline stations, private and public schools, retail stores and shops, and other local business are within its vicinity. These business and local employment comprise the main livelihoods in the community.

89. The major industries in Pursat Province include agricultural products such as paddy rice, cash crops such as maize, cassava, beans and vegetables; livestock; and fishery products from the Tonle Sap Lake. It also has the Steung Atai Hydro-Power Plant which produces 120 MW of electricity (CDCa, 2014). In the local community of the Pursat PTC, rice farming is the key source of livelihood. Also within its vicinity are schools, retails shops, gasoline stations, government buildings, and a nearby train station. The PTC is near the national road; thus local businesses are located near the training center.

90. Major industries in Kampong Speu Province are garments (18 factories) and footwear (4 factories). It also has an agro-industry which is comprised of rice milling, sugar factories, corn processing, and animal feed factories. Other manufacturing sectors are on pharmaceutical, carton boxes, safety helmets, handbags, roof tiles, and mattresses (CDCa, 2014). In the local community of the Kampong Speu PTC, there are some small retails stores and shops, local farms, school, and a pagoda. It is the location with the most rural setting of all other project locations; it is about 3 km from the national road and the access road is unpaved. Thus, the area is mostly of rural residential and farmland; none of the commercial areas usually found in district/town centers. The principal livelihoods in the area are agriculture and local employment from factories.

91. The major industries in Koh Kong Province are sugar factory, water companies, hydropower plants, garments, and food processing factories (CDCa, 2014). It is a tourism destination thus service industries like transport, hotels, and shops are abundant. The province is bordering the Gulf of Thailand and has its rivers; thus fishing is the main source of living for many. In the local community of the Koh Kong PTC, there are schools, government building, and residential area. Local businesses serving the community are available.

92. In Preah Sihanouk Province, major industries are garments, footwear, frozen seafood, beer, acacia, motorcycle assembly, and petroleum (CDCa,). It has three SEZs; namely the Sihanoukville Port SEZ, Sihanoukville SEZ 1, and Sihanoukville SEZ 2 (CDCb, 2014). The province is a major tourist destination due to its pristine beaches, thus the tourism industry and related services are developed. The Sihanouk PTC is colocated with other schools and government buildings in an area which is also residential. Thus local businesses, such as retail

stores and shops that serve students, workers, and local community are widely available. Local employment and businesses are the main source of livelihood in the community.

7. Communication

93. All project locations have mobile network companies, landline phone companies and internet service providers. Some popular mobile network companies that can be found all over the country are Metfone, Smart, Beeline, Mobitel, Casacom, CAM GSM, Camshin, Mfone, Hello, and many others. Landline companies to name a few are Telecom Cambodia and Camintel. And internet service providers include Click net, Metfone, Ezecom, Camintel, Cam Net, Beeline, and many more (CDCa, 2014). Telecommunication in Cambodia is very accessible and affordable.

D. Protected Areas and Historical, Cultural and Religious Sites

94. Cambodia is rich in its history, culture, religion, and nature. And it is well-known mostly for the Archeological Park of Angkor (Angkor Park). The Authority for Protection and Management of Angkor and the Region of Siem Reap (APSARA) is responsible to protect, maintain, conserve and improve the value of the archaeological park, the culture, the environment and the history of the Angkor region as defined on the World Heritage List, among its other major responsibilities. Its territorial authority is specified in Article 5 of the *Law on the Protection of Cultural Heritage* promulgated in 1996. The term "Siemreap-Angkor" is defined in the Royal Decree establishing Protected Cultural Zones, with five degrees of protection in the region (APSARA, 2005). The proposed new location for the Siem Reap PTC is outside the protected archaeological reserves (Zone 2), protected cultural landscape (Zone 3) and sites of archaeological and anthropological or historic interest (Zone 4). The vicinity map showing the location of the Project with reference to the Angkor Protected Zone is in Appendix 3. The project construction will not have any negative impact in the Angkor Park.

95. Furthermore, all the other Public TVET Institutions under the project are located in areas that have been developed in the past, at the least eight years ago. The project construction will be within the premises of the institutions, thus no impact on any protected area and historical/cultural/religious site is anticipated. The nearest distance of a Public TVET Institution from a protected area or site is about 700 m (from the Protected Zone 2 of Angkor Park) and farthest at 40 km (from the Kirirom National Park) (Table 9).

Table 9: Proximity of the Public TVET Institutions to the Nearest Protected Areas and Historical, Cultural, and Religious Sites

No	Public TVET Institution	Nearest Approximate Distance (km) / To the direction of:	
		Protected Area	Historical / Cultural / Religious Site
01	Banteay Meanchey	30 km / SE	22 km / NE
02	Battambang	14 km / E	11km / NW
03	Kampong Cham	5km / SE	2.5 km / S
04	Kampong Speu	40 km / SW	11 km / SE
05	Kampong Thom	12 km / SW	10 km / NE
06	Kandal	20 km / SW	17.5 km / SW
07	Koh Kong	1 km / N	-
08	Pursat	20 km / NE	23 km / NW
09	Siem Reap	0.7 km / N	3.3 km / SW
10	Preah Sihanouk	2.2 km / E	60 km / E

km = kilometer; N,S,W,E = North, South, West, East

Note: The approximate distances were based on vicinity maps of all the Public TVET Institutions (Appendix 3)

V. ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

A. Introduction

This chapter presents the potential environmental impacts of the project during pre-construction, construction and operation phases of the project and the recommended mitigation measures to address the environmental impacts. The analysis of the environmental impacts is focused on the civil works associated with the following: (i) construction of three women dormitories with water and sanitation packages in the provincial training centers (PTCs) of Koh Kong, Banteay Meanchey and Chantiers-Ecoles de Formation Professionnelle in Siem Reap under TVETSDP; and three dormitories with water and sanitation packages in the provincial training centers (PTCs) of Kratie, Battambang (Prey Kounkhla) and Kandal under TVETSDP-AF; (ii) construction of nine workshops with specialized equipment packages at PTCs of Banteay Meanchey, Kampong Cham, Kampong Speu, Kampong Thom, Kandal, Koh Kong, Pursat, Siem Reap, Sihanoukville, and Battambang-BIT under TVETSDP, and nine workshop with specialized equipment packages at PTCs of Preyveng, Tbong Khmum, Kratie, Kep, JVC in Phnom Penh, Kampong Chhnang, Battambang Preykoun Khla, Pailin, and Odor Meanchey under TVETSDP-AF; (iii) construction of additional building including workshops and classrooms at the Battambang Institute of Technology under TVETSDP, and construction of additional building at PTCs of Tbong Khmum, CIEDI in Phnom Penh, and Siem Reap CEF PTC (Salakarathan) under TVETSDP-AF; and (iv) rehabilitation of the DGT VET building.

96. The technical design details on the civil works of the project is not yet defined but the construction activities in all the public TVET institutions and rehabilitation of DGT VET building are of similar nature which will be conducted in a relatively small area and located on the existing government-owned land. The assessment of anticipated impacts and mitigation measures will be updated, if necessary, upon completion of the technical design details.

97. The potential environmental impacts have been identified by the following means: (i) site visit and assessment on the public TVET institutions- Banteay Mancheay PTC, Kampong Cham PTC, Kampong Thom PTC, Kampong Speu PTC, Kandal PTC, Koh Kong PTC, Pursat PTC, Sihanoukville PTC, Battambang Institute of Technology and Chantiers-Ecoles de Formation in Siem Reap, Prey Veng PTC, Tbong Khmum PTC, Kratie PTC, Kep PTC, JVC-Phnom Penh, CIEDI- Phnom Penh, Kampong Chhnang PTC, Battambang PTC, Pailin PTC, Odor Meanchey PTC, Siem Reap PTC; (ii) stakeholders' survey interviews and consultative meetings; and (iii) desktop research of information relevant to the proposed project.

98. Site visits and assessment was organized into two phases: First phase was done from June 5-12, 2014 by DGT VET representatives and national and international environmental specialists for TVETSDP; and Second phase (for TVETSDP-AF) was done from October 2-3, 2015 for Prey Veng PTC, Tbong Khmum PTC and Kratie PTC, October 05-8, 2015 for Kep PTC, Phnom Penh CIEDI, Phnom Penh JVC and Kandal PTC, October 16-17, 2015 for Kampong Chhnang PTC, Battambang PVC and Pailin PTC, and from October 19-20, 2015 for Siem Reap PTC and Odor Meanchey PTC by DGT VET representative and national safeguard specialist.

99. The main purpose of the site visit and assessment are the following:

- (i) Identify any potentially significant environmental impacts from the civil works associated with the construction of workshop, dormitory and additional building;
- (ii) Observe the existing condition and the surrounding environment of the training centers; and
- (iii) Consult and conduct survey interview on the stakeholders for their recommendations and suggestions on the implementation of the project.

100. Identification of significant impacts and formulation of the mitigation measures have been guided by the General Rapid Environmental Assessment (REA) Checklist and ADB SPS 2009.

B. Anticipated Impacts and Mitigation Measures: Pre-construction Phase

101. Potential pre-construction phase impacts are primarily related to project siting, including land acquisition and resettlement and encroachment on historical, cultural, and archaeological sites and protected areas and the planning and details of the technical design.

1. Land acquisition and Resettlement

102. The project does not have a significant impact on land acquisition and resettlement. All the civil works for the project are located on existing sites and government-owned land except for the Chantiers-Ecoles de Formation in Siem Reap⁹ and Tbong Khmum PTC are located on new provincial development sites but both land are also owned by government. The training center in Siem Reap will be located in Prey Kuy, Ampil Commune Siem Reap while the training center in Tbong Khmum will be located in Nikum Leu Village, Sra Lop Commune, Tbong Khmum Municipality, Tbong Khmum Province. .

103. Access to the project sites is through public right of way (ROW) and existing roads hence, land acquisition and encroachment on private property will not occur.

2. Encroachment on Ecologically and Culturally Protected Areas

104. There are no anticipated impacts on encroachment on ecologically and culturally protected areas because the civil works are located on the existing public TVET institutions and as discussed in the baseline environment conditions, there are no culturally and culturally protected areas in the location of the Project.

3. Technical design standards

105. During the preparation of the initial environment examination, the final technical design (i.e. number of bed, number of floor-level, total floor area) of the project is not yet identified. To ensure the structural integrity of the new structures, the design should comply with applicable national and international standards. Also, the technical design of the workshops, dormitory, additional building and rehabilitation activities shall take into consideration the following: (i) 2012

⁹ The transfer of ownership for the new location of Siem Reap is made by Apsara Authority to Ministry of Labor, Vocation, Education and Training dated in August 17, 2015 with a letter number of 578/15.

School Construction Guidelines of Cambodia; (ii) provision of water supply which will meet applicable national drinking water quality standards; and (iii) construction of sanitation facilities should not be located near source of drinking water (at least 30 meters from the source of drinking water)¹⁰ and consistent with applicable national and international guidelines (i.e. World Health Organization's Water, Sanitation and Hygiene Standards for Schools in Low-cost Settings); and (iii) design considerations should be consistent with the Master Plan of the public TVET institutions.

4. Flooding

106. Based on the results of the public consultations for the TVETSDP-AF, some of the stakeholders advised that there are project areas that experience flooding during heavy rains. Specifically these are in Kandal PTC (about 0.5 m high for a few days every year), Kampong Chhnang PTC (0.5 m high for a few hours during rainy season) and Prey Konkhla PTC (0.1 m high for a few hours during heavy rains). During the preparation of project design, flooding conditions will be ascertained and appropriate measures will be included in the design to minimize or avoid impacts to the proposed structures.

C. Anticipated Impacts and Mitigation Measures: Construction Phase

107. The civil works anticipated during the construction activities are: (i) site clearing and earthworks such as excavation and site grading; (ii) laying of foundations; (iii) casting of ground floor slab; (iv) construction of floor beams and floor slabs; (v) construction of roof beams and roofing; (vi) pipe network for the sanitation and water facilities for the dormitories; (vii) architectural components and finishes; (viii) electricity connection for workshop, dormitories and classroom; and (viii) transportation of materials to, from and within the site.

108. The following discussions are the anticipated impacts during the construction phase of the project. Most of these impacts are short-term, site-specific and within relatively small area. There are no impacts that are significant in nature. The impacts associated with the construction activities can be minimized and/or avoided with the implementation of mitigation and management measures.

1. Air Quality

109. Construction activities may generate dust and gaseous pollutants. Dust generation is usually caused by a combination of on-site excavation and movement of earth materials, contact of construction equipment and machinery with bare soil, and exposure of bare soil and soil piles to wind. Excavation and backfilling works will also give rise to the increase in ground level concentration of total suspended particulate matter (TSP). Secondary sources of emission may include exhaust from vehicles and equipment (such as carbon monoxide, sulfur oxides, particulate matter, nitrous oxides and hydrocarbon). To minimize the impacts on air quality, the following measures shall be implemented by the contractor:

- Water spraying on road surface and work areas, as necessary, especially during dry weather;
- Place stockpiled soil in areas shielded from prevailing winds;

¹⁰ Fact Sheet 3.4 Simple pit latrines, World Health Organization Fact Sheets on environmental sanitation, accessed on June 22, 2014. http://www.who.int/water_sanitation_health/hygiene/emergencies/fs3_4.pdf

- Truck carrying sands, soil, stone, and other loose materials should be covered with tarpaulin; and
- Vehicles and equipment used during construction must be properly maintained and in good condition to ensure optimal performance. Also, all vehicles and equipment used in the construction activities shall have valid certifications indicating compliance to vehicle emission standards.
- Ensure that truck tires, particularly for trucks carrying soil from excavation sites and construction areas, are cleaned to avoid spread of soil/dirt on roads which may cause muddy or dusty conditions during wet or dry periods, respectively.

2. Water Quality

110. Water sources are susceptible to pollution from run-off or soil erosion from stockpiled construction materials and spoils, domestic sewage from construction workers, accidental spillage of oil and other lubricants, wastewater from washing of construction equipment and vehicles and improper disposal of solid wastes. These wastewaters are likely to cause deterioration of surface water quality, flooding and flow obstruction of watercourses, including drainage and irrigation canals. To minimize the impacts on water quality, the following measures shall be implemented by the contractor:

- Minimize spoil by balancing cut and fill wherever possible. Spoil shall only be disposed to areas approved by local authority;
- Impacts due to soil erosion will be mitigated by careful grading of the construction site such that water is not allowed to run off of the construction site into adjacent drainages. Where excavated soils are onsite, adequate measures will be implemented to control runoff, including covering exposed soils, construction of settling basins, or temporary silt traps along the drainage leading to water bodies;
- All earthworks must be conducted during the dry season to prevent the problem of soil run-off during monsoon season;
- Implementation of solid wastes collection and disposal system, with provision for waste segregation. The construction contractor should provide enough waste bins for temporary waste storage;
- Provision on adequate on-site sanitation facilities with septic tanks to prevent untreated sewage from being channeled into the drainage canals, irrigation canals, and river;
- Ensure that no cesspools¹¹ will be created during construction activities; and
- Place storage areas for fuels and lubricants away from any drainage leading to water bodies. Designate area for equipment and vehicle washing and maintenance. The area should be provided with oil and grease traps to prevent oil from being washed into drainage canals. Waste/used oil should be stored in suitable containers in a safe place . Disposal of used oil should comply with national and local regulations.
- Workers must use existing toilet in the training center except the new proposed construction sites in Tbong Khmum and Siem Rep where construction contractors should provide sanitary toilets and sufficient water supply for workers and staff during construction.

3. Noise and Vibration

¹¹ Cesspools are underground holes for the disposal of human waste. A cesspool is a covered watertight tank used for receiving and storing sewage and has no outlet. Raw, untreated sewage is discharged directly into the ground, where it can contaminate oceans, streams and groundwater.

111. The major sources of noise and vibration are from the operation of pile drivers, earth moving and excavation equipment, concrete mixers, cranes; and transporting equipment, materials and people. Noise and vibration from the construction activities may cause disruption of training/classes in the TVET institutions and nuisance to nearby community and other sensitive receptors (i.e. school, hospitals, place of worship). Also, noise and vibration due to the movement of vehicles along the access road may potentially result to nuisance. Vibration from the construction activities may also cause damage to other structures and buildings in the project area. To minimize noise and vibration impacts, the following measures shall be implemented by the contractor:

- Planning activities in consultation with the officials and staff of the public TVET and the Chief of Village Council so that activities with the greatest potential to generate noise and vibration are planned during periods of the day that will result in least disturbance;
- Construction activities will be avoided during night time, and religious or cultural events in close proximity to the roadside such as Friday prayers, temple festivals and weddings;
- All construction equipment and vehicles shall be well maintained, regularly inspected for noise emissions, and shall be fitted with muffler and other appropriate noise suppression equipment consistent with applicable national and local regulations;
- Impose speed limits on construction vehicles to minimize emissions along areas where sensitive receptors are located (i.e. temples, hospitals, schools, houses)
- Truck driver and equipment operators shall avoid the use horns unless it is necessary to warn other road users or animals of the vehicle's approach; and
- Identify any buildings at risk (i.e. old buildings in Kandal training center) from vibration damage and avoiding any pneumatic drills or heavy vehicles in the vicinity. Complete the civil works in these areas as quickly as possible.
- If available and practicable, use hydraulic technology for drilling soil which generate low noise during construction.

4. Quarry and Borrow Sites

112. The following measures shall be implemented at quarry and borrow sites to minimize impacts on water quality, reduce dust emission during transport, minimize soil erosion and siltation of nearby water courses and avoid damage to productive land and ecologically sensitive areas:

- Utilize readily available sources of materials. If contractor procures materials from existing borrow pits and quarries, ensure that these conform to all relevant regulatory requirements;
- Borrow areas and quarries (if these are being opened up exclusively for the project) must comply with environmental requirements, as applicable.
- Borrow areas and quarries must not be located in ecologically and culturally protected areas.

5. Generation of Solid Wastes

113. The solid wastes that may be generated from the construction and rehabilitation activities are the following: (i) construction wastes such as excess excavated earth (spoils), discarded construction materials, cement bags, wood, steel, oils, fuels and other similar items;

(ii) domestic wastes such as food wastes, paper, plastic bag, and plastic bottles; and (iii) hazardous materials from old buildings such as asbestos-containing materials (ACM)¹² in the roofing, siding, ducts or wallboard, thermal insulation on pipes, plaster or fireproofing, and flooring materials.

114. Improper solid waste management could cause odor and vermin problems, air pollution, risks to health and safety, flow obstruction of nearby watercourses and could negatively impact the landscape. The following mitigation measures to minimize impacts from waste generation shall be implemented by the contractor:

- Construction materials and stockpiles of soils should be covered to reduce material loss;
- Stockpiles, lubricants, fuels, and other materials should be located away from steep slopes and water bodies and kept in adequately protected areas;
- Avoid stockpiling any excess spoils. Excess excavated soils should be disposed to approved designated areas;
- Domestic solid wastes should be properly segregated in biodegradable and non-biodegradable for collection and disposal to solid waste disposal site or landfill approved by local authorities;
- Prohibit open burning and littering or disposal of solid wastes into canals, rivers and other watercourses;
- Residual and hazardous wastes such as oils, fuels, and lubricants shall be disposed in disposal sites approved by local authorities;
- Prepare an ACM management plan to clearly identify where the ACM is present, its condition, and establish procedure for its removal and disposal; and
- Ensure that wastes are not haphazardly dumped within the project site and adjacent areas.
- All types of solid wastes must be disposed properly into waste bins for temporary storage before transporting them to be disposed into dump site or landfill approved by local authorities.
- Construction contractor must provide sufficient waste bins at construction areas. Kitchen wastes including left-over food, vegetable trimmings, and other organic wastes should be separated. These could be used by villagers as animal feeds or as fertilizer. Plastic bags and plastic bottles should be segregated for re-use or recycling.

6. Biological Environment

115. The construction activities are located on existing TVET institution and there are no protected areas, areas of ecological interest or environmental sensitive areas in or around the project site.

116. If during the project implementation, there will be cutting of trees or removal of vegetation, compensatory plantation for trees lost at a rate of two trees for every cut tree. Special attention shall be given to protecting giant or old trees and locally important trees (with

¹² Asbestos is a group of naturally occurring fibrous silicate minerals. It was once used widely in the production of many industrial and household products because of its useful properties, including fire retardation, electrical and thermal insulation, chemical and thermal stability and high tensile strength. Today, asbestos is recognized as a cause of various diseases and cancers and is considered as a health hazard if inhaled (World Bank Group, 2009).

religious importance) during implementation. The following mitigation measures shall be implemented by project design and a contractor:

- Avoid cutting tree as much possible.,
- Prohibit burning of cleared vegetation.
- Re-planting trees near the sub-project to compensate for lost trees, provide shade and improve the landscape in the sub-project areas.

7. Cultural Heritage

117. Construction activities are within the premises of the Public TVET Institutions which have been developed in time, thus no cultural heritage is expected to be found. However, mitigating measures must be in place for any possible “chance discoveries” made during construction work; with procedure as discussed in *Article 37 of the Law on the Protection of Cultural Heritage (NS/RKM/0196/26)*. The Chance Discovery Procedure will be put in place to include the following:

- If any cultural heritage is encountered, all works at the discovery site should be immediately halted
- Without delay, the Contractor and/or site engineer will inform the PTC director of the find and then report it to the local authorities who shall decide on the measures to be taken during the chance discoveries.
- Record of all discoveries should be maintained by the Contractor and/or site engineer, including chain of custody instructions for movable finds
- All Project workers and staff shall be made aware of the Chance Discovery Procedure.

8. Traffic

118. Construction activities may result to an increase in movement of heavy vehicles for the transport of materials and equipment. Aside from the generation of noise and dust on hauling routes, the movement of construction vehicles will disrupt normal traffic patterns and expose the local community and the trainees and personnel in the TVET institutions to risk of injury or accidents. The following measures shall be implemented by the contractor to minimize such impacts:

- Using locally sourced materials, whenever possible, to minimize transport distances;
- The contractor should closely coordinate with local authorities and with the TVET institutions for traffic management;
- Regular maintenance of vehicles and use of manufacturer approved parts to minimize potentially serious accidents caused by malfunction or premature failure;
- The contractor must select duly licensed drivers with good track record;
- The contractor should require its drivers to drive following national traffic policy and at lower speeds when passing through built-up and residential areas.
- The contractor must ensure that vehicles are regularly maintained and in good working condition.

The contractor should regularly inform the local authorities on project construction schedule and location.

- 9. Damage to Infrastructure

119. Transport of construction materials and other construction activities may cause damage to existing roads, irrigation and drainage canals adjacent to the construction sites. The

contractor shall implement the following measures to minimize the damage to existing infrastructure:

- The contractor shall not allow overloading of trucks used for the transport of materials; and
- The contractor will be required to repair damaged infrastructure resulting from the transport of materials and other construction activities. These infrastructures should be reinstated to their original condition upon completion of construction works.

10. Occupational Health and Safety

120. Construction activities may cause harm and danger to the lives and welfare of workers. The contractor should prepare occupational health and safety plan (OHSP) which will be part of the contractor's contract documents. The occupational safety plan should have provisions on (i) providing personal protective equipment (PPE) like hard hats, safety gloves, ear muffers to all workers; (ii) providing occupational health and safety training to all workers (i.e. first aid measures, prevention of malaria, diarrhea, HIV/AIDS); (iii) documenting safety procedures to be followed for all construction site activities; (iv) maintaining records of accident and the corrective actions implemented; and (v) emergency response plan during fire, earthquake and other incidents.

121. The existing health services are within three kilometers in the project area which are mostly public health centers. These centers, however, may not be able to accommodate additional patients resulting from accidents during construction activities. Therefore, first-aid facilities for the workers and at least one safety and health officer should be assigned in the construction area.

122. Most of the public TVET institutions have water supply connections from public and private water companies except for the BIT which buy bottled water for drinking and use surface water, groundwater, and rainwater for other activities. Sanitary facilities, although available within the premises of the institution, must be allotted or provided for the sole use of construction workers. Recommended measures to be implemented by the contractor for water and sanitation include:

- Provide adequate portable or permanent sanitation facilities serving all workers; Provide sufficient, safe, and easily accessible drinking water stations in the project area.
123. Most of the subproject will be located in the public TVET institutions where workers should use the existing toilets and shower rooms. The contractor must ensure that workers maintain cleanliness of sanitation facilities and construction areas. As for new proposed construction sites including Siem Reap and Tbong Khmum, the contractor must provide enough toilet and shower rooms in good condition for worker's usage. Additionally, the contractor should provide sufficient water supply for washing/bathing and drinking water as well.

124. Construction camps will not be allowed in the project area to ensure the safety of the trainees and staff temporarily residing in the public TVET institutions.

11. Community, Health and Safety

125. The construction activities will be inside the premises of public TVET institutions and management strategies must be implemented to protect both the people within the Public TVET Institution and the nearby local community from physical, chemical, or other hazards associated with the construction sites. Risks may arise from unauthorized entry at the construction site, resulting to potential contact with hazardous materials, contaminated soils and other environmental media, or excavations and structures which may pose falling and entrapment hazards. Recommended measures to mitigate these risks, whenever applicable, include:

- The contractor should prepare a Community Health and Safety Plan (CHSP) which should be developed in consultation with the training center director, affected communities and local authorities. The CHSP should include specific emergency response procedures and preparedness, communication systems and protocols, interaction with local emergency and health authorities and provision of emergency service vehicles.
- Restrict access to the construction site, through a combination of institutional and administrative controls, including the provision of fencing the construction area and barricades, night lighting and signage on open trenches and excavation areas;
- Posting warning signs and information in the construction area on public safety hazards and emergency contact information;
- Providing security personnel in construction areas, if needed;
- Members of the local community will be given priority for employment in the construction activities. This will have the added benefit of avoiding social problems usually encountered when workers are sourced from other provinces; and
- Workers need to be aware of the following general rules: (i) no alcohol/drugs on-site; (ii) prevent excessive noise; (iii) no illegal activities such as, but not limited to gambling, and hunting farm animals in the area; (iv) trespassing on private/commercial properties adjoining the site is forbidden; (v) no littering in the public TVET institutions; (vi) workers are not allowed to be loitering in the TVET institutions especially when there are trainings or classes in adjacent buildings; and (vii) prohibit guns and other weapons.

D. Anticipated Impacts and Mitigation Measures: Operation and Maintenance Phase

126. There are no anticipated significant impacts during the operation and maintenance of the project. However, with the nature of the training and programmes (i.e. auto mechanic, agricultural machinery, electricity) in the public TVET institutions, the following are the recommended measures on the maintenance of the workshops, buildings and dormitories which will be implemented by the PTC:

- Occupational health and safety for the teachers and trainees such as the provision of first-aid kit, PPE to trainees and teachers in all workshop areas;
- Emergency response plan during fire, earthquake and other incidents;
- Proper segregation, storage, collection and disposal of domestic solid wastes.
- Providing personal protective equipment (PPE) like hard hats, safety gloves, ear muffers and other appropriate safety equipment to the teachers and trainees particularly for workshop operation.

VI. INFORMATION DISCLOSURE, CONSULTATION, AND PARTICIPATION

127. The public participation process includes (i) identifying interested and affected parties (stakeholders); (ii) informing and providing the stakeholders with sufficient background and technical information regarding the proposed development; (iii) creating opportunities and mechanisms whereby they can participate and raise their viewpoints (issues, comments, and concerns) with regard to the proposed development; (iv) giving the stakeholders feedback on process findings and recommendations; and (v) ensuring compliance to process requirements with regards to the environmental and related legislation.

A. Public Consultation Conducted

128. Public consultations were conducted during the site visits and assessment in the ten (10) public TVET institutions on June 5-12, 2014 and the twelve (12) public TVET institutions in October 2015. The meeting organized by DGTVET has the following objectives: (i) present the proposed development in the TVETSDP; (ii) to provide a background information on the required IEE based on ADB's SPS 2009; (iii) to provide background information and profile of the public TVET institutions; (iv) to conduct perception survey through key informant interview on the potential environmental, resettlement and social impacts of the project; and (v) ask for the recommendations and mitigation measures of the stakeholders on the implementation of the project.

129. The stakeholders who attended the meeting are the following: (i) representative from the Commune/village council; (ii) representative from the DGTVET; (iii) representative from the Provincial Department of Labor and Vocational Training (PDLVT); (iii) Director, staff and trainees of the public TVET institutions; (iv) international and national environmental consultants; and (v) villagers living in the subproject area.

130. A perception survey using a pre-designed questionnaire was conducted in Khmer language through key informant interviews. The topics discussed were: (i) project awareness; (ii) background information on the public TVET institutions; (iii) environmental issues within the institution and the local community; (iv) environmental concerns on the project; (v) perceived negative impacts and benefits of the project; (vi) approval or disapproval of the project; (vii) involuntary resettlement and indigenous people issues within the institution area; and (viii) recommendations, suggestions and mitigation measures on the project implementation. Refer to Appendix 4 for the complete documentation of the public consultation conducted. Table 10 shows the number of key informants interviewed for the project.

Table 10: Number of stakeholders interviewed for the perception survey

No	Province	Date	Number of Stakeholders Interviewed
01	Banteay Meanchey	6 June 2014	5
02	Battambang	7 June 2014	4
03	Kampong Cham	5 June 2014	5
04	Kampong Speu	10 June 2014	6
05	Kampong Thom	5 June 2014	5
06	Kandal	12 June 2014	6

07	Koh Kong	11 June 2014	5
08	Pursat	7 June 2014	5
09	Siem Reap	6 June 2014	4
10	Preah Sihanouk	11 June 2014	5
11	Prey Veng	02 October 2015	12
12	Tbong Khmum	02 October 2015	09
13	Kratie	03 October 2015	20
14	Kep	05 October 2015	19
15	CIEDI Phnom Penh	07 October 2015	07
16	JVC Phnom Penh	07 October 2015	06
17	Kandal PTC	08 October 2015	21
18	Kampong Chhnang PTC	16 October 2015	19
19	Battambang PTC	16 October 2015	13
20	Pailin PTC	17 October 2015	11
21	Siem Reap CEFPTC	19 October 2015	09
22	Odor Meanchey	20 October 2015	09

131. The consolidated response, comments and recommendations of the stakeholders on the project are the following:

- i. The project will not have any negative environmental impact but only positive social benefits. It will help reduce poverty and will increase the access of the poor and disadvantaged people, especially those from the remote areas to education;
- ii. Dust emission is expected to be generated in some areas during the implementation of the project but only short period during construction;
- iii. Noise during construction will not affect the day-to-day activities in the institutions and the local community. The recommendation is to use construction equipment that produced less noise and fence the area undergoing construction activities;
- iv. Use smaller construction vehicles to avoid road degradation and vehicular accidents in areas on narrow roads. Consider routes with wider roads and less-populated areas for large construction vehicles;
- v. Consider hiring workers from the local community for the civil works of the project;
- vi. Consider involving the provincial training center as a member of building quality committee for checking the quality of building and construction completion; and
- vii. It is recommended that construction activities will not be scheduled during rainy or monsoon season.

132. The suggestions, comments and recommendations will be incorporated in the final technical design and environmental management plan (EMP) of the project.

B. Future Consultation and Disclosure

133. The public consultation and disclosure program with the stakeholders will remain a continuous process throughout the project implementation and will include the following:

1. IEE Disclosure

134. The IEE report for the original loan has been disclosed on ADB's website. The same will be done for this updated IEE. A Khmer summary should also be posted at the TVET

website, along with link in the ADB website for the full report. The IEE report (English and Khmer) and other relevant documents will also be made available at: (i) offices of implementing and executing agencies; (ii) provincial offices of MLVT; (iii) public TVET institutions; and (iv) contractor's office. It will be ensured that hard copies of IEE (English and Khmer) are kept at places which are conveniently accessible to all stakeholders.

2. Consultation during construction phase

135. The following consultation should be conducted during the construction phase: (a) public meetings with affected communities to discuss and plan work programs and allow issues to be raised and addressed once construction has started; and (b) meetings to discuss and plan construction work with individual communities to reduce disturbance and other impacts, and to provide a mechanism through which stakeholders can participate in project monitoring and evaluation.

3. Project Disclosure

136. Further disclosure of the project details during the construction phase may include: (a) public information campaigns (via newspaper, flyers, and media) to explain the project to the wider city population and prepare them for disruptions they may experience once construction is underway; (b) public disclosure meetings at key project stages to inform the public of progress and future plans, and to provide copies of summary documents in local language; (c) formal disclosure of completed project reports by making copies available at convenient locations in the study areas, and informing the public of their availability; and (d) providing a mechanism through which comments can be made.

VII. GRIEVANCE REDRESS MECHANISM

137. A grievance redress mechanism (GRM) will be established to receive and facilitates the resolution of affected people's (AP's) concerns, complaints, and grievances on the implementation of the project. The GRM will comply with the requirements of the ADB SPS (2009) and will aim to provide a time-bound and transparent mechanism to voice and resolve social and environmental concerns linked to the project.

138. As a general policy, the implementing agency will work proactively toward preventing grievances through the implementation of impact mitigation measures to the anticipated impacts and address potential issues before they become grievances. Also, information of the GRM should be included in the public information campaign of the project.

A. Communication Channel

139. DGTVET, the implementing agency of the project will provide a number of formal and informal channels through which comments and/or complaints on the construction activities can be received. These include:

- **TVET Website:** Provide a homepage for the TVETSDP project which provides a *Contact us* link which members of the public can submit an email for feedback and/or grievances to the DGTVET appropriate departments and TVET institutions' directors.

- **On-site contacts:** A notice board will be posted at each site with the name and contact details of the contractor, site engineer and TVET institutions director. These notice boards will be placed in a visible area known to the public and should be presented in the local language (Khmer).

B. Type of Grievances

140. Any affected person (AP) will be able to submit a grievance with DGTVET or through local authority or the provincial training center if they believe that activities connected to the implementation of the project, specifically during the construction phase, is resulting to serious impact on the community, the environmental, or on the quality of life. Grievances could include:

- Negative impacts on a person or a community (i.e. noise pollution, dust emissions, disruption of classes)
- Damage on private properties including land, tree or other building
- Dangers to health and safety or to the environment
- Damage to infrastructure such as road degradation
- Failure to comply with standards or legal obligations
- Harassment of any nature and improper conduct or unethical behavior
- Threat to the peace and security in the public TVET institutions and local community

C. Grievance Resolution Process

141. The following steps outlined the procedures on receiving and facilitating the resolution of APs concerns, complaints and grievances during the construction phase of the project (Figure 12).

142. **1st Level Grievance:** Field-Level Resolution. In case of grievances that are immediate and urgent in the perception of the complainant, the contractor and/or site engineer will provide the most easily accessible or first level contact for quick resolution of grievances. A meeting may be held among the AP, Contractor, officials or community relations officer of PTC, village council chief to discuss the whereabouts of the complaint. Immediate remedial action on the AP is expected from the contractor. The resolution of the complaint should be done within one week.

143. **2nd Level Grievance:** If no understanding or amicable solution can be reached within seven days from filing the complaint, the AP can elevate the complaint to the public or community relations officer of the Department of TVET Management. The Department of TVET Management is under the Directorate General of TVET, which is directly responsible for the operation and maintenance of public TVET institutions. Resolution of the complaints should be done within 15 days.

144. **3rd Level Grievance:** If no understanding or amicable solution can be reached within fifteen days from filing the complaint, the AP can elevate the complaint to the Project

Coordination Unit (PCU) safeguards officer¹³. The PCU in consultation with appointed officers/specialists will resolve the complaints within 30 days.

145. **Judicial Process and ADB Accountability Mechanism.** Despite the project GRM, an aggrieved person shall have access to the country's legal system at any stage, and accessing the country's legal system can run parallel to accessing the GRM and is not dependent on the negative outcome of the GRM. In the event that the established GRM is not in a position to resolve the issue, the affected person also can use the ADB Accountability Mechanism (AM) through directly contacting (in writing) the Complaint Receiving Officer (CRO) at ADB headquarters or the ADB Cambodia Resident Mission (CARM). The complaint can be submitted in any of the official languages of ADB's developing member countries. The ADB Accountability Mechanism provides a forum where people adversely affected by ADB-assisted projects can raise issues and seek solutions to their problems and report alleged noncompliance of ADB's operational policies and procedures. It consists of two separate but complimentary functions: consultation phase and compliance review phase.

D. Documentation of GRM

146. At any stage of the GRM, the contractors and the assigned secretary of the GRC and PCU should document all complaints recorded including the contact details of the complainant, date of filing the grievance, nature of grievance, minutes of meeting, agreed corrective action or resolution and signed statement of resolution or satisfaction from the complainant.

147. The number of grievances recorded and resolved and the outcomes will be disclosed in the office of the project implementation unit, TVET institutions, and on the TVET website, as well as reported in the monitoring reports submitted to ADB during the construction and operation of the Project.

E. Periodic review and documentation of lessons learned

148. The PIU designated safeguards focal person or community relations officer will periodically review the functioning of the GRM and record information on the effectiveness of the mechanism, especially on the project's ability to prevent and address grievances.

F. Costs

149. The executing agency will be responsible for all administrative fees and legal fees that will be incurred in the resolution of grievances if the APs win their case.

G. Grievance Follow-up

150. DGTNET or MLVT may contact the complainant at a later stage to ensure that the activities continue to pose no further problems. If issues were not completely resolved, new complaints will be treated as new grievance and re-enter the GRM process.

¹³ The Project Coordination Unit (PCU) composed of Project Director (Secretary of State, MLVT), Deputy Project Director (Undersecretary of State), Project Coordinator (Director General, DGTNET), and Deputy Project Coordinator (Deputy Director General, DGTNET). The PCU will be supported by 33 DGTNET's qualified staff.

H. Confidentiality and Anonymity

151. An AP submitting a grievance may wish to raise concern in confidence. If the AP requested to protect his/her identity, it will not be disclosed without consent. Details of the submissions and allegations will remain secure within the team responsible for investigating the concern.

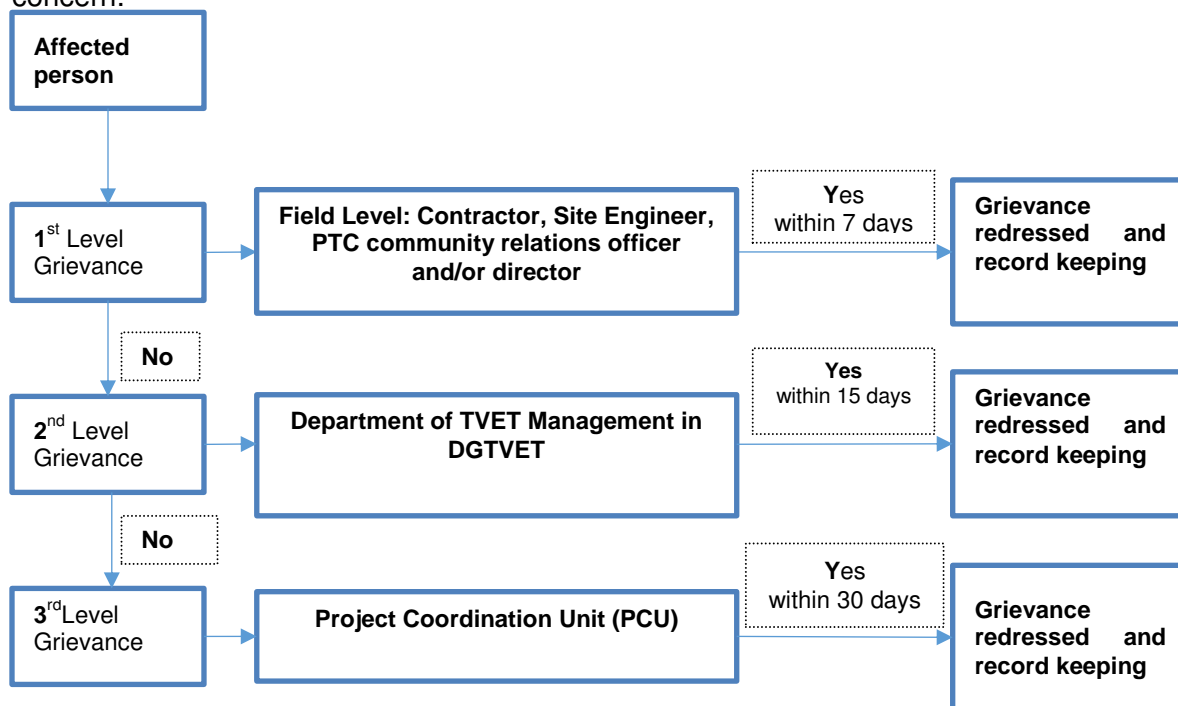


Figure 12: Grievance Redress Mechanism

VIII. ENVIRONMENTAL MANAGEMENT PLAN

152. This section presents the mitigation measures, environmental monitoring plan, and institutional arrangements to address the environmental impacts of the project. The purpose of the environmental management plan (EMP) is to ensure that all activities associated in the project will not result to significant adverse environmental and social impacts.

153. A copy of the EMP must be kept on work sites at all times. This EMP will be included in the bid documents and will be further reviewed and updated during implementation. The EMP will be made binding on all contractors operating on site and will be included in the contractual clauses. Non-compliance with, or any deviation from, the conditions set-out in the document constitutes a failure in compliance.

A. Environmental Mitigation Measures

154. The anticipated impacts and the corresponding mitigation measures identified in Chapter V are summarized in Table 11. The table also shows the authority responsible for the implementation of mitigation measures, schedule of implementation and mitigation cost. The overall implementation of the mitigation measures will be the responsible of the contractor and will be supervised by the Site Engineer.

Table 11: Environmental Mitigation Measures

Potential Environment Impact	Mitigation Measures	Schedule	Institutional Responsibility	Estimated Cost
Pre-Construction Phase				
Non-compliance of the technical design to applicable national and international guidelines	<ul style="list-style-type: none"> Planning principles and design considerations will be reviewed and will be consistent with the Master Plan of the TVET institutions The final technical design of the workshops, dormitory, additional building and rehabilitation activities should take into consideration the following: (i) follow the suggested guidelines on building school facilities; (ii) construction of sanitation facilities should not be located near source of drinking water (at least 30 meters from the source of drinking water) and consistent with applicable national and international guidelines (i.e. World Health Organization's Water, Sanitation and Hygiene Standards for Schools in Low-cost Settings); and (iii) follow applicable rules and regulations on structural integrity of building structures 	Planning Stage of the project	DGTVET	Included in the project cost
Site-specific impacts and mitigation measures are not appropriate and sufficient to the final technical design of the project	<ul style="list-style-type: none"> Update IEE and EMP based on the final technical design of the project Ensure updated EMP is provided to the contractors Relevant information disclosed 	Upon completion of the final technical design	DGTVET	Included in the Project cost
Flooding in some areas could impact on the proposed structures such as in Kandal PTC, Kampong Chhnang PTC, and Prey Konkhla PTC.	<ul style="list-style-type: none"> During the preparation of project design, flooding conditions will be ascertained and appropriate measures will be included in the design to minimize or avoid impacts to the proposed structures. 	Planning Stage of the project	DGTVET	Included in the Project cost
CONSTRUCTION PHASE				
Air Pollution				
Generation of dust or particulate matter from on-site excavation , and movement of earth materials	<ul style="list-style-type: none"> Water spraying on road surface and work areas, as necessary especially during dry weather Place stockpiled soil in areas shielded from prevailing 	During project construction	Contractor	Included in the project cost

Potential Environment Impact	Mitigation Measures	Schedule	Institutional Responsibility	Estimated Cost
	winds			
Emission from movement of heavy equipment and construction vehicles	<ul style="list-style-type: none"> Truck carrying sands, soil, stone, and other loose materials should be covered with tarpaulin Vehicles and equipment used during construction must be properly maintained and in good condition to ensure optimal performance. All vehicles and equipment used in the construction activities shall have valid certifications indicating compliance to vehicle emission standards 	During project construction	Contractor	Included in the project cost
Water Pollution				
Run-off or soil erosion from stockpiled construction materials and spoils	<ul style="list-style-type: none"> Minimize spoil by balancing cut and fill wherever possible. Spoil shall only be disposed to areas approved by local authorities Impacts due to soil erosion will be mitigated by careful grading of the construction site such that water is not allowed to run off of the construction site into adjacent drainages. Where excavated soils are onsite, adequate measures will be implemented to control runoff, including covering exposed soils, construction of settling basins, or temporary silt traps along the drainage leading to water bodies. All earthworks must be conducted during the dry season to prevent the problem of soil run-off during monsoon season 	During project construction	Contractor	Included in the project cost
Domestic sewage from construction workers, accidental spillage of oil and other lubricants, wastewater from washing of construction equipment and vehicles and improper disposal of solid wastes.	<ul style="list-style-type: none"> Implementation of solid wastes collection, storage and disposal system, with provision for waste segregation. Provision on adequate on-site sanitation facilities with septic tanks to prevent untreated sewage from being channeled into the drainage canals, irrigation canals, and river Ensure that no cesspools will be created during construction activities 	During project construction	Contractor	Included in the project cost

Potential Environment Impact	Mitigation Measures	Schedule	Institutional Responsibility	Estimated Cost
	<ul style="list-style-type: none"> Place storage areas for fuels and lubricants away from any drainage leading to water bodies. Designate area for equipment and vehicle washing and maintenance. The area should be provided with oil and grease traps to prevent oil from being washed into drainage canals Used oil should be stored at safe place for sale or disposal consistent with national and local regulations. Prohibit to disposal into the environment such as water course, rice field and other areas not designed and approved (i.e., with permit from authorities) to receive such waste. 			
Noise and Vibration				
Disruption of training/classes in the TVET institutions. Noise pollution to other sensitive receptors: nearby community, schools, hospitals in the project area.	<ul style="list-style-type: none"> Planning activities in consultation with the staff and officials of public TVET institutions and the Chief of Village Council so that activities with the greatest potential to generate noise and vibration are planned during periods of the day that will result in least disturbance Construction activities will be avoided during night time, and religious or cultural events in close proximity to the roadside such as Friday prayers, temple festivals and weddings. Follow applicable national guidelines on permissible noise level during construction activities All construction equipment and vehicles shall be well maintained, regularly inspected for noise emissions, and shall be fitted with muffler and other appropriate noise suppression equipment consistent with applicable national and local regulations Prohibit workers from generating loud noise (e.g., due to loud talking, when handling materials). 	During project construction	Contractor	Included in the project cost

Potential Environment Impact	Mitigation Measures	Schedule	Institutional Responsibility	Estimated Cost
Noise and vibration due to the movement of vehicles along the access road may potentially result to nuisance.	<ul style="list-style-type: none"> Impose speed limits on construction vehicles to minimize emissions along areas where sensitive receptors are located (i.e. temples, hospitals, schools, houses) Truck driver and equipment operators shall avoid the use horns unless it is necessary to warn other road users or animals of the vehicle's approach 	During project construction	Contractor	Included in the project cost
Vibration from the construction activities may cause damage to other structures and buildings in the area	<ul style="list-style-type: none"> Identify any buildings at risk (i.e. old buildings in Kandal training center) from vibration damage and avoiding any pneumatic drills or heavy vehicles in the vicinity. Complete the civil works in these areas as quickly as possible 	During project construction	Contractor	Included in the project cost
Quarry and Borrow Sites				
Operation of quarry and borrow sites could cause adverse impacts to surface water quality, elevated dust emission during excavation, soil erosion and siltation of nearby water courses, and potential damage to productive land and ecologically sensitive areas.	<ul style="list-style-type: none"> Utilize readily available sources of materials. If contractor procures materials from existing borrow pits and quarries, ensure that these conform to all relevant regulatory requirements. Borrow areas and quarries (if these are being opened up exclusively for the project) must comply with environmental requirements, as applicable Borrow area and quarry must not be located in culturally and ecologically protected areas. 	During project construction	Contractor	Included in the project cost
Generation of Solid Wastes				
Improper solid waste management could cause odor and vermin problems, air pollution, risks to health and safety, flow obstruction of nearby watercourses and could negatively impact the landscape	<ul style="list-style-type: none"> Construction materials and stockpiles of soils should be covered to reduce material loss. Stockpiles, lubricants, fuels, and other materials should be located away from steep slopes and water bodies. Avoid stockpiling any excess spoils. Excess excavated soils should be disposed to approved designated areas. Domestic solid wastes (i.e. food wastes) should be properly segregated in biodegradable and non- 	During project construction	Contractor	Included in the project cost

Potential Environment Impact	Mitigation Measures	Schedule	Institutional Responsibility	Estimated Cost
developed in time, thus no cultural heritage is expected to be found. However, mitigating measures must be in place for any possible “chance discoveries” made during construction work; with procedure as discussed in <i>Article 37 of the Law on the Protection of Cultural Heritage (NS/RKM/0196/26)</i> . The Chance Discovery Procedure will be put in place to include the following	<p>halted.</p> <ul style="list-style-type: none"> Without delay, the contractor and/or site engineer will inform the PTC Director of the find and report it to local authorities who shall decide on the measures to be taken during the chance discoveries. Record of all discoveries should be maintained by the Contractor and/or Site engineer. All project workers and staff shall be made aware of the Chance Discovery Procedure 			
Traffic				
Aside from the generation of noise and dust on hauling routes, the movement of construction vehicles will disrupt normal traffic patterns and expose the local community and the trainees and personnel in the TVET institutions to risk of injury or accidents	<ul style="list-style-type: none"> Using locally sourced materials, whenever possible, to minimize transport distances The contractor should closely coordinate with local authorities and with the TVET institutions for traffic management Regular maintenance of vehicles and use of manufacturer approved parts to minimize potentially serious accidents caused by malfunction or premature failure The contractor should require its drivers to drive lower speeds when passing through built-up and residential areas The contractor should ensure that drivers are duly licensed with good track records. The contractor should ensure that vehicles and equipment are regularly maintained and in good working conditions. 	During project construction	Contractor	Included in the project cost
Damage to infrastructure				
Transport of construction materials and other construction activities may cause damage to existing roads, irrigation and drainage canals adjacent to the construction sites. The contractor shall	<ul style="list-style-type: none"> The contractor shall not allow overloading of trucks used for the transport of materials; and The contractor will be required to repair damaged infrastructure resulting from the transport of materials and other construction activities. 	During project construction	Contractor	Included in the project cost

Potential Environment Impact	Mitigation Measures	Schedule	Institutional Responsibility	Estimated Cost
implement the following measures to minimize the damage to existing infrastructure	These infrastructures should be reinstated to their original condition upon completion of construction works			
Occupational Health and Safety				
Construction activities may cause harm and danger to the lives and welfare of workers	<ul style="list-style-type: none"> The contractor should prepare occupational health and safety plan (OHSP) which will be part of the contractor's contract documents. The occupational safety plan should have provisions on (i) providing personal protective equipment (PPE) like hard hats, safety gloves, ear muffs to all workers; (ii) providing occupational health and safety training to all workers (i.e. first aid measures, prevention of malaria, diarrhea, HIV/AIDS); (iii) documenting safety procedures to be followed for all construction site activities; (iv) maintaining records of accident and the corrective actions implemented; and (v) emergency response plan during fire, earthquake and other incidents Provision of first-aid facilities for the workers and at least one safety and health officer should be assigned in the construction area Provide adequate portable or permanent sanitation facilities serving all workers Provide sufficient, safe, and easily accessible drinking water stations in the project area Construction camps will not be allowed in the project area to ensure the safety of trainees and staff temporarily residing in the public TVET institutions 	<p>Must be established before the start of construction activities</p> <p>During project construction</p>	<p>Contractor and DGTNET</p> <p>Contractor</p> <p>Contractor</p> <p>Contractor</p> <p>Contractor and DGTNET</p>	Included in the project cost
Community Health and Safety				
Physical, chemical, or other hazards associated with the construction	<ul style="list-style-type: none"> The contractor should prepare a Community Health and Safety Plan (CHSP) 	Must be established before the	Contractor and DGTNET	Included in the project cost

Potential Environment Impact	Mitigation Measures	Schedule	Institutional Responsibility	Estimated Cost
sites. Risks may arise from unauthorized entry at the construction site, resulting to potential contact with hazardous materials, contaminated soils and other environmental media, or excavations and structures which may pose falling and entrapment hazards	which should be developed in consultation with the training center director, affected communities and local authorities. The CHSP should include specific emergency response procedures and preparedness, communication systems and protocols, interaction with local emergency and health authorities and provision of emergency service vehicle.	start of construction activities		
	<ul style="list-style-type: none"> Restrict access to the construction site, through a combination of institutional and administrative controls, including the provisions of fencing the construction area and barricades, night lighting and signage on open trenches and excavation areas. 	During project construction	Contractor and DGTVET	
	<ul style="list-style-type: none"> Providing security personnel in construction areas, if needed 		Contractor	
	<ul style="list-style-type: none"> Posting warning signs and information in the construction area on public safety hazards and emergency contact information. 		Contractor	
	<ul style="list-style-type: none"> Members of the local community will be given priority for employment in the construction activities. This will have the added benefit of avoiding social problems usually encountered when workers are sourced from other provinces 		Contractor	
	<ul style="list-style-type: none"> Workers need to be aware of the following general rules: (i) no alcohol/drugs on-site; (ii) prevent excessive noise; (iii) no illegal activities such as, but not limited to gambling, and hunting farm animals in the area; (iv) trespassing on private/commercial properties adjoining the site is forbidden; (v) no littering in 		Contractor	

Potential Environment Impact	Mitigation Measures	Schedule	Institutional Responsibility	Estimated Cost
	the public TVET institutions; and (vi) workers are not allowed to be loitering in the TVET institutions especially when there are trainings or classes in adjacent building			
OPERATION AND MAINTENANCE				
Due to the nature of the trainings and programmes in the TVET system, potential risk to the maintenance of the workshops and dormitories are occupational health and safety of trainees and staff and the proper segregation and disposal of solid wastes.	<ul style="list-style-type: none"> • Provision of first-aid kit in the workshop area • Provision of PPE (i.e. gloves, , proper shoes, face mask, safety goggles and other appropriate safety gear) to staff and trainees, as necessary. • Establish emergency response procedure and preparedness during fire, earthquake and other incidents; and • Encourage proper waste segregation, collection and disposal • Train all trainees on health and safety during works to avoid or minimize risk on health and safety before going to practice at the workshop. 	Operation and Maintenance	PTC	Administrative costs

B. Environmental Monitoring Plan

155. The actual implementation of the project will be managed by DGTNET. There are three departments in DGTNET namely, Department of TVET Management, Department of National Competency Standards and Department of Labour Market Information. The Department of TVET Management is directly responsible for the operation and maintenance of the public TVET institutions. The Department of TVET Management will assign a safeguards officer (or any position equivalent to the existing organization structure), who will work closely with the contractor during the construction phase to monitor the implementation of EMP. Table 12 shows the proposed environmental monitoring plan, schedule and responsible entities to be involved in the monitoring and evaluation.

156. **Reporting.** The ADB's SPS 2009 requires category B projects to submit semiannual environmental monitoring reports (SEMR) during the construction phase of the project. The contractor will submit monthly monitoring reports to DGTNET, which will be consolidated, validated and submitted semiannually to ADB during the construction phase of the project. Monitoring reports may be required, as necessary during the operation and maintenance of the project, which will be submitted annually. All monitoring reports will be uploaded in the ADB and TVET websites.

Table 12: Environmental Monitoring Plan

Parameters to be Monitored	Location and method of monitoring	Schedule/Frequency	Responsibility
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Parameters to be Monitored	Location and method of monitoring	Schedule/Frequency	Responsibility
Pre-Construction			
Completion of the detailed design of the project in accordance to applicable national and international guidelines	Review of detailed design documentation of the project	Prior to project implementation	Safeguards Officer
Updated IEE	Review of the disclosure of the updated IEE (if necessary) based on the final detailed design of the project	Upon completion of the detailed design	Safeguards Officer
Construction Phase			
Implementation of the construction phase environmental mitigation measures specified in Table 11.	Site inspection and survey interview with local authority, contractor staff and villagers during construction activities in the public TVET institutions, the nearby community and borrow area and quarry as specified in Table 10.	Quarterly and continuous throughout the project construction Random checks on-site during construction phase of the project	Safeguards Officer
Review of the contractor's occupational health and safety plan (OHSP)	Review and approval of the OHS plan Monitor the implementation of OHS plan	Review the OHS plan before the start of the construction activities Quarterly and continuous throughout the project implementation	Safeguards Officer
Review of the contractor's Community Health and Safety Plan (CHSP)	Review and approval of the CHS plan Monitor the implementation of CHS plan	Review the OHS plan before the start of the construction activities Quarterly and continuous throughout the project implementation	Safeguards Officer
Operation and Maintenance Phase			
Implementation of the operation and maintenance phase environmental mitigation measures specified in Table 11	Site inspection and assessment. Interviews with local authority, PTC's staff and villagers.	Semi-annually	Safeguards Officer

C. Institutional Arrangements and Responsibilities

157. The table below shows the institutional responsibilities for the implementation of EMP.

Table 13: Responsibilities for EMP Implementation

Agency	Responsibilities
Ministry of Labour and Vocational Training (MLVT)	Executing Agency <ul style="list-style-type: none"> Ensure that sufficient funds are available to properly implement the EMP

	<ul style="list-style-type: none"> Ensure that project implementation complies with the provisions of the EMP, ADB SPS 2009, applicable environmental policies and guidelines
Directorate General of Technical Vocational Education and Training (DGTVE)	Implementing agency <ul style="list-style-type: none"> Responsible for the overall responsibilities for the implementation of EMP and EMoP and other requirements stated in the IEE. Appoint a Safeguards Officer from the Department of TVET Management
Safeguards Officer	<ul style="list-style-type: none"> The assigned safeguards officer will have the following responsibilities: (i) inclusion of EMP in bidding documents and other applicable contracts; (ii) implementation of EMP and EMoP during the construction, operation and maintenance activities in the public TVET institutions; (iii) review and monitoring of the OHSP and CHSP; and (iv) submission of semi-annual monitoring reports to ADB.
Contractor	<ul style="list-style-type: none"> Provide sufficient funding and human resources for the implementation of EMP Ensure proper and timely implementation of the mitigation measure during the construction phase of the project. Submit and implement OHS and CHS plans to DGTVE Implement additional environmental mitigation measures, as necessary

D. Capacity Building

158. To strengthen the capacity of the DGTVE in the EMP and EMoP implementation, the environmental training and awareness of DGTVE personnel, specifically the appointed safeguards officer, site engineers, construction/civil engineers and contractors will be designed. The training will focus on (i) ADB's SPS 2009; (ii) environmental management and monitoring; and (iii) on occupational and community health safety plans. The capacity building and training activities will be delivered prior to the start of the construction activities.

E. EMP Budget

159. The costs for the EMP and EMoP measures are part of the engineering, construction, and procurement costs and are not included in the EMP budget. The cost that will be included in the EMP budget will be the monitoring during the construction and operation phases of the project and the training for the capacity building on ADB's SPS 2009, environmental management and monitoring, and on occupational and community health safety. MLVT may hire national environmental consultants to conduct the trainings. The estimated EMP budget is shown in Table 14.

Table 14: Estimated Budget for EMP and EMoP Implementation

Activity	Unit	Number	Unit Cost \$	Total \$
A. Pre-construction				
Training and Capacity Building ^a				
• ADB's SPS 2009	Days	1	2,000	2,000
• Environmental management and monitoring	Days	4	2,000	8,000
• Occupational health and safety	Days	2	2,000	4,000
• Community health and safety, and	Days	2	2,000	4,000

environmental awareness				
• National environment specialists for the training	Days	9	200	1,800
B. Construction Phase^b				
Site Inspection and monitoring				
• Transportation	Year	1	2,000	4,000
• Per diem	Year	1	1,000	2,000
C. Operation Phase^c				
• Site Inspection and assessment	Year	Continuing	1,000/yr	4,000
Sub-Total				29,800
Contingencies (15%)				4,470
Total				34,270

^a The costs included in the training and capacity building are for the venue and training materials.

^b It was estimated that construction activities will be finished in one year.

^c The estimated amount included in the EMB budget is for the first two years of operation.

IX. CONCLUSION AND RECOMMENDATION

The TVETSDP and TVETSDP-AF projects which will make provision to the following components: (i) construction of three women dormitories with water and sanitation packages in the Provincial Training Centers (PTCs) of Koh Kong, Banteay Meanchey, and Chantiers-Ecoles de Formation Professionnelle in Siem Reap under TVETSDP, and three dormitories with water and sanitation packages in Kratie PTC, Battambang PVC Prey Kounkhla and Kandal PTC under TVETSDP-AF ; (ii) construction of nine workshops with specialized equipment packages at PTCs of Banteay Meanchey, Kampong Cham, Kampong Speu, Kampong Thom, Kandal, Koh Kong, Pursat, Siem Reap and Sihanoukville under TVETSDP; and other nine workshop at PTCs of Prey Veng, Tbong Khmum, Kratie, Kep, JVC in Phnom Penh, Kampong Chhnang, Battambang Preykoun Khla, Pailin, and Odor Meanchey under TVETSDP-AF; (iii) construction of additional building including workshops and classrooms at the Battambang Institute of Technology under TVETSDP, and at Tbong Khmum, CIEDI in Phnom Penh, and Siem Reap CEFP PTC under TVETSDP-AF; and (iv) rehabilitation of the DGTNET building will not have any significant environmental and social impacts during the pre-construction, construction and operation and maintenance phases of the project.

160. The location of the construction activities are on existing location of the public TVET institutions except for the Chantiers-Ecoles de Formation Professionnelle in Siem Reap, where the land ownership is already transferred by Apsara Authority to Ministry of Labor, Vocation and Training (MLVT) since August 17, 2015, and the Tbong Khmum PTC which is located in the new provincial development of Tbong Khmum in government owned land. The location of the public TVET institutions are government-owned land and access to the project sites is through public right-of-way (ROW) and existing roads, hence, land acquisition and encroachment on private property will not occur. Also, all the location of the public TVET institutions, including the proposed new location for Siem Reap and Tbong Khmum are not located in or near protected areas, wetlands, mangroves, estuaries, cultural heritage site or historical monuments. Further, the project is not required by the Ministry of Environment of Cambodia to undertake an environmental impact assessment.

161. During the preparation of the initial environment examination, the final technical design (i.e. number of bed, number of floor-level, total floor area) of the project is not yet identified. To ensure the structural integrity of the new structures, the design should comply with applicable

national and international standards. Also, the technical design of the workshops, dormitory, additional building and rehabilitation activities shall take into consideration the following: (i) 2012 School Construction Guidelines of Cambodia; and (ii) construction of sanitation facilities should not be located near source of drinking water (at least 30 meters from the source of drinking water) and consistent with applicable national and international guidelines (i.e. World Health Organization's Water, Sanitation and Hygiene Standards for Schools in Low-cost Settings); and (iii) design considerations should be consistent with the Master Plan of the public TVET institutions. The IEE will be updated, if necessary, upon completion of the technical design.

162. The anticipated impacts on the physical and biological environment are temporary, localized, relatively in small area and can be easily avoided or minimized with the implementation of mitigation and monitoring measures which are detailed in the environmental mitigation plan ((EMP) and environmental monitoring plan (EMoP), respectively. The following are the anticipated impacts and the corresponding mitigation measures during the construction phase of the Project:

- (i) air pollution from the dust emissions from on-site excavation, movement of earth materials and emission from movement of heavy equipment and construction vehicles which will be mitigated by good construction practices such as water spraying on road surface and work areas, covering all materials during transportation, and proper maintenance of construction vehicles and equipment;
- (ii) water pollution from run-off or soil erosion from stockpiled construction materials and wastewater from domestic sewage of construction workers and accidental spillage of oil and other lubricants from washing of construction equipment which will be mitigated by covering exposed soils, construction of temporary silt traps, and provision of adequate and on-site sanitation facilities;
- (iii) noise pollution from the construction activities resulting to disturbance of classes and nuisance to the community which will be mitigated with continuous consultation with the officials of the training centers and the community on the schedule and time of construction activities and the use of noise suppression on construction equipment;
- (iv) generation of solid wastes which will be mitigated by the provision of the waste bins in the construction site and the proper segregation, temporary storage, collection and disposal of solid wastes will be strictly observed;
- (v) occupational health and safety in the construction site causing harm and danger to the lives and welfare of works which will be mitigated with the implementation of occupational and health safety plan including the provision of personal protective equipment to all workers;
- (vi) community health and safety such as the disruption of normal traffic patterns, damage or degradation of national roads from the transport of materials and risks from unauthorized entry to the construction resulting to accidents. The will be mitigated by the implementation of community health and safety plan which will includes the provision of fence to enclose the area of civil works and posting warning signs and information in the construction area.

163. During the operation and maintenance of the workshop, dormitory and building, the public TVET institutions will ensure the implementation of proper segregation, collection and

disposal of solid waste, provision of adequate drinking water supply and sanitation facilities, implementation of occupational health and safety to all trainees and staff, and emergency response plan during fire, earthquake and other incidents.

164. The mitigation and monitoring measures from the anticipated impacts are included in the environmental management and monitoring plans (EMP and EMoP) which will be part of the bidding documents of the project. The schedule, budget and responsible authority for the implementation are also included in the EMP and EMoP. Also, the contractor will be required to prepare a community, health and safety and occupational, health and safety plans prior to the construction activities. The concerns and recommendations of the stakeholders were also incorporated in the EMP and a grievance redress mechanism (GRM) is also established to address and facilitate complaints in a timely and transparent manner during the construction phase of the project

165. Results of the initial environment examination show that the construction of dormitory, workshop and building at the public TVET institutions and rehabilitation of the DGTvet building will not result to significant adverse environmental impacts. The anticipated impacts during the construction of the project are temporary, localized and in relatively small area which can be easily mitigated with the implementation of EMP and EMoP. Also, as a result of the social perception survey, the public TVET institutions and the local community in the training centers, the Project is acceptable and will create positive social impacts to women, indigenous people and the poor by increasing their access to education, thus improving their quality of life. No further special study or detailed environment impact assessment (EIA) needs to be undertaken to comply with ADB's environmental safeguards requirements.

References

1. Asian Development Bank. *Environment Safeguards: A Good Practice Sourcebook (Draft Working Document)*. December 2012
2. Asian Development Bank. *Safeguard Policy Statement*. June 2009
3. Authority for Protection and Management of Angkor and the Region of Siem Reap (APSARA). 2005. History and Organization.
http://www.autoriteapsara.org/en/apsara/about_apsara/history_organization.html
(accessed on June 8, 2014)
4. Council for the Development of Cambodia (CDCa). Municipality information
<http://www.cambodiainvestment.gov.kh/municipality-info.html> (accessed on June 8, 2014)
5. Google Map, 2014. Map data. <https://www.google.com/maps/preview>
(Viewed on June 15, 2014)
6. Directorate General of Technical Vocational Education and Training (DGTvet). *Master Plans of the public TVET institutions*.

7. M. Petersen et. al. *Documentation for the Southeast Asia Seismic Hazard Maps*. 2007
8. Ministry of Commerce of the Kingdom of Cambodia (MOC). *Full Report on Cambodia Trade Integration Strategy 2013-2018 and Trade Swap Road Map 2013-2018*. 2013
9. Ministry of Education, Youth and Sport of the Kingdom of Cambodia. *The Education Statistics and Indicators 2012-2013 Book*. 2013.
10. Ministry of Education, Youth and Sport. *School Construction Guidelines of Cambodia*. May 2012
11. Ministry of Health of the Kingdom of Cambodia (MOH). Provincial Health Departments. 2009
12. National Institute of Statistics (NIS). *General Population Census of Cambodia 2008*. 2008
13. National Training Board. <http://www.ntb.gov.kh/institutions.htm>
(accessed on June 20, 2014)
14. Royal Government of Cambodia. *Rectangular Strategy for Growth, Employment, Equity and Efficiency Phase III, Phnom Penh*. September 2013.
15. United Nations Education, Scientific and Cultural Organization, International Center for Technical and Vocational Education and Training (ENESCO-UNEVOC). World TVET database. <http://www.unevoc.unesco.org/go.php?q=World+TVET+Database&ct=KHM>
(accessed on June 22, 2014)
16. United Nations Environment Programme (UNEP). Cambodia Environment Outlook. <http://geodata.rrcap.unep.org/> (accessed June 8, 2014).
17. United Nations Children's Fund (UNICEF). Statistics.
http://www.unicef.org/infobycountry/cambodia_statistics.html#116
(accessed on June 8, 2014)
18. United Nations Educational, Scientific, and Cultural Organization (UNESCO). *Literacy Rates in Cambodia: Literacy Rates by village*. 2011
19. World Health Organization (WHO). Fact Sheets on environmental sanitation.
http://www.who.int/water_sanitation_health/hygiene/emergencies/fs3_4.pdf
(accessed on June 22, 2014)
20. World Health Organization (WHO) and Ministry of Health of the Kingdom of Cambodia (MOH). 2012 *Health Service Delivery Profile: Cambodia*. 2012

21. World Bank Group. *Climate Risk and Adaptation Country Profile*. 2011.
22. World Bank Group. *General Environment, Health, and Safety Guidelines (EHS): Hazardous Materials Management*. April 2007.
23. World Bank Group. *Good Practice Note: Asbestos-Occupational and Community Health Issues*. May 2009.

Appendices

Appendix 1: ADB's Rapid Environmental Assessment Checklist

Instructions:

(i) The project team completes this checklist to support the environmental classification of a project. It is to be attached to the environmental categorization form and submitted to the Environment and Safeguards Division (RSES), for endorsement by Director, RSES and for approval by the Chief Compliance Officer.

(ii) This checklist focuses on environmental issues and concerns. To ensure that social dimensions are adequately considered, refer also to ADB's (a) checklists on involuntary resettlement and Indigenous Peoples; (b) poverty reduction handbook; (c) staff guide to consultation and participation; and (d) gender checklists.

(iii) Answer the questions assuming the "without mitigation" case. The purpose is to identify potential impacts. Use the "remarks" section to discuss any anticipated mitigation measures.

Country/Project Title: CAM: Technical Vocational Education and Training Sector Development Program (TVETSDP)

Sector Division: Human and Social Development Division, Southeast Asia Department (SEHS)

Screening Questions	Yes	No	Remarks
A. Project Siting Is the Project area adjacent to or within any of the following environmentally sensitive areas?			
▪ Cultural heritage site		√	The construction of dormitories, workshops and building are located on existing public TVET institutions. There are no protected areas or areas with cultural and historical importance in or near the locations of the public TVET institutions. Also, there are no protected areas or areas with cultural and historical importance in the location of the DGTVE building for the proposed rehabilitation works.
▪ Legally protected Area (core zone or buffer zone)		√	
▪ Wetland		√	
▪ Mangrove		√	
▪ Estuarine		√	
▪ Special area for protecting biodiversity		√	
B. Potential Environmental Impacts Will the Project cause...			
▪ impairment of historical/cultural areas; disfiguration of landscape or potential loss/damage to physical cultural resources?		√	See above remarks

Screening Questions	Yes	No	Remarks
<ul style="list-style-type: none"> disturbance to precious ecology (e.g. sensitive or protected areas)? 		√	
<ul style="list-style-type: none"> alteration of surface water hydrology of waterways resulting in increased sediment in streams affected by increased soil erosion at construction site? 	√		Mitigation measures such as temporary silt traps along the drainage leading to water bodies will be implemented in the Environmental Management Plan (EMP).
<ul style="list-style-type: none"> deterioration of surface water quality due to silt runoff and sanitary wastes from worker-based camps and chemicals used in construction? 	√		Mitigation measures such as the provision of on-site sanitation facilities with septic tanks to prevent untreated sewage from being channeled into river, drainage and irrigation canals will be implemented in the EMP.
<ul style="list-style-type: none"> increased air pollution due to project construction and operation? 	√		Generation of dust and noise from site excavation, movement of earth materials and movement of heavy equipment and construction vehicles is anticipated during the construction phase of the project. Such impacts are temporary, localized and relatively in small area.
<ul style="list-style-type: none"> noise and vibration due to project construction or operation? 	√		Mitigation measures such as water spraying, tarpaulin cover on trucks carrying sand, soil and stone, and consultation for the schedule of construction activities will be implemented in the EMP.
<ul style="list-style-type: none"> involuntary resettlement of people? (physical displacement and/or economic displacement) 		√	Not applicable. The location of the construction activities are within the existing complex of the public TVET institutions.
<ul style="list-style-type: none"> disproportionate impacts on the poor, women and children, Indigenous Peoples or other vulnerable groups? 		√	No negative impact. The direct beneficiaries of the project are the poor and women in the location of the public TVET institutions. The construction of the women dormitories will retain women trainees in the public TVET institutions. Also, the project will assist the poor to be skilled workers, thus, helping them to enhance their family income.
<ul style="list-style-type: none"> poor sanitation and solid waste disposal in construction camps and work sites, and possible transmission of communicable diseases (such as STI's and HIV/AIDS) from workers to local populations? 		√	Not anticipated butt mitigation measures included in the EMP.
<ul style="list-style-type: none"> creation of temporary breeding habitats for diseases such as those transmitted by mosquitoes and rodents? 		√	
<ul style="list-style-type: none"> social conflicts if workers from other regions or countries are hired? 		√	Not anticipated because members of the local community will be given priority for employment during the implementation of the project.

Screening Questions	Yes	No	Remarks
▪ large population influx during project construction and operation that causes increased burden on social infrastructure and services (such as water supply and sanitation systems)?		√	
▪ risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during project construction and operation?	√		The contractor will be required to submit an occupational health safety plan prior to the start of construction activities. Also, mitigation measures are included in the EMP.
▪ risks to community health and safety due to the transport, storage, and use and/or disposal of materials such as explosives, fuel and other chemicals during construction and operation?		√	Not applicable. Construction and operation will not involve use of explosives and chemicals.
▪ community safety risks due to both accidental and natural causes, especially where the structural elements or components of the project are accessible to members of the affected community or where their failure could result in injury to the community throughout project construction, operation and decommissioning?		√	Community health and safety risks and hazards shall be managed by implementation of community health and safety plan. Also, the public institutions will ensure the implementation of emergency preparedness and response procedures.
▪ generation of solid waste and/or hazardous waste?	√		Mitigation measures during construction and operation for proper waste segregation, collection and disposal are included in the EMP.
▪ use of chemicals?		√	Not applicable
▪ generation of wastewater during construction or operation?		√	Not anticipated. Mitigation measures to prevent water pollution during construction and operation are included in the EMP.

A Checklist for Preliminary Climate Risk Screening

Country/Project Title: Technical and Vocational Education and Training Sector Development Program

Sector : Education

Subsector:

Division/Department: SEHS/SERD

Screening Questions		Score	Remarks ¹⁴
Location and Design of project	Is siting and/or routing of the project (or its components) likely to be affected by climate conditions including extreme weather related events such as floods, droughts, storms, landslides?	0	The locations of the Project are on existing public TVET institutions
	Would the project design (e.g. the clearance for bridges) need to consider any hydro-meteorological parameters (e.g., sea-level, peak river flow, reliable water level, peak wind speed etc)?	0	
Materials and Maintenance	Would weather, current and likely future climate conditions (e.g. prevailing humidity level, temperature contrast between hot summer days and cold winter days, exposure to wind and humidity hydro-meteorological parameters likely affect the selection of project inputs over the life of project outputs (e.g. construction material)?	0	The design of the workshop, dormitory, and buildings will be guided by the 2012 School Construction Guidelines of Cambodia for disaster resilient school buildings
	Would weather, current and likely future climate conditions, and related extreme events likely affect the maintenance (scheduling and cost) of project output(s) ?	0	
Performance of project outputs	Would weather/climate conditions, and related extreme events likely affect the performance (e.g. annual power production) of project output(s) (e.g. hydro-power generation facilities) throughout their design life time?	0	Not applicable

Options for answers and corresponding score are provided below:

Response	Score
Not Likely	0
Likely	1
Very Likely	2

Responses when added that provide a score of 0 will be considered low risk project. If adding all responses will result to a score of 1-4 and that no score of 2 was given to any single response, the project will be assigned a medium risk category. A total score of 5 or more (which include providing a score of 1 in all responses) or a 2 in any single response, will be categorized as high risk project.

Result of Initial Screening (Low, Medium, High): Low

Other

Comments: _____

Prepared by: DGTVET

¹⁴ If possible, provide details on the sensitivity of project components to climate conditions, such as how climate parameters are considered in design standards for infrastructure components, how changes in key climate parameters and sea level might affect the siting/routing of project, the selection of construction material and/or scheduling, performances and/or the maintenance cost/scheduling of project outputs.

Appendix 2: Master plans of the public TVET Institutions¹⁵

Appendix 2.1: Master Plan of Banteay Meanchey

Appendix 2.2: Master Plan of Battambang Institute of Technology

Appendix 2.3: Master Plan of Kampong Cham

Appendix 2.4: Master Plan of Kampong Speu

Appendix 2.5: Master Plan of Kampong Thom

Appendix 2.6: Master Plan of Kandal

Appendix 2.7: Master Plan of Koh Kong

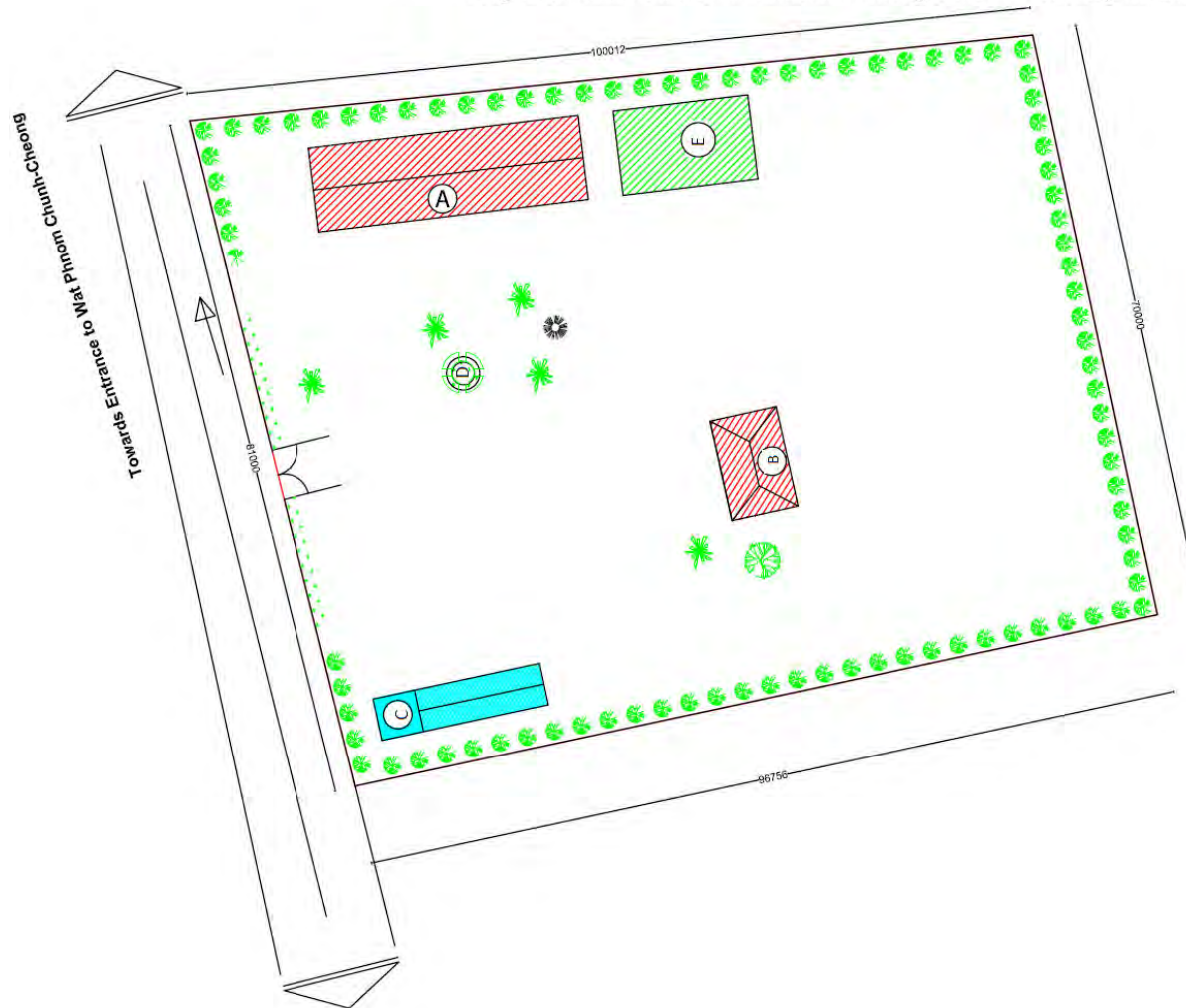
Appendix 2.8: Master Plan of Pursat

Appendix 2.9: Master Plan of Preah Sihanouk (Sihanoukville)

¹⁵ The Master Plans are from the Directorate General of TVET. For Siem Reap, the Master Plan and the transfer of land ownership are still on process.

Appendix 2.1: Master Plan of Banteay Meanchey

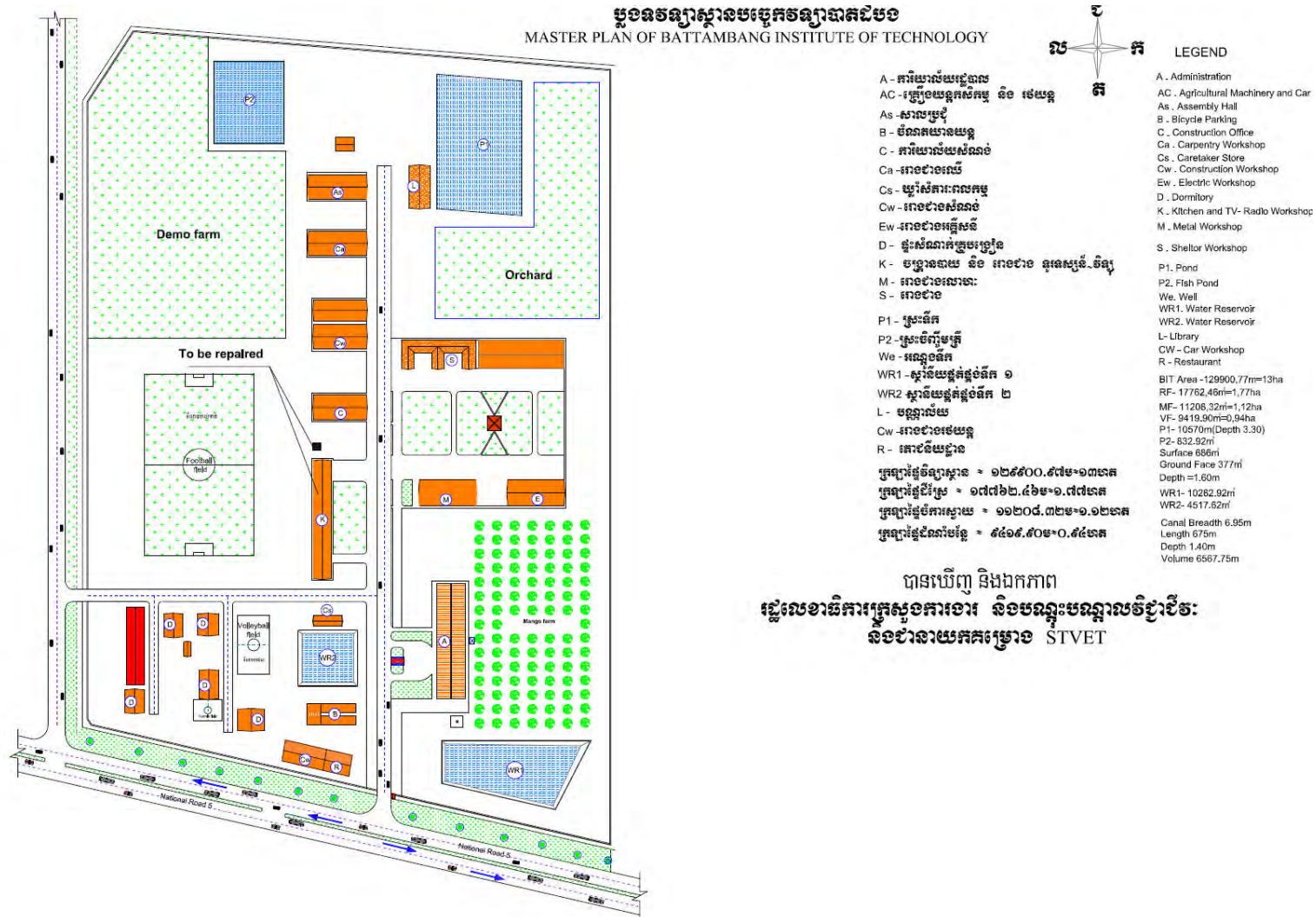
គម្រោងប្លង់មេមជ្ឈមណ្ឌលបណ្តុះបណ្តាលវិជ្ជាជីវៈ ខេត្តបន្ទាយមានជ័យ Proposed Master Plan of Provincial Training Center of Banteay Meanchey Province



Note

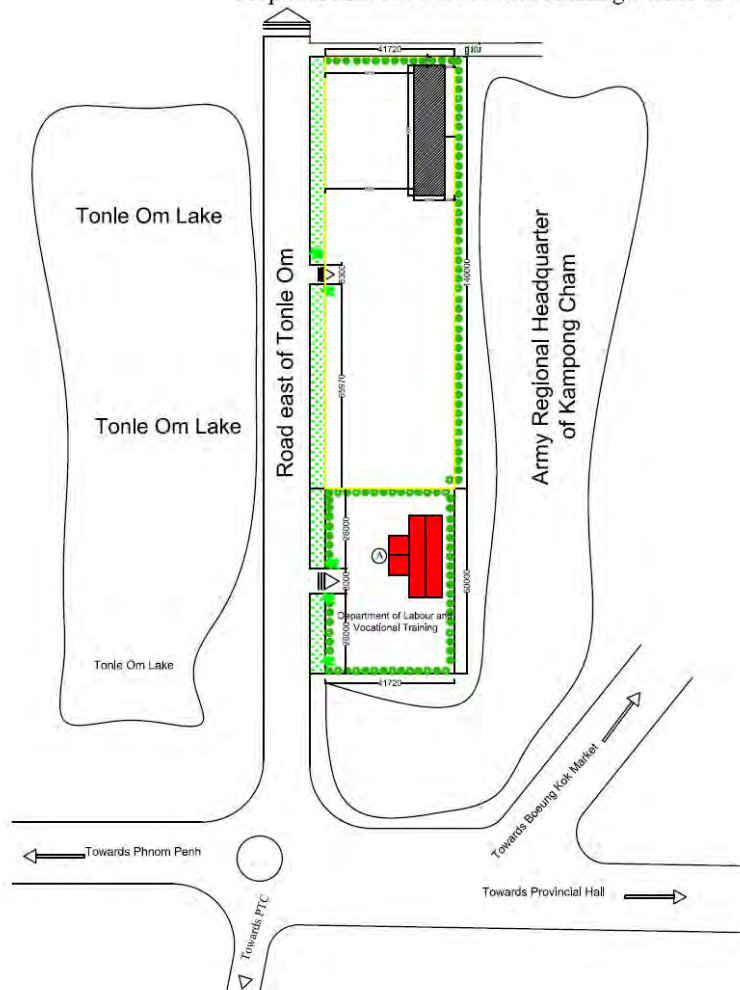
- A Building 32m x 10m (Existing)
- B Office Building 8m x 12m (Existing)
- C Instructor's Temporary Dormitory
- D Flag Platform
- E Workshop

Appendix 2.2: Master Plan of Battambang Institute of Technology



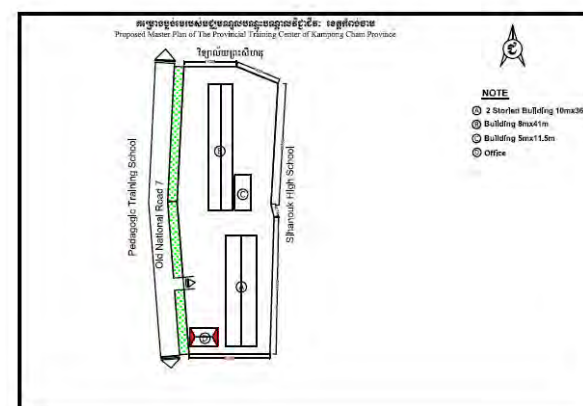
Appendix 2.3: Master Plan of Kampong Cham

គម្រោងប្លង់មជ្ឈមណ្ឌលបណ្តុះបណ្តាលវិជ្ជាជីវៈ ខេត្តកំពង់ចាម (ទីតាំងទី២) Proposed Master Plan of Provincial Training Center of Kampong Cham Province (Second Location)



NOTE

- (A) Department of Labour and Vocational Training
- (B) Proposed Dormitory of Provincial Training Center



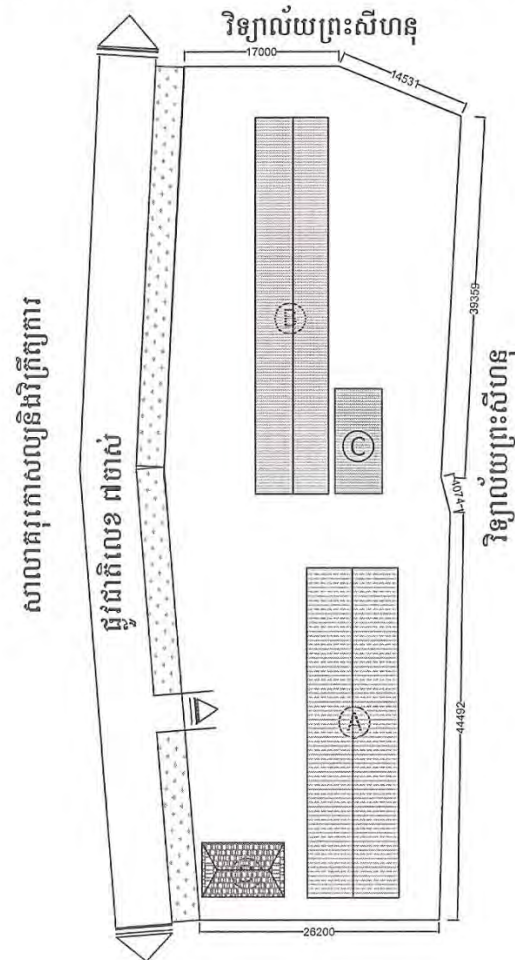
- NOTE**
- ⊙ 2 Storey Building 10m x 30m
 - ⊙ Building 8m x 1m
 - ⊙ Building 5m x 1.5m
 - ⊙ Office

គម្រោងប្លង់មេរបស់មជ្ឈមណ្ឌលបណ្តុះបណ្តាលវិជ្ជាជីវៈ ខេត្តកំពង់ចាម
Proposed Master Plan of The Provincial Training Center of Kampong Cham Province



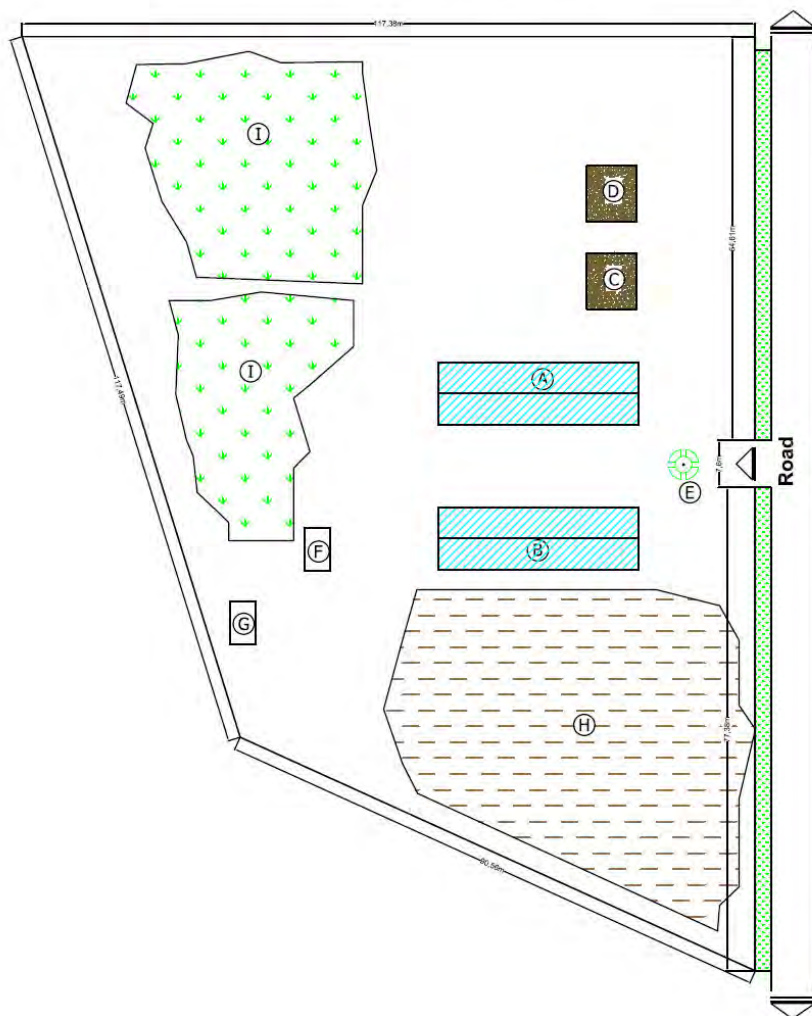
NOTE

- Ⓐ 2 Storied Building 10mx36m
- Ⓑ Building 8mx41m
- Ⓒ Building 5mx11.5m
- Ⓓ Office



Appendix 2.4: Master Plan of Kampong Speu

គម្រោងប្លង់មេបង្ហាញបណ្តុះបណ្តាលវិជ្ជាជីវៈ ខេត្តកំពង់ស្ពឺ
Proposed Master Plan of Provincial Training Center of Kampong Speu Province

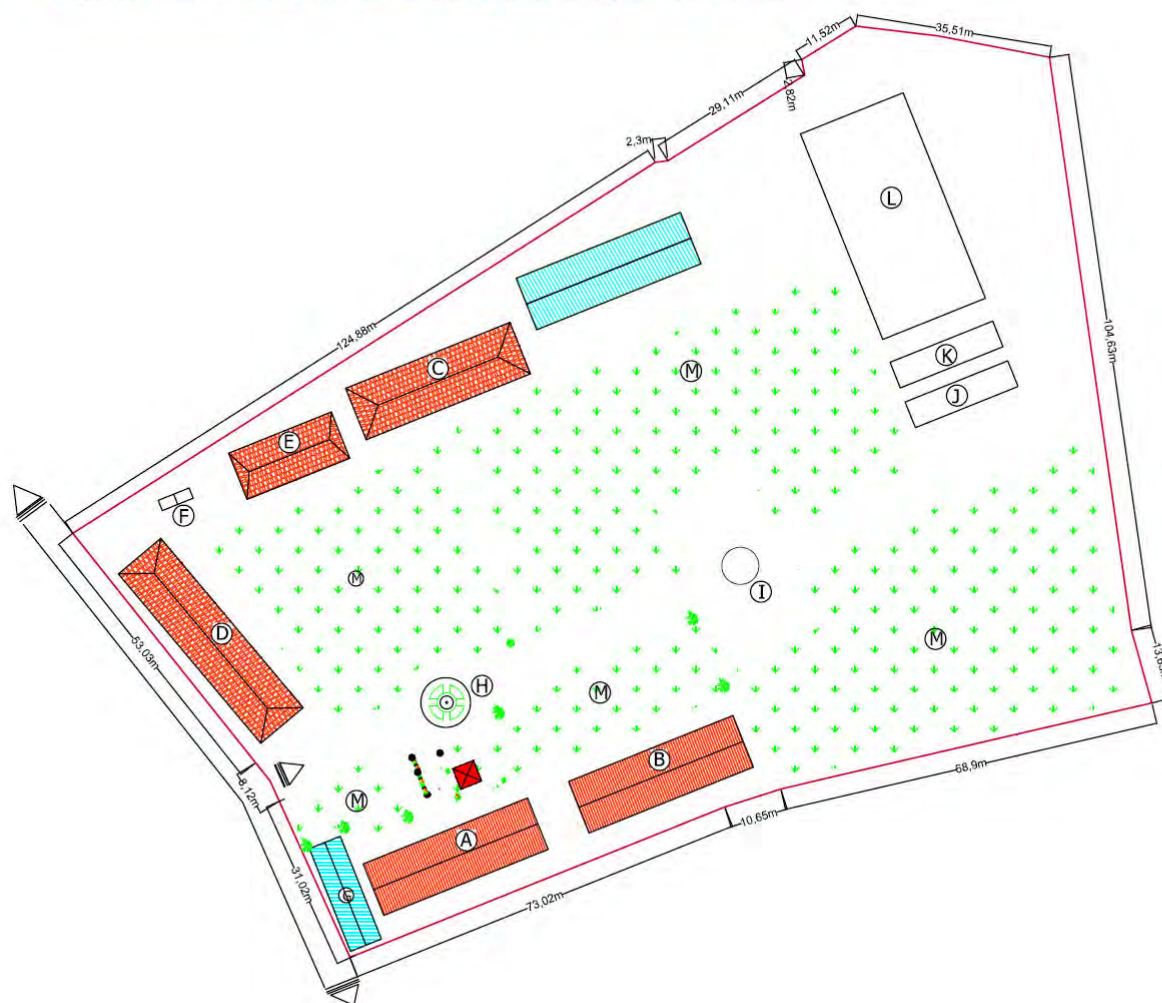


NOTE

- (A) Building 10mx32m
- (B) Building 10mx32m
- (C) Building 8mx9m
- (D) Building 8mx9m
- (E) Flag platform
- (F) Generator
- (G) Toilet Block
- (H) Lake
- (I) Rice field

Appendix 2.5: Master Plan of Kampong Thom

គម្រោងប្លង់មេបណ្ណាល័យបណ្តុះបណ្តាលវិជ្ជាជីវៈខេត្តកំពង់ធំ
Proposed Master Plan for Provincial Training Center of Kampong Thom Province

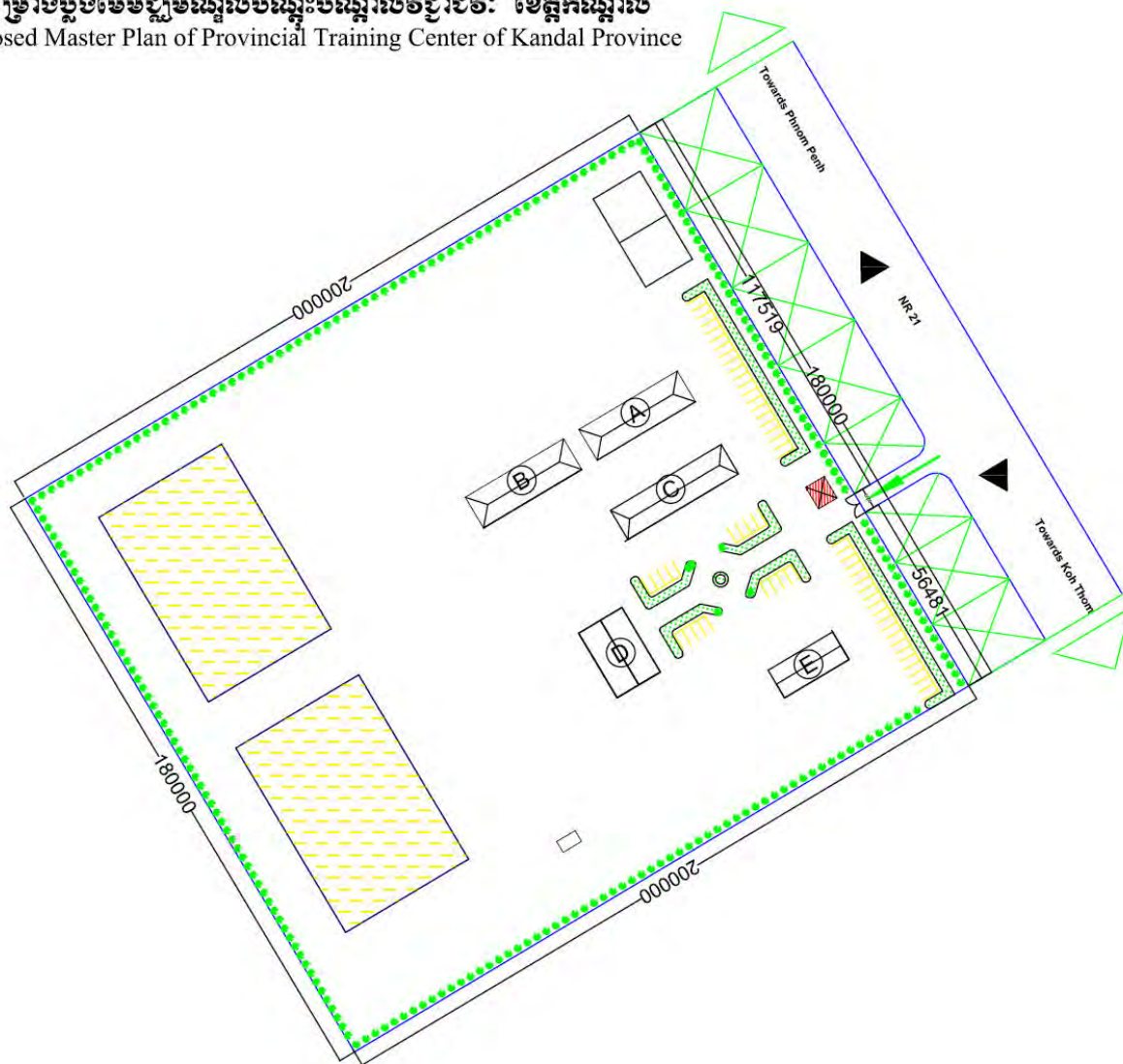


NOTE

- (A) ADB Building 10mx32m
- (B) ADB Building 10mx32m
- (C) ADB Building 10mx32m
- (D) Wooden Building 10mx40m
- (E) Wooden Building 9mx20m
- (F) Toilet Block 2mx6m
- (G) Canteen 6mx20m
- (H) Flag Platform
- (I) Basket ball Court Layout
- (J) Plantation Court
- (K) Pig Raising Court
- (L) Fish Raising Pond
- (M) Gardening

Appendix 2.6: Master Plan of Kandal

គម្រោងប្លង់មេបណ្ណាល័យបណ្តុះបណ្តាលវិជ្ជាជីវៈ ខេត្តកណ្តាល
Proposed Master Plan of Provincial Training Center of Kandal Province

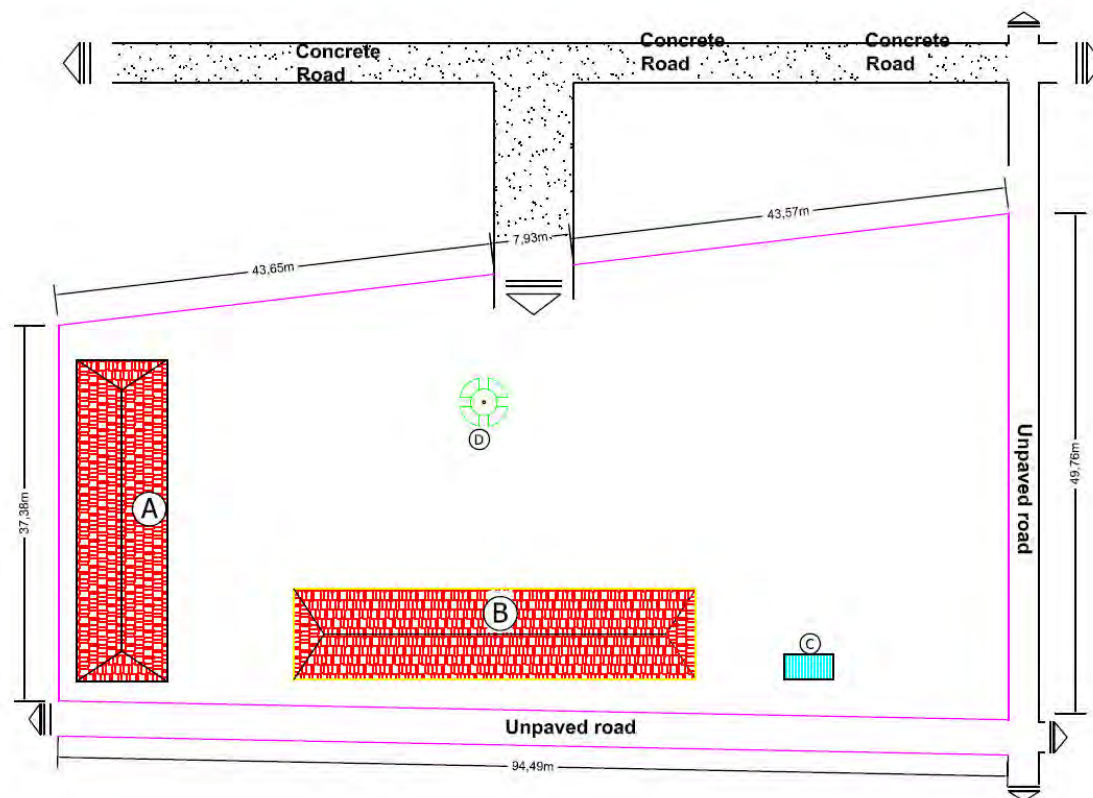


NOTE

- Ⓐ ADB Building 10mx32m
- Ⓑ ADB Building 10mx32m
- Ⓒ Building 12mx36m
- Ⓓ Existing Building 14mx21m
- Ⓔ Existing Building 9mx21m

Appendix 2.7: Master Plan of Koh Kong

គម្រោងប្លង់មេមជ្ឈមណ្ឌលបណ្តុះបណ្តាលវិជ្ជាជីវៈ ខេត្តកោះកុង Proposed Master Plan of Provincial Training Center of Koh Kong Province



NOTE

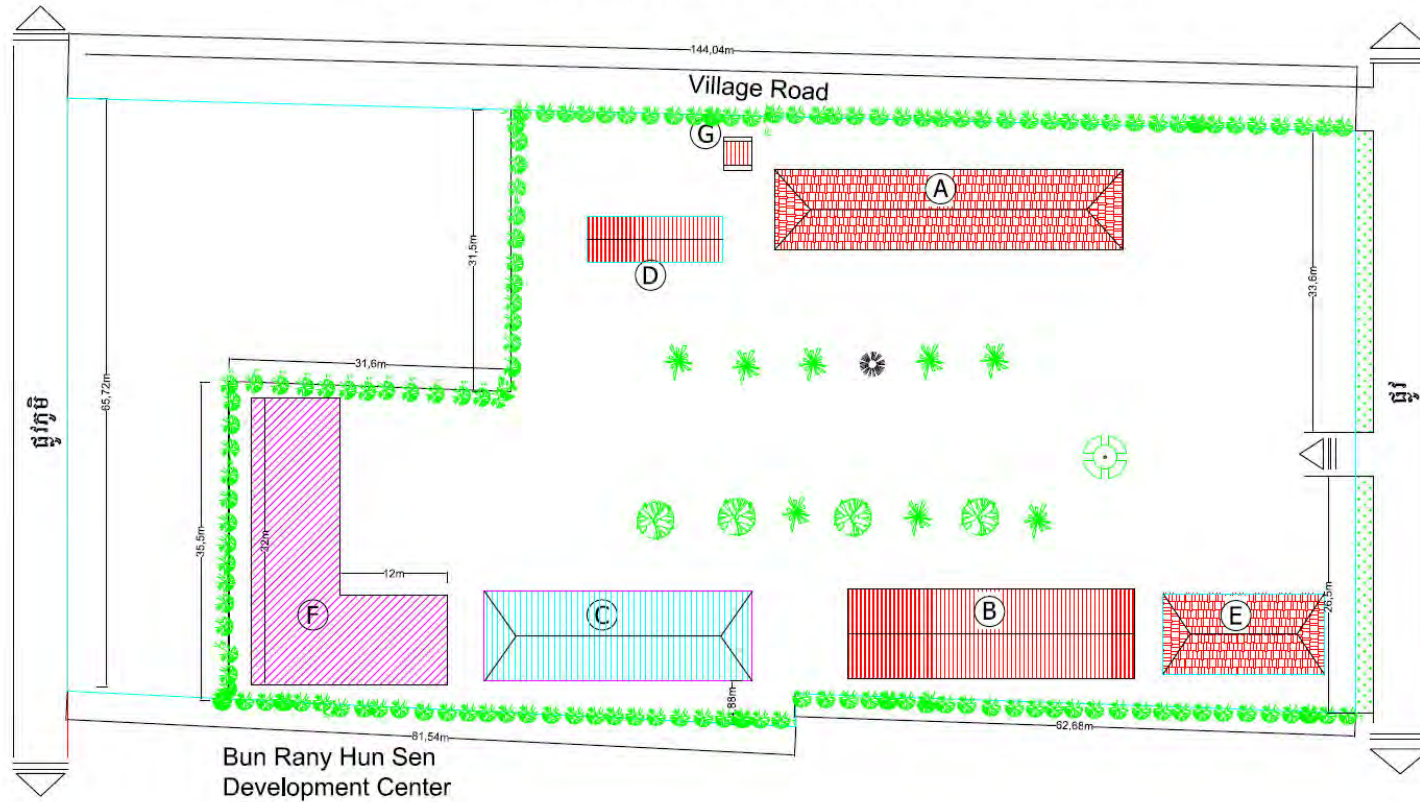
- Ⓐ ADB Building 9mx32m
- Ⓑ ADB Building 9mx40m
- Ⓒ Toilet Block
- Ⓓ Flag Platform

Appendix 2.8:

Master Plan of Pursat

គម្រោងប្លង់មេមជ្ឈមណ្ឌលបណ្តុះបណ្តាលវិជ្ជាជីវៈ ខេត្តពោធិ៍សាត់

Proposed Master Plan of Provincial Training Center of Pursat Province

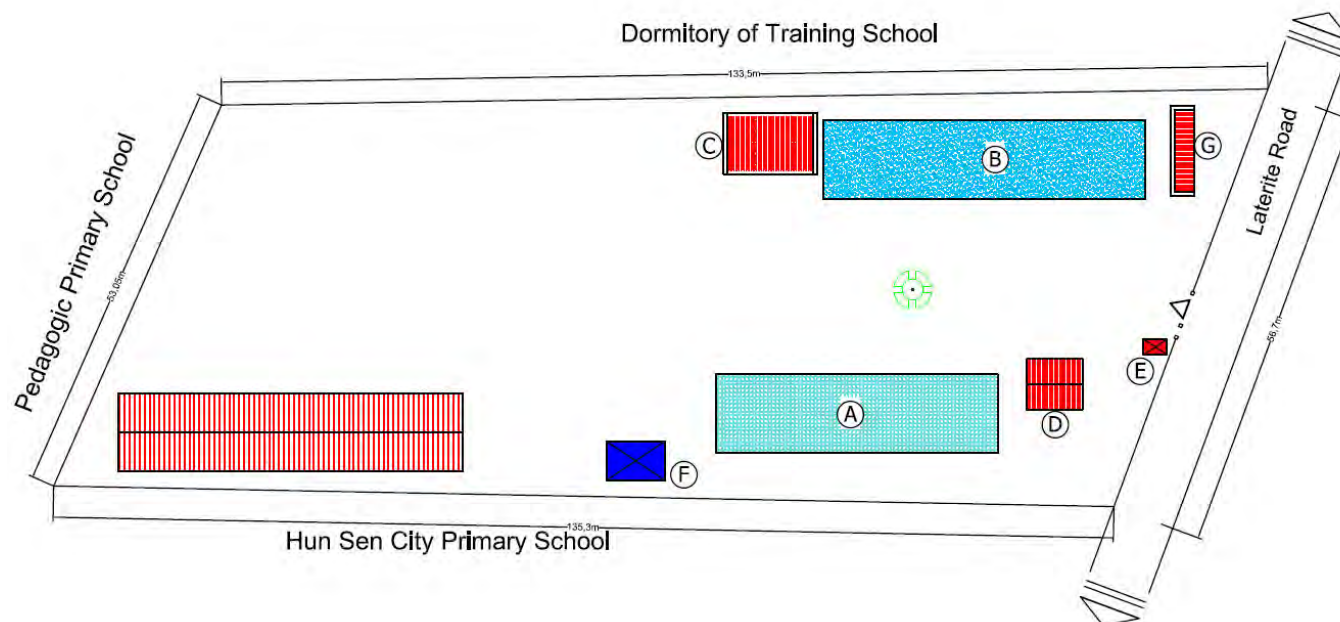


NOTE

- (A) Australia Building 9mx39m
- (B) ADB Building 10mx32m
- (C) Building 10mx30m
- (D) Dormitory Building 5mx15m
- (E) Korea Building 9mx18m
- (F) Wood building 8mx28m
- (G) Toilet block

Master Plan of Preah Sihanouk (Sihanoukville)

គម្រោងបង្កើតមណ្ឌលបណ្តុះបណ្តាលវិជ្ជាជីវៈ ខេត្តព្រះសីហនុ
Proposed Master of Provincial Training Center of Preah Sihanouk Province



NOTE

- (A) 2 storied Building 10mx36m
- (B) Workshop Building 10mx41m
- (C) Motor Repair workshop 4.8mx11m
- (D) Outfitting Room 7mx6m
- (E) Information
- (F) Library 5mx7.5m
- (G) Toilet Block

Appendix 3: Vicinity and Location Maps of the public TVET institutions

Appendix 3.1a:	Vicinity Map of Banteay Meanchey Provincial Training Center (PTC)
Appendix 3.1b:	Location Map of Banteay Meanchey PTC
Appendix 3.2a:	Vicinity Map Battambang Institute of Technology
Appendix 3.2b:	Location Map Battambang Institute of Technology
Appendix 3.3a:	Vicinity Map of Kampong Cham PTC
Appendix 3.3b:	Location Map of the existing Kampong Cham PTC
Appendix 3.3c:	Location Map of the new site of Kampong Cham PTC
Appendix 3.4a:	Vicinity Map of Kampong Speu PTC
Appendix 3.4b:	Location Map of Kampong Speu PTC
Appendix 3.5a:	Vicinity Map of Kampong Thom PTC
Appendix 3.5b:	Location Map of Kampong Thom PTC
Appendix 3.6a:	Vicinity Map of Kandal PTC and DGTVET building
Appendix 3.6b:	Location Map of Kandal PTC
Appendix 3.6c:	Location Map of DGTVET building
Appendix 3.7a:	Vicinity Map of Koh Kong and Preah Sihanouk (Sihanoukville) PTCs
Appendix 3.7b:	Location Map of Koh Kong PTC
Appendix 3.7c:	Location Map of Preah Sihanouk (Sihanoukville) PTC
Appendix 3.8a:	Vicinity Map of Pursat PTC
Appendix 3.8b:	Location Map of Pursat PTC
Appendix 3.9a:	Vicinity Map of the proposed new location of Siem Reap PTC and its location with reference to the Angkor Protected Landscape (APL)
Appendix 3.9b:	Location Map of the proposed new location of Siem Reap PTC
Appendix 3.10:	Location Map of the proposed Subproject of Prey Veng PTC
Appendix 3.11:	Location Map of the proposed Subproject of Tbong Khmum PTC
Appendix 3.12:	Location Map and Master Plan of the proposed Subproject of Kratie PTC
Appendix 3.12:	Location Map of the proposed Subproject of CIEDI, Phnom Penh
Appendix 3.13a:	Location of the proposed Subproject of Battambang PTC Prey Kounkhla

Appendix 3.13b: Master Plan and Land Ownership of the proposed Subproject of Battambang PTC Prey Kounkhla

Appendix 3.14: Location of the proposed Subproject of Odor Meanchey PTC

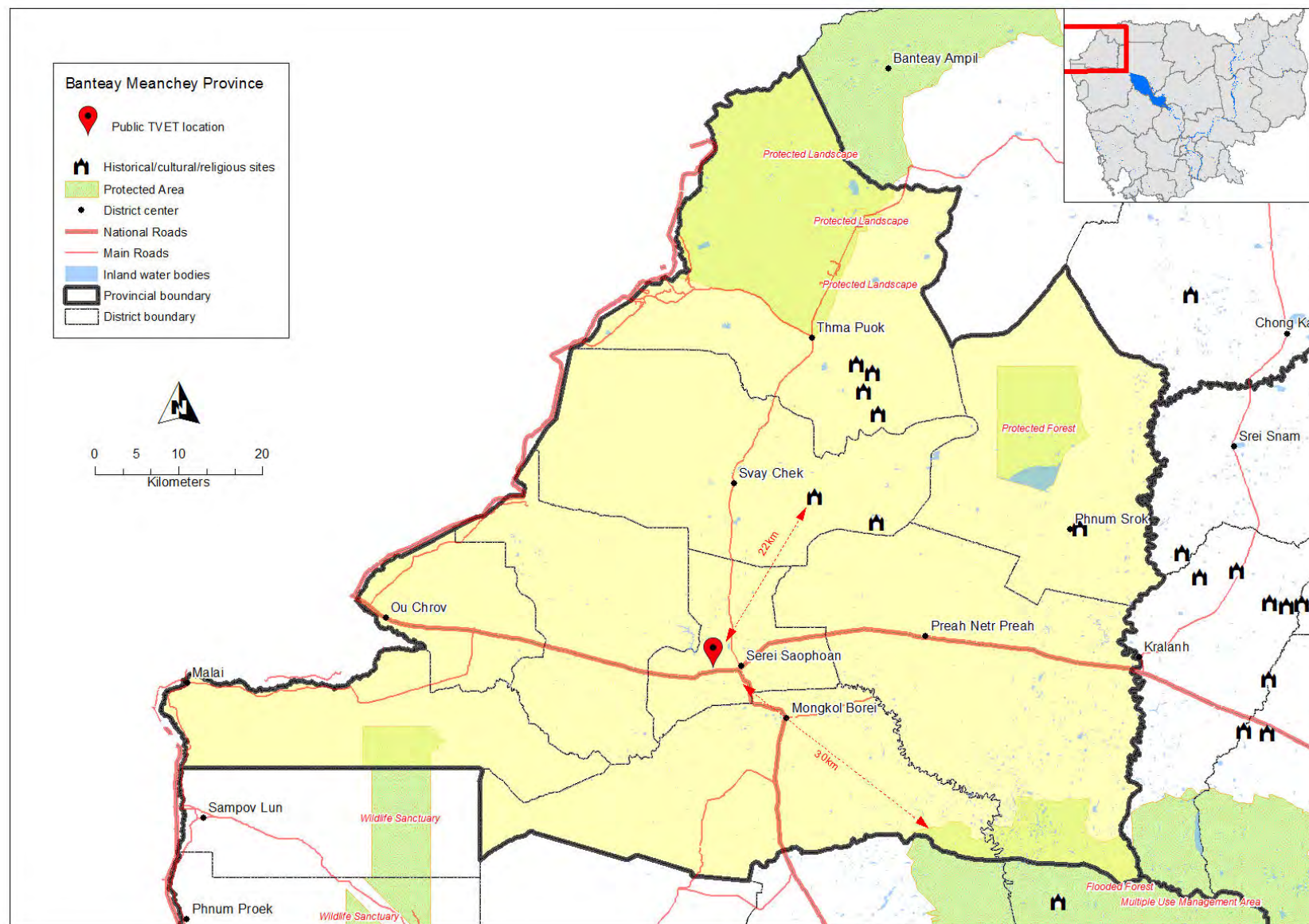
Appendix 3.15: Location of the proposed Subproject of Kampong Chhnang PTC

Appendix 3.16: Location of the proposed Subproject of Kep PTC

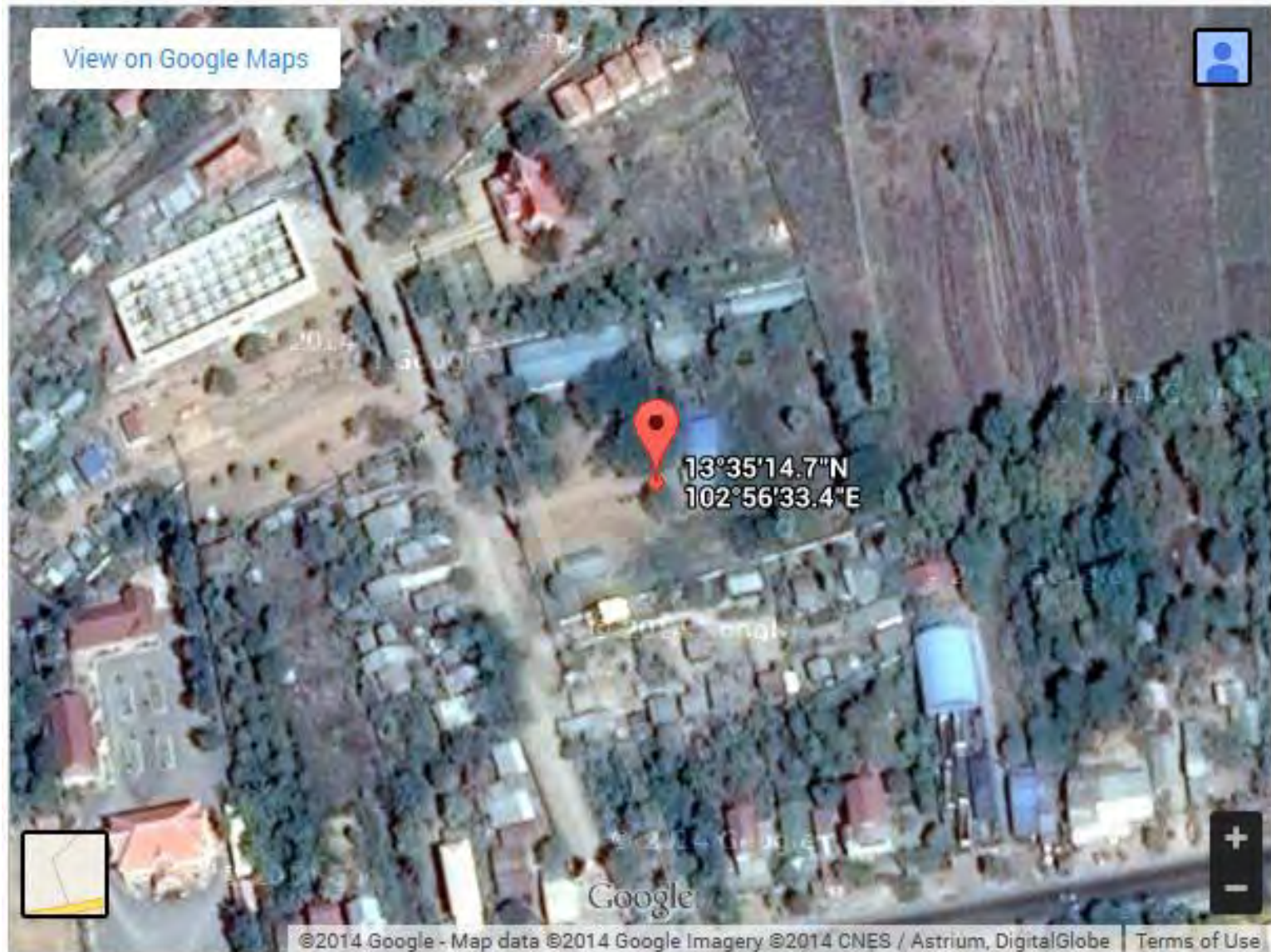
Appendix 3.17: Location of the proposed Subproject of Kampong Chhnang PTC

ppendix 3.18: Location of the proposed Subproject of Pailin PTC

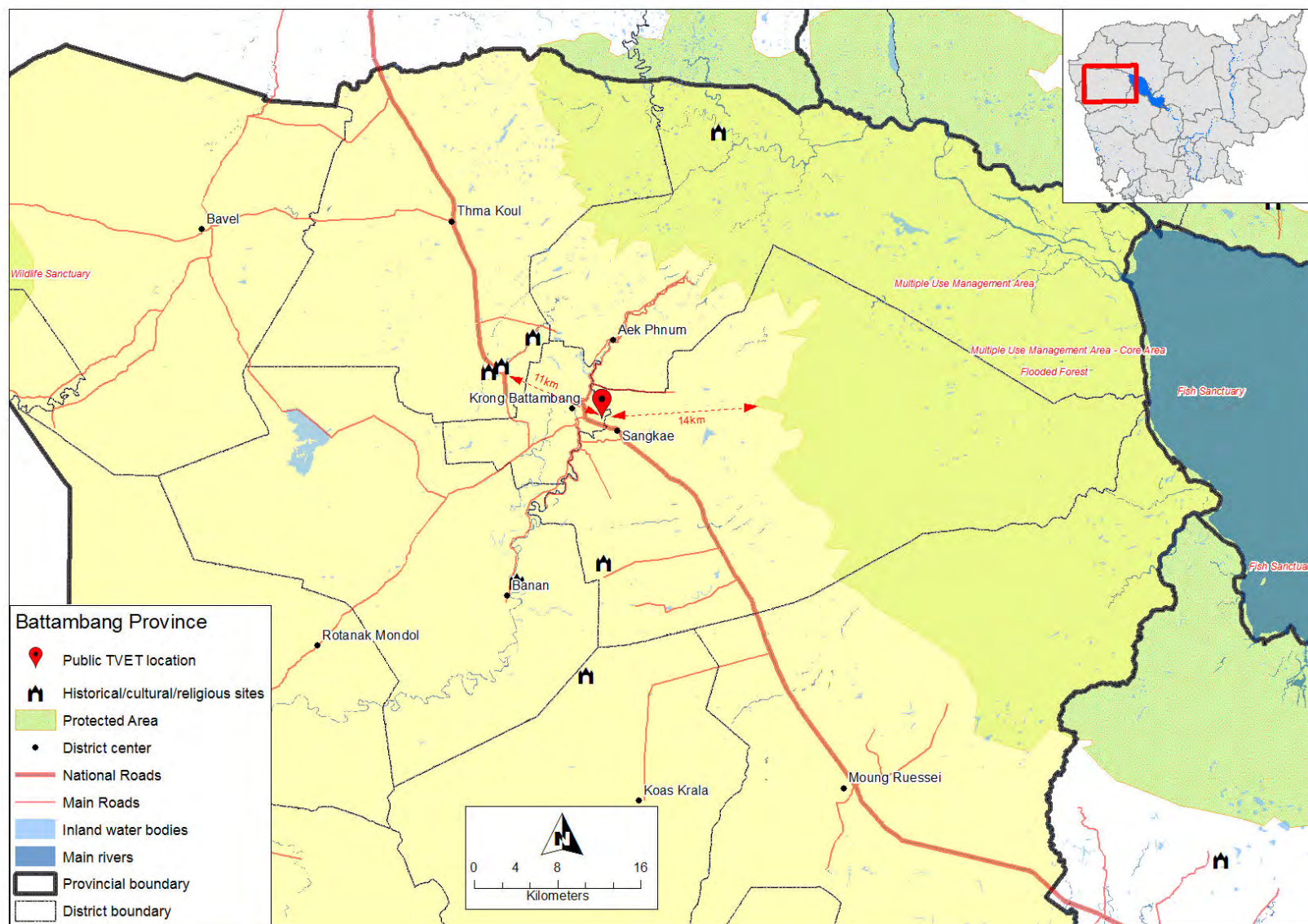
Appendix 3.1a: Vicinity Map of Banteay Meanchey



Appendix 3.1b: Location Map of Banteay Meanchey



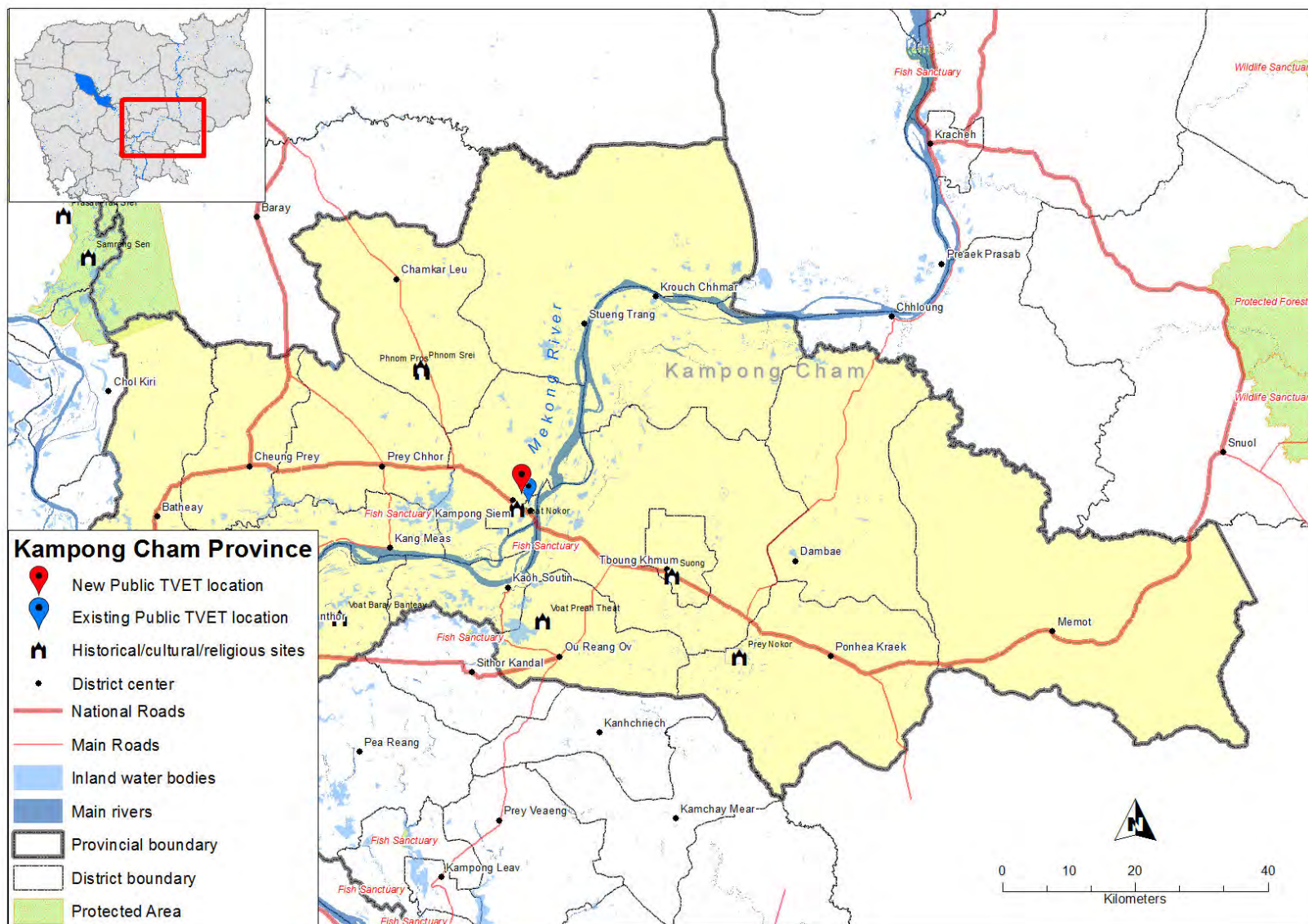
Appendix 3.2a: Vicinity Map of Battambang Institute of Technology



Appendix 3.2b: Location Map of Battambang Institute of Technology



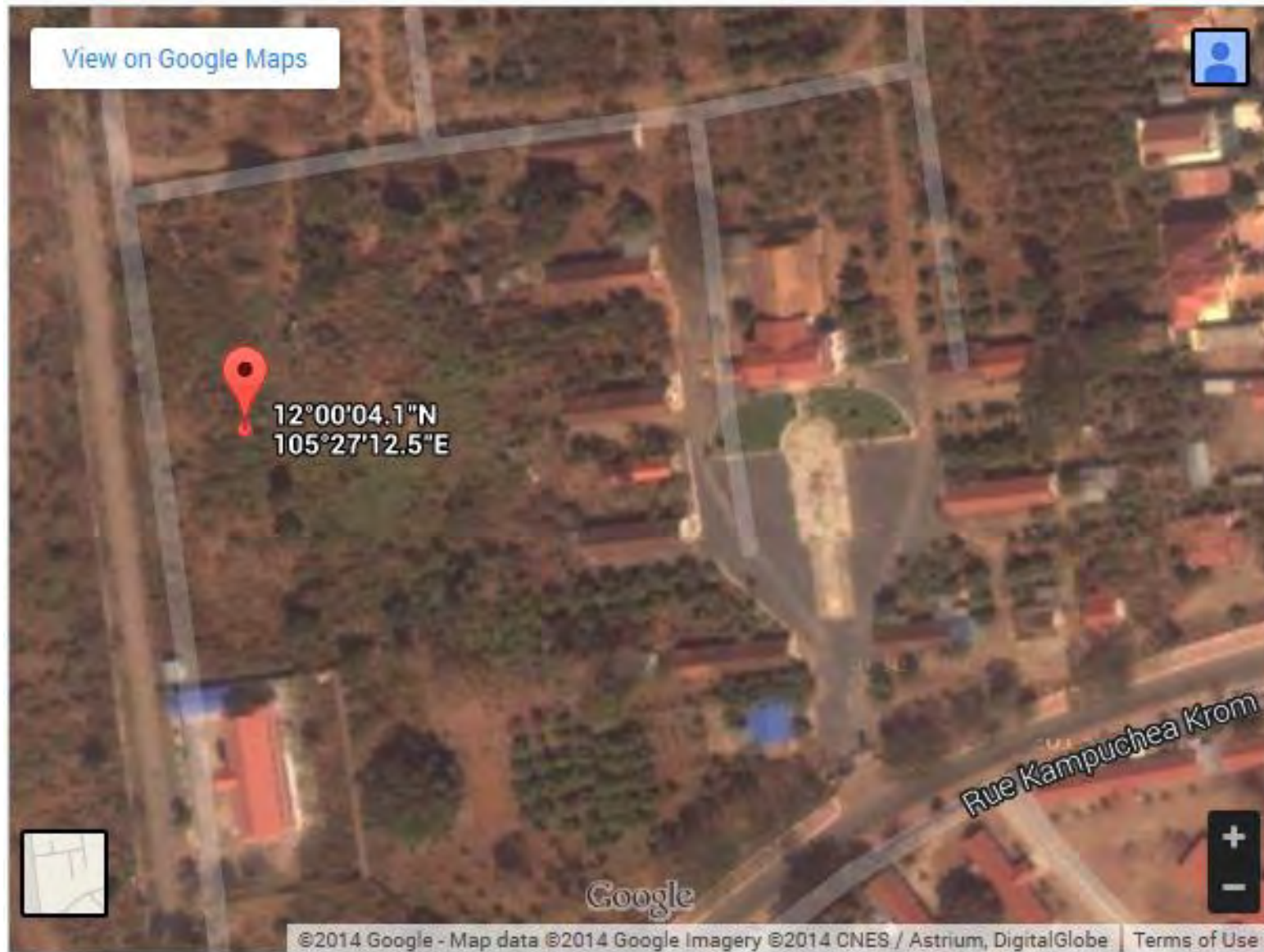
Appendix 3.3a: Vicinity Map of Kampong Cham PTC



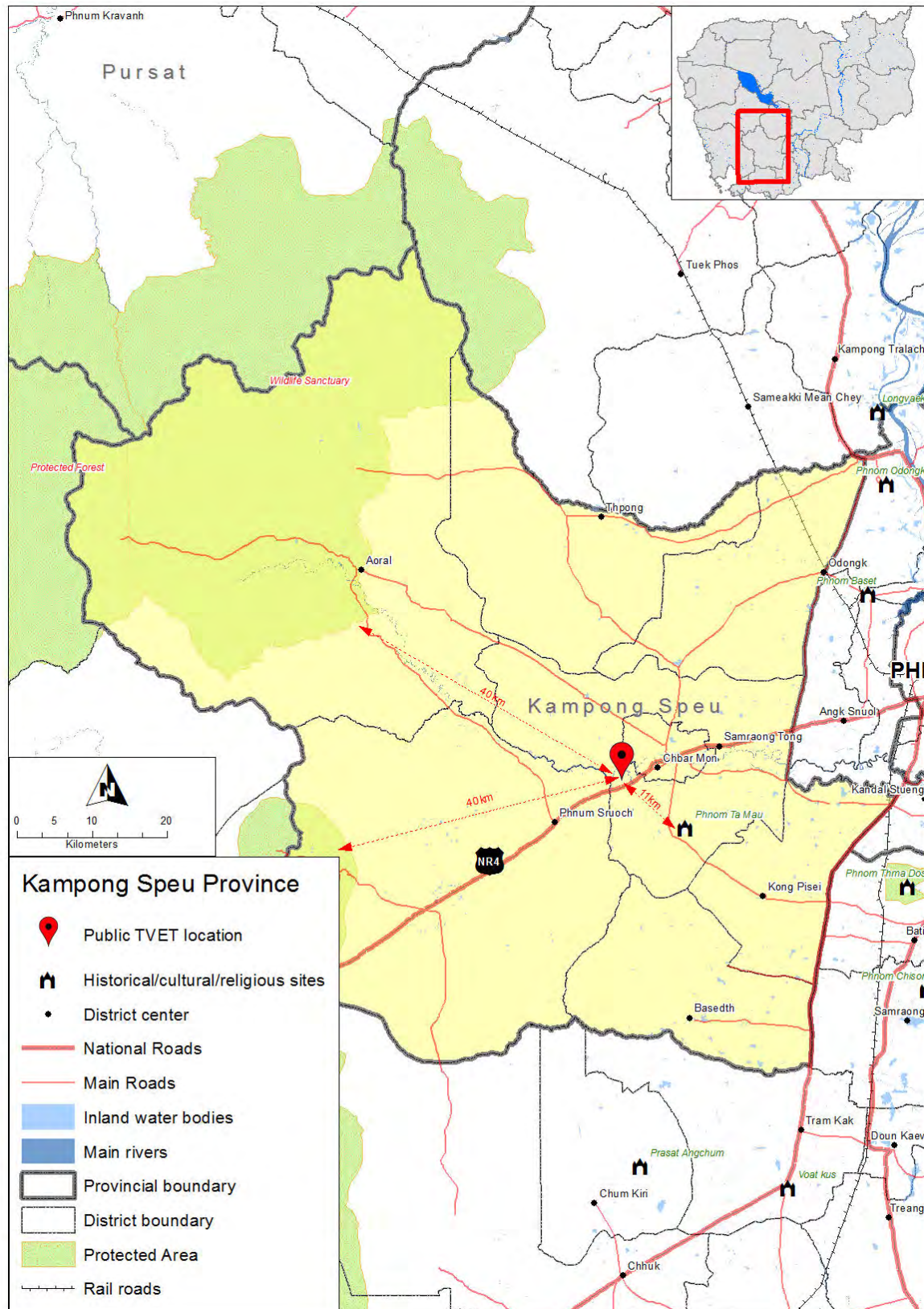
Appendix 3.3b: Location Map of Existing Kampong Cham PTC



Appendix 3.3c: Location Map of the new site of Kampong Cham PTC



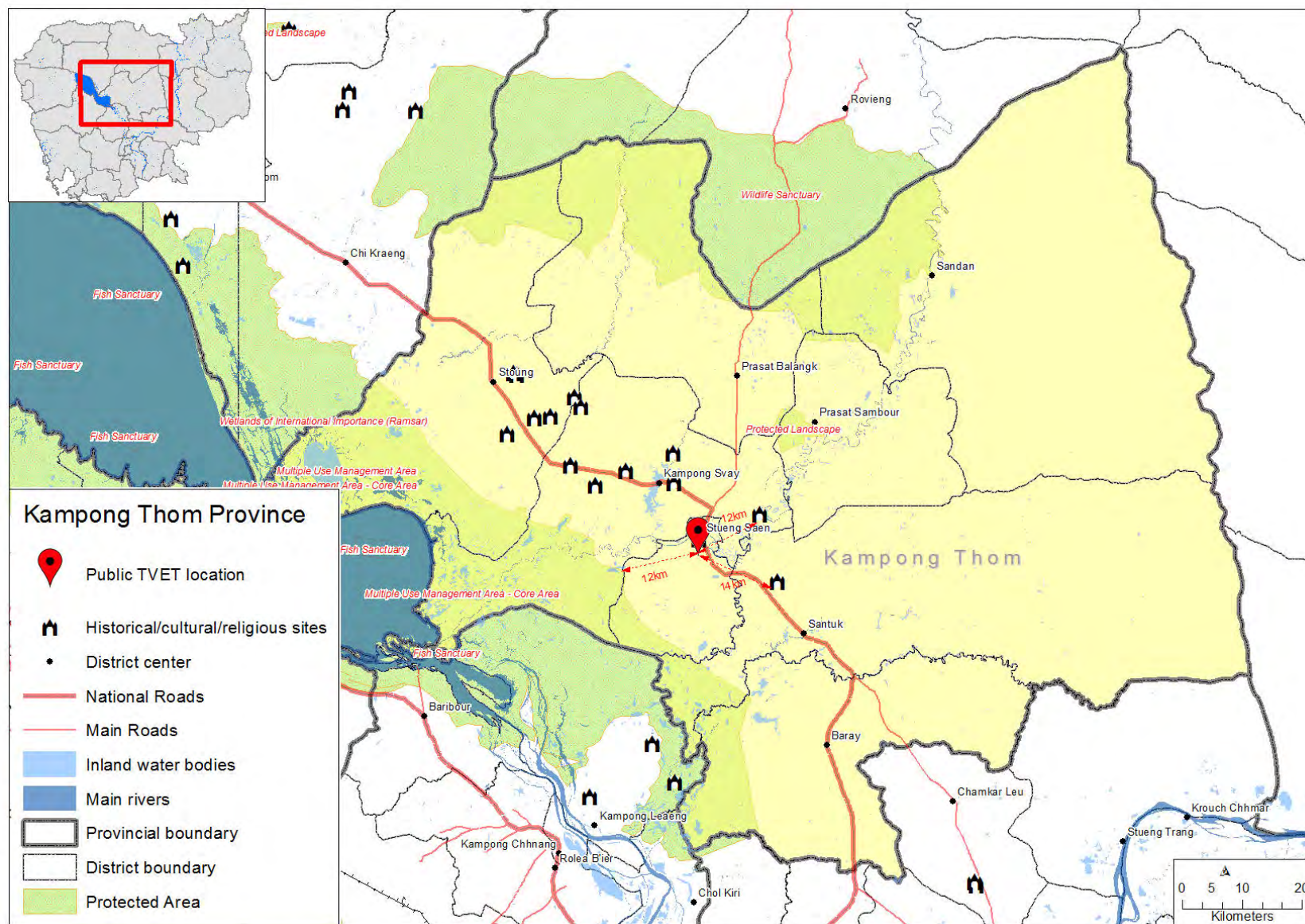
Appendix 3.4a: Vicinity Map of Kampong Speu PTC



Appendix 3.4b: Location Map of Kampong Speu PTC



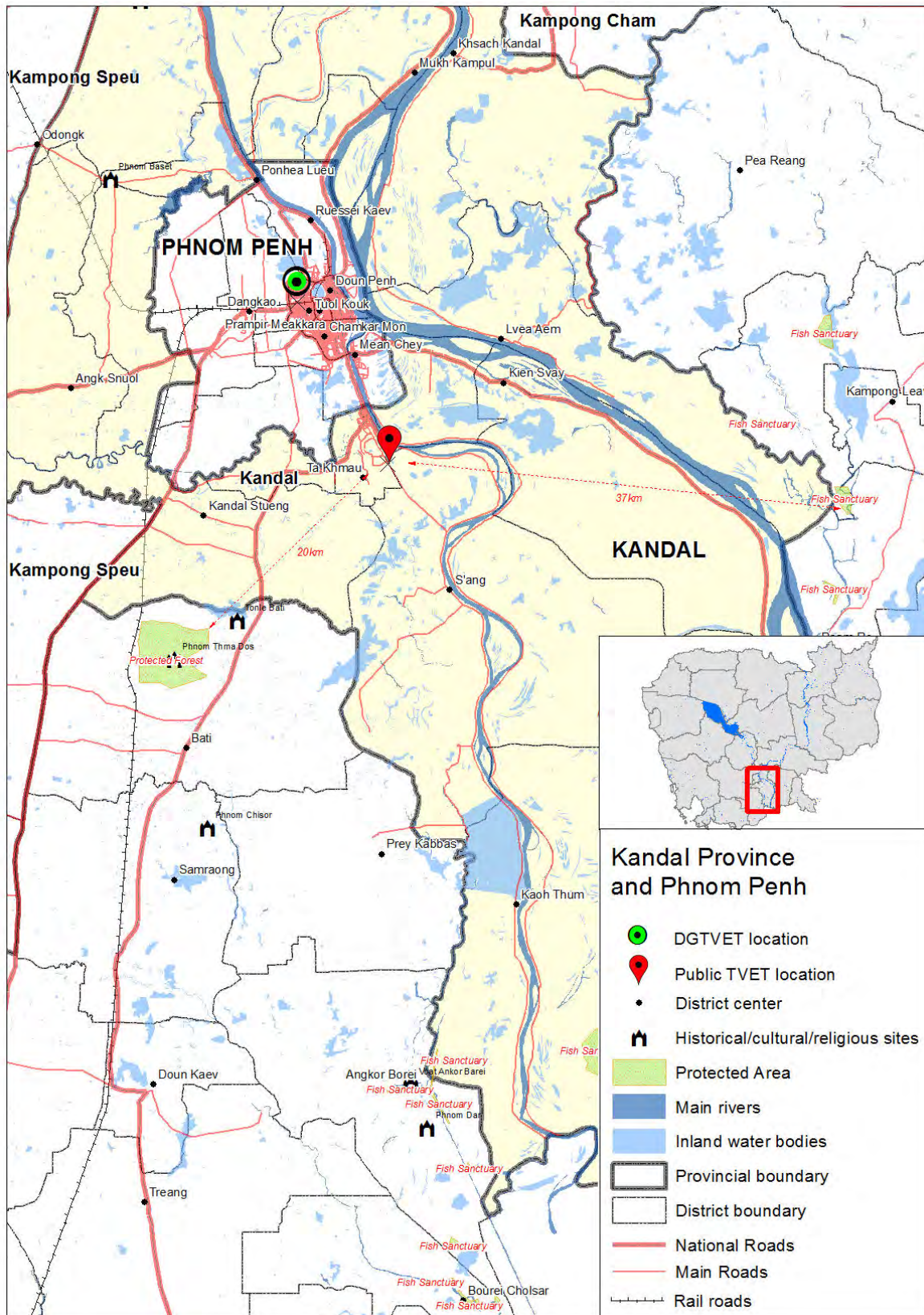
Appendix 3.5a: Vicinity Map of Kampong Thom PTC



Appendix 3.5b: Location Map of Kampong Thom PTC



Appendix 3.6a: Vicinity Map of Kandal PTC and DGT VET Building



Appendix 3.6b: Location Map of Kandal PTC



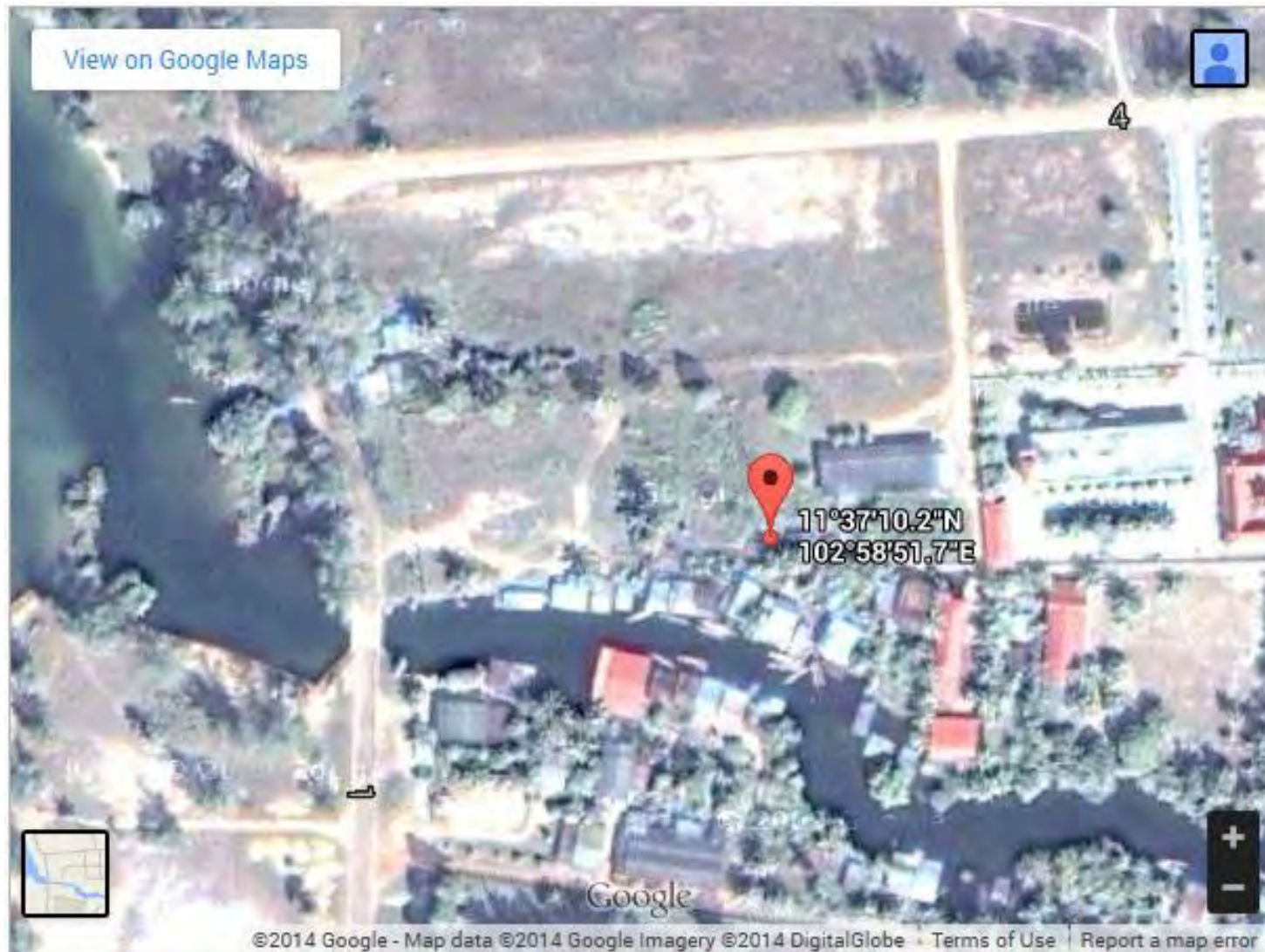
Appendix 3.6b: Location Map of DGTVET Building



Appendix 3.7a: Vicinity Map of Koh Kong and Preah Sihanouk PTCs



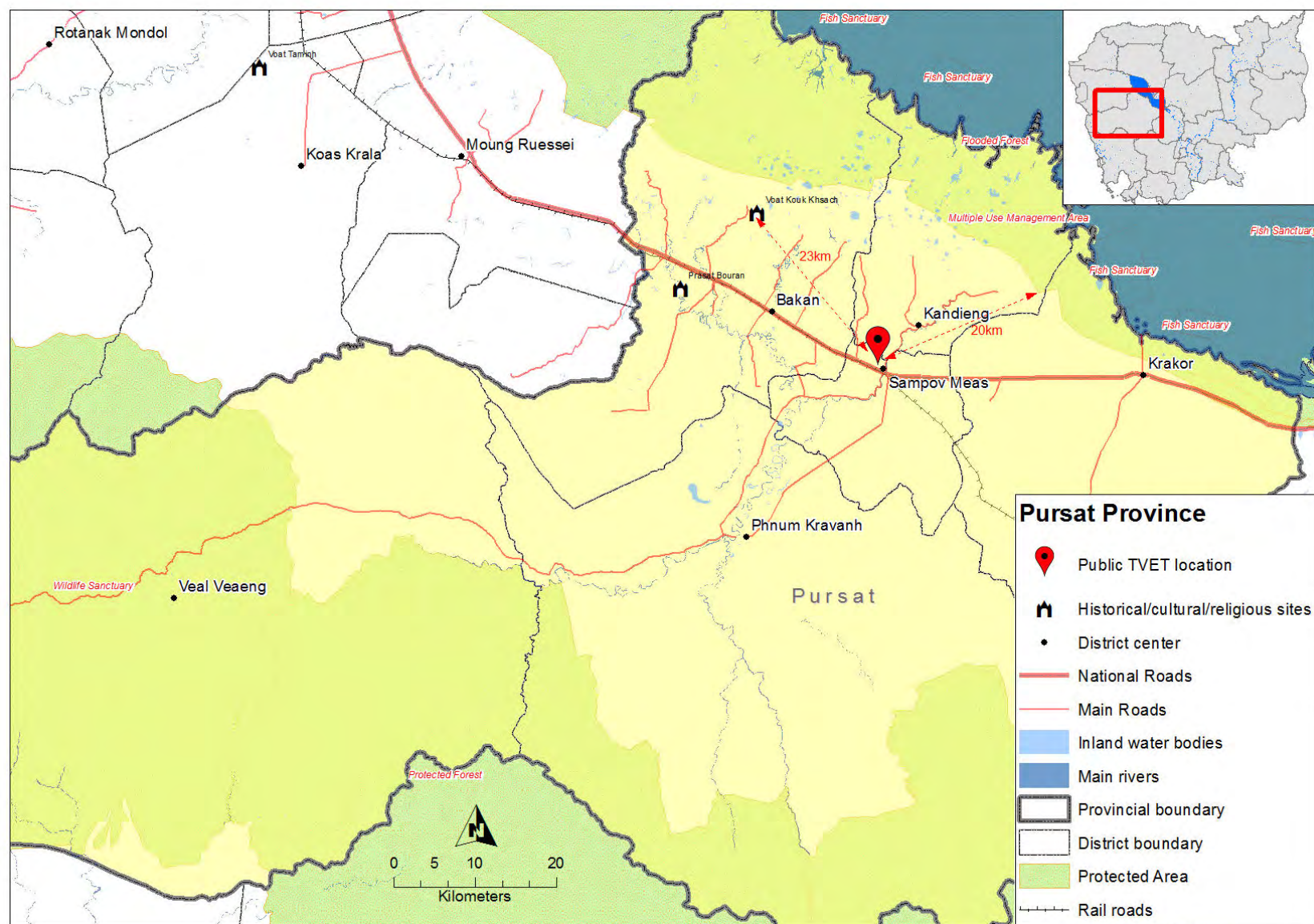
Appendix 3.7b: Location Map of Koh Kong PTC



Appendix 3.7c: Location Map of Preah Sihanouk (Sihanoukville) PTC



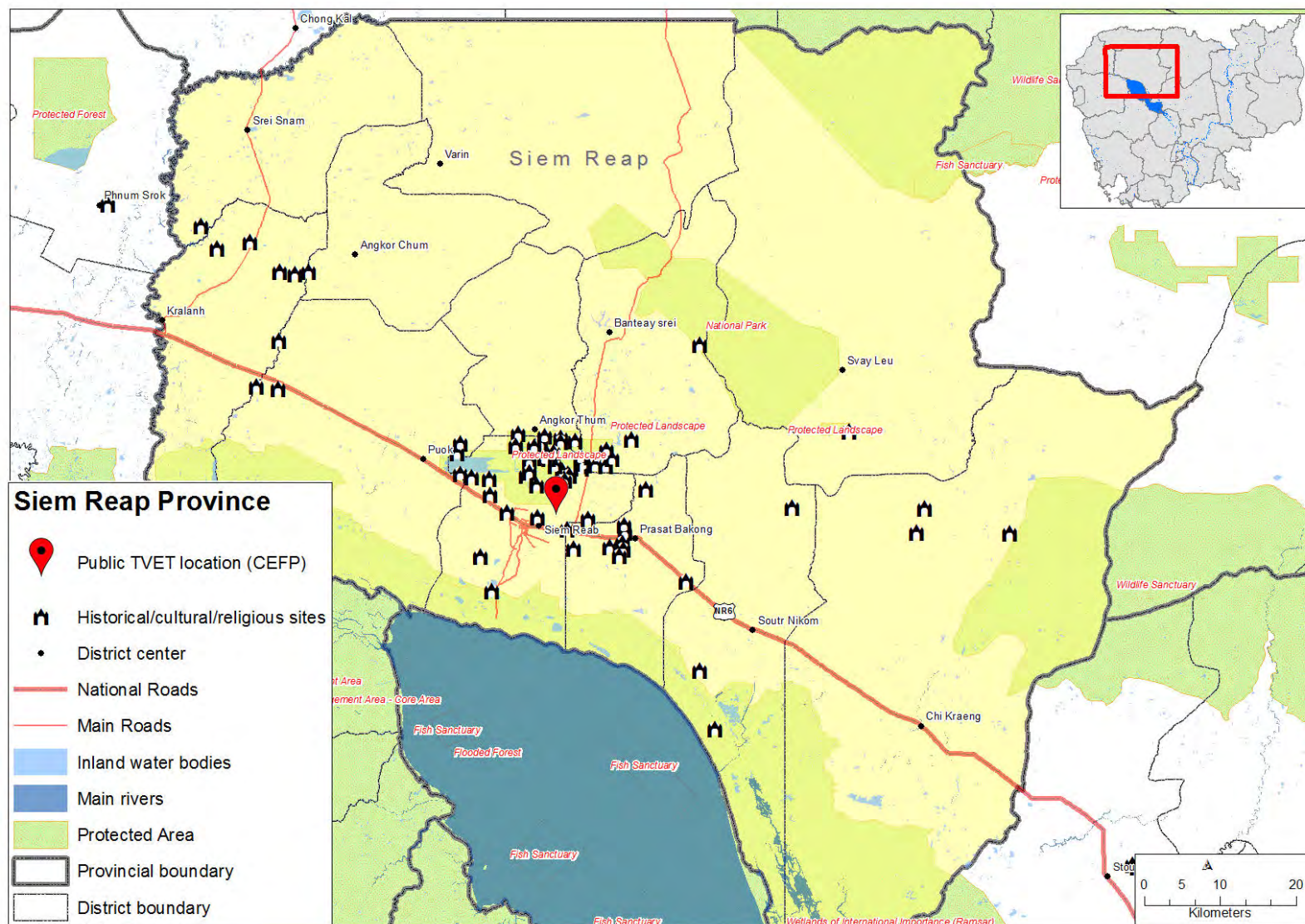
Appendix 3.8a: Vicinity Map of Pursat PTC



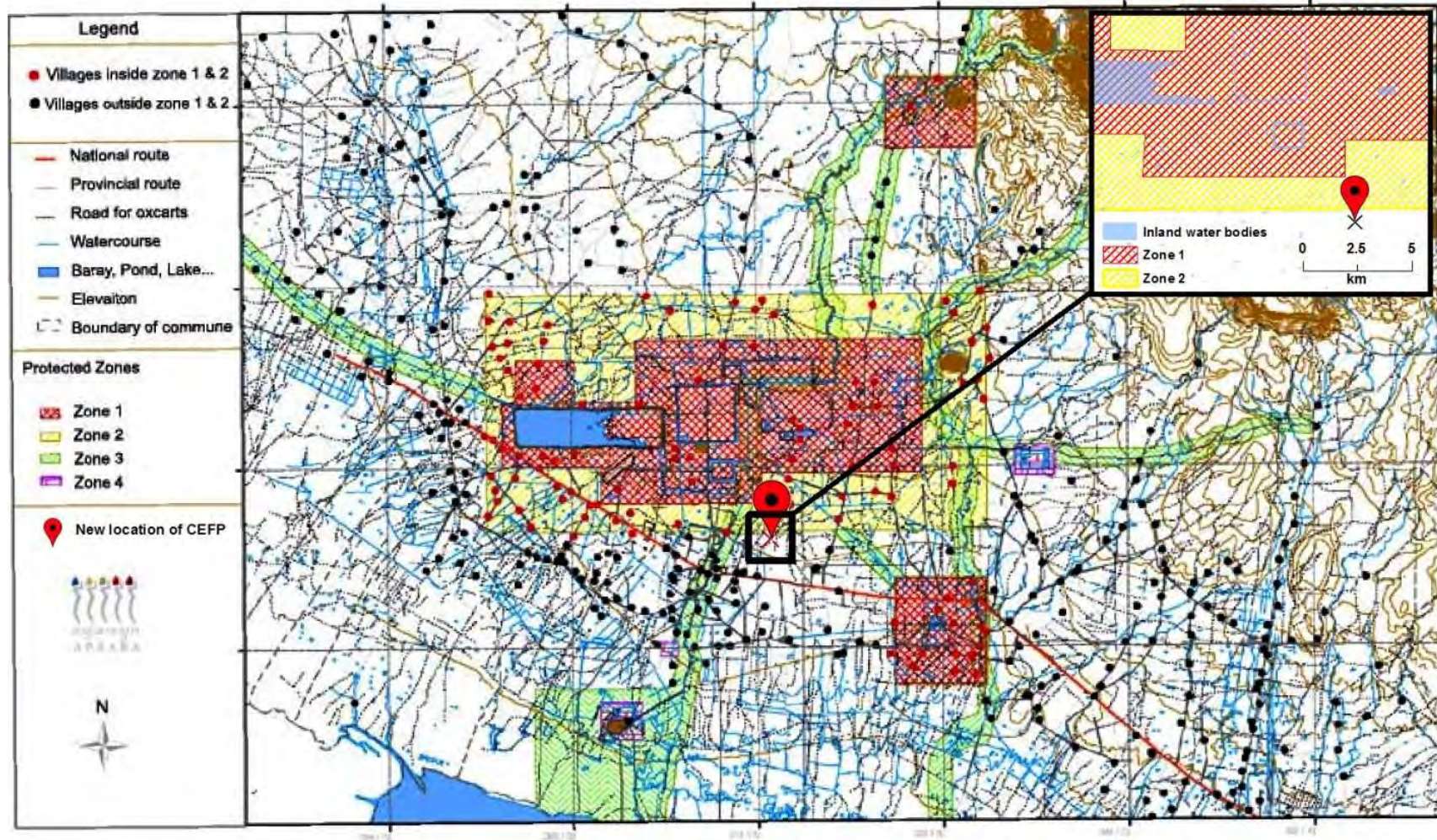
Appendix 3.8b: Location Map of Pursat PTC



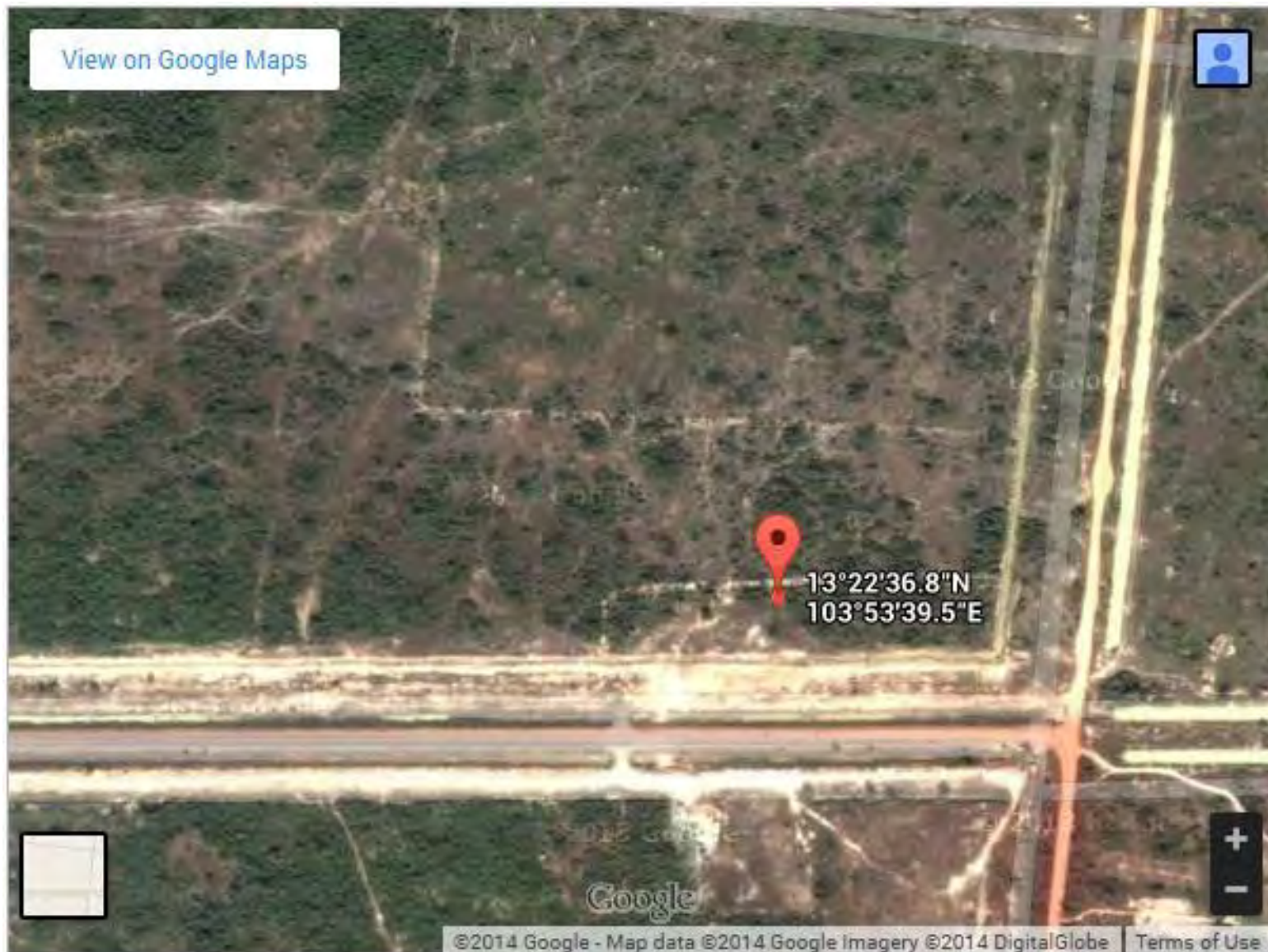
Appendix 3.9a: Vicinity Map of the proposed new location of Siem Reap PTC and its location with reference to the Angkor Protected Landscape (APL)



Angkor Park



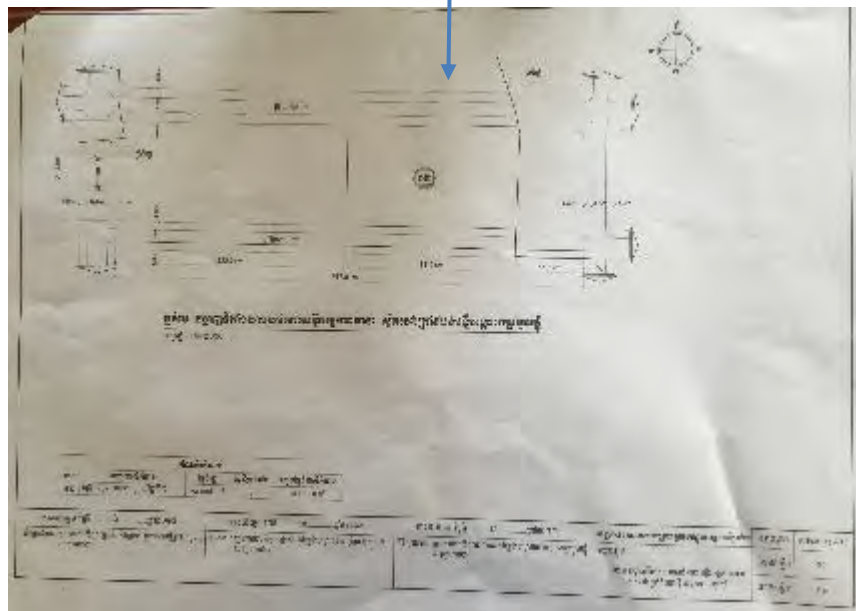
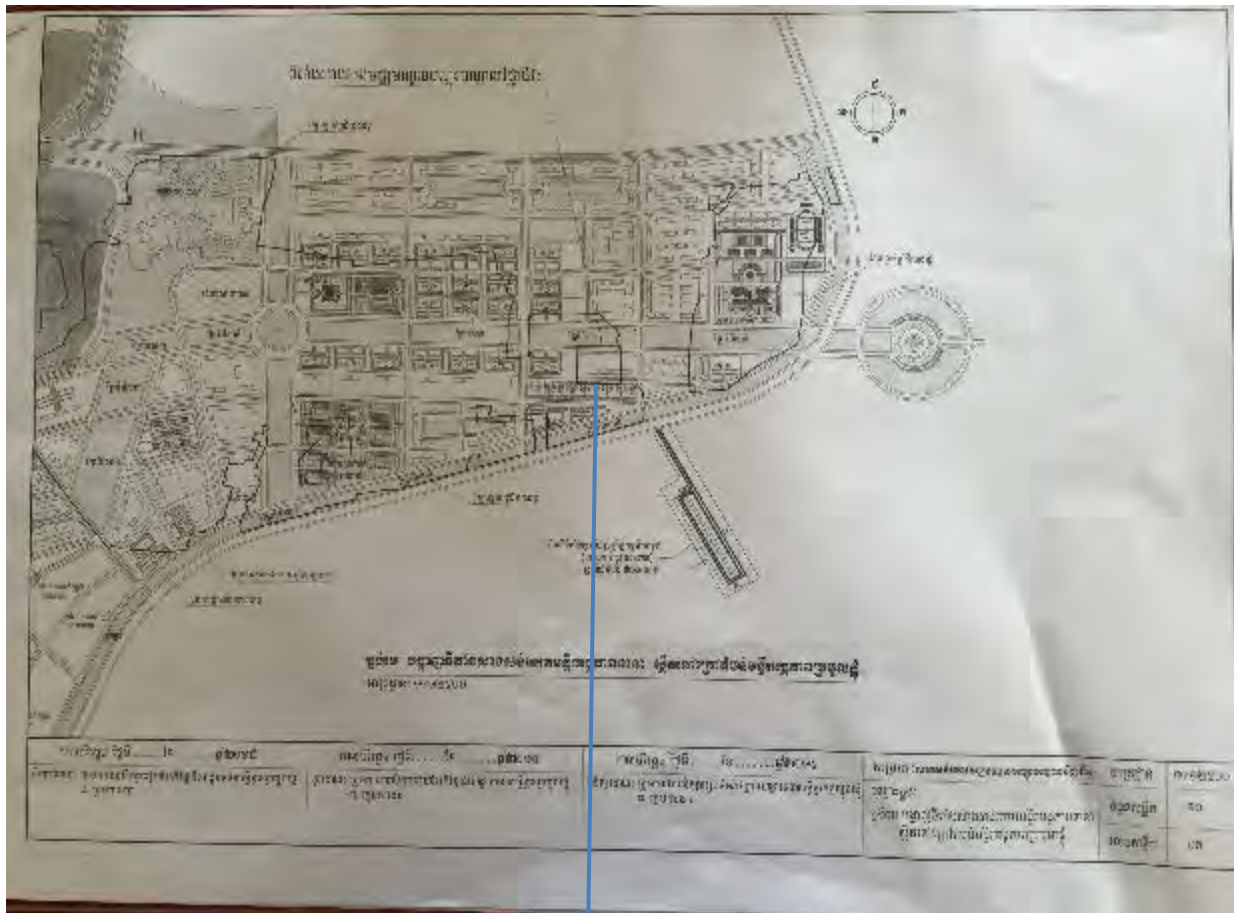
Appendix 3.9b: Location Map of the proposed new location of Siem Reap PTC



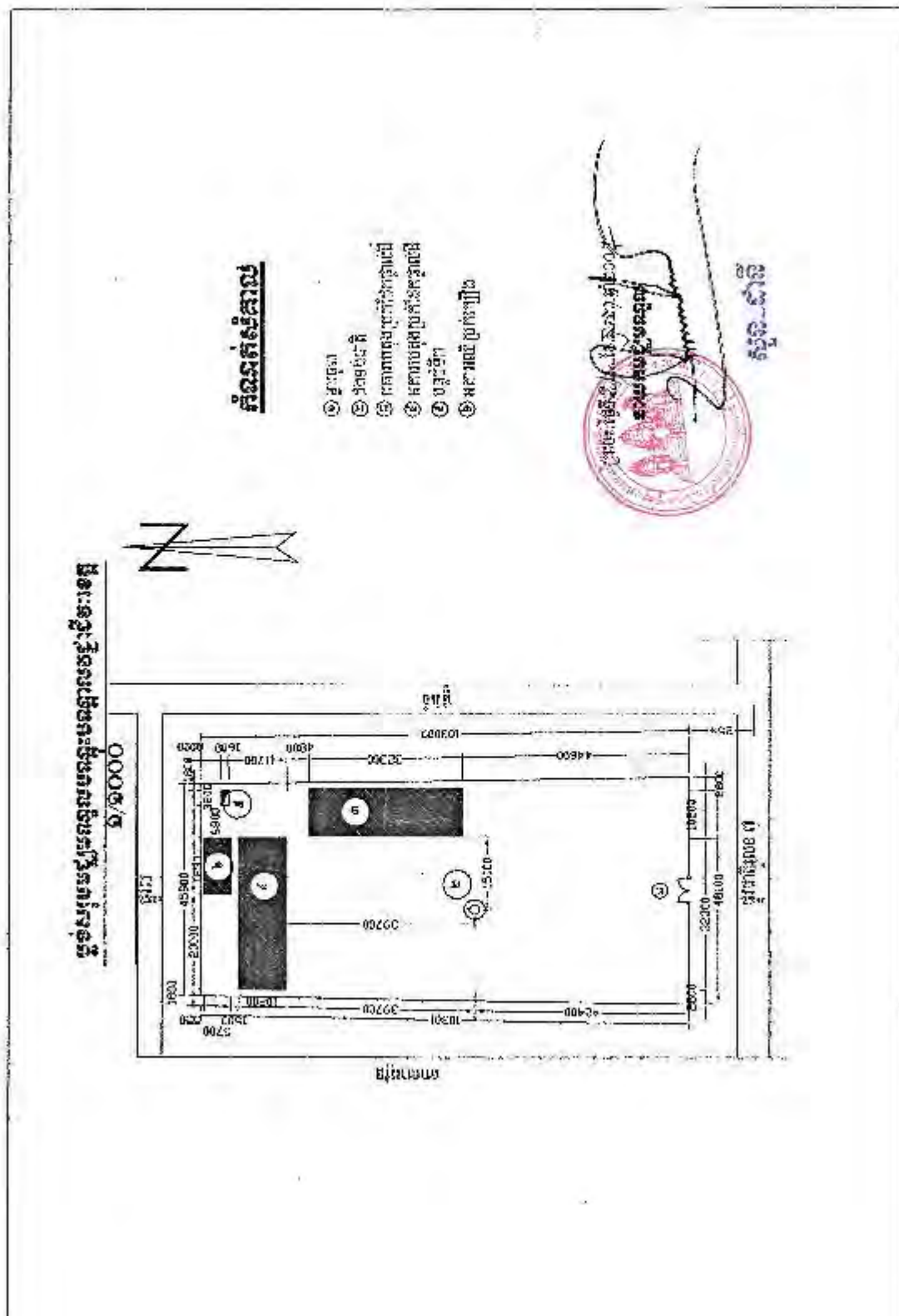
Appendix 3.10: Location Map of the proposed Subproject of Prey Veng PTC



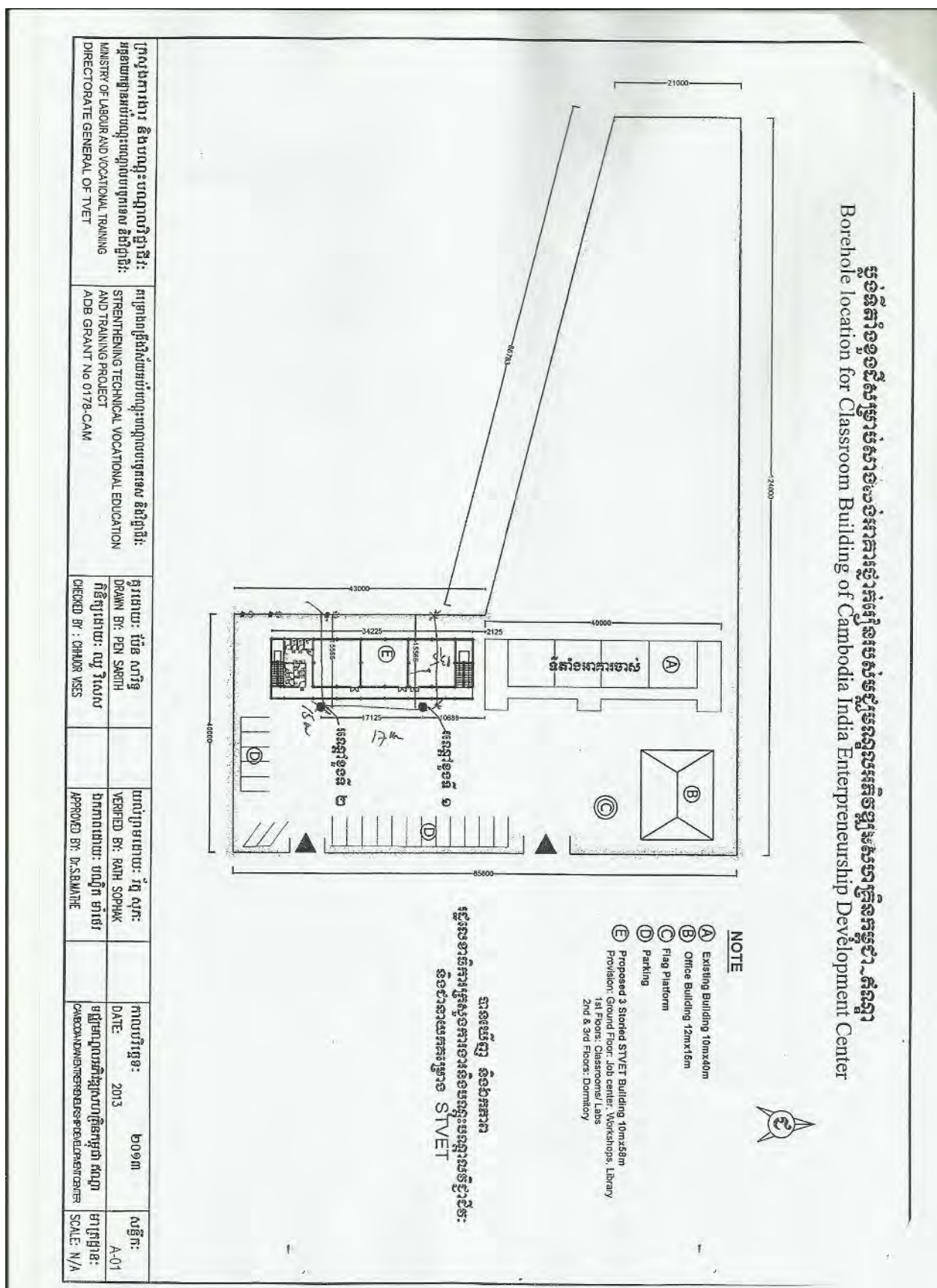
Appendix 3.11: Location Map of the proposed Subproject of Tbong Khmum PTC



Appendix 3.12: Location Map and Master Plan of the proposed Subproject of Kratie PTC



Appendix 3.12: Location Map of the proposed Subproject of CIEDI, Phnom Penh

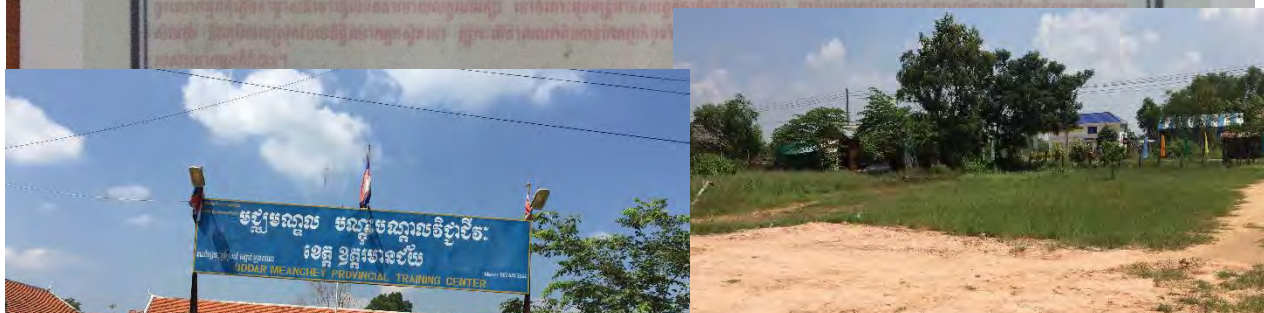




Appendix 3.13a: Location of the proposed Subproject of Battambang PTC Prey Kounkhla



Appendix 3.13b: Master Plan and Land Ownership of the proposed Subproject of Battambang PTC Prey Kounkhla



Appendix 3.15: Location of the proposed Subproject of Kep PTC



Appendix 3.16: Location of the proposed Subproject of Kep PTC



Appendix 3.18: Location of the proposed Subproject of Pailin PTC



SUMMARY OF STAKEHOLDER INTERVIEWS IN KAMPONG CHAM PROVINCIAL TRAINING CENTER (PTC)

Summary of Stakeholder Interviews
Technical Vocational Education and Training Sector Development Program (TVETSDP) Project
Kampong Cham PTC

Location: Village 7, Kampong Cham Commune, Kampong Cham Town, Kampong Cham Province

Date: 05 June 2014

The survey method used is key informant interview. The surveys were conducted during the meeting in the Kampong Cham PTC. Five (5) stakeholders were interviewed, and they are the PTC Director and Deputy Director, Chief of the Commune Council, Director of the Provincial Department of Labor and Vocational Training (PDLVT), and the Deputy Director of Directorate General of TVET Management (DGTVETM).

The representatives of the PTC are aware of the project but not on the specifics of what the PTC will be receiving (dormitory, workshop, classroom, or equipment package). The Deputy Director of DGTVETM informed that the PTC will receive a new workshop.

The following are the environmental issues raised by the stakeholders:

- There is access to electricity as supplied by the Electricité du Cambodge (EDC), but the local community still uses firewood and gas for cooking.

There were no environmental concerns expected by all stakeholders during project construction, except for possible dust emission during construction. They have no objections to the project because it will be located in a nearby land, less than 500 m, owned by the Kampong Cham PTC. The land is within the vicinity of government buildings and there are no residential areas nearby. Generally, all stakeholders agree that the project will improve the accessibility of poor people to the PTC which will reduce migration of youth to other provinces and poverty. They all hope that the project will push through.

SUMMARY OF STAKEHOLDER INTERVIEWS IN KAMPONG THOM PROVINCIAL TRAINING CENTER (PTC)

Summary of Stakeholder Interviews

Technical Vocational Education and Training Sector Development Program (TVETSDP) Project
Kampong Thom PTC

Location: Archar Leak Village, Archar Leak Commune, Stueng Saen Town, Kampong Thom Province

Date: 05 June 2014

The survey method used is key informant interview. The surveys were conducted during the meeting in the Kampong Thom PTC. Five (5) stakeholders were interviewed, and they are the PTC Director and Deputy Director, Chief of the Commune Council, Director of the Provincial Department of Labor and Vocational Training (PDLVT), and the Deputy Director of Directorate General of TVET Management (DGTVETM).

The representatives of the PTC are aware of the project but not on the specifics of what the PTC will be receiving (dormitory, workshop, classroom, or equipment package). The Deputy Director of DGTVETM informed that the PTC will receive a workshop. The Chief of the Commune Council was aware of the project through the PTC. He mentioned that even project information was not given in detail, he does not need to know more.

The following are the environmental issues raised by the stakeholders:

- According to the Chief of the Commune Council, there are no major environmental issues in the commune. Although flooding is experienced at times during the rainy season, this was not serious.
- People in the commune have access to electricity from the Electricité du Cambodge (EDC) and water from a private company. However, even there is electricity supply the local community still uses firewood and gas for cooking.

No environmental concerns were expected by all stakeholders during project implementation. All have no objections to the project. In closing, the stakeholders believe that the project will increase access to education by the poor and disadvantaged people. They all hope that the project will push through.

**SUMMARY OF STAKEHOLDER INTERVIEWS IN SIEM REAP
PROVINCIAL TRAINING CENTER (PTC)**

Summary of Stakeholder Interviews
Technical Vocational Education and Training Sector Development Program (TVETSDP) Project
Siem Reap PTC

Location: Wat Bo Village, Salakamreuk Commune, Siem Reap Town, Siem Reap Province
Date: 06 June 2014

The survey method used is key informant interview. The surveys were conducted during the meeting in the Siem Reap PTC. Four (4) stakeholders were interviewed, and they are the PTC Director and Deputy Director, Chief of the Commune Council, and the Deputy Director of Directorate General of TVET Management (DGTVETM).

The representatives of the PTC are aware of the project but not on the specifics of what the PTC will be receiving (dormitory, workshop, classroom, or equipment package). The Deputy Director of DGTVETM informed that the PTC will receive a dormitory in the new location that the government will provide for the PTC. As for the community representative, the Chief of the Commune Council is not aware of the project.

There were no environmental concerns expected by all stakeholders during project implementation. They have no objections to the project because the new location for the PTC will be within the area owned by the government. The said location is located less than 10 km from the town proper. They all agree that the dormitory will improve accessibility of poor and disadvantaged people to the PTC, especially for those in the remote areas. This will also provide comfort and convenience to the trainees in the PTC. They all hope that the project will push through.

**SUMMARY OF STAKEHOLDER INTERVIEWS IN BANTEAY MEANCHEY
PROVINCIAL TRAINING CENTER (PTC)**

Summary of Stakeholder Interviews
Technical Vocational Education and Training Sector Development Program (TVETSDP) Project
Banteay Meanchey PTC

Location: Keap Village, Teuk Tla Commune, Serey Saophoan Town, Banteay Meanchey Province

Date: 06 June 2014

The survey method used is key informant interview. The surveys were conducted during the meeting in the Banteay Meanchey PTC. Five (5) stakeholders were interviewed, and they are the PTC Director; Chief of the Commune Council; Vice Chief of the Village Council; Director of the Provincial Department of Labor and Vocational Training (PDLVT); and the Deputy Director of Directorate General of TVET Management (DGTVETM).

The representatives of the PTC are aware of the project but not on the specifics of what the PTC will be receiving (dormitory, workshop, classroom, or equipment package). The Deputy Director of DGTVETM informed that the PTC will receive a new dormitory. The Vice Chief of the Village Council was not aware of the project prior to the meeting and he wishes to know more about it if possible.

The following are the environmental issues raised by the stakeholders:

- Some areas in the commune are inundated up to 1.5 meters annually during rainy season due to proximity to the Tonle Sap River. However, this does not affect the PTC location since it is about 2 km away.
- Common diseases in the community are diabetes, hypertension, and typhoid fever

No environmental concerns were expected by all stakeholders during project implementation, except for dust emission raised by the Chief of the Commune Council. All have no objections to the project. Generally, all stakeholders agree that the project will help reduce poverty and increase access to education by the poor and disadvantaged people, especially those from the remote areas. They all hope that the project will push through.

SUMMARY OF STAKEHOLDER INTERVIEWS IN

BATTAMBANG INSTITUTE OF TECHNOLOGY (BIT)

Summary of Stakeholder Interviews

Technical Vocational Education and Training Sector Development Program (TVETSDP) Project
Battambang Institute of Technology (BIT)

Location: Romchek 4 Village, Ratanak Commune, Battambang Town, Battambang Province

Date: 07 June 2014

The survey method used is key informant interview. The surveys were conducted during the meeting in the BIT. Four (4) stakeholders were interviewed, and they are the BIT Director and Deputy Director, Director of the Provincial Department of Labor and Vocational Training (PDLVT), and the Deputy Director of Directorate General of TVET Management (DGTVETM).

The Director of the PDLVT said that he was aware of the project and hopes to get more information if possible.

The following are the environmental issues raised by the stakeholders:

- No environmental issues were identified in the village. Within the BIT, flooding is rarely experienced during the rainy season since its location is high.
- Although there is electricity supply from the Electricité du Cambodge (EDC), most in the local community still use firewood and gas for cooking.

During project implementation, no environmental concerns were identified by the stakeholders. All have no objections to the project. The BIT Director and the Director of the PDLVT mentioned that the land area of the BIT is 13 ha, thus impact of the construction works to the community is low. Further, impact on disruption of classes and training within the BIT premises were also noted to be low since buildings are situated far from each other. Installation of fences can also be applied to the area for construction. In closing, the stakeholders believe that the new workshop will help in the improvement of the education and training services of the BIT. They all hope that the project will push through.

SUMMARY OF STAKEHOLDER INTERVIEWS IN PURSAT PROVINCIAL TRAINING CENTER (PTC)

Summary of Stakeholder Interviews
Technical Vocational Education and Training Sector Development Program (TVETSDP) Project
Pursat PTC

Location: Chamkachek Village, Phthesprey Commune, Pursat Province

Date: 07 June 2014

The survey method used is key informant interview. The surveys were conducted during the meeting in the Pursat PTC. Five (5) stakeholders were interviewed, and they are the PTC Director and Deputy Director, Vice Chief of the Village Council, Director of the Provincial Department of Labor and Vocational Training (PDLVT), and the Deputy Director of Directorate General of TVET Management (DGTVETM).

The representatives of the PTC are aware of the project but not on the specifics of what the PTC will be receiving (dormitory, workshop, classroom, or equipment package). The Deputy Director of DGTVETM informed that the PTC will receive a workshop. The Vice Chief of Commune was aware of the project from the PTC but does not need know much detail about it.

The following are the environmental issues raised by the stakeholders:

- There are no major environmental issues in the village. Flooding is experienced but in areas about 3 km from the PTC.
- The local community has access to electricity from the Electricité du Cambodge (EDC) but still uses firewood and gas for cooking.

No environmental concerns were expected by all stakeholders during project implementation. All have no objections to the project. In closing, the stakeholders believe that the project will increase access to education by the poor and disadvantaged people. They all hope that the project will push through.

SUMMARY OF STAKEHOLDER INTERVIEWS IN KAMPONG SPEU PROVINCIAL TRAINING CENTER (PTC)

Summary of Stakeholder Interviews
Technical Vocational Education and Training Sector Development Program (TVETSDP) Project
Kampong Speu PTC

Location: Tompoung Village, Kaheng Commune, Samraong Tong District, Kampong Speu Province

Date: 10 June 2014

The survey method used is key informant interview. The surveys were conducted during the meeting in the Kampong Speu PTC. Six (6) stakeholders were interviewed, and they are the PTC Director and Deputy Director, Vice Chief of Commune; Director and Deputy Director of the Provincial Department of Labor and Vocational Training (PDLVT), and the Deputy Director of Directorate General of TVET Management (DGTVETM).

The representatives of the PTC are aware of the project but not on the specifics of what the PTC will be receiving (dormitory, workshop, classroom, or equipment package). The Deputy Director of DGTVETM informed that the PTC will receive a new workshop. As for the community representative, the Vice Chief of Commune is aware of the project based on information from the PTC, and he wish to know more about it if possible.

The following are the environmental issues raised by the stakeholders:

- Drought is experienced during August to November wherein these months were supposed to be rainy season.
- Common illnesses experienced by the community and PTC residents are stomachache and allergies. There are no serious illnesses or epidemic.
- Water is not a problem in the PTC, i.e. they are supplied by a private company. Although they have deep wells, they do not use the groundwater due to possible chemical contamination. However, most people in the local community get their water from the Stung Prek Tnout stream. And while there is electricity supply from the Electricité du Cambodge (EDC), the local community still uses firewood and gas for cooking.

There were no environmental concerns expected by all stakeholders during project construction. They mentioned there are no environmental impacts since the PTC location is far from the center of the community.

All have no objections to the project. The Director of the PDLVT recommended that during construction, local workers should be hired for some works. The PTC representatives fully support the project since this will address their need for workshop and additional facilities. Generally, all stakeholders agree that the project will help reduce poverty and increase the access to education of the poor and disadvantaged people. They all hope that the project will push through.

SUMMARY OF STAKEHOLDER INTERVIEWS IN KOH KONG PROVINCIAL TRAINING CENTER (PTC)

Summary of Stakeholder Interviews
Technical Vocational Education and Training Sector Development Program (TVETSDP) Project
Koh Kong PTC

Location: Village1, Smachmeanchey Commune, Koh Kong Town, Koh Kong Province
Date: 11 June 2014

The survey method used is key informant interview. The surveys were conducted during the meeting in the Koh Kong PTC. Five (5) stakeholders were interviewed, and they are the PTC Director and Deputy Director, Member of the Commune Council, Director of the Provincial Department of Labor and Vocational Training (PDLVT), and the Deputy Director of Directorate General of TVET Management (DGTVETM).

The representatives of the PTC are aware of the project but not on the specifics of what the PTC will be receiving (dormitory, workshop, classroom, or equipment package). The Deputy Director of DGTVETM informed that the PTC will receive a dormitory. The Member of the Commune Council is aware of the project and mentioned that even though she was not informed of the project details, she does not need to know more.

The following are the environmental issues raised by the stakeholders:

- According to the Member of the Commune Council, the commune has never experienced extreme weather conditions before. But inundations during heavy rain occur since solid wastes block the drainage system.
- Common illnesses experienced by the local community and of the trainees and staffs temporarily residing in the PTC are colds and cough. According to the Member of the Commune Council, there were some cases of malaria in the highlands and forest part of the commune, but this is far from the PTC.
- People in the local community have access to water through a private water company. However, boiling prior to drinking is a common practice. At times they also buy mineral water. And while there is electricity supply from the Electricité du Cambodge (EDC), the local community still uses firewood and gas for cooking.

No environmental concerns were expected by all stakeholders during project implementation. All have no objections to the project. The PTC Director mentioned that there were three construction works done in the past during rainy season that all failed, thus he is suggesting that construction works for the dormitory be done during dry season. The PDLVT recommended that the contractor hire local workers for some of the works. In closing, the stakeholders believe that the new dormitory will increase access to education by the poor and disadvantaged people, especially from the remote areas. They all hope that the project will push through.

SUMMARY OF STAKEHOLDER INTERVIEWS IN PREAH SIHANOUK PROVINCIAL TRAINING CENTER (PTC)

Summary of Stakeholder Interviews

Technical Vocational Education and Training Sector Development Program (TVETSDP) Project
Preah Sihanouk PTC

Location: Group 15, Village 2, Commune 3, Preah Sihanouk Town, Preah Sihanouk Ville

Date: 11 June 2014

The survey method used is key informant interview. The surveys were conducted during the meeting in the Preah Sihanouk PTC. Five (5) stakeholders were interviewed: PTC Director and Deputy Director; Vice Chief of the Commune Council; Director of the Provincial Department of Labor and Vocational Training (PDLVT); and the Deputy Director of Directorate General of TVET Management (DGTVETM).

The representatives of the PTC are aware of the project but not on the specifics of what the PTC will be receiving (dormitory, workshop, classroom, or equipment package). The Deputy Director of DGTVETM informed that the PTC will receive a new workshop. The Vice Chief of the Commune Council was not aware of the project prior to the meeting. She wishes to know more if possible.

The following are the environmental issues raised by the stakeholders:

- No environmental issues were identified in the village where the PTC is located. The village is at a high elevation therefore flooding is not experienced. But for other low-lying villages near the sea, flooding occurs during the rainy season. However, the Vice Chief of the Commune Council downplayed this issue.
- A wild poisonous snake is sighted at times in the community, i.e. called “Pos Porplak” in Khmer language.
- People in the local community have access to water through a private water company. However, boiling prior to drinking is a common practice. At times they also buy mineral water. And while there is electricity supply from the Electricité du Cambodge (EDC), the local community still uses firewood and gas for cooking.

No environmental concerns were expected by all stakeholders during project implementation. All have no objections to the project. Suggestions were solicited and the Vice Chief of the Commune Council proposed the use of smaller construction vehicles. Access road to the PTC is narrow and can be degraded by big ones. Further, she is concerned of possible vehicular accidents with children. In relation to this, the Director of the PDLVT recommended that the contractor use another access road that is bigger and along less-populated areas. Generally, all stakeholders agree that the project will help reduce poverty and increase access to education by the poor and disadvantaged people. They all hope that the project will push through.

SUMMARY OF STAKEHOLDER INTERVIEWS IN KANDAL PROVINCIAL TRAINING CENTER (PTC)

Summary of Stakeholder Interviews
Technical Vocational Education and Training Sector Development Program (TVETSDP) Project
Kandal PTC

Location: Preak Tnout Village, Takhmao Commune, Takhmao Town, Kandal Province

Date: 12 June 2014

The survey method used is key informant interview. The surveys were conducted during the meeting in the Kandal PTC. Six (6) stakeholders were interviewed, and they are the PTC Director and two Deputy Directors, Chief of the Commune Council, Deputy Director of the Provincial Department of Labor and Vocational Training (PDLVT), and the Deputy Director of Directorate General of TVET Management (DGTVETM).

The representatives of the PTC are aware of the project but not on the specifics of what the PTC will be receiving (dormitory, workshop, classroom, or equipment package). The Deputy Director of DGTVETM informed that the PTC will receive a new workshop. The Chief of Commune was informed about the project by the PTC but not in detail. However, he generally supports any improvement of the PTC and does not need to know project details.

The following are the environmental issues raised by the stakeholders:

- No environmental issues were identified in the village where the PTC is located. The Chief of Commune mentioned that all villages in the commune have never experienced extreme flooding. And whenever there are inundations due to heavy rains, these settle and drain after a few hours.
- The local community still uses firewood and gas for cooking even they have access to electricity from the Electricité du Cambodge (EDC).

During project implementation, no environmental concerns were identified by the stakeholders. All have no objections to the project. The Chief of Commune added that the government has a plan for expansion of the road in front of the PTC (to a width of 30m). The magnitude of impact of the said project to the community in the buffer zones is major, while the impact of the construction of PTC workshop is minor. Further, he added that noise receptors during construction will only be the few houses in front of the PTC. In closing, the stakeholders believe that the new workshop will help in the improvement of the education and training services of the PTC. They all hope that the project will push through.

SUMMARY OF STAKEHOLDER INTERVIEWS IN PREY VENG PROVINCIAL TRAINING CENTER (PTC)

Summary of Stakeholder Interviews
Technical Vocational Education and Training Sector Development Program– Additional
Financing (TVETSDP-AF) Project
Prey Veng PTC

Location: Lek Mouy Village, Kampong Leav Commune, Prey Veng Municipality, Prey Veng Province

Date: 02 October 2015

The interviews were conducted by using ADB Rapid Environmental Assessment Checklist to consult with the relevant stakeholders in Prey Veng PTC on 02 October 2015. The participants include the Director, Deputy Director, Staff and Teacher of the PTC, Chief of Lek Mouy Villager, Commune council, Villager, Representatives of the Director of the Provincial Department of Labor and Vocational Training (PDLVT) and Directorate General of TVET Management (DGTVETM).

Result of the interview is included in the following:

- The representatives of the PTC are aware of the project but do not know clearly on the project types (such as dormitory, workshop, classroom, equipment package or rehabilitation). All participants are happy when they know that the project particularly AFD will support the workshop and additional rehabilitation.
- The subproject is proposed at the existing Provincial Pre Veng PTC thus there is significant environmental issue on cultural heritage site, protected and biodiversity area.
- Flooding is also not a serious concern as well as climate change.
- The subproject is located in the existing PTC thus there is no issue on land acquisition. The land title is owned by government.
- The anticipated impacts shall be only locally, short time and small which will be mitigated easily by Environmental Management Plan and Monitoring Plan.

At end, participants wish to get project as soon as possible because they raised important and needs of the project for the PTC to improve the existing service. They also thanks ADB, MLVT and AFD for support.

SUMMARY OF STAKEHOLDER INTERVIEWS IN TBONG KHMUM PROVINCIAL TRAINING CENTER (PTC)

Summary of Stakeholder Interviews
Technical Vocational Education and Training Sector Development Program– Additional
Financing (TVETSDP-AF) Project
Tbong Khmum PTC

Location: Nikum Leu Village, Sra Lop Commune, Tbong Khmum Municipality, Prey Veng Province

Date: 02 October 2015

The interviews were conducted by using ADB Rapid Environmental Assessment Checklist to consult with the relevant stakeholders in Tbong Khmum PTC on 02 October 2015. The meetings were conducted with two groups; First meeting was conducted with provincial deputy governor of Tbong Khmum Province, Provincial Director of LVT, PTC Director, Representatives of the MLVT and Safeguard Specialist, to discuss on land ownership, size and master plan of the subproject land. The Deputy Governor explained that the land for the proposed subproject has been provided by Provincial Administrative Office of Tbong Khmum to Tbong Khmum PTC as requested at the new provincial administrative development located in Nikum Leu, Sra Lop Commune in Tbong Khmum. The total land size are 17,032 m² with government owned the land. The provincial Tbong Khmum office, Provincial Departments and other provincial agencies will be moved to there after the building will be completed. The Deputy Governor of Province also suggested to speed up the project so that the Tbong Khmum PTC can move activities as planned.

Second meeting was conducted with local authority, villagers, Director and staff of Provincial Department of LVT, director and staff of Tbong Khmum PTC, Safeguard Specialist and MLVT's representatives. The second meeting was discussed on environmental issues before construction (site selection), during construction and during operation.

Result of the interview related to environmental issues is included in the following:

- The Tbong Khmum PTC and Director of Provincial Department of Labor, Vocation and Training are aware of the project but do not know clearly on the project types (such as dormitory, workshop, classroom, equipment package or rehabilitation). All participants are happy when they know that the project particularly AFD will support the workshop and additional rehabilitation, because the Tbong Khmum PTC has no own building yet. It noted that the Tbong Khmum Province is newest province upgraded from district.
- The subproject is proposed at a new Provincial Administration Development area where still have some trees planted and owned by government. Now government approved to use the areas for provincial development.
- Even if there is new development site but significant environmental impact on cultural heritage site, protected area and environmental sensitive areas are not found.
- Flooding is also not a very serious concern as well as climate change at the subproject.
- There is no issue on land acquisition. The land title is owned by government.
- Anticipated impacts including trees, waste generation, dust, and sanitation will occur but they are only locally, short time and small impacts which will be mitigated by Environmental Management Plan and Monitoring Plan.

At end, participants wish to get project as soon as possible because they raised important and needs of the project for the PTC to improve the existing service. They also thanked ADB, MLVT and AFD for support.

SUMMARY OF STAKEHOLDER INTERVIEWS IN KRATIE PROVINCIAL TRAINING CENTER (PTC)

Summary of Stakeholder Interviews
Technical Vocational Education and Training Sector Development Program– Additional
Financing (TVETSDP-AF) Project
Kratie PTC

Location: O'Reusey Pi Village, O'Reusey Commune, Kratie Municipality, Kratie Province

Date: 03 October 2015

The interviews were conducted by using ADB Rapid Environmental Assessment Checklist to consult with the relevant stakeholders in Tbong Khmum PTC on 03 October 2015.

Interview was conducted with local authority, villagers, Deputy Director of Provincial Department of LVT, director and staff of Kratie PTC, Villagers, Safeguard Specialist and MLVT's representatives. The meeting was discussed on environmental issues before construction (site selection), during construction and during operation.

Result of the interview related to environmental issues is included in the following:

- The participants are aware of the project but do not know clearly on the project types (such as dormitory, workshop, classroom, equipment package or rehabilitation).
- There is no significant environmental impacts on cultural heritage site, protected area and environmental sensitive areas. The heritage site like Sosor 100 is located about 55 km from the subproject.
- Flooding, storm or landslides are not serious concerns at the subproject area.
- The subproject is located in the existing PTC thus there is no issue on land acquisition. The land title is owned by government.
- Only Mekong River exists about 5 km from the subproject thus there is no impact on water quality.
- Anticipated impacts including waste generation, dust, community safety, road safety and sanitation will occur but they are only locally, short time and small impacts which will be mitigated by Environmental Management Plan and Monitoring Plan.

All participants are happy when they know that the project particularly AFD will support the workshop and additional rehabilitation, because the PTC is lack of dormitory and workshop.

At end, participants wish to get project as soon as possible because they raised important and needs of the project for the PTC to improve the existing service. They also thanked ADB and AFD for support.

**SUMMARY OF STAKEHOLDER INTERVIEWS IN KEP
PROVINCIAL TRAINING CENTER (PTC)**

Summary of Stakeholder Interviews
Technical Vocational Education and Training Sector Development Program– Additional
Financing (TVETSDP-AF) Project
Kep PTC

Location: Thmey Village, Preythom Commune, Kep Municipality, Kep Province

Date: 05 October 2015

The interviews were conducted by using ADB Rapid Environmental Assessment Checklist as guidance to consult with the relevant stakeholders in Kep PTC on 05 October 2015.

Participants include local authority (village chief and commune chief), villagers, Director of Provincial Department of LVT, director and staff of Kep PTC, Safeguard Specialist and MLVT's representatives, with total number of 19 participants of which 1 was woman. The meeting was discussed on environmental issues before construction (site selection), during construction and during operation.

Result of the interview presents in the following:

- The participants are aware of the project but do not know clearly on the project types (such as dormitory, workshop, classroom, equipment package or rehabilitation).
- There is no significant environmental impacts on cultural heritage site, protected area and environmental sensitive areas.
- There is Kep national park which is approximately 1.5 km from the subproject; however the subproject is not located at the projected area or area prohibited for development. The subproject is located at residential and institutional areas where building development is allowed.
- Flooding, storm or landslides is not a serious concerns at the subproject area.
- The subproject is located in the existing PTC thus there is no issue on land acquisition. The land title is owned by government.
- Anticipated impacts including waste generation, dust, community safety, road safety and sanitation will occur and they are only locally, short-periodic and small impacts which will be mitigated by Environmental Management Plan and Monitoring Plan.

At end, Mr. Dith Lay Heak, Provincial Director of Department of Labor, Vocation and Training, thanked the mission team for coming to visit the Kep PTC and also special thanks to MLVT, ADB and AFD for support. He wish to get project as soon as possible.

SUMMARY OF STAKEHOLDER INTERVIEWS IN CIEDI, PHNOM PENH

Summary of Stakeholder Interviews

Technical Vocational Education and Training Sector Development Program– Additional
Financing (TVETSDP-AF) Project
CIEDI Phnom Penh

Location: Chong Thnal Khang Lech Village, Teuk Thla Commune, Sen Sok Municipality, Phnom Penh

Date: 07 October 2015

The interviews were conducted by using ADB Rapid Environmental Assessment Checklist as guidance to consult with the relevant stakeholders in CIEDI on 07 October 2015.

Participants include local authority (village chief), director and staff of CIEDI Phnom Penh, Safeguard Specialist and MLVT's representatives, with total number of 07 participants of which no woman attend. The meeting was discussed on environmental issues before construction (site selection), during construction and during operation.

Result of the interview presents in the following:

- The participants are aware of the project under support by ADB but do not know clearly on the project types (such as dormitory, workshop, classroom, equipment package or rehabilitation).
- There are no significant environmental impacts on cultural heritage site, protected area and environmental sensitive areas.
- Flooding, weather, storm or landslides are not serious concerns at the subproject areas.
- The subproject is located in the existing institution thus there is no issue on land acquisition. The land title is owned by government. Villager chief also ensured that the land is not occupied by community but it is owned by government.
- Anticipated impacts including waste generation, dust, community safety, noise, road safety and sanitation will occur and they are only locally, short-periodic and small impacts which will be mitigated by Environmental Management Plan and Monitoring Plan.

At end, Director of the CIEDI thanked the mission team for coming to visit the institution and also special thanks to MLVT and ADB for support.

SUMMARY OF STAKEHOLDER INTERVIEWS IN JAPAN VOCATIONAL CENTER (JVC)

Summary of Stakeholder Interviews
Technical Vocational Education and Training Sector Development Program– Additional
Financing (TVETSDP-AF) Project
JVC Phnom Penh

Location: Deum Kor Village, Chhroy Changva Commune, Chhroy Changva Municipality, Phnom Penh

Date: 07 October 2015

The interviews were conducted by using ADB Rapid Environmental Assessment Checklist as guidance to consult with the relevant stakeholders in JVC on 07 October 2015.

Participants include director and staff of JVC, Safeguard Specialist and MLVT's representatives, with total number of 06 participants of which one is woman. The meeting was discussed on environmental issues before construction (site selection), during construction and during operation.

Result of the interview presents in the following:

- The participants are aware of the project. The JVC will get workshop under the ADB project support.
- There are no significant environmental impacts on cultural heritage site, protected area and environmental sensitive areas.
- Flooding, weather, storm or landslides are not serious concerns at the subproject areas.
- The subproject is located in the existing institution thus there is no issue on land acquisition. The land title is owned by government. Director of JVC also ensured that the land is not occupied by community but it is owned by JVC, under government control.

- Anticipated impacts including waste generation, dust, community safety and security, noise, road safety and sanitation will occur and they are only locally, short-periodic and small impacts which will be mitigated by Environmental Management Plan and Monitoring Plan.

At end, Director of the JVC thanked the mission team for coming to visit the JVC and also gave his special thanks to MLVT, ADB and AFD for support.

SUMMARY OF STAKEHOLDER INTERVIEWS IN KANDAL PROVINCIAL TRAINING CENTER

Summary of Stakeholder Interviews

Technical Vocational Education and Training Sector Development Program – Additional
Financing (TVETSDP-AF) Project
Kandal PTC

Location: Prek Samrong Village, Takhmao Commune, Takhmao Municipality, Kandal province
Date: 08 October 2015

The interviews were conducted by using ADB Rapid Environmental Assessment Checklist as guidance to consult with the relevant stakeholders in Kandal PTC on 08 October 2015. Participants include authority, villager, director and staff of Kandal PTC, Safeguard Specialist and MLVT's representatives, with total number of 21 participants of which 06 participants are woman. The meeting was discussed on environmental issues before construction (site selection), during construction and during operation.

Result of the interview presents in the following:

- The participants are aware of the project under support by ADB but do not know clearly on the project types (such as dormitory, workshop, classroom, equipment package or rehabilitation).
- The subproject is located in the existing Kandal PTC thus no anticipated impacts on cultural heritage site, protected area and environmental sensitive areas will happen.
- Weather, storm or landslides are not serious concerns at the subproject areas.
- Some parts of proposed subproject site was flooded about 0.5 m by rain for few days period every year.
- The subproject is located in the existing institution thus there is no issue on land acquisition. The land title is owned by government. Participants ensured that the land is not occupied by community or private sector but it is owned by government.
- Anticipated impacts including waste generation, dust, erosion, community safety, noise, road safety and sanitation will occur and they are only locally, short-periodic and small impacts which will be mitigated by Environmental Management Plan and Monitoring Plan.

At end, participants requested to ADB and AFD to speed up project construction as soon as possible.

**SUMMARY OF STAKEHOLDER INTERVIEWS IN KAMPONG CHHNANG
PROVINCIAL TRAINING CENTER**

Summary of Stakeholder Interviews
Technical Vocational Education and Training Sector Development Program– Additional
Financing (TVETSDP-AF) Project
Kampong Chhnang PTC

Location: Tulkralanh Village, Kampong Chhnang Commune, Kampong Chhnang Municipality,
Kampong Chhnang province

Date: 16 October 2015

The interviews were conducted by using ADB Rapid Environmental Assessment Checklist as guidance to consult with the relevant stakeholders in Kampong Chhnang PTC on 16 October 2015. Participants include authority, villager, director and staff of Kampong Chhnang PTC, Safeguard Specialist and MLVT's representatives, with total number of 19 participants of which no participant is woman. The meeting was discussed on environmental issues before construction (site selection), during construction and during operation.

Result of the interview presents in the following:

- The participants are aware of the project under support by ADB but do not know clearly on the project types (such as dormitory, workshop, classroom, equipment package or rehabilitation).
- The subproject is located in the existing Kampong Chhnang PTC thus no anticipated impacts on cultural heritage site, protected area and environmental sensitive areas will happen.
- There is no serious issue on weather, storm or landslides at the subproject areas.
- Some parts of proposed subproject site was flooded about 0.5 m by rain for few hours during rainy season.
- The subproject is located in the existing institution thus there is no issue on land acquisition. The land title is owned by government. Participants ensured that the land is not occupied by community or private sector but it owned by government.
- Anticipated impacts including waste generation, dust, community safety, noise, road safety and sanitation will occur and they are only locally, short-periodic and small impacts which will be mitigated by Environmental Management Plan and Monitoring Plan.

At end, participants requested to ADB and AFD to speed up project construction as soon as possible.

**SUMMARY OF STAKEHOLDER INTERVIEWS IN BATTAMBANG
PROVINCIAL TRAINING CENTER (PTC)**

Summary of Stakeholder Interviews
Technical Vocational Education and Training Sector Development Program– Additional
Financing (TVETSDP-AF) Project
Battambang Prey Kounkhla PTC

Location: Andong Pring Village, Oumarl Commune, Battambang Municipality, Battambang province

Date: 16 October 2015

The interviews were conducted by using ADB Rapid Environmental Assessment Checklist as guidance to consult with the relevant stakeholders in Battambang Prey Kounkhla PTC on 16 October 2015. Participants include authority, villager, director and staff of Battambang PTC, Safeguard Specialist and MLVT's representatives, with total number of 13 participants of which one participant is woman. The meeting was discussed on environmental issues before construction (site selection), during construction and during operation.

Result of the interview presents in the following:

- The participants are aware of the project under support by ADB but do not know clearly on the project types (such as dormitory, workshop, classroom, equipment package or rehabilitation).
- The subproject is located in the existing Battambang Prey Kounkhla PTC thus no anticipated impacts on cultural heritage site, protected area and environmental sensitive areas is expected.
- There are no serious issues on weather, storm or landslides at the subproject areas.
- Some parts of the PTC was flooded about 0.1 m by rain for few hours during rainy season.
- The subproject is located in the existing institution thus there is no issue on land acquisition. The land title is owned by government. Participants ensured that the land is not occupied by community or private sector but it is owned by government.
- Anticipated impacts including waste generation, dust, community safety, soil spoil, waste of black oil, road safety and sanitation will occur and they are only locally, short-periodic and small impacts which will be mitigated by Environmental Management Plan and Monitoring Plan.

At end, Director of the Battambang PTC thanked the mission team for coming to visit the PTC and also gave his special thanks to MLVT, ADB and AFD for support.

SUMMARY OF STAKEHOLDER INTERVIEWS IN PAILIN PROVINCIAL TRAINING CENTER (PTC)

Summary of Stakeholder Interviews

Technical Vocational Education and Training Sector Development Program– Additional
Financing (TVETSDP-AF) Project
Pailin PTC

Location: O'Tapuk Krom Village, Tul Lvea Commune, Pailin Municipality, Pailin province

Date: 17 October 2015

The interviews were conducted by using ADB Rapid Environmental Assessment Checklist as guidance to consult with the relevant stakeholders in Pailin PTC on 17 October 2015. Participants include authority, villager, director and staff of Pailin PTC, Safeguard Specialist and MLVT's representatives, with total number of 11 participants of which one participant is woman.

The meeting was discussed on environmental issues before construction (site selection), during construction and during operation.

Result of the interview presents in the following:

- The participants are aware of the project under support by ADB but do not know clearly on the project types (such as dormitory, workshop, classroom, equipment package or rehabilitation).
- The subproject is located in the existing Pailin PTC thus no anticipated impacts on cultural heritage site, protected area and environmental sensitive areas is expected.
- There is no serious issue on weather, storm or landslides at the subproject areas.
- The subproject is located in the existing institution thus there is no issue on land acquisition. The land title is owned by government. Participants ensured that the land is not occupied by community or private sector but it owned by government.
- Anticipated impacts including waste generation, dust, soil spoil, waste of black oil, community safety, noise and air pollution, road safety and sanitation will occur and they are only locally, short-periodic and small impacts which will be mitigated by Environmental Management Plan and Monitoring Plan.

At end, participants thanked the mission team for coming to visit the PTC and also gave their special thanks to MLVT, ADB and AFD for support.

SUMMARY OF STAKEHOLDER INTERVIEWS IN ODOR MEANCHEY PROVINCIAL TRAINING CENTER (PTC)

Summary of Stakeholder Interviews

Technical Vocational Education and Training Sector Development Program– Additional
Financing (TVETSDP-AF) Project
Odor Meanchey PTC

Location: Borey Rathabal Village, Samrong Commune, Samrong Municipality, Samrong province

Date: 20 October 2015

The interviews were conducted by using ADB Rapid Environmental Assessment Checklist as guidance to consult with the relevant stakeholders in Odor Meanchey PTC on 20 October 2015. Participants include authority, villager, director and staff of Odor Meanchey PTC, Safeguard Specialist and MLVT's representatives, with total number of 09 participants of which one participant is woman. The meeting was discussed on environmental issues before construction, during construction and during operation.

Result of the interview presents in the following:

- The participants are aware of the project under support by ADB but do not know clearly on the project types (such as dormitory, workshop, classroom, equipment package or rehabilitation).

- The subproject is located in the existing Odor Meanchey PTC thus no anticipated impacts on cultural heritage site, protected area and environmental sensitive areas is expected.
- There is no serious issue on weather, storm or landslides at the subproject areas.
- The subproject is located in the existing Odor Meanchey PTC thus there is no any issue on land acquisition. The land title is owned by government. Director of Odor Meanchey PTC ensured that the land is not occupied by community or private sector but it is owned by government.
- Anticipated impacts including waste generation, dust, community safety, road safety and sanitation will occur and they are only locally, short-periodic and small impacts which will be mitigated by Environmental Management Plan and Monitoring Plan.

At end, the PTC's Director on behalf of participants thanked the mission team for coming to visit the PTC and also gave their special thanks to MLVT, ADB and AFD for support.

SUMMARY OF STAKEHOLDER INTERVIEWS IN SIEM REAP CEFP VTC

Summary of Stakeholder Interviews
Technical Vocational Education and Training Sector Development Program– Additional
Financing (TVETSDP-AF) Project
Siem Reap CEFP VTC

Location: Prey Kuy Village, Ampil Commune, Siem Reap Municipality, Siem Reap province

Date: 19 October 2015

The interview was conducted by using ADB Rapid Environmental Assessment Checklist as guidance to consult with the relevant stakeholders in Siem Reap CEFP VTC on 19 October 2015. Participants include authority, villager, director and staff of Siem Reap CEFP PTC, Safeguard Specialist and MLVT's representatives, with total number of 09 participants of which one participant is woman. The meeting was discussed on environmental issues before construction, during construction and during operation.

Result of the interview presents in the following:

- The participants are aware of the project under support by ADB but do not know clearly on the project types (such as dormitory, workshop, classroom, equipment package or rehabilitation).
- The subproject is located in new provincial Siem Reap administration development plan area but there is no anticipated impact on cultural heritage site, protected area and environmental sensitive areas.
- There is no serious issue on flooding, weather and storm events or landslides at the subproject areas.
- The subproject is located in new provincial development area and there is no any issue on land acquisition. The land title was transferred by Apsara Authority since 17 August 2015 to Ministry of Labor, Vocation and Training. Thus the land owned by government.
- Anticipated impacts including waste generation, dust, soil spoil, community safety, air pollution, traffic jam and road safety and sanitation will occur and they are only locally,

short-periodic and small impacts which will be mitigated by Environmental Management Plan and Monitoring Plan.

At end, participants thanked the mission team and donors for support.

Appendix 4.2: Summary of the perception survey conducted in the public TVET institutions (Khmer)

A. Kampong Cham PTC

**សង្ខេបបទសម្ភាសន៍នាទម្រង់អ្នកពាក់ព័ន្ធក្នុង
មជ្ឈមណ្ឌលបណ្តុះបណ្តាលខេត្តកំពង់ចាម**

Technical Vocational Education and Training Sector Development Program (TVETSDP) Project

ទីតាំង: ភូមិទី៧, សង្កាត់កំពង់ចាម, ក្រុងកំពង់ចាម, ខេត្តកំពង់ចាម

ថ្ងៃទី: ៥មិថុនា២០១៥

វិធីសំរេងព័ត៌មាននេះផ្អែកលើការសម្ភាសន៍អ្នកពាក់ព័ន្ធសំខាន់ៗ។ សំរេងព័ត៌មាននេះធ្វើឡើងកំឡុងពេលប្រជុំក្នុងមជ្ឈមណ្ឌលបណ្តុះបណ្តាលខេត្តកំពង់ចាម។ អ្នកពាក់ព័ន្ធផ្ទាល់ត្រូវបានសម្ភាសន៍ដែលរួមមាននាយក និងនាយករងមជ្ឈមណ្ឌល, ចៅសង្កាត់, ប្រធានមន្ទីរការងារនិងបណ្តុះបណ្តាលវិជ្ជាជីវៈខេត្ត និងអនុប្រធាន DGTVE។

អ្នកតំណាងមជ្ឈមណ្ឌលបានដឹងពីគំរោង ប៉ុន្តែមិនបានដឹងលំអិតពីអ្វីដែលមជ្ឈមណ្ឌលនឹងទទួលបាន (អន្តេរាសិកជ្ជាន, រោងជាង, ថ្នាក់រៀន, រឺ កញ្ចប់បរិក្ខារ)។ អនុប្រធាន DGTVEបានផ្តល់ព័ត៌មានថា មជ្ឈមណ្ឌល នឹងទទួលបានរោងជាងថ្មីមួយ។

បញ្ហាបរិស្ថានដែលបានលើកឡើងពីអ្នកពាក់ព័ន្ធ:

- ទោះបីជាមានចរន្តអគ្គិសនីផ្គត់ផ្គង់ពី EDCក៏ដោយ សហគមន៍នៅតែប្រើអុស និងហ្គាសដើម្បីចម្អិនអាហារ។

មិនមានការប្រារព្ធបញ្ហាបរិស្ថានត្រូវបានរំពឹងទុក ដោយអ្នកពាក់ព័ន្ធទាំងអស់ក្នុងកំឡុងពេលសាងសង់លើកលែងតែការបុរេជី ។ អ្នកទាំងអស់គ្នាមិនជំទាស់ចំពោះគំរោងទេ ពីព្រោះទីតាំងសាងសង់ស្ថិតក្នុងដីជិតគ្នា មិនលើសពី៥០០ម៉ែត្រ ពីមជ្ឈមណ្ឌលចាស់ ដែលគ្រប់គ្រងដោយមជ្ឈមណ្ឌលបណ្តុះបណ្តាលខេត្តកំពង់ចាម។ ដីនេះស្ថិតក្នុងតំបន់ដែលសំបូរដោយអគាររដ្ឋាភិបាល និងគ្មានផ្ទះជុំវិញនោះទេ។ ជាទូទៅ អ្នកពាក់ព័ន្ធទាំងអស់យល់ស្របថា គំរោងនេះនឹងបង្កើនចំនួនអ្នកក្រីក្រឲ្យចូលរៀនបានកាន់តែច្រើន ដែលនឹងជួយកាត់បន្ថយចំណាកស្រុកនៃយុវជនទៅកាន់ខេត្តដទៃទៀត រួមទាំងចូលរួមកាត់បន្ថយភាពក្រីក្រផងដែរ។ ពួកគេសង្ឃឹមថា គំរោងនេះនឹងដំណើរការដោយជោគជ័យ។

B. Kampong Thom PTC

**សង្ខេបបទសម្ភាសន៍រវាងអ្នកពាក់ព័ន្ធក្នុង
មជ្ឈមណ្ឌលបណ្តុះបណ្តាលខេត្តកំពង់ធំ**

Technical Vocational Education and Training Sector Development Program (TVETSDP) Project

ទីតាំង: ភូមិអាចារ្យលក្ខី, សង្កាត់អាចារ្យលក្ខី, ក្រុងស្ទឹងសែន, ខេត្តកំពង់ធំ
ថ្ងៃទី: ៥មិថុនា២០១៥

វិធីសំរង់ព័ត៌មាននេះផ្អែកលើការសម្ភាសន៍អ្នកពាក់ព័ន្ធសំខាន់ៗ។ សំរង់ព័ត៌មាននេះធ្វើឡើងកំឡុងពេលប្រជុំក្នុងមជ្ឈមណ្ឌលបណ្តុះបណ្តាលខេត្តកំពង់ធំ។ អ្នកពាក់ព័ន្ធផ្ទាល់ត្រូវបានសម្ភាសន៍ ដែលមាននាយក និងនាយករងមជ្ឈមណ្ឌល, ចៅសង្កាត់, ប្រធានមន្ទីរការងារនិងបណ្តុះបណ្តាលវិជ្ជាជីវៈខេត្ត និងអនុប្រធាន DGT VET ។

អ្នកតំណាងមជ្ឈមណ្ឌលបានដឹងពីគំរោងប៉ូន្តែមមិនបានដឹងលំអិតពីអ្វីដែលមជ្ឈមណ្ឌលនឹងទទួលបាន (អន្តរាសិកដ្ឋាន, រោងជាង, ថ្នាក់រៀន, វីក័ត្យាប័បវិគ្គារ)។ អនុប្រធាន DGT VET បានផ្តល់ព័ត៌មានថា មជ្ឈមណ្ឌលនឹងទទួលបានរោងជាងថ្មីមួយ។ លោកចៅសង្កាត់បានដឹងពីគំរោងតាមរយៈមជ្ឈមណ្ឌល។ គាត់បញ្ជាក់ថា ទោះបីព័ត៌មានពីគំរោងមិនលំអិត ប៉ុន្តែគាត់មិនចាំបាច់ដឹងពីព័ត៌មានបន្ថែមនោះទេ។

បញ្ហាបរិស្ថានដែលបានលើកឡើងពីអ្នកពាក់ព័ន្ធ:

- យោងតាមលោកចៅសង្កាត់ មិនមានបញ្ហាបរិស្ថានធំៗនៅក្នុងសង្កាត់ទេ បើទោះជាមានការជន់លិចក្នុងកំឡុងពេលរដូវភ្លៀងក៏ដោយ ប៉ុន្តែមិនធ្ងន់ធ្ងរទេ។
- ប្រជាជននៅក្នុងសង្កាត់មានការផ្គត់ផ្គង់អគ្គិសនីពី EDC និងទឹកពីក្រុមហ៊ុនឯកជន។ ទោះបីជាមានចរន្តអគ្គិសនីផ្គត់ផ្គង់ពី EDC ក៏ដោយ ប៉ុន្តែសហគមន៍នៅតែប្រើអុស និងប្លាសដេម្យីចំអិនអាហារ។

មិនមានការបារម្ភពីបញ្ហាបរិស្ថានត្រូវបានរំពឹងទុកដោយអ្នកពាក់ព័ន្ធទាំងអស់ក្នុងកំឡុងពេលសាងសង់។

អ្នកទាំងអស់គ្នាមិនជំទាស់ចំពោះគំរោងទេ។ ជាចុងបញ្ចប់ អ្នកពាក់ព័ន្ធទាំងអស់យល់ស្របថាគំរោងនេះ នឹងជួយកាត់បន្ថយភាពក្រីក្រ និងបង្កើនចំនួនអ្នកក្រីក្រ និងជនពិការឲ្យចូលរៀនបានកាន់តែច្រើន។ ពួកគេសង្ឃឹមថាគំរោងនេះនឹងជំរុញការដោយជោគជ័យ។

**សង្ខេបបទសម្ភាសន៍នាទីមកពាក់ព័ន្ធក្នុង
មជ្ឈមណ្ឌលបណ្តុះបណ្តាលខេត្តសៀមរាប**

Technical Vocational Education and Training Sector Development Program (TVETSDP) Project

ទីតាំង: ភូមិវត្តបូ, សង្កាត់កំរើក, ក្រុងសៀមរាប, ខេត្តសៀមរាប

ថ្ងៃទី: ៦ មិថុនា ២០១៥

វិធីសំរេងព័ត៌មាននេះផ្អែកលើការសម្ភាសន៍អ្នកពាក់ព័ន្ធសំខាន់ៗ។ សំរេងព័ត៌មាននេះធ្វើឡើងកំឡុងពេលប្រជុំក្នុងមជ្ឈមណ្ឌលបណ្តុះបណ្តាលខេត្តសៀមរាប។ អ្នកពាក់ព័ន្ធផ្ទាល់ត្រូវបានសម្ភាសន៍ ដែលរួមមាននាយក, នាយករងមជ្ឈមណ្ឌល, ចៅសង្កាត់រង និងអនុប្រធាន DGT VET។

អ្នកតំណាងមជ្ឈមណ្ឌលបានដឹងពីគំរោង ប៉ុន្តែមិនបានដឹងលម្អិតអំពីអ្វីដែលមជ្ឈមណ្ឌលនឹងទទួលបាន (អន្តេកសិកម្ម, រោងចាង, ថ្នាក់រៀន, វីក្យាប័ណ្ណបរិក្ខារ)។ អនុប្រធាន DGT VET បានផ្តល់ព័ត៌មានថា មជ្ឈមណ្ឌល នឹងទទួលបានអន្តេកសិកម្មក្នុងទីតាំងថ្មីមួយដែលរដ្ឋាភិបាលនឹងផ្តល់ឲ្យមជ្ឈមណ្ឌល។ សំរាប់អ្នកតំណាងសហគមន៍ លោកចៅសង្កាត់រងគឺមិនបានដឹងអំពីគំរោងនេះទេ។

មិនមានការព្រួយបារម្ភពីបញ្ហាបរិស្ថានត្រូវបានរំពឹងទុក ដោយអ្នកពាក់ព័ន្ធទាំងអស់ក្នុងកំឡុងពេលសាងសង់ទេ។ អ្នកទាំងអស់គ្នាមិនជំទាស់ចំពោះគំរោងនេះទេ ព្រោះទីតាំងថ្មីរបស់មជ្ឈមណ្ឌល គឺគ្រប់គ្រងដោយរដ្ឋាភិបាល។ តំបន់នេះគឺជិតនៅមិនឆ្ងាយជាង១០គីឡូម៉ែត្រទៅទីប្រជុំជនក្រុង។ អ្នកពាក់ព័ន្ធទាំងអស់យល់ស្របថា អគារអន្តេកសិកម្មថ្មីនេះ នឹង បង្កើនចំនួនចូលរៀននៃជនក្រីក្រនិងជនពិការ ជាពិសេស សំរាប់អ្នកមកពីតំបន់ដាច់ស្រយាល។ បន្ថែមពីនេះទៀត អគារនេះនឹងផ្តល់នូវភាពងាយស្រួលចំពោះសិក្ខាកាម។ ពួកគេសង្ឃឹមថាគំរោងនេះនឹងដំណើរការដោយជោគជ័យ។

សង្ខេបបទសម្ភាសន៍នាងអ្នកពាក់ព័ន្ធក្នុង មជ្ឈមណ្ឌលបណ្តុះបណ្តាលខេត្តបន្ទាយមានជ័យ

Technical Vocational Education and Training Sector Development Program (TVETSDP) Project

ទីតាំង: ភូមិ គៀប, សង្កាត់ទឹកថ្លា, ក្រុងសិរីសោភ័ណ្ឌ, ខេត្តបន្ទាយមានជ័យ

ថ្ងៃទី: ៦ មិថុនា ២០១៥

វិធីសំរេងព័ត៌មាននេះផ្អែកលើការសម្ភាសន៍អ្នកពាក់ព័ន្ធសំខាន់ៗ។ សំរេងព័ត៌មាននេះធ្វើឡើងកំឡុងពេលប្រជុំក្នុងមជ្ឈមណ្ឌលបណ្តុះបណ្តាលខេត្តបន្ទាយមានជ័យ។ អ្នកពាក់ព័ន្ធដែត្រូវបានសម្ភាសន៍ ដែលរួមមាននាយកមជ្ឈមណ្ឌល, ចៅសង្កាត់, មេភូមិរង, ប្រធានមន្ទីរការងារនិងបណ្តុះបណ្តាលវិជ្ជាជីវៈខេត្ត និងអនុប្រធាន DGT VET ។

អ្នកតំណាងមជ្ឈមណ្ឌលបានដឹងពីគំរោង ប៉ុន្តែមិនបានដឹងលម្អិតអំពីអ្វីដែលមជ្ឈមណ្ឌលនឹងទទួលបាន (អន្តេរាសិកដ្ឋាន, រោងជាង, ថ្នាក់រៀន, វីក័ត្យាប័បវិគ្គារ)។ អនុប្រធាន DGT VET បានផ្តល់ព័ត៌មានថា មជ្ឈមណ្ឌល នឹងទទួលបាននូវអន្តេរាសិកដ្ឋានថ្មីមួយ។ មេភូមិរងមិនបានដឹងមុនពីគំរោងនេះទេ ហើយគាត់មានបំណងចង់ដឹងបន្ថែមទៀតអំពីគំរោង បើសិនជាអាច។

បញ្ហាបរិស្ថានដែលបានលើកឡើងពីអ្នកពាក់ព័ន្ធ:

- តំបន់ខ្លះនៅក្នុងសង្កាត់ គឺជន់លិចរហូតដល់១.៥ម៉ែត្រជារៀងរាល់ឆ្នាំក្នុងកំឡុងរដូវភ្លៀង ដោយហេតុថា វានៅជិតទន្លេសាប។ ទោះជាយ៉ាងនេះក៏ដោយ វាមិនមានឥទ្ធិពលលើទីតាំងមជ្ឈមណ្ឌលទេ ពីព្រោះវានៅចម្ងាយប្រហែល៥គីឡូម៉ែត្រពីមជ្ឈមណ្ឌល។
- ជំងឺទូទៅដែលកើតមានក្នុងសហគមន៍ គឺទឹកនោមផ្អែម, លើសឈាម និង គ្រុនពោះរៀន។

មិនមានការបារម្ភពីបញ្ហាបរិស្ថានត្រូវបានរំពឹងទុកដោយអ្នកពាក់ព័ន្ធទាំងអស់ក្នុងកំឡុងពេលសាងសង់ លើកលែងតែការហុយដី ដែលលើកឡើងដោយលោកចៅសង្កាត់។ អ្នកទាំងអស់គ្នាមិនជំទាស់ចំពោះគំរោងទេ។ ជាទូទៅ អ្នកពាក់ព័ន្ធទាំងអស់យល់ស្របថា គំរោងនេះនឹងជួយកាត់បន្ថយភាពក្រីក្រ និងបង្កើនចំនួនអ្នកក្រីក្រនិងជនពិការ ជាពិសេសអ្នកដែលមកពីតំបន់ដាច់ស្រយាល ឲ្យចូលរៀនបានកាន់តែច្រើន។ ពួកគេសង្ឃឹមថាគំរោងនេះ នឹងជំរុញការងារដោយជោគជ័យ។

**សង្ខេបបទសម្ភាសន៍រវាងអ្នកពាក់ព័ន្ធក្នុង
វិទ្យាស្ថានបច្ចេកវិទ្យាខេត្តបាត់ដំបង**

Technical Vocational Education and Training Sector Development Program (TVETSDP) Project

ទីតាំង: ភូមិ រំចេក៤, សង្កាត់រតនៈ, ក្រុងបាត់ដំបង, ខេត្តបាត់ដំបង
ថ្ងៃទី: ៧ មិថុនា ២០១៤

វិធីសំរង់ព័ត៌មាននេះផ្អែកលើការសម្ភាសន៍អ្នកពាក់ព័ន្ធសំខាន់ៗ។ សំរង់ព័ត៌មាននេះធ្វើឡើងកំឡុងពេល ប្រជុំក្នុងវិទ្យាស្ថានបច្ចេកវិទ្យាខេត្តបាត់ដំបង។ អ្នកពាក់ព័ន្ធទាក់ទងត្រូវបានសម្ភាសន៍ ដែលរួមមាននាយក និងនាយករងវិទ្យាស្ថាន, ប្រធានមន្ទីរការងារនិងបណ្តុះបណ្តាលវិជ្ជាជីវៈខេត្ត និងអនុប្រធានDGTVET។ លោកប្រធានមន្ទីរបានមានប្រសាសន៍ថា គាត់បានដឹងពីគំរោងនេះនឹងសង្ឃឹមថាទទួលបានព័ត៌មានបន្ថែមទៀតលើសិនជាអាច។

បញ្ហាបរិស្ថានដែលបានលើកឡើងពីអ្នកពាក់ព័ន្ធ:

- មិនមានបញ្ហាបរិស្ថានដែលបានកត់សម្គាល់ឃើញមាននៅក្នុងភូមិ។ នៅក្នុងបរិវេណBITទឹកជំនន់មិនងាយនឹងកើតមានក្នុងកំឡុងពេលរដូវភ្លៀវ ព្រោះទីតាំងវិទ្យាស្ថានស្ថិតនៅកន្លែងខ្ពស់។
- ទោះបីជាមានចរន្តអគ្គិសនីផ្គត់ផ្គង់ពី EDC ក៏ដោយ ប៉ុន្តែភាគច្រើនសហគមន៍នៅតែប្រើអុស និងហ្គាសដើម្បីចម្អិនអាហារ។

ក្នុងពេលសាងសង់ មិនមានការព្រួយបារម្ភអំពីបញ្ហាបរិស្ថានដែលលើកឡើងដោយអ្នកពាក់ព័ន្ធ។ អ្នកទាំងអស់គ្នាមិនជំទាស់ចំពោះគំរោងទេ។ លោកនាយកវិទ្យាស្ថាន និង លោកប្រធានមន្ទីរ បានបញ្ជាក់ថាផ្ទៃដីរបស់វិទ្យាស្ថានគឺ១៣ហិកតា ដូច្នេះផលប៉ះពាល់នៃការងារសាងសង់ទៅលើសហគមន៍គឺតិចតួចណាស់។ លើសពីនេះទៀត ការរំខានក្នុងកំឡុងពេលសិក្សាក្នុងបរិវេណ BITគឺតិចតួចដោយសារអគារនីមួយៗស្ថិតនៅឆ្ងាយពីគ្នា។ របងអាចប្រើព័ទ្ធជុំវិញបរិវេណសាងសង់។ ជាចុងបញ្ចប់ អ្នកពាក់ព័ន្ធទាំងអស់ជឿជាក់ថាគំរោងជាងថ្មីនឹងជួយបង្កើនចំនួនចូលរៀន និងសេវាបណ្តុះបណ្តាលរបស់BIT។ ពួកគេសង្ឃឹមថាគំរោងនេះនឹងដំណើរការដោយជោគជ័យ។

សង្ខេបបទសម្ភាសន៍នោះមកពាក់ព័ន្ធក្នុង មជ្ឈមណ្ឌលបណ្តុះបណ្តាលខេត្តពោធិ៍សាត់

Technical Vocational Education and Training Sector Development Program (TVETSDP) Project

ទីតាំង: ភូមិចំការចេក, សង្កាត់ថ្មបៃ, ក្រុងពោធិ៍សាត់, ខេត្តពោធិ៍សាត់

ថ្ងៃទី: ៧ មិថុនា ២០១៤

វិធីសំរេងព័ត៌មាននេះផ្អែកលើការសម្ភាសន៍អ្នកពាក់ព័ន្ធសំខាន់ៗ។ សំរេងព័ត៌មាននេះធ្វើឡើងកំឡុងពេលប្រជុំក្នុងមជ្ឈមណ្ឌលបណ្តុះបណ្តាលខេត្តពោធិ៍សាត់។ អ្នកពាក់ព័ន្ធផ្សេងៗត្រូវបានសម្ភាសន៍ ដែលមាននាយក និងនាយករងមជ្ឈមណ្ឌល, ចៅសង្កាត់, ប្រធានមន្ទីរការងារនិងបណ្តុះបណ្តាលវិជ្ជាជីវៈខេត្តនិងអនុប្រធាន DGT VET។

អ្នកតំណាងមជ្ឈមណ្ឌលបណ្តុះបណ្តាលបានដឹងពីគំរោង ប៉ុន្តែមិនបានដឹងលំអិតពីអ្វីដែលមជ្ឈមណ្ឌលនឹងទទួលបាន(អន្តេសិកជន, រោងជាង, ថ្នាក់រៀន, វី កញ្ចប់បរិក្ខារ)។ អនុប្រធាន DGT VETបានផ្តល់ព័ត៌មានថា មជ្ឈមណ្ឌល នឹងទទួលបាននូវរោងជាងថ្មីមួយ។ លោកចៅសង្កាត់បានដឹងពីគំរោងតាមរយៈមជ្ឈមណ្ឌល ប៉ុន្តែគាត់និយាយថា គាត់មិនចាំបាច់ដឹងពីព័ត៌មានលំអិតនោះទេ។

បញ្ហាបរិស្ថានដែលបានលើកឡើងពីអ្នកពាក់ព័ន្ធ:

- មិនមានបញ្ហាបរិស្ថានធំដុំនៅក្នុងភូមិទេ ធ្លាប់មានការជន់លិចកើតឡើងពីមុនមក ប៉ុន្តែវាបិទនៅប្រហែល៣គីឡូម៉ែត្រពីមជ្ឈមណ្ឌល។
- សង្កាត់មានការផ្គត់ផ្គង់អគ្គិសនីពី EDC ប៉ុន្តែសហគមន៍នៅតែប្រើអុស និងហ្គាសដើម្បីចម្អិនអាហារ។

មិនមានការព្រួយបារម្ភពីបញ្ហាបរិស្ថានត្រូវបានរំពឹងទុក ដោយអ្នកពាក់ព័ន្ធទាំងអស់ក្នុងកំឡុងពេលសាងសង់ទេ។ អ្នកទាំងអស់គ្នាមិនជំទាស់ចំពោះគំរោងទេ។ ជាចុងបញ្ចប់ អ្នកពាក់ព័ន្ធទាំងអស់ជឿថា គំរោងនេះនឹងបង្កើនចំនួនចូលរៀននៃជនក្រីក្រនិងជនពិការ។ ពួកគេសង្ឃឹមថា គំរោងនេះនឹងជំរុញការងារដោយជោគជ័យ។

**សង្ខេបបទសម្ភាសន៍រវាងអ្នកពាក់ព័ន្ធក្នុង
មជ្ឈមណ្ឌលបណ្តុះបណ្តាលខេត្តកំពង់ស្ពឺ**

Technical Vocational Education and Training Sector Development Program (TVETSDP) Project

ទីតាំង: ភូមិ ទំពូង, សង្កាត់ការបែរ, ស្រុកសំរោងទង, ខេត្តកំពង់ស្ពឺ
ថ្ងៃទី: ១០ មិថុនា ២០១៥

វិធីសំរេងព័ត៌មាននេះផ្អែកលើការសម្ភាសន៍អ្នកពាក់ព័ន្ធសំខាន់ៗ។ សំរេងព័ត៌មាននេះធ្វើឡើងកំឡុងពេលប្រជុំក្នុងមជ្ឈមណ្ឌលបណ្តុះបណ្តាលខេត្តកំពង់ស្ពឺ។ អ្នកពាក់ព័ន្ធនាក់ត្រូវបានសម្ភាសន៍ ដែលរួមមាននាយក និងនាយករងមជ្ឈមណ្ឌល, ចៅសង្កាត់, ប្រធាន និងអនុប្រធានមន្ទីរការងារនិងបណ្តុះបណ្តាលវិជ្ជាជីវៈខេត្ត និងអនុប្រធានDGTVET។

អ្នកតំណាងមជ្ឈមណ្ឌលបានដឹងពីតំរូវការប៉ុន្តែមិនបានដឹងលំអិតពីអ្វីដែលមជ្ឈមណ្ឌលនឹងទទួលបាន (អន្តេកសិកម្ម, រោងចាង, ថ្នាក់រៀន, វី កញ្ចប់បរិក្ខារ)។ អនុប្រធានDGTVET បានផ្តល់ព័ត៌មានថា មជ្ឈមណ្ឌលនឹងទទួលបានរោងចាងថ្មីមួយ។ បើតាមអ្នកតំណាងសង្កាត់, លោកចៅសង្កាត់រងគឺបានដឹងអំពីតំរូវការដោយផ្អែកលើព័ត៌មានពីមជ្ឈមណ្ឌលបណ្តុះបណ្តាល ហើយគាត់មានបំណងចង់ដឹងបន្ថែមទៀតអំពីវិស័យជាអាទិ៍។

បញ្ហាបរិស្ថានដែលបានលើកឡើងពីអ្នកពាក់ព័ន្ធ:

- ភាពរាំងស្ងួតកើតមានក្នុងកំឡុងខែសីហាដល់ខែវិច្ឆិកាដែលខែទាំងនេះគឺជារដូវភ្លៀង។
- ជំងឺទូទៅដែលកើតមានចំពោះសហគមន៍ និងអ្នកស្នាក់នៅក្នុងមជ្ឈមណ្ឌលគឺជំងឺឈឺពោះ និងកន្ទួលរមាស់។ មិនមានជំងឺធ្ងន់ធ្ងរ រឺ រោគរាតត្បាតទេ។
- ទឹកមិនមែនជាបញ្ហាចំពោះសហគមន៍ទេ។ ទឹកត្រូវបានផ្គត់ផ្គង់ដោយក្រុមហ៊ុនឯកជន។ យ៉ាងណាមិញ ប្រជាជនមិននិយមប្រើទឹកអណ្តូងទេ ដោយពួកគាត់ព្រួយបារម្ភពីបញ្ហាជាតិគីមីនៅក្នុងទឹកអណ្តូង។ ទោះជាយ៉ាងណាក៏ដោយប្រជាជនភាគច្រើនប្រើប្រាស់ទឹកមកពីស្ទឹងព្រែកត្នោត។
- ទោះមានចរន្តអគ្គីសនីផ្គត់ផ្គង់ពី EDCក៏ដោយ សហគមន៍នៅតែប្រើអុស និងហ្គាសដើម្បីចម្អិនអាហារ។

មិនមានការបារម្ភពីបញ្ហាបរិស្ថានត្រូវបានរំពឹងទុកដោយអ្នកពាក់ព័ន្ធទាំងអស់ក្នុងកំឡុងពេលគំរោង
សាងសង់។ ពួកគាត់បញ្ជាក់ថាមិនមានផលប៉ះពាល់បរិស្ថានទេ ដោយសារទីតាំងមជ្ឈមណ្ឌលគឺបិតនៅ
ឆ្ងាយពីសហគមន៍។ អ្នកទាំងអស់គ្នាមិនជំទាស់ចំពោះគំរោងទេ។ លោកនាយកមជ្ឈមណ្ឌលបាន
សំណូមពរថា គួរតែជួលកម្មករក្នុងភូមិដើម្បីជួយធ្វើការងារនេះ។ គំណាងមជ្ឈមណ្ឌលគឺគាំទ្រយ៉ាងពេញ
ទំហឹងទៅលើគំរោងនេះ ដោយសារវាឆ្លើយតបនឹងគំរូការរបស់ពួកគេដែលចង់បានរោងជាង និង
បរិក្ខារបន្ថែម។ ជាទូទៅ អ្នកពាក់ព័ន្ធទាំងអស់យល់ស្របថាគំរោងនេះ នឹងជួយកាត់បន្ថយភាពក្រីក្រ
និងបង្កើនចំនួនអ្នកក្រីក្រ និងជនពិការឲ្យចូលរៀនបានកាន់តែច្រើន។ ពួកគេសង្ឃឹមថាគំរោងនេះ
នឹងដំណើរការដោយជោគជ័យ។

សង្ខេបបទសម្ភាសន៍នៃអ្នកពាក់ព័ន្ធក្នុង

មជ្ឈមណ្ឌលបណ្តុះបណ្តាលខេត្តកោះកុង

Technical Vocational Education and Training Sector Development Program (TVETSDP) Project

ទីតាំង: ភូមិទី១, សង្កាត់ស្មាច់មានជ័យ, ក្រុងកោះកុង, ខេត្តកោះកុង

ថ្ងៃទី: ១១ មិថុនា ២០១៥

វិធីសំរេងព័ត៌មាននេះផ្អែកលើការសម្ភាសន៍អ្នកពាក់ព័ន្ធសំខាន់ៗ។ សំរេងព័ត៌មាននេះធ្វើឡើងកំឡុងពេលប្រជុំក្នុងមជ្ឈមណ្ឌលបណ្តុះបណ្តាលខេត្តកោះកុង។ អ្នកពាក់ព័ន្ធផ្ទាល់នាក់ត្រូវបានសម្ភាសន៍ ដែលរួមមាននាយក និងនាយករងមជ្ឈមណ្ឌល, ក្រុមប្រឹក្សាសង្កាត់, ប្រធានមន្ទីរការងារនិងបណ្តុះបណ្តាលវិជ្ជាជីវៈខេត្ត និងអនុប្រធាន DGTVET។

អ្នកតំណាងមជ្ឈមណ្ឌលបណ្តុះបណ្តាលបានដឹងពីគំរោង ប៉ុន្តែមិនបានដឹងលំអិតពីអ្វីដែលមជ្ឈមណ្ឌលនឹងទទួលបាន(អន្តេរាសិកជ្ជាន, រោងជាង, ថ្នាក់រៀន, រឺ កញ្ចប់បរិក្ខារ)។ អនុប្រធាន DGTVETបានផ្តល់ព័ត៌មានថា មជ្ឈមណ្ឌលនឹងទទួលបាននូវអន្តេរាសិកជ្ជានថ្មីមួយ។ ក្រុមប្រឹក្សាសង្កាត់បានដឹងពីគំរោងនេះហើយបានបញ្ជាក់ថា ទោះជាខាងមិនបានដឹងលំអិតពីគំរោង នាងមិនចាំបាច់ដឹងអ្វីបន្ថែមទៀតទេ។

បញ្ហាបរិស្ថានដែលបានលើកឡើងពីអ្នកពាក់ព័ន្ធ:

- តាមរយៈក្រុមប្រឹក្សាសង្កាត់ សង្កាត់មិនធ្លាប់រងគ្រោះដោយសារបញ្ហាអាកាសធាតុពីមុនមកទេ។ ប៉ុន្តែការជន់លិចក្នុងកំឡុងពេលមានភ្លៀងខ្លាំង គឺបណ្តាលមកពីការកកស្ទះនៃសំណល់រឹងក្នុងប្រព័ន្ធរំដោះទឹក។
- ជំងឺទូទៅដែលកើតមានចំពោះសិក្ខាកាមនិងបុគ្គលិកដែលស្នាក់នៅបណ្តោះអាសន្នក្នុងមជ្ឈមណ្ឌល គឺជំងឺផ្តាសាយនិងក្អក។ យោងតាមសំដីក្រុមប្រឹក្សាសង្កាត់បញ្ជាក់ថា ជំងឺគ្រុនចាញ់កើតមានខ្លះក្នុងតំបន់ខ្ពង់រាបនិងតំបន់ព្រៃនៃសង្កាត់ ប៉ុន្តែវាមិននៅឆ្ងាយពីមជ្ឈមណ្ឌល។
- សហគមន៍មានទឹកប្រើប្រាស់ដែលផ្គត់ផ្គង់ដោយក្រុមហ៊ុនឯកជន។ ទោះជាយ៉ាងនេះក្តី ពួកគេនៅតែនិយមដាំទឹកដីកៗ ពេលខ្លះពួកគេទិញទឹកបរិសុទ្ធ។ ទោះបីជាមានចរន្តអគ្គីសនីផ្គត់ផ្គង់ពីក្រុមហ៊ុនឯកជនក៏ដោយ សហគមន៍នៅតែប្រើអុស និងហ្គាសដើម្បីចម្អិនអាហារ។

មិនមានការព្រួយបារម្ភអំពីបញ្ហាបរិស្ថានដែលលើកឡើងដោយអ្នកពាក់ព័ន្ធ ក្នុងកំឡុងពេលសាងសង់។ អ្នកទាំងអស់គ្នាមិនជំទាស់ចំពោះគំរោងទេ។ នាយកមជ្ឈមណ្ឌលបានបញ្ជាក់ថា មានការងារសំណង់បី ដែលបានធ្វើចំរុះរៀងហើយបានទទួលបរាជ័យ ដូច្នេះគាត់ក៏មានសំណើថា ការងារសាងសង់អគារ អន្តេរាសិកដ្ឋានគួរធ្វើក្នុងរដូវប្រាំង។ ប្រធានមន្ទីរបានសំណូមពរ អោយអ្នកមៅការសាងសង់គួរតែជួល កម្មករក្នុងភូមិសំរាប់ការងារនេះ។ ជាចុងបញ្ចប់ អ្នកពាក់ព័ន្ធទាំងអស់ជឿជាក់ថាអគារអន្តេរាសិកដ្ឋានថ្មី នឹងជួយបង្កើនចំនួនអ្នកក្រីក្រនិងជនពិការ ជាពិសេស អ្នកដែលមកពីតំបន់ដាច់ស្រយាល ឲ្យចូលរៀន បានកាន់តែច្រើន។ ពួកគេសង្ឃឹមថា គំរោងនេះនឹងដំណើរការដោយជោគជ័យ។

សង្ខេបបទសម្ភាសន៍រវាងអ្នកពាក់ព័ន្ធក្នុង

មជ្ឈមណ្ឌលបណ្តុះបណ្តាលខេត្តព្រះសីហនុ

Technical Vocational Education and Training Sector Development Program (TVETSDP) Project

ទីតាំង: ក្រុមទី៥, ភូមិទី២, សង្កាត់ទី៣, ក្រុងព្រះសីហនុ, ខេត្តព្រះសីហនុ

ថ្ងៃទី: ១១ មិថុនា ២០១៥

វិធីសំរេងព័ត៌មាននេះផ្អែកលើការសម្ភាសន៍អ្នកពាក់ព័ន្ធសំខាន់ៗ។ សំរេងព័ត៌មាននេះធ្វើឡើងកំឡុងពេលប្រជុំក្នុងមជ្ឈមណ្ឌលបណ្តុះបណ្តាលខេត្តព្រះសីហនុ។ អ្នកពាក់ព័ន្ធផ្សេងៗនាក់ត្រូវបានសម្ភាសន៍ដែលរួមមាននាយក និងនាយករងមជ្ឈមណ្ឌល, ចៅសង្កាត់រង, ប្រធានមន្ទីរការងារនិងបណ្តុះបណ្តាលវិជ្ជាជីវៈខេត្ត និងអនុប្រធាន DGTVE។

អ្នកតំណាងមជ្ឈមណ្ឌលបានដឹងពីគំរោង ប៉ុន្តែមិនបានដឹងលំអិតពីអ្វីដែលមជ្ឈមណ្ឌលនឹងទទួលបាន (អន្តេកសិកម្ម, រោងចក្រ, ថ្នាក់រៀន, វី កញ្ចប់បរិក្ខារ)។ អនុប្រធាន DGTVE បានផ្តល់ព័ត៌មានថា មជ្ឈមណ្ឌល នឹងទទួលបានរោងចក្រជាងមួយ។ ចៅសង្កាត់រងមិនបានដឹងមុនពីគំរោងនេះទេក្នុងកិច្ចប្រជុំ ហើយគាត់មានបំណងចង់ដឹងបន្ថែមទៀតអំពីគំរោង បើសិនជាអាច។

បញ្ហាបរិស្ថានដែលបានលើកឡើងពីអ្នកពាក់ព័ន្ធ:

- មិនមានបញ្ហាបរិស្ថានដែលបានកត់សម្គាល់ឃើញមាននៅក្នុងភូមិ កន្លែងដែលមជ្ឈមណ្ឌលស្ថិតនៅទេ។ ភូមិបិតនៅរយៈកំពស់ខ្ពស់ ហេតុដូច្នេះ ទឹកជំនន់គឺមិនអាចកើតមានទេ។ ប៉ុន្តែចំពោះភូមិដែលនៅទាបជិតសមុទ្រ ទឹកជំនន់អាចកើតមានក្នុងរដូវភ្លៀង។ យ៉ាងណាក៏ដោយលោកចៅសង្កាត់រងបានបញ្ជាក់ថា បញ្ហានេះមិនធំដុំទេ។
- ពស់ពិសព្រៃម្យ៉ាងឈ្មោះថា ពស់ពន្លាក់ត្រូវបានសង្កេតឃើញនៅក្នុងសហគមន៍។
- ប្រជាជននៅក្នុងសហគមន៍មានទឹកប្រើប្រាស់ដែលផ្គត់ផ្គង់ដោយក្រុមហ៊ុនឯកជន។ ទោះបីជាយ៉ាងនេះក្តី ពួកគេនៅតែនិយមដាំទឹកដីក។ ពេលខ្លះពួកគេទិញទឹកបរិសុទ្ធ។
- ទោះបីជាមានចរន្តអគ្គីសនីផ្គត់ផ្គង់ពី EDC ក៏ដោយ សហគមន៍នៅតែប្រើអុស និងប្លាស្ទិកដើម្បីចម្អិនអាហារ។

មិនមានការព្រួយបារម្ភអំពីបញ្ហាបរិស្ថានដែលលើកឡើងដោយអ្នកពាក់ព័ន្ធ ក្នុងកំឡុងពេលសាងសង់។ អ្នកទាំងអស់គ្នាមិនជំទាស់ចំពោះគំរោងទេ។ លោកស្រីចៅសង្កាត់រងបានស្នើសុំអោយប្រើប្រាស់នូវគ្រឿងចក្រធន់តូចក្នុងការសាងសង់ដោយសារ ផ្លូវទៅកាន់មជ្ឈមណ្ឌល គឺតូចហើយអាចធ្វើឲ្យខូចខាតដោយគ្រឿងចក្រធន់ធំៗម៉្យាងទៀត គាត់មានការបារម្ភចំពោះគ្រោះថ្នាក់ចរាចរណ៍ដែលអាចកើតមានបង្កដោយគ្រឿងចក្រទៅលើក្មេងៗ។ ប្រធានមន្ទីរសំណូមពរឲ្យអ្នកមៅការសាងសង់ប្រើផ្លូវផ្សេងទៀតដែលធំ ហើយមានប្រជាជនរស់នៅតិចៗ ជាទូទៅ អ្នកពាក់ព័ន្ធទាំងអស់យល់ស្របថាគំរោងនេះជួយកាត់បន្ថយភាពក្រីក្រនិងបង្កើនចំនួនអ្នកក្រីក្រ និងជនពិការឲ្យចូលរៀនបានកាន់តែច្រើន។ ពួកគេសង្ឃឹមថាគំរោងនេះ នឹងដំណើរការដោយជោគជ័យ។

**សង្ខេបបទសម្ភាសន៍នោះអ្នកពាក់ព័ន្ធក្នុង
មជ្ឈមណ្ឌលបណ្តុះបណ្តាលខេត្តកណ្តាល**

Technical Vocational Education and Training Sector Development Program (TVETSDP) Project

ទីតាំង: ភូមិ ព្រែកត្នោត, សង្កាត់តាខ្មៅ, ក្រុងតាខ្មៅ, ខេត្តកណ្តាល

ថ្ងៃទី: ១២ មិថុនា ២០១៥

វិធីសំរេងព័ត៌មាននេះផ្អែកលើការសម្ភាសន៍អ្នកពាក់ព័ន្ធសំខាន់ៗ។ សំរេងព័ត៌មាននេះធ្វើឡើងកំឡុងពេលប្រជុំក្នុងមជ្ឈមណ្ឌលបណ្តុះបណ្តាលខេត្តកណ្តាល។ អ្នកពាក់ព័ន្ធនាក់ត្រូវបានសម្ភាសន៍ ដែលរួមមាននាយក និងនាយករង២នាក់របស់មជ្ឈមណ្ឌល, ចៅសង្កាត់, អនុប្រធានមន្ទីរការងារនិងបណ្តុះបណ្តាលវិជ្ជាជីវៈខេត្ត និងអនុប្រធាន DGT VET។

អ្នកតំណាងមជ្ឈមណ្ឌលបានដឹងពីគំរោងប៉ូន្តែមិនបានដឹងលំអិតពីអ្វីដែលមជ្ឈមណ្ឌលនឹងទទួលបាន (អន្តេកសិកម្ម, រោងជាង, ថ្នាក់រៀន, រឺ កញ្ចប់បរិក្ខារ)។ អនុប្រធាន DGT VET បានផ្តល់ព័ត៌មានថា មជ្ឈមណ្ឌលនឹងទទួលបានរោងជាងថ្មីមួយ។ លោកចៅសង្កាត់បានដឹងពីគំរោងតាមរយៈមជ្ឈមណ្ឌលប៉ូន្តែមិនបានដឹងលំអិតទេ។ ទោះជាយ៉ាងនេះក៏ដោយ គាត់គាំទ្ររាល់ការអភិវឌ្ឍន៍មជ្ឈមណ្ឌល និងមិនចាំបាច់ដឹងលំអិតអំពីគំរោងទេ។

បញ្ហាបរិស្ថានដែលបានលើកឡើងពីអ្នកពាក់ព័ន្ធ:

- មិនមានបញ្ហាបរិស្ថានដែលបានកត់សម្គាល់ឃើញមាននៅក្នុងភូមិកន្លែងដែលមជ្ឈមណ្ឌលស្ថិតនៅ។ លោកចៅសង្កាត់បានបញ្ជាក់ថាភូមិទាំងអស់នៅក្នុងសង្កាត់មិនធ្លាប់មានទឹកជំនន់ធំទេ។ បើសិនជាមានការជន់លិចដោយសារមានភ្លៀងខ្លាំង វាត្រូវបានស្រកទៅវិញបន្ទាប់ពី៣ទៅ៥ម៉ោងក្រោយ។
- សហគមន៍នៅតែប្រើអុស និងហ្គាសដើម្បីចម្អិនអាហារ, ទោះបីជាមាន ចរន្តអគ្គីសនីផ្គត់ផ្គង់ពី EDC ក៏ដោយ។

ក្នុងកំឡុងពេលសាងសង់ មិនមានការព្រួយបារម្ភអំពីបញ្ហាបរិស្ថានដែលលើកឡើងដោយអ្នកពាក់ព័ន្ធ។ អ្នកទាំងអស់គ្នាមិនជំទាស់ចំពោះគំរោងនេះទេ។ លោកចៅសង្កាត់បានបន្ថែមថា រដ្ឋាភិបាលមានគំរោង ពង្រីកផ្លូវពីមុខវិទ្យាស្ថាន(មានទទឹង៣០ម៉ែត្រ)។ ដូច្នេះគាត់យល់ថា ផលប៉ះពាល់ដែលកើតមានដោយសារ ការសាងសង់រោងជាងគឺតូចបើធៀបនឹងផលប៉ះពាល់ដោយសារគំរោងពង្រីកផ្លូវ។ គាត់បន្ថែមថា សំលេង រំខានក្នុងកំឡុងពេលសាងសង់ នឹងកើតមានចំពោះផ្ទះមួយចំនួនតូចដែលនៅចំពីមុខវិទ្យាស្ថាន។ ជាចុងបញ្ចប់ អ្នកពាក់ព័ន្ធទាំងអស់ជឿជាក់ថា រោងជាងថ្មីនឹងជួយពង្រឹងវិស័យអប់រំ និងសេវាបណ្តុះបណ្តាល របស់មជ្ឈមណ្ឌល។ ពួកគេសង្ឃឹមថាគំរោងនេះនឹងដំណើរការដោយជោគជ័យ។

Appendix 4.3: List of persons interviewed for the perception survey

បង្កើតឡើងដោយប្រព័ន្ធប្រព្រឹត្តិការណ៍

LIST OF PERSONS INTERVIEWED

Technical Vocational Education and Training Sector Development Program (TVETSDP) Project

శ్రీమంత్రి కృష్ణ చంద్ర బాబు, పరిశ్రమ శాఖ మంత్రి కృష్ణ కృష్ణ.

[illegible]

បញ្ជី ឈ្មោះ អ្នក ត្រូវបាន ជំរាញ

LIST OF PERSONS INTERVIEWED

Technical Vocational Education and Training Sector Development Program (TVETSDP) Project

គំរោង កម្មវិធី បណ្តុះ បណ្តាល បច្ចេកទេស ស្រប តាម តំបន់:

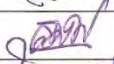

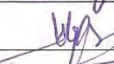



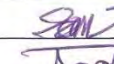

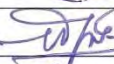
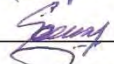
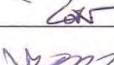
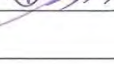








†
vice dire
of PTC

DATE កាលបរិច្ឆេទ	NAME ឈ្មោះ	ADDRESS / Position អាសយដ្ឋាន / តំណែង	SIGNATURE ហត្ថលេខា
06/06/14	MOEUN THANAK	ឧបនាយករដ្ឋមន្ត្រី	Thun
06.06.14	សេង កាំណី	នាយកដ្ឋាន គម្រោង បច្ចេកទេស	Seun
06.06.14	Seng Kanna	Director of CEEP	
06.06.14	Mod Simum	Deputy of CEEP	Se
06.06.14	Hing Sicteth	Deputy Director, DTVETM, MLVT	
06.06.14	ហ៊ីង សិក្ខេត	BTMC បច្ចេកទេស	
06.06.14	ហ៊ីង សិក្ខេត	BTMC បច្ចេកទេស	
06.06.14	Lim Sotheith	ប្រធាន គម្រោង បច្ចេកទេស	
06.06.14	SAMATHA SOCHERATH	Director PTC, BTMC	Officer
7. June. 14	Outk Davandy	Director BIT	
7/6/14	Nann Nhim	De. Director BIT	
7/6/14	PONH SOPHEAK	Head Department, BIT	S.P.
7/6/14	Hong. SOKUN	ប្រធាន គម្រោង បច្ចេកទេស	
7/06/14	PUM CHANTHA	Director PS	
7/06/14	Ly SOPHEA	ប្រធាន គម្រោង បច្ចេកទេស	
7/06/14	Ngeth Tath	Deputy Director PS	
9.06.14	GIANN SOCHERATH	ប្រធាន គម្រោង បច្ចេកទេស	
10.06.14	CHUH SAROEUN	deputy director PTC, Kampong Speu	
10.06.14	វ៉ាន់, Nim	ប្រធាន គម្រោង បច្ចេកទេស	
10.06.14	Sim Rattanale	Director of DLVT, Kamp	
10.06.14	Huy Nareth	Deputy Director of PD LUT, Kamp	
10-06-14	KEM-CHHEAK N	Director	

පාලන කොටස
LIST OF PERSONS INTERVIEWED

Technical Vocational Education and Training Sector Development Program (TVETSDP) Project

මහජන විදුලි සන්නිවේදන අමාත්‍යාංශයේ පාලන කොටසේ පිටපත්

DATE තැරිදි	NAME නම	ADDRESS / Position ලිපිනය / තනතුර	SIGNATURE අත්සන	
11.06.2014	සරත් සමරසිංහ	විද්‍යා මණ්ඩල		K R
11.06.2014	සීත සේන	ගාලු පොලිස් භූමිකා		
11.06.2014	සුදානා සේන	කොළඹ VTC කළමනාකරු		
11.06.2014	මහජන විදුලි සන්නිවේදන අමාත්‍යාංශයේ	ගාලු පොලිස් භූමිකා		
11.06.2014	සරත් සමරසිංහ	විද්‍යා මණ්ඩල		K R
11.06.2014	සරත් සමරසිංහ	විද්‍යා මණ්ඩල		K P
11.06.2014	සරත් සමරසිංහ	විද්‍යා මණ්ඩල		K P
12.06.2014	සරත් සමරසිංහ	විද්‍යා මණ්ඩල		K D
12.06.2014	සරත් සමරසිංහ	විද්‍යා මණ්ඩල		
12.06.2014	සරත් සමරසිංහ	විද්‍යා මණ්ඩල		
12.06.2014	සරත් සමරසිංහ	විද්‍යා මණ්ඩල		
12.06.2014	සරත් සමරසිංහ	විද්‍යා මණ්ඩල		
12.06.2014	සරත් සමරසිංහ	විද්‍යා මණ්ඩල		
12.06.2014	සරත් සමරසිංහ	විද්‍යා මණ්ඩල		
12.06.2014	සරත් සමරසිංහ	විද්‍යා මණ්ඩල		
12.06.2014	සරත් සමරසිංහ	විද්‍යා මණ්ඩල		
12.06.2014	සරත් සමරසිංහ	විද්‍යා මණ්ඩල		
12.06.2014	සරත් සමරසිංහ	විද්‍යා මණ්ඩල		
12.06.2014	සරත් සමරසිංහ	විද්‍යා මණ්ඩල		
12.06.2014	සරත් සමරසිංහ	විද්‍යා මණ්ඩල		

Date: 02 October 2015

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Date: 02 October 2015

Thong Khnam

Date: 09 October 2015

[illegible]

Kratie PTC: List of participant attended in the consultative meeting

Date: 03 October 2015

Kratie

List of participants in safeguards consultation meeting
Date: 03 October 2015

No	Name	Village	Sex	Age	Occupation
1					
2	ឈ្មោះ ហង់	PTC ក្រចេះ	ប្រុស	35	Kratie 0977870009
3	ឈ្មោះ ហង់	ឧត្តុង្គ	—	61	011 2735 22
4	ឈ្មោះ ហង់	PTC ក្រចេះ	—	49	012 339392
5	ឈ្មោះ ហង់	PTC ក្រចេះ	—	29	
6	ឈ្មោះ ហង់	PTC ក្រចេះ	—	32	
7	ឈ្មោះ ហង់	PTC ក្រចេះ	—	29	
8	ឈ្មោះ ហង់	PTC ក្រចេះ	—	27	
9	ឈ្មោះ ហង់	PTC ក្រចេះ	—	29	
10	ឈ្មោះ ហង់	PTC ក្រចេះ	—	34	Sand Sea
11	ឈ្មោះ ហង់	PTC ក្រចេះ	—	26	They
12	ឈ្មោះ ហង់	PTC ក្រចេះ	—	28	Netel
13	ឈ្មោះ ហង់	PTC ក្រចេះ	—	30	Netel
14	ឈ្មោះ ហង់	PTC ក្រចេះ	—	28	S
15	ឈ្មោះ ហង់	ឧត្តុង្គ	—	58	CPWS
16	ឈ្មោះ ហង់	ឧត្តុង្គ	—	52	CPWS
17	ឈ្មោះ ហង់	ឧត្តុង្គ	—	48	CPWS
18	ឈ្មោះ ហង់	ឧត្តុង្គ	—	50	Kratie = 012949096
19	KHAT PROMSOPHOKHA		M	27	deputy chief of office 011 555246
20	Sour Sethe		M		Safeguard specialist
21	Khay Khemara		M	48	former vice director of Department (MLM)

ឈ្មោះ ហង់
 ឈ្មោះ ហង់
 ឈ្មោះ ហង់

Kep PTC: List of participant attended in the consultative meeting

Date: 05 October 2015

List of participants in safeguards consultation meeting

Date: 05/10/2015

No	Name	Village	Sex	Age	Occupation
1	Dith Lay Hengk	Director labour	M	55	<i>[Signature]</i> 015 440 927 012 480 927 012 583 483
2	POUY MOUN		F		<i>[Signature]</i>
3	SREY MEUNING	Deputy Director labour			<i>[Signature]</i> 012 552 605
4	Nep Saroun	Director PTC	M	35	<i>[Signature]</i> 092 953 669
5	KPAT PROMSAPART	WTC chief office	M	27	<i>[Signature]</i>
6	IAENGATENERA	Deputy Director of transport	M	43	<i>[Signature]</i>
7	SIM LAI	PTC Kep	M	28	<i>[Signature]</i>
8	UM. SOKHUM	THMEY Village	M	49	<i>[Signature]</i>
9	SANN SOPHANN	PTC Kep	M	28	<i>[Signature]</i>
10	SAY CHANTREA	PTC Kep	M	30	<i>[Signature]</i>
11	HOU CHANNA	PTC Kep	M	30	<i>[Signature]</i>
12	PICH THANY	PTC Kep	M	32	<i>[Signature]</i>
13	CHUN VUTHA	PTC Kep	M	37	<i>[Signature]</i>
14	KONG VANNA	PTC Kep	M	28	<i>[Signature]</i>
15	MONI-SOKHAK	PTC Kep	M	29	<i>[Signature]</i>
16	Khon Chantrea	PTC Kep	M	31	<i>[Signature]</i>
17	Toem Makara	PTC Kep	M	28	<i>[Signature]</i>
18	Mei Tetsuya	PTC Kep	M	28	<i>[Signature]</i>
19	Sour Sedhey	Safeguard S. M			<i>[Signature]</i> 012 555 021
20					
21					
22					
23					

Date: 07 October 2015

(Contact: 0775 67272)

CIEDI

Date: 07/10/2015

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Date: 07 October 2015

Date: 07/10/2015

[illegible]

Kandal PTC: List of participant attended in the consultative meeting

Date: 08 October 2015

Kandal 9

List of participants in safeguards consultation meeting
Date: 08/10/2015

No	Name	Village	Sex	Age	Occupation
1					
2	Sear Sathy		M		Safeguard Sp. rep
3	CHUNTEVIN	គង្រ	M	50	ឈ្មួញ 05789310
4	LENG KOLA	គង្រ	M	36	គង្រ
5	Ngeon Vithet	គង្រ	M	37	016883358
6	CHHEM KHEHART	គង្រ	M	30	គង្រ 012456847
7	NOUN SARDUM	គង្រ	M	31	— — 015550077
8	NORN LANGENG	គង្រ	F	28	គង្រ 07722 02 82.
9	LENG VANAVUTH	គង្រ	M	34	គង្រ 012625515
10	Soy Sreynrch	គង្រ	F	26	គង្រ (0967452066)
11	SOUN CHHORUON	គង្រ	F	28	គង្រ 089616961
12	Son Sonika	គង្រ	F	28	គង្រ 010455969
13	Chan Somna	គង្រ	F	28	គង្រ (017620280)
14	V.N. HUAN	គង្រ	M	28	គង្រ
15	Kim Chanpisith	គង្រ	M	28	គង្រ
16	Him Chai Hong	គង្រ	M	32	— —
17	Pen Soeong	គង្រ	M	37	— — 012220911
18	YE. Vessna	គង្រ	M	34	— —
19	Choen Samath	គង្រ	M	35	— —
20	Sam Samuth	គង្រ	M	34	
22	Lim Samnang	គង្រ	F	37	គង្រ

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Kampong Chhnang PTC: List of participant attended in the consultative meeting (

Date: 16 October 2015

List of participants in safeguards consultation meeting

Date: 16/10/2015

No	Name	Village	Sex	Age	Occupation
1	ly. CHANRITH	012.426033	M	46	Director
2	PEE. RORUN		M	43	Village chief
3	Sim veasna		M	34	Deputy Director
4	SITH. SOPHEAKDEY		M	32	Officer of PTC.
5	KHENG KEMERD		M		Vice director of department
6	KHAT PROMSOPHAKA		M	29	deputy chief office
7	MEN. THOU		M	50	Resident
8	KONG. BETHONY		M	32	Teacher
9	HUENG SOHENG		M	24	Local Resident
10	KEV. MANIT		M	33	Teacher
11	PEOU RADALLY		M	34	Teacher
12	HY. BUNNA		M	33	Teacher
13	SUONG SOTHEA		M	26	Teacher
14	LUENG SOPHAL		M	52	Teacher
15	BE SOVAN		M	19	Local Resident
16	SEAN SAMATH		M	19	Local Resident
17	NOUN CHANTHAN		M	23	Local Resident
18	CHHAN CHHOUN		M	23	Local Resident
19	Sear Sefky		M		Safeguard Specialist

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2015

16/10/15

Date: 16 October 2015

Baktambang PTC

Date: 16/10/2015

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Date: 17 October 2015

Date: 17 October 2015

Date: 17/10/2015

Date: 17/10/2015

[illegible]

017945424

S. Louis
070 361624

Date: 17 October 2015

Odor Meanchey

Date: 20/10/2015

[illegible]

Date: 17 October 2015

Date: 10/10/2015

No	Name	Village	Sex	Age	Occupation
1	မောင်ကျော်		M		အမှုကပ်လုပ်သူ
2	ကိုယ်ကျော်		M	38	CETP 012596466
3	ဇာန်ကျော်		M	29	CETP 010991257
4	ဒေါ်စန္ဒီ	ဂါးတန်း	M	၈-၁	၀၁၂၄၆၇၀၁၅
5	ဒေါ်စန္ဒီ	ဂါးတန်း	M	၈-၁	၀၉၂၄၆၆၂၅၄
6	ကျွန်းသိန်း		M		
7	ကျွန်းသိန်း		M	29	NLT, အမှုကပ်လုပ်သူ
8	မောင်ကျော်		M		
9	ကျွန်းသိန်း		M		Safeguard sp- နယ်ရေးနှင့် နိုင်ငံရေး ရေးရာများ အဖွဲ့အစည်း ၀၉၆၇-၁၀၁၃၀၁၅ ၀၉၆၇-၁၀၁၃၀၁၅

**Appendix 4.4: Photos of the public consultation in the public TVET institutions
(June 5-12, 2014 and October 2015)**

Kampong Cham PTC

Location: Village 7, Kampong Cham Commune, Kampong Cham Town, Kampong Cham Province

Date: 5 June 2014



Kampong Thom PTC

Location: Archar Leak Village, Archar Leak Commune, Stueng Saen Town, Kampong Thom Province

Date: 5 June 2014



Siem Reap PTC

Location: Wat Bo Village, Salakamreuk Commune, Siem Reap Town, Siem Reap Province

Date: 6 June 2014



Banteay Meanchey PTC

Location: Keap Village, Teuk Tla Commune, Serey Saophoan Town, Banteay Meanchey Province

Date: 6 June 2014



Battambang Institute of Technology

Location: Romchek 4 Village, Ratanak Commune, Battambang Town, Battambang Province

Date: 7 June 2014



Pursat PTC

Location: Chamkachek Village, Phthesprey Commune, Pursat Town, Pursat Province

Date: 7 June 2014



Kampong Speu PTC

Location: Tompoung Village, Kaheng Commune, Samraong Tong District, Kampong Speu Province

Date: 10 June 2014



Koh Kong PTC

Location: Village 1, Smachmeanchey Commune, Koh Kong Town, Koh Kong Province

Date: 11 June 2014



Preah Sihanouk PTC

Location: Group 15, Village 2, Commune 3, Preah Sihanouk Town, Preah Sihanouk Ville

Date: 11 June 2014



Kandal PTC

Location: Preak Tnout Village, Takhmao Commune, Takhmao Town, Kandal Province

Date: 12 June 2014



Prey Veng PTC

Location: Lek Mouy (1) Village, Lvea Commune, Prey Veng Municipality, Prey Veng Province

Date: 02 October 2015



Tbong Khmum PTC

Location: Nikum Leu Village, Sra Lop Commune, Tbong Khmum Municipality, Tbong Khmum Province

Date: 02 October 2015



Left picture shows consultative meeting with local authority, PTC, PDLVET and Villager, and right picture shows a meeting with deputy-governor of Tbong Khmum Province

Kratie PTC

Location: O'Reusey Pi Village, O'Reusey Commune, Kratie Municipality, Kratie Province

Date: 03 October 2015



Kep PTC

Location: Thmey Village, Preythom Commune, Kep Municipality, Kep Province

Date: 05 October 2015



CIEDI Phnom Penh

Location: Chong Thnal Khang Lech Village, Teuk Thla Commune, Sen Sok Khan, Phnom Penh

Date: 07 October 2015



JVC Phnom Penh

Location: Deum Ampil Village, Chroy Changva Commune, Chroy Changva Khan, Phnom Penh

Date: 07 October 2015



Kandal PTC

Location: Prek Samrong Village, Takhmao Commune, Takhmao Municipality, Kandal Province

Date: 08 October 2015



Kampong Chhnang PTC

Location: Tulkralanh Village, Kampong Chhnang Commune, Kampong Chhnang Municipality, Kampong Chhnang Province

Date: 16 October 2015



Battambang PTC Prey Kounkhla

Location: Andong Pring Village, Omarl Commune, Battambang Municipality, Battambang Province.

Date: 16 October 2015



Pailin PTC

Location: O'Tapuk Krom Village, Tul Lvea Commune, Pailin Municipality, Pailin Province.

Date: 17 October 2015



Siem Reap CEFP VTC

Location: Prey Kuy Village, Ampil Commune, Siem Reap Municipality, Siem Reap Province.

Date: 19 October 2015



Odor Meanchey PTC

Location: Borey Rathabal Village, Samrong Commune, Samrong Municipality, Samrong Province.

Date: 20 October 2015

