Ministry of Education, Youth and Sport
Kingdom of Cambodia

Preparatory Survey Report on the Project for the Establishment of the Teacher Education College in Kampong Cham Province in the Kingdom of Cambodia

March 2026

Japan International Cooperation Agency (JICA)

Mohri, Architect & Associates, Inc.
INTEM Consulting, Inc.
PADECO Co., Ltd.

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Preface

Japan International Cooperation Agency (JICA) decided to conduct the preparatory survey and entrust the survey to the joint venture of Mohri, Architect & Associates, Inc., INTEM Consulting, Inc. and PADECO Co., Ltd.

The survey team held a series of discussions with the officials concerned of the Government of Cambodia, and conducted field investigations. As a result of further studies in Japan, the present report was finalized.

I hope that this report will contribute to the promotion of the project and to the enhancement of friendly relations between our two counties.

Finally, I wish to express my sincere appreciation to the officials concerned of the Government of Cambodia for their close cooperation extended to the survey team.

March, 2026

Hiromichi MORISHITA
Director General,
Human Development Department
Japan International Cooperation Agency

Summary

1. Outline of the Country

The Kingdom of Cambodia (hereinafter referred to as "Cambodia") is a Southeast Asian nation with a land area of approximately 180,000km^2, bordering Kingdom of Thailand, Lao People's Democratic Republic, and Socialist Republic of Viet Nam. The central and southern regions consist of fertile plains within the Mekong Delta river system. Characterized by a tropical monsoon climate, the country experiences a rainy season from June to October and a dry season from November to May.

Since the end of the civil war in 1990, Cambodia has achieved peace and operates as a constitutional monarchy with a democratic system and a market economy. Although the 2009 real GDP growth rate fell to minus 2% due to the global recession triggered by the Lehman shock, the economy saw remarkable growth of 7 to 8% from 2011 onwards, accompanied by an improved unemployment rate[1]. Since 2022, the country has maintained stable economic growth with an annual rate exceeding 5.0%.

In 2013, the nominal GDP per capita surpassed 1,000 USD. Consequently, in 2015, the World Bank (WB) reclassified Cambodia from a "low-income country" to a "lower-middle-income country" following its review of income-based country classifications[2]. By 2024, the nominal GDP per capita reached 2,755 USD[3]. In the capital city of Phnom Penh, the urban landscape is undergoing a significant transformation, marked by the opening of a new airport in 2025, extensive infrastructure development of major roads, and the proliferation of foreign-affiliated hotels, major shopping malls, and high-rise buildings. The industrial composition as a percentage of GDP consists of industry (secondary sector) at 38.7%, services (tertiary sector) at 37.8%, and agriculture (primary sector) at 23.6%[4].

2. Background of the Project

The modern teacher training system in Cambodia began with irregular short-term training sessions during the post-conflict reconstruction period of the 1980s. Subsequently, "12+2" teacher training centres (a two-year program following high school graduation) were established as formal institutions for primary and lower secondary education. While these centres contributed to the expansion of basic education, the low quality of education – stemming from teachers' insufficient knowledge and pedagogical skill – has become a significant issue. Notably, the learning achievement levels of 15-year-old students are reported to be among the lowest in ASEAN (PISA-D, 2022).

In its "Pentagonal Strategy Phase I", formulated in August 2023, the Cambodian government identified human capital development as a priority area, emphasizing sustainable economic development through the cultivation of highly skilled human resources. Expanding a workforce capable of acquiring the knowledge and techniques demanded by industry will contribute to increased productivity and labor quality; this is also highly significant from the perspective of Japanese companies operating in Cambodia.

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[1] International Monetary Fund, IMF data
[2] WB, Cambodia Economic Update; Improving Macroeconomic and Financial Resilience, 2016.
[3] Japan External Trade Organization (JETRO) , Basic Economic Indicators(https://www.jetro.go.jp/world/asia/kh/basic_01.html)
[4] Asian Development Bank, Key Indicators for Asia and the Pacific 2024

However, the development of highly skilled human resources requires a foundation of basic and practical abilities. Currently, the transition rate to higher education remains low (high school completion rate: 33.1%; university enrollment rate: 17.9%; Ministry of Education, Youth and Sports (MoEYS), 2022), partly due to students' lack of basic academic skills caused by the deficiency in teachers' expertise.

Against this backdrop, the Cambodian government has been accelerating the upgrading of teacher training programs and qualifications to a bachelor's degree level (such as the "12+4" system) to strengthen teacher education, which forms the foundation of educational quality. In the revised "Teacher Policy Action Plan (TPAP, 2024–2028)", MoEYS designated the two Teacher Education Colleges (TECs) in Phnom Penh and Battambang – established with Japanese support – as models. The Ministry decided to upgrade four additional teacher training colleges (in Kandal, Kampong Cham, Prey Veng, and Takeo provinces) into TECs by 2028. Consequently, a total of six TECs providing primary and lower secondary teacher training programs will be established by that year, and all lower secondary teacher training programs will be upgraded to the bachelor's degree level.

Against this background, the Cambodian government requested Grant Aid from Japan to provide the facilities and equipment necessary to upgrade the TTC in Kampong Cham Provinces into TEC out of the four schools planned for development. Kampong Cham P/RTTC is strategically located to serve as a central hub for training teachers for primary and lower secondary schools in the northeastern region, which includes many remote areas. By establishing a system to provide new online courses that leverage the existing resources (both human and educational) of current TEC, the Project is expected to serve as a model for the autonomous and effective expansion of teacher training programs in a country facing a shortage of high-quality university faculty. The upgrading of this college is intended to serve as a foothold for expanding the four-year teacher training curriculum – established through Japanese assistance – across all of Cambodia, with a view toward the future upgrading of the remaining three institutions. MoEYS intends to establish Kampong Cham Teacher Education College (KCTEC), which will be upgraded to a university under the Project, as a model institution for digitalization and a Centre of Excellence (COE) for Digital Transformation (DX) in teacher education. Under these circumstances, Japan International Cooperation Agency (JICA) decided to conduct a Preparatory Survey for the "Project for the Establishment of the Teacher Education College in Kampong Cham Province in the Kingdom of Cambodia" (hereinafter referred to as "the Project").

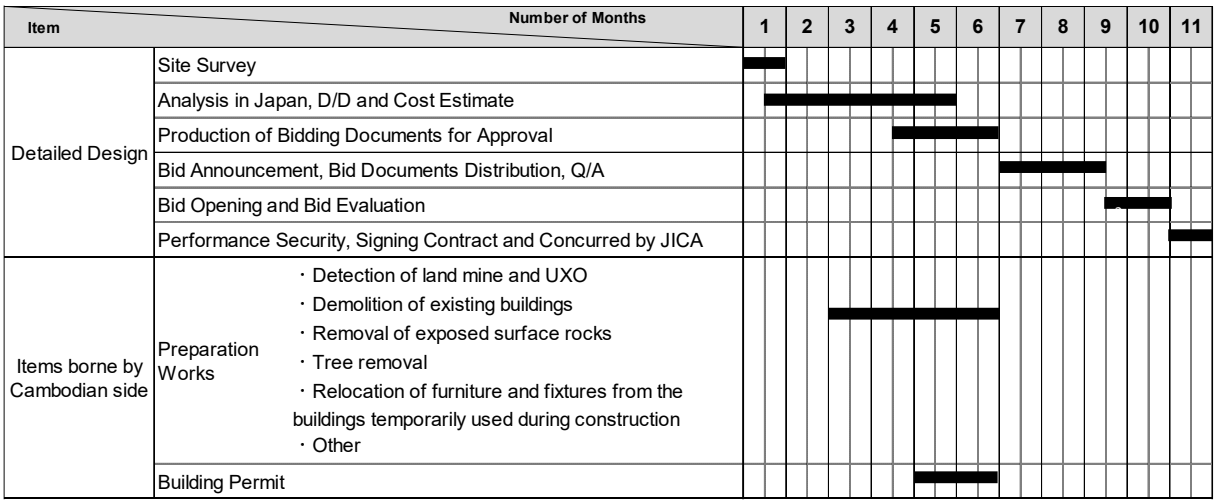
3. Outline of Study and Contents of the Project

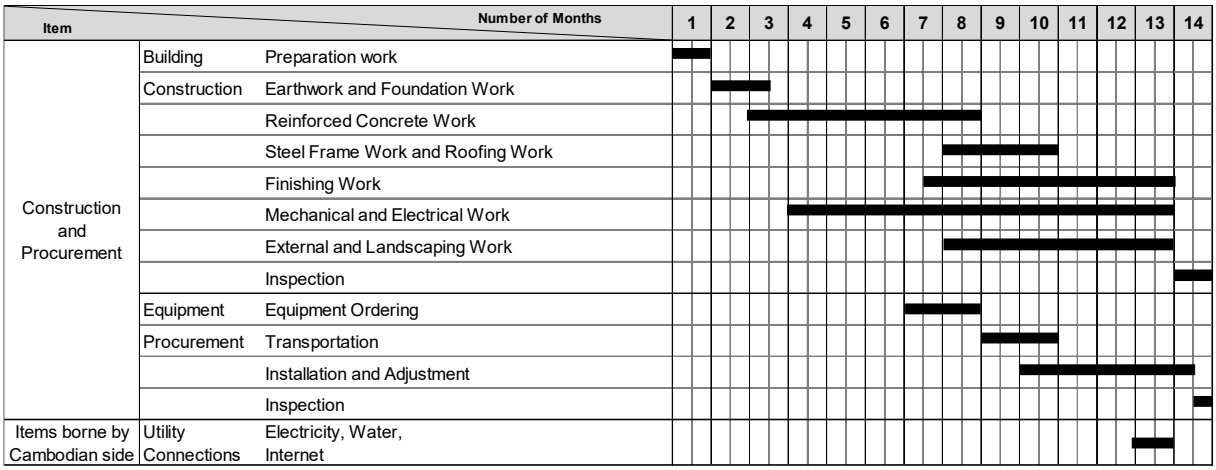
3-1. Basic Concept of the Project

The Project will involve the development of educational facilities and equipment for each subject required to upgrade the existing two-year teacher training centres in Kampong Cham into a four-year TEC. Since there is insufficient space for expansion within the current Provincial Teacher Training College (PTTC) premises, the policy is to conduct the construction of facilities under the Project within the existing Regional Teacher Training Centre (RTTC) premises.

4. Project Implementation Schedule

The draft implementation schedule for the Project is shown below.





Source: The survey team

Figure: Project Implementation Schedule (Provisional)

5. Project Evaluation

5-1. Relevance

The direct beneficiaries of the Project are student teachers, faculty and staff of KCTEC. Through the construction of buildings and equipment procurement under the Project, education and research will be conducted in alignment with university-level curricula, which is expected to result in the training of high-quality primary and lower secondary teachers.

As these Bachelor's degree-holding teachers trained at KCTEC are deployed nationwide, including Northeast provinces, the Project is expected to contribute to the nationwide dissemination of quality basic education. In the medium to long term, this will lead to overall human resource development, including the highly skilled professionals who will lead Cambodia's industrial sector, thereby contributing to the country's economic growth. Consequently, the entire nation will be indirect beneficiaries of the Project.

The "Pentagonal Strategy Phase 1 (2023)" of the Cambodian government sets human capital development and the promotion of a digital economy and society as strategic priorities. Furthermore, the "Education Strategic Plan (ESP 2024-2028)," formulated in response to the Pentagonal Strategy, positions the reform of the teacher training system as an essential pillar for improving educational quality and fostering the 21st-century skills. It aims to achieve fundamental systemic reforms, enhance the quality of education, and ensure equal educational opportunities. Notably, the ESP 2024-2028 targets increasing the percentage of teachers holding a Bachelor's degree from 30% in 2023 to 50% by 2028.

In addition, the "TPAP 2024-2030," which aims for comprehensive reform toward improved educational quality and sustainable human resource development, includes a strategy to upgrade all existing RTTCs to TECs by 2029. Therefore, the Project – which supports the integration of Kampong Cham P/RTTC and the establishment of KCTEC as a four-year college through the construction of buildings and equipment procurement – is highly consistent with the upstream policies and education strategies of Cambodia.

The "Country Development Cooperation Policy for Cambodia (April 2024)" by the Japanese government explicitly states the importance of improving the quality of education, including basic education, and the development of digital infrastructure under its priority area, "Realizing sustainable and equitable growth." Furthermore, the "JICA Country Analysis Paper for the Kingdom of Cambodia (March 2024)" identifies "Industrial Diversification and Vitality Creation" as a key challenge. As the Project aligns with the priority policy of "Strengthening Teacher Capacity" in the JICA Global Agenda (JICA's strategy by issue), it is highly consistent with these national policies and analyses.

In addition, through the Grant Aid project "The Project for the Construction of Teacher Education Colleges (2017)" which Japan supported the establishment of P/BTEC, the first four-year teacher education colleges in Cambodia. With further support from technical cooperation projects – "The Project for Establishing Foundations for Teacher Education Colleges (E-TEC: 2017-2022)" and S-TEC (2024-2027)" – both colleges have established robust systems for management, education, and research, and are now producing highly qualified teachers. In supporting the establishment of KCTEC, the Project is expected to achieve even greater development effectiveness by leveraging the experience gained from the establishment and operation of P/BTEC, and by receiving support from PTEC to implement blended learning, including online lessons.

5-2. Effectiveness

The Project is expected to bring about the following quantitative results.

Table: Quantitative Indicators (Preliminary)

Indicator	Base value (Actual :202)	Target value (2032) [4 yrs. after completion]
Number of the pre-service student teachers and the in-service teachers in the teacher qualification upgrade programs (12+4, BA+1, and others) at KCTEC	0	1,400 (350 student teachers × 4 years)

It should be noted that, from the actual performance of the existing P/BTEC, a stable intake of new student teachers and consistent enrollment at KCTEC are not necessarily guaranteed every year. Furthermore, there is a possibility that the number of admissions may not reach the full capacity as initially projected.

In addition, the Project is expected to bring about the following qualitative results.

- Improving the educational environment to advance pedagogical practices will enhance the quality of the teacher qualification upgrading program in Kampong Cham Province.

By combining the advancement of educational practices (through the use of blended learning and Learning Management System (LMS)) with the environmental improvements provided by the Project (the construction of the STEM building and provision of related equipment), a foundation for continuous institutional educational improvement—including tracking learning progress and providing teacher-to-student feedback—will be established. This is expected to lead to the continuous production of higher-quality teachers in the future.

From the above, it is deemed highly relevant and effective for the Project to be implemented.

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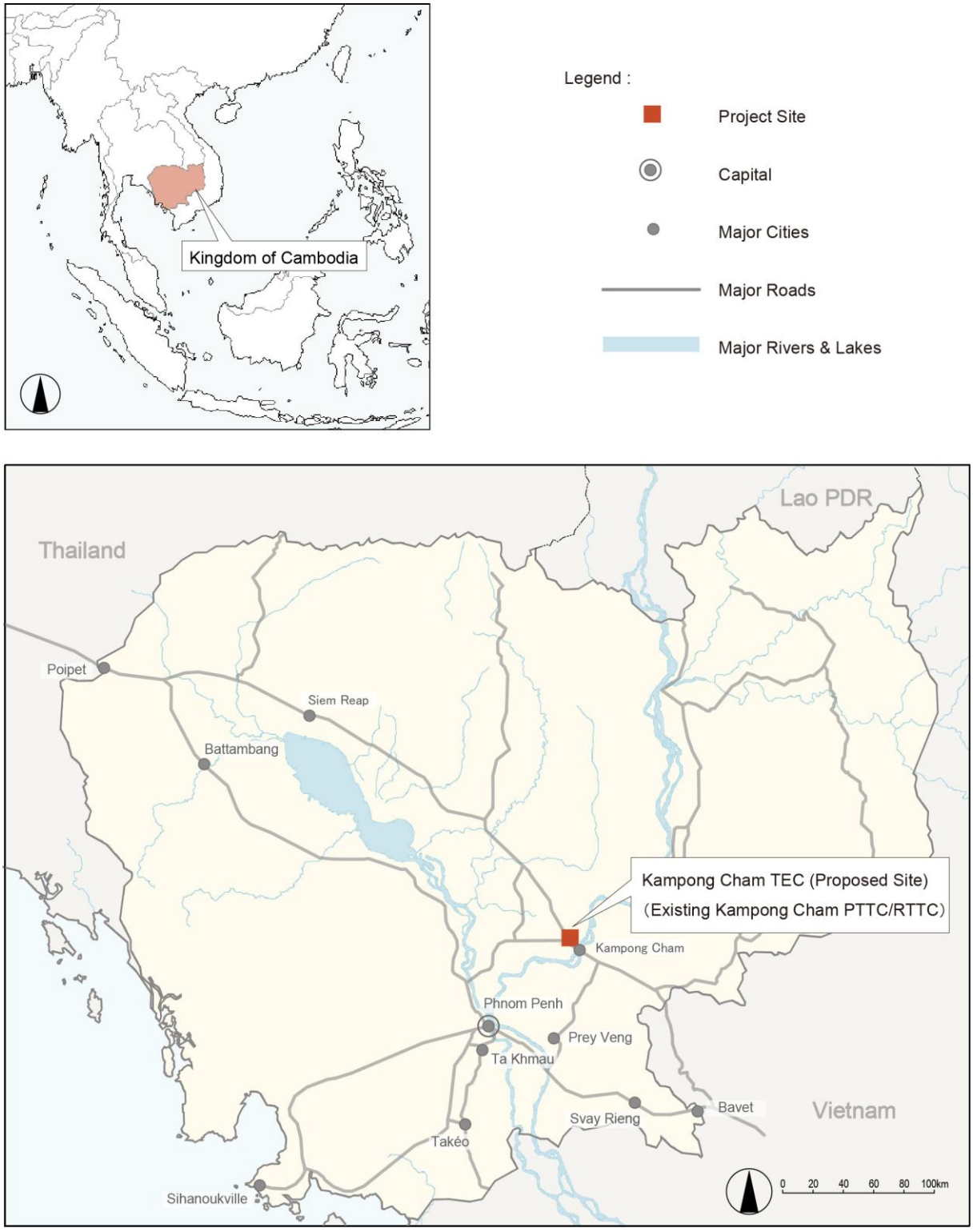
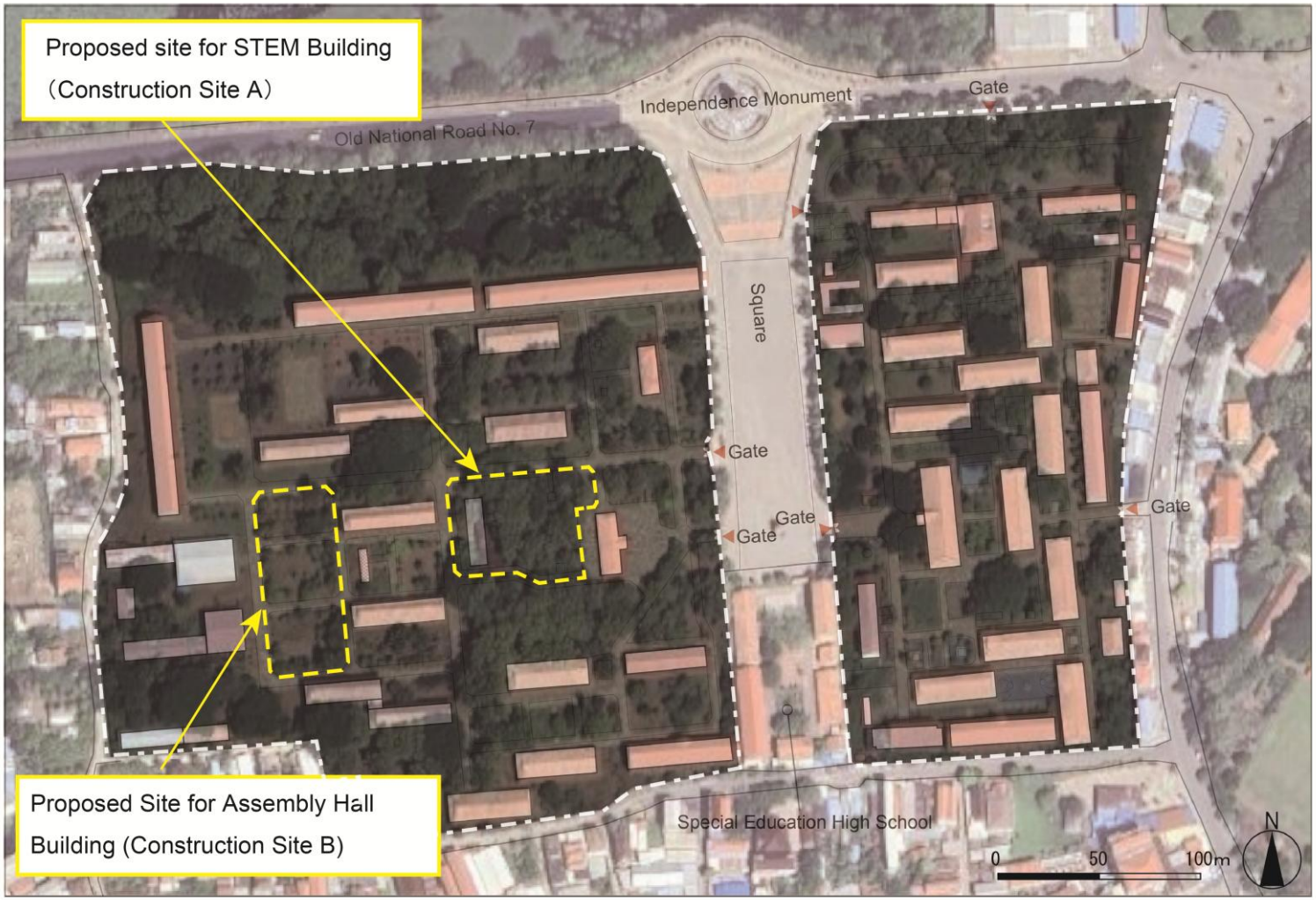


Project Site Map-1



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Abbreviations

AC	Air-conditioning
ACC	Accreditation Committee of Cambodia
AED	Automated External Defibrillator
A/P	Authorization to Pay
AV	Audio Visual
B/A	Banking Arrangement
BOQ	Bill of Quantities
BTEC	Battambang Teacher Education College
CDC	Council for the Development of Cambodia
COE	Centre of Excellence
DAC	Development Assistance Committee
DGTED	Directorate General of Teacher Education Development
DOF	Department of Finance
DSPC	Department of State Property and Construction
DX	Digital Transformation
EIA	Environmental Impact Assessment
E/N	Exchange of Notes
EPC	Environmental Protection Contract
ESP	Education Strategic Plan
E-TEC	The Project for Establishing Foundations for Teacher Education College
GGP	Grant Assistance for Grass-roots Human Security Projects
IEE	Initial Environmental Examination
ICT	Information Communication Technology
IQA	Internal Quality Assurance
JICA	Japan International Cooperation Agency
KCTEC	Kampong Cham Teacher Education College
LMS	Learning Management System
M/D	Minutes of Discussion
MDB	Main Distribution Board
MEF	Ministry of Economy and Finance
MFAIC	Ministry of Foreign Affairs and International Cooperation
MoEYS	Ministry of Education, Youth and Sports

MV	Medium Voltage
NIE	National Institute of Education, Cambodia
OECD	Organisation for Economic Co-operation and Development
PCR	Project Completion Report
PISA	Programme for International Student Assessment
PIU	Project Implementation Unit
PMR	Project Monitoring Report
PMU	Project Management Unit
PTEC	Phnom Penh Teacher Education College
PTTC	Provincial Teacher Training College
RTTC	Regional Teacher Training Centre
SOP	Standard Operating Procedures
S-TEC	The Project for Strengthening Teacher Education Colleges for Basic Education Quality
STEM	Science, Technology, Engineering, and Mathematics
STEPSAM 2	Science Teacher Education Project
TEC	Teacher Education College
TEPS	Teacher Education Provider Standard
T/N	Technical Notes
TPAP	Teacher Policy Action Plan
TTC	Teacher Training College
UPS	Uninterruptible Power Supply
VAT	Value Added Tax
WB	World Bank

Chapter 1 Background of the Project

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1-1 Background of the Grant Aid

The modern teacher training system in the Kingdom of Cambodia (hereinafter referred to as "Cambodia") began with irregular short-term training sessions during the post-conflict reconstruction period of the 1980s. Subsequently, "12+2" teacher training centres (a two-year program following high school graduation) were established as formal institutions for primary and lower secondary education. While these centres contributed to the expansion of basic education, the low quality of education – stemming from teachers' insufficient knowledge and pedagogical skill – has become a significant issue. Notably, the learning achievement levels of 15-year-old students are reported to be among the lowest in ASEAN (PISA-D, 2022).

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will be upgraded to a university under the Project, as a model institution for digitalization and a Centre of Excellence (COE) for Digital Transformation (DX) in teacher education. Under these circumstances, Japan International Cooperation Agency (JICA) decided to conduct a Preparatory Survey for the "Project for the Establishment of the Teacher Education College in Kampong Cham Province in the Kingdom of Cambodia" (hereinafter referred to as "the Project").

1-2 Natural Conditions

(1) Climatic Conditions

Kampong Cham Province, where the project site is located, has a tropical monsoon climate (tropical wet) with distinct rainy and dry seasons. The rainy season lasts for approximately six months, from May to October, with precipitation peaking in September at an average monthly rainfall of 255.95 mm. Temperatures remain high throughout the year, with monthly averages ranging from 26.39°C (December) to 29.80°C (April)[8].

(2) Seismic Conditions

No seismic history has been recorded in Cambodia.

(3) Geographic and Topographic Conditions / Soil Conditions

Regional Teacher Training Centre (RTTC) in Kampong Cham campus, the project site, is located approximately 2 km from the Mekong River. The geological composition consists of sandy clay containing weathered basalt from the ground surface to a depth of about 0.4 m, underlaid by a basalt layer (bedrock) ranging from low to high strength. A characteristic feature of the existing campus is the presence of numerous basalt boulders scattered across the surface of the open spaces.

At Provincial Teacher Training College and Regional Teacher Training Centre (P/RTTC) site, there are no historical records of flood damage caused by river overflow. Although temporary inundation of up to 20 cm may occur during heavy rainfall, the high infiltration capacity of the soil allows the water to recede naturally within several tens of minutes to a few hours.

1-3 Environmental and Social Considerations

1-3-1 JICA Guidelines for Environmental and Social Considerations

The Project is classified as Category C under the "JICA Guidelines for Environmental and Social Considerations (April 2022)." This category is applied to projects considered to have minimal or virtually no adverse environmental and social impacts.

1-3-2 Environmental and Social Consideration Rules and Authorities

In Cambodia, according to the Ministry of Environment Prakas No. 21 (2020), all development projects are required to undertake either an Environmental Impact Assessment (EIA), an Initial

[8] Source: Climate Risk Country Profile, WB Group

Environmental Examination (IEE), or an Environmental Protection Contract (EPC), depending on their scale and nature. The EPC is applied to projects considered to have the least environmental impact.

Prakas No. 21 categorizes development projects into six sectors: (1) Industry, Energy, and Trade, (2) Health, (3) Water Resources, (4) Agriculture, (5) Tourism, and (6) Infrastructure. Within each sector, the requirement for EIA, IEE, or EPC is determined based on the type and scale of the buildings/facilities.

The Project falls under the category of "Construction of various types of buildings" within the (6) Infrastructure sector. Given that the planned scale is approximately 4,000 m², it is expected to fall under the EPC requirement category. However, MoEYS is required to consult with the Ministry of Environment to confirm the category as well as necessary procedures based on the outline design drawings and other relevant documents.

Table 1-1 Annex to Prakas No. 21
"Classification of Environmental Impact Assessment for Development Projects Based on Scale"6. Infrastructure Sector

No.	Type of Project	EIA	IEE	EPC
175	Construction of various types of buildings	Building Area > 45,000m²	Building Area >15,000-45,000m²	Building Area >3,000-15,000m²

Source: Prepared by the Survey Team based on the Annex of Prakas No. 21

Regardless of the category (EIA, IEE, or EPC), the formulation of an Environmental Monitoring Plan (EMoP) prior to project implementation and its monitoring during the implementation phase are required; these responsibilities are to be undertaken by MoEYS.

1-4 Conducting a Climate Risk Assessment

The potential impacts on climate change are examined using the "JICA Climate Finance Impact Tool / Adaptation (JICA Climate-FIT (Adaptation))." The scope of this assessment includes the facilities and equipment provided under the Project, as well as the educational activities that constitute the Project's primary objectives.

1-4-1 Examination of Climate Hazards

Through consultations with the President of Kampong Cham RTTC during the first field survey (Field Survey I), "Heavy rain/Inundation" and "High temperatures" were identified as climate hazards for the project site in Kampong Cham Province.

1-4-2 Frequency of Climate Hazards

The current frequency and future projections of the identified climate hazards are evaluated.

(1) Current Status of Climate Hazards

The current frequency is evaluated using the following scale from the "JICA Climate Finance Impact

Tool / Adaptation (JICA Climate-FIT (Adaptation))."

- ＋＋ : Occur(ed) frequently in the past and at present
- ＋ : Occur(ed) occasionally in the past and at present
- － : Has not occurred in the past

The evaluations of each climate hazard and the underlying reasons are presented in the table below.

Table 1-2 Evaluation Results of Climate Hazards

Climate Hazard	Current Status	Rationale
Heavy Rain / Inundation	-	Heavy rain occurs; however, the ground floor levels of the existing buildings at the construction site are sufficiently high to prevent inundation. The construction site is not affected by flooding as it is located at a certain distance from the Mekong River.
High Temperatures	+	Temperatures are particularly high during the extreme heat season.

Source: Prepared by the Survey Team based on interviews conducted during Field Survey I.

(2) Future Assessment of Climate Hazards

Regarding the outlook, based on the "Climate Risk Profile: Cambodia (2024)" published by WB Group, it is assessed that the frequency and/or intensity of climate hazards at the target site will increase.

Table 1-3 Future Evaluation Results of Climate Hazards

Climate Hazard	Current Status	Rationale
Heavy Rain / Inundation	Increase ↗	• The probability of extreme rainfall events is expected to increase across Cambodia by the mid-21st century. • In the central plains, including Kampong Cham Province, the probability of heavy rainfall with 100-year historical return periods is projected to be higher.
High Temperatures	Increase ↗	• The average temperature across Cambodia has risen by 0.29°C per decade[9], and this upward trend is expected to continue in the future.

Source: Prepared by the Survey Team based on "Climate Risk Profile: Cambodia (2024)" by the World Bank Group.

1-4-3 Impact Level of Climate Hazards on Assessment (Exposure) Targets

Next, the impact levels of (1) heavy rain/inundation and (2) high temperatures on the assessment (exposure) targets—namely buildings, equipment, and educational activities—are evaluated using the following four-scale criteria from the JICA Climate-FIT (Adaptation).

- Level 3: The events and impacts that have occurred to date were so severe that they were difficult to cope with or manage.

[9] Per decade from 1971 to 2020

- Level 2: The events and impacts that have occurred to date were moderately difficult to manage or cope with.
- Level 1: Coping with or managing the events and impacts that have occurred to date was not particularly difficult. The impacts were minor, and it was possible to manage them to a certain extent.
- Level 0: There have been little to no impacts from the events that have occurred to date.

The following table presents the impact level evaluations of (1) heavy rain/inundation and (2) high temperatures on existing buildings, equipment, and educational activities at the target site, along with the underlying reasons.

Table 1-4 Evaluation Results of Impact Levels on Assessment (Exposure) Targets

<table>
<tr><th rowspan="2"></th><th colspan="2">Heavy Rain / Inundation</th><th colspan="2">High Temperatures</th></tr>
<tr><th>Level</th><th>Rationale</th><th>Level</th><th>Rationale</th></tr>
<tr><td>Buildings</td><td>0</td><td rowspan="3">While there are some areas within the site with poor drainage, there is no flooding inside the buildings due to the elevated floor levels; thus, there is no disruption to equipment or educational activities.</td><td>0</td><td>There is no disruption caused by high temperatures.</td></tr>
<tr><td>Equipment Plan</td><td>0</td><td>0</td><td rowspan="2">There is no disruption due to the installation and use of air-conditioning (AC) unit.</td></tr>
<tr><td>Educational Activities</td><td>0</td><td>0</td></tr>
</table>

Source: Prepared by the Survey Team based on interviews conducted during Field Survey I

1-4-4 Examination and Conclusion of Vulnerabilities of Assessment Targets

Currently, the assessed targets-including buildings, equipment procurement, and educational activities-are hardly affected by climate hazards. Although the intensity of the climate hazards is projected to increase in the future, it is considered that these can be managed through existing measures, such as maintaining elevated floor levels and installing AC unit. Therefore, (1) heavy rain/inundation and (2) high temperatures are not judged to pose significant climate risks to the Project. The Project will use conventional measures, such as ensuring sufficient floor height for new buildings and installing AC unit in rooms where procured equipment is placed, as necessary.

Chapter 2 Contents of the Project

Chapter 2 Contents of the Project

2-1 Basic Concept of the Project

2-1-1 Outline of the Project

The objective of the Project is to improve the learning environment for student teachers in teacher training programs in Kampong Cham Province by providing educational facilities and equipment necessary to upgrade the existing teacher education institution to the TEC, thereby contributing to strengthening teacher education system and enhancing the quality of basic education.

(1) Construction

The plan consists of two buildings with a total floor area of approximately 4,032 m^2: a STEM building for Science, Technology, Engineering, and Mathematics (STEM) education and an assembly hall building.

Table 2-1 Outline of the Construction

Building Name	Principal Rooms	Floor Area
STEM Building	Science laboratories 1-6 (including Prep. Rooms), Lecture hall (including Storage), Hall, Meeting room, Administration office (including storage), First aid room, Pantry, Machine room, Digital multi-purpose rooms 1-2 (including storage and prep. rooms), Director's office, Vice-directors' offices 1-4,Tolets[10] (Male/ Female/ Universal), Corridor, Stairs, Ramp	2,712.58 m^2
Assembly Hall Building	Hall, Stage, Waiting room, Storage, Entrance, Pantry, ACunit space, Toilets(Male/ Female/ Universal), Stairs, Service passage	1,319.86 m^2
TOTAL		4,032.44 m^2

Source: The Survey Team

(2) Equipment

Table 2-2 Outline of the Equipment Plan

Equipment Category	Item	No of Items
ICT[11] Equipment	Equipment to be used for lectures and practical training in the digital multi-purpose room and laboratories (including laptop computers, interactive flat panels, monitors, projectors, web cameras, and audio equipment).	13
Math and Science Teaching Materials	Teaching materials and experimental tools to be used for practical training in primary school Science and Mathematics, as well as lower secondary school Physics, Chemistry, Biology, and Earth Science (including laboratory instruments, microscopes, human body models, etc.).	98
School Furniture	Science laboratory benches, desks and chairs for the digital multi-purpose room, and other related furniture.	19
Teaching Material Production	Power tools, workbenches, etc.	12

[10] WC
[11] Information Communication Technology

Equipment Category	Item	No of Items
Equipment		
Audio-Visual (AV) Equipment	Audio equipment, projectors, and other peripherals for the digital multi-purpose room and assembly hall.	6
Library Digitalization Equipment	Desktop computers, book scanners, etc.	5
First Aid Room Equipment	Fixtures and medical equipment (including beds and wheelchairs) and Automated External Defibrillators (AED).	2

Source: The Survey Team

2-2 Outline Design of the Japanese Assistance

2-2-1 Design Policy

2-2-1-1 Basic Policy

(1) Project Site

The Project will involve the development of educational facilities and equipment for each subject required to upgrade the existing two-year teacher training college/centre in Kampong Cham into a four-year TEC. Since there is insufficient space for expansion within the current Provincial Teacher Training College (PTTC) premises, the policy is to conduct the construction of facilities under the Project within the existing RTTC premises.

(2) Teacher Training Courses covered by the Project

The Project covers the construction of facilities and the procurement of equipment for the training of primary and lower secondary education teachers.

(3) Setting the Project Scale

The number of student teachers for the primary and lower secondary teacher training programs is assumed to be equivalent to the full-scale admission capacity of Phnom Penh Teacher Education College and Battambang Teacher Education College (P/BTEC), namely 350 student teachers per year (250 for the primary teacher training program and 100 for the lower secondary teacher training program).

(4) Architectural Plan

1) Components of Planned Facilities

Based on discussions with the Cambodian side, the following two facilities are planned under the Project.

Table 2-3 Facility Components of the Project

Building Name	Description
STEM building	• A facility that integrates a STEM block, including science laboratories and digital multi-purpose rooms, with administrative block consisting of an auditorium, a director's office, vice- director's offices, meeting room, a first aid room, and administrative offices into a single building. • The facility shall be equipped to support the following activities and classes, assuming the utilization of digital technology. ➢ Introduction of remote education utilizing P/BTEC resources ➢ Preparedness for the future of STEM education with a view toward digitalization ➢ A COE for DX in teacher education ➢ A model TEC for digitalization in teacher training
Assembly hall building	• A facility equipped for assembly and indoor sports.

Source: The Survey Team

Note that existing general classrooms, administrative offices for staff, the library, and dormitories are sufficient to meet the needs of the current campus. Therefore, these are not included in the scope of the Project.

2) Composition and Scale of Planned Rooms (Facility Components)

Based on the requests for facility components confirmed during Field Survey I, the necessity and appropriateness of each room were examined. This assessment considered the status of facilities and their utilization at existing TECs (P/BTEC), as well as the condition of existing facilities at the current P/RTTC campus. The facility components and their scales for the Project are shown in the table below.

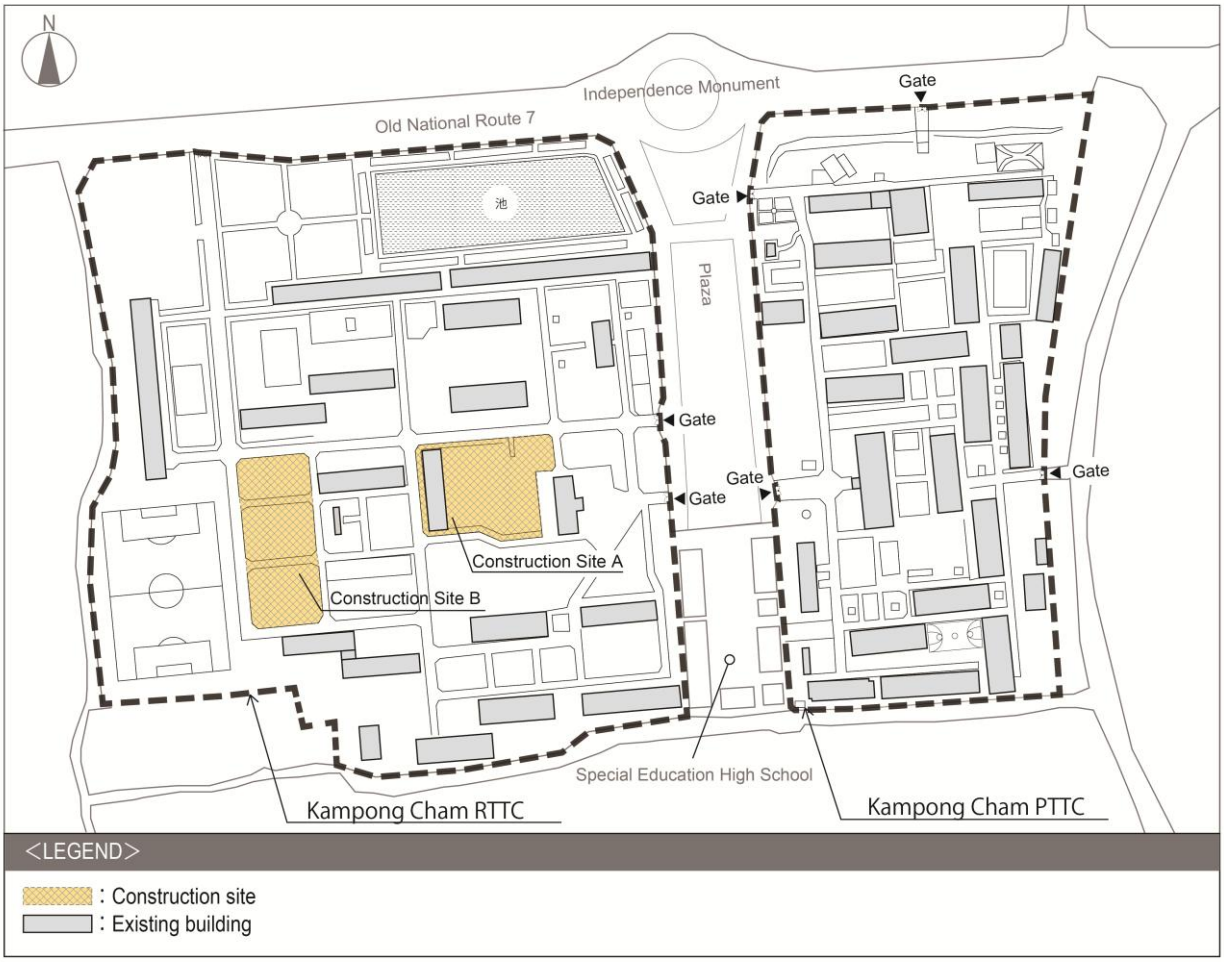
Table 2-4 Main Facility Components and Scale

Bldg./Block	Room	Capacity	Qty	Remarks
STEM building				
STEM block	Digital multi-purpose room	30	2	For primary teacher training, for lower secondary teacher training, including prep rooms and storage.
	Science laboratory	30	2	For primary teacher training, including prep. room.
	Physics laboratory	30	1	For lower secondary teacher training, including prep. room.
	Chemistry laboratory	30	1	ditto
	Earth science laboratory	30	1	ditto
	Earth science laboratory	30	1	ditto
Admin block	Auditorium	120	1	Including storage
	Meeting room	30	1	--
	Director's room	--	1	--
	Vice-director's room	--	4	--
	Office	10	1	Including storage
	First aid room	--	1	--
Assembly hall building				
--	Assembly hall	500-600	1	Including stage, waiting room, and storage.

Source: The Survey Team

3) Selection of Construction Site

As a result of discussions with the Cambodian side, it was confirmed with MoEYS that the STEM building will be constructed on Site A, and the assembly hall building on Site B. The characteristics of Sites A and B, along with the appropriateness and suitability of these locations for the planned facilities, are described below.



Source: The Survey Team

Figure 2-1 Layout Plan of the Project Construction Sites in the MoEYS Master Plan

① STEM Building Site (Construction Site A)

Construction site A for the STEM building is a rectangular plot of approximately 3,700 m^2, located almost directly in front of the main gate of the existing RTTC. Situated near the main gate (northeast gate) and offering easy access from the current PTTC, Site A is expected to serve as the symbolic landmark of KCTEC.

Although a dilapidated faculty office building currently stands between Site A and the main gate, it has been confirmed that MoEYS is considering the future demolition of this building. If it is demolished, the STEM building will be positioned directly facing the main gate. This location is highly suitable for the STEM building and is expected to provide significant public relations visibility for Japan's Grant Aid.

Regarding the site conditions, there is a ground level difference of approximately 2m from east to west. Since the site contains gazebos and a dilapidated, unused classroom block, the Cambodian side is required to remove these structures (including their foundations), as well as existing trees (including uprooting) and exposed rocks on the ground surface.

② Assembly Hall Building Site (Construction Site B)

Construction site B for the assembly hall building is a rectangular plot of approximately 3,400 m^2, located in the southwestern part of the existing RTTC campus. According to the future campus plan developed by MoEYS, there is a plan to install a new gate on the northern road adjacent to RTTC, connecting it to the access path on the west side of Site B. This will ensure excellent accessibility from both the existing main gate on the east and the proposed new gate on the north. The site is generally flat, and while there are some trees and rocks, no existing buildings are present. Under the future campus plan, the area to the west of Site B is designated for a sports field. Consequently, KCTEC's sports and recreational facilities will be strategically consolidated in the southwestern section of the campus.

4) Priority of Facility Components

During Field Survey I, the contents and priorities of the facilities requested by MoEYS were confirmed in the Minutes of Discussions (M/D) as follows:

Table 2-5 Contents and Priorities of the Requested Facilities Agreed in the M/D

Priority Order	Facilities
1	Administration block with auditorium
2	Multi-purpose Hall
3	STEM block with science laboratory for both secondary and primary education, and ICT room
4	Library block with e-library

Source: Prepared by the Survey Team based on the M/D

Subsequently, regarding the facility components confirmed in the M/D, MoEYS requested to change the contents and priorities of the requested facilities during the Technical Notes (T/N) discussions as follows:

Table 2-6 Facility Components and Priorities Agreed in the T/N

Priority Order	Facilities
1	STEM block • Science laboratories for primary teacher training including preparation rooms (2 rooms) • Science laboratories for lower secondary teacher training including preparation rooms (4 rooms) • Digital multi-purpose room (2 rooms)
2	Assembly hall
3	Administration block • Auditorium • Director • Vice director (4 rooms) • Meeting room • First aid room, etc.

Source: The Survey Team based on the T/N

Based on the requests, the facility plan was developed during the preparatory design stage. During Field Survey II, it was explained to and agreed by the Cambodian side that if adjustments to the facility

components become necessary in the future due to budget constraints or other reasons, the scale of the assembly hall building will be reduced (i.e., reduction in seating capacity).

5) Demolition and removal of existing buildings associated with the implementation of the Project

The existing buildings located within the project site must be demolished and removed by the Cambodian side prior to the implementation of the Project. Within the proposed sites, there are dilapidated and unused existing buildings and gazebos on the sites planned for the STEM building and the leaching pit, while no existing buildings are present on the site for the assembly hall building.

During Field Survey II, both sides discussed and agreed that the Cambodian side would be responsible for the demolition and removal of existing buildings at the construction sites for the STEM building and the leaching pit.

Note that for dilapidated existing buildings located where they do not interfere with the construction of facilities under the Project, the decision on whether to demolish, remove, or leave them as they are shall be at the discretion of the Cambodian side, and such work will not be categorized as part of the undertakings to be borne by the Cambodian side for the implementation of the Project.

(5) Equipment Plan

1) Basic Policy for Equipment Planning

The plan is to procure and install Information Communication Technology (ICT) equipment, science and mathematics teaching materials, educational furniture, materials production equipment, AV equipment, e-library equipment, and first aid room equipment for the new facilities to be constructed under the Project, as well as for the existing facilities that MoEYS has planned to renovate.

Table 2-7 Equipment Installation Location

Equipment Category	Room(s) for Installation	Condition of Facilities
ICT Equipment	Digital multi-purpose room Laboratory 1-6 Library (for primary and lower secondary teacher training) Auditorium Assembly hall	All facilities are new except for the libraries. The library for lower secondary education has been renovated, while the one for primary education is scheduled to be renovated by MoEYS.
Primary Science Teaching Materials Lower Secondary Physics/ Chemistry/ Biology/ Earth Science Teaching Materials	Laboratory 1-6	New buildings to be constructed by the Project.
Primary Mathematics Teaching Materials Lower Secondary Mathematics Teaching Materials	Digital multi-purpose room	ditto
Educational Furniture	Digital multi-purpose room Laboratory 1-6	ditto

Equipment Category	Room(s) for Installation	Condition of Facilities
Equipment for Developing Teaching Materials	Teaching material development Room (workshop building)	The science laboratory building, constructed through the Grant Assistance for Grassroots Human Security Projects (GGP), is scheduled to be renovated into a workshop by MoEYS.
AV Equipment	Auditorium Assembly hall	New buildings to be constructed by the Project.
E-library Equipment	Library (for primary and lower secondary teacher training)	The library for lower secondary education has been renovated, while the one for primary education is scheduled to be renovated by MoEYS.
First Aid Room Equipment	First aid room	New buildings to be constructed by the Project.

Source: The Survey Team

2) Project Scale for Equipment

Through considerations with MoEYS regarding the equipment plan, the requested equipment was narrowed down by confirming the rationale for each request, its consistency with lecture and practical training experiences at P/BTEC, and future plans (such as teacher training and operation/maintenance plans). Additionally, priorities were assigned to each requested item as follows:

- Priority A: Equipment indispensable for lectures and practical training.
- Priority B: Equipment whose necessity is recognized but requires further consideration during the analysis in Japan. It was agreed with the recipient side that these items may be excluded from the plan depending on the budget.

During the analysis in Japan, the contents of the equipment plan were reviewed based on the assigned priorities utilizing the following selection criteria and reflected in the final plan:

① Items meeting the upstream policies and TEC curriculum
② Items to be used frequently and by a large number of students
③ Items, shortage of which hinder practicum and experiments
④ ICT equipment necessary for education using Digital Technology
⑤ Items for practicum/experiment which are crucial for education using Digital Technology
⑥ Items not overlapping with assistance by other development partners
⑦ Items featuring not overly advanced technology
⑧ Item which is not used for the administrative department

3) Equipment Quantities

Based on the assumption of 30 students per lecture or practical session, the required quantities of equipment are calculated according to their intended use: teacher lectures/demonstrations, group work, or individual work. For science practical, it is assumed that experiments will be conducted by dividing students into 8 groups. For ICT and AV equipment used across various sessions, the required quantities

are determined based on both the number of students and the size of the rooms where they will be installed.

Table 2-8 Policy for Calculating Equipment Quantities

Equipment Category	Number of Students	Number of Groups	Concept / Rationale
ICT Equipment	30-120	2-10	Based on room size and training content
Primary Science Teaching Materials Lower Secondary Physics/ Chemistry/ Biology/ Earth Science Teaching Materials	30	8	The configuration is based on two groups per laboratory table, with 3-4 members per group. In addition, one set for the instructor will be planned.
Primary Mathematics Teaching Materials Lower Secondary Mathematics Teaching Materials	30	8	Each laboratory table will accommodate two groups, with 3 to 4 members per group. An additional set for the instructor will also be provided.
Educational Furniture	30	8	Each laboratory table will accommodate two groups.
Equipment for Developing Teaching Materials	30	8	Each group will consist of 3 to 4 members. One set of power tools will be shared by two groups, while one set of woodworking tools will be provided per group.
AV Equipment	120-600	Not specified	Based on room size
E-library Equipment	Not set	Not set	ditto
First aid room Equipment	Up to 2 persons	Not specified	ditto

Source: Prepared by the Survey Team based on interviews with MoEYS

4) Utilization plan of existing facilities

Within the existing RTTC campus, there is a science laboratory building constructed in 2009 under the Japanese government's GGP, which is still in use. However, the existing facilities and equipment are inadequate to meet the future needs of science education, particularly with the shift toward digitalization. Consequently, it was decided that new science laboratories compatible with digital technology would be developed under the Project.

Meanwhile, although some parts of the existing laboratory building show signs of deterioration, the structure itself remains functional for continued use. Therefore, MoEYS has confirmed its policy to renovate and utilize this building as a teaching material development room (workshop building) at the Cambodian side's expense. Accordingly, the equipment necessary for this teaching material development room is also included in the scope of the Project.

In addition, a request was made for library digitalization equipment for PTTC. In connection with this, it was agreed that the Cambodian side would renovate the existing building into an E-library for

primary teacher training.

During Field survey I, the team explained and confirmed that any change in the use of facilities constructed under the GGP requires the official confirmation and consent of the Japanese government.

2-2-1-2 Policy for Natural Conditions

(1) Climatic Conditions

Kampong Cham city (Kampong Cham province), where the project site is located, has a tropical climate with distinct wet and dry seasons. The wet season lasts for approximately six months from May to October. Temperatures remain high throughout the year, with the monthly average temperature reaching 29°C in April, the hottest month.

To address these hot and humid weather conditions, the facility plan will focus on suppressing temperature increases through solar radiation shielding and thermal insulation. Simultaneously, electrical and mechanical systems will be designed to maintain an indoor environment appropriate for a higher education institution.

(2) Geological Conditions

The foundations for each planned facility will be designed based on the results of the geological and soil investigations at each construction site. It should be noted that many basalt rocks of various sizes are scattered on the surface and underground in the open spaces within the site, which may pose obstacles during construction. Geotechnical investigations will be conducted during the detailed design stage to confirm the distribution of underground rock, thereby aiming to mitigate construction risks.

(3) Flooding

Currently, no gutters or rainwater drainage pipes are installed within RTTC campus, and rainwater falling on the site basically infiltrates naturally into the ground. Through interviews, it was confirmed that while some areas of the site may be temporarily flooded up to approximately 20 cm above ground level during heavy rain, the water infiltrates quickly once the rain stops. Furthermore, there is no history of floor-level flooding inside existing buildings, as their first-floor levels are set 40–50 cm higher than the ground level. However, it was also explained that at PTTC located across the street to the east of RTTC, it takes several hours for rainwater to infiltrate, partly due to the larger paved area relative to the site area. Under the Project, if new buildings are constructed and their surroundings are paved within RTTC campus, it is anticipated that rainwater infiltration after heavy rain will take longer than before, similar to the situation at PTTC. Therefore, to mitigate the risk of flooding for the new buildings after heavy rain, the first-floor level will be set at 1 m above the ground level. Regarding the rainwater drainage plan for the two new buildings, rainwater from the roofs will be collected through drainage pipes and treated by infiltration at the leaching pit to be installed in the low-lying area in the western part of the campus.

(4) Earthquake

Since there is no historical record of earthquakes in Cambodia, seismic loads will not be considered

in the structural design. Furthermore, as there are no specific structural safety standards in Cambodia, the structural design will be conducted in accordance with Japanese standards and specifications.

2-2-1-3 Policy for Socio-economic Conditions

(1) Considerations to Perspectives on Inclusion and Gender

Taking into consideration use by various people including the physically handicapped, the Project incorporates the following points in architectural design:

- Male/female toilets and universal toilets shall be planned on each floor of every building. The number of stalls and fixtures will be determined on the assumption that facility users are equally divided between men and women.
- At the main entrance of the planned facility, a ramp shall be installed to provide access from the exterior to the ground floor level, with a ramp of 1/12.
- In the STEM building, a ramp shall be installed to connect the lower floor to the upper floor, with a ramp of 1/12.
- A first aid shall be provided, not only for users who feel unwell but also as a rest space for staff[12] who are unexpectedly required to bring their children to work, together with their children.

(2) Clearance of Landmine/Unexploded Ordnance (UXO)

In Cambodia, there are lingering concerns regarding unexploded ordnance (UXO) and landmines from the civil war era. According to officials of RTTC, the Cambodian Mine Action Centre (CMAC) had previously conducted a landmine and UXO survey on the campus; however, it was explained that the certificate is currently missing. MoEYS expressed the view that two rounds of landmine and UXO detection/ clearance by CMAC would be required at the proposed construction sites.

- 1st round: Before the start of removal and clearing of rocks and existing structures (including foundations).
- 2nd round: After the removal of rocks and existing buildings/structures (including foundations).

MoEYS conducted the first detection/ clearance at the STEM building and assembly hall building sites in December 2025 and provided the Japanese side with the certificate of completion. Furthermore, it was confirmed during Field Survey II that the Cambodian side, at its own expense, would conduct subsequent clearance at the project site for STEM building, assembly hall building, and leaching pits after the removal of existing buildings/structures and other obstacles within the areas.

[12] At Kampong Cham P/RTTC, there are several students who are raising children, but it is reported that they do not attend classes on campus with their children. On the other hand, faculty members occasionally come to work accompanied by their children, and it has been noted that ensuring privacy during breastfeeding is difficult in such cases

2-2-1-4 Policy for Local Industries of Construction and Procurement

(1) Building Permit

It was confirmed that the building permits and necessary approvals required for the construction of facilities under the Project shall be obtained by the Cambodian side at its own responsibility at each stage when application becomes possible.

(2) Building Standards

In Cambodia, building-related laws equivalent to the Building Standards Act of Japan have not yet been fully established. In particular, regarding design standards such as structural design, it is common to adopt the standards of other countries or international standards. For the Project, an appropriate plan will be developed after reviewing international and foreign standards commonly adopted in Cambodia, as well as Japanese standards and local technical guidelines.

(3) Equipment Procurement

The procurement of the planned equipment for the Project is based on the utilization of local companies. Although there are manufacturers' agents or distributors in Phnom Penh that handle various types of equipment, they do not always guarantee the required product quality. Since many Japanese or third-country manufacturers have established agents in Cambodia, the procurement plan will be formulated to ensure that products from these reliable manufacturers can be procured.

It is assumed that the equipment will be transported to Cambodia by the Japanese or third-country manufacturers, or their agents. After customs clearance, the items will be delivered to the warehouse designated by the Supplier of the equipment. The delivery of the equipment to the project site will be carried out by a delivery company arranged by the Supplier of the equipment or through the Supplier's own delivery system.

2-2-1-5 Policy for Employing Local Firms

(1) Consultants

In Cambodia, while there are several consulting firms with experience collaborating with Japanese and other international consultants, the number of highly skilled engineers capable of meeting high-level technical requirements is limited. For the Project, the policy is to utilize local consultants who possess extensive experience in international projects, including those involving Japan.

(2) Construction Companies

In Cambodia, there are local construction companies with proven track records as main contractors for Grant Assistance for Community Development Projects, as well as sub-contractors for Japanese construction firms in General Grant Aid projects. Additionally, there are electrical and mechanical contractors with experience working under Japanese mechanical and electrical firms. Therefore, it is considered possible to construct facilities while ensuring a certain level of quality, adherence to the construction schedule, and safety by utilizing these local contractors for both architectural, and electrical and mechanical works. The total floor area of the two planned buildings in the Project is approximately

4,032.44 m^2. Given their technical and financial capacities, a single construction company would have no problem constructing both buildings. Consequently, the facility construction for the Project will be planned as a single lot that combines both the facilities and the furniture.

(3) Equipment Suppliers

Considering that the Project adopts the procurement method for the utilization of local companies, the plan assumes that equipment suppliers registered in Cambodia will undertake the procurement. Accordingly, it is expected that the bidding will be participated in by companies capable of providing consistent and comprehensive services—from the delivery of equipment supplied from within Cambodia, Japan, or neighboring countries to the Project site, to their installation, adjustment, trial runs, and initial operational training.

2-2-1-6 Policy for Employing Japanese Firms

Since the Project is based on the procurement of facility construction and equipment through the utilization of local companies, the only Japanese firm directly involved in the Project will be the consultant. The construction work and equipment procurement will be undertaken by companies registered in Cambodia.

However, regarding equipment procurement, there are several agents in Cambodia that can supply products from Japanese manufacturers. For equipment that can be sourced through these agents, the procurement plan will be developed on the premise of locally procuring Japanese manufacturers' products. This approach enables the Project to maintain the policy of utilizing Japanese companies and their technologies within the framework of the local procurement.

2-2-1-7 Policy for Operation and Maintenance

The policies for the operation and maintenance (O&M) of the facilities and equipment provided under the Project are described below.

(1) Buildings

Currently, the Kampong Cham P/RTTC receives an annual school budget through MoEYS, from which it manages facility maintenance costs. Since P/RTTC does not have dedicated technical staff for maintenance, the administrative staff handles O&M by outsourcing the work. Although maintenance funds can be insufficient in certain years—requiring applications for special budgets for large-scale repairs or waiting for the following year's budget allocation— it can be stated that the existing facilities are generally well-maintained, with no facilities becoming unusable due to a lack of maintenance. Daily cleaning is carried out by janitorial staff with the cooperation of student teachers.

As described later, once P/RTTC is upgraded to a college-level institution, it is expected that MoEYS will allocate a college-level budget, including O&M funds, and assign maintenance staff in accordance with the standards of PTEC. Therefore, it is anticipated that the facilities provided under the Project will be maintained in good condition, similar to the existing facilities at the Kampong Cham P/RTTC and those at PTEC. Consequently, a soft component program for facility maintenance is not included in the

Project plan.

(2) Equipment

Most of the equipment planned for the Project has a proven track record of use with similar equipment at P/BTEC. Based on the operational and maintenance status of both existing TECs, KCTEC will formulate its own operational and maintenance plan. As this equipment will be used in interactive classes conducted by PTEC, it is expected that teachers will acquire the necessary skills to operate the equipment through these sessions. To prevent malfunctions caused by incorrect operation, the initial operational training under the Project will provide instructions on daily maintenance to the faculty members in charge of each subject.

Regarding after-sales service after the handing over of equipment, it is assumed that the Cambodian companies acting as the Supplier of equipment will provide necessary support based on their respective service systems, as confirmed during the surveys. Particular attention will be paid to ensuring that the channels for the procurement of consumables and the repair services (including parts replacement) are clearly defined in the handing over documents.

2-2-1-8 Policy for Grade Setting of Buildings and Equipment

(1) Buildings

KCTEC, which will be constructed under the Project, is to be established as the third TEC in Cambodia, following P/BTEC constructed under the preceding project. It is planned to serve as a model school for digitalization and, in the future, as a COE for research in DX within teacher training. Therefore, while using the grade of the preceding projects as a baseline, the design will ensure an appropriate grade for implementing teacher training programmes and a standard suitable for its future vision.

The design will incorporate necessary performance features to maintain a sound and safe learning environment and ensure ease of maintenance, taking into account natural conditions such as high temperatures, high humidity, and the prolonged rainy season, as well as geological and topographical conditions, the surrounding environment, and social circumstances. Each room will be designed with a spatial layout and finishing appropriate for its intended use, and the grade of electrical and mechanical systems will be set at a level necessary to maintain the indoor environment.

Furthermore, regarding the architectural design, including the exterior appearance, the forms and finishes will be harmonized with the local environment, landscape, and future vision. By incorporating aesthetic and design considerations, the Project buildings will also demonstrate the presence and visibility of Japan's Grant Aid programme.

(2) Equipment

As the preceding project provided similar equipment to P/BTEC, and considering that KCTEC is expected to conduct interactive online classes connected with PTEC upon its opening, the equipment for science and mathematics—particularly those used for practical training—will be planned based on the grade procured to PTEC.

Although the Project is implemented as the Grant Aid utilizing local companies, several Japanese manufacturers are able to supply products through agents or distributors registered in Cambodia. Therefore, the plan will include Japanese manufacturers' products, particularly for science and mathematics teaching materials and educational furniture. In cases where it is difficult to include Japanese products, the plan will consider relatively high-quality European or American products that can be procured within Cambodia.

Regarding ICT equipment, the plan will focus on products that are widely distributed in Cambodia and will not require excessively advanced specifications. For AV equipment, since there are local agents that handle Japanese manufacturers' products, the plan will include Japanese manufacturers' products as much as possible.

2-2-1-9 Policy for Methods and Schedule of Construction/Procurement

(1) Buildings

Prior to the commencement of the Project, the Cambodian side is responsible for the demolition and removal of existing buildings, as well as landmine and UXO clearance before and after the demolition. Considering these conditions, along with the fact that construction will take place while KCTEC remains operational on the same premises, it is essential to formulate a comprehensive temporary works plan and a detailed construction schedule (details are provided in "2-2-4-2: Implementation Conditions" and "2-2-4-9: Implementation Schedule").

Furthermore, acknowledging a potential shortage of skilled labor across various trades in Cambodia, the buildings will feature a reinforced concrete (RC) structure—a standard method locally manageable for general workers. For interior and exterior finishes, materials and methods will be selected based on conventional local practices familiar to general laborers. The construction period will be set appropriately, taking into account the involvement of local contractors.

Additionally, to ensure a specific standard of construction safety management even with local contractors, the scope and specifications for temporary fencing and scaffolding will be clearly designated as "Specified Temporary Works" (Designated Temporary Works) in the drawings. By requiring these items to be priced in the Bill of Quantities (BOQ) for bidding and contract purposes, the proper installation of these safety facilities will be guaranteed.

(2) Equipment

Since the equipment for the Project will be procured under the framework for utilizing local companies, the procurement will be undertaken by manufacturers' agents or distributors registered in Cambodia as the Supplier of equipment. Therefore, the plan is based on the premise that all equipment will be procured locally.

At the same time, as the equipment is expected to be products from Japan or third-country manufacturers, the procurement plan and schedule will be established by considering several factors: the period required for equipment manufacturing, transportation to the site, installation works, and instructions, as well as the overall construction schedule of the facilities.

2-2-1-10 Policy for Construction Supervision

The construction works will be supervised according to the design documents (technical specifications and drawings) and a construction supervision plan which stipulates the specific methods of supervision over quality, schedule, safety, and other aspects.

Concerning safety management, the Consultant will refer to "the Guidance for the Management of Safety for Construction Works in Japanese ODA Projects" of JICA to formulate a safety management policy within a scope feasible for local construction companies. Based on this policy, the Consultant will supervise and provide guidance on the contractor's safety measures. Details of the construction supervision plan are described in "2-2-4-4: Consultant Supervision."

2-2-1-11 Policy for Security Management

The Project shall take safety measures in accordance with JICA's safety rules. As of December 2025, all areas of Cambodia, excluding the border regions with Thailand, are categorized as Level 1 (be cautious) according to the overseas safety information provided by the Ministry of Foreign Affairs of Japan.

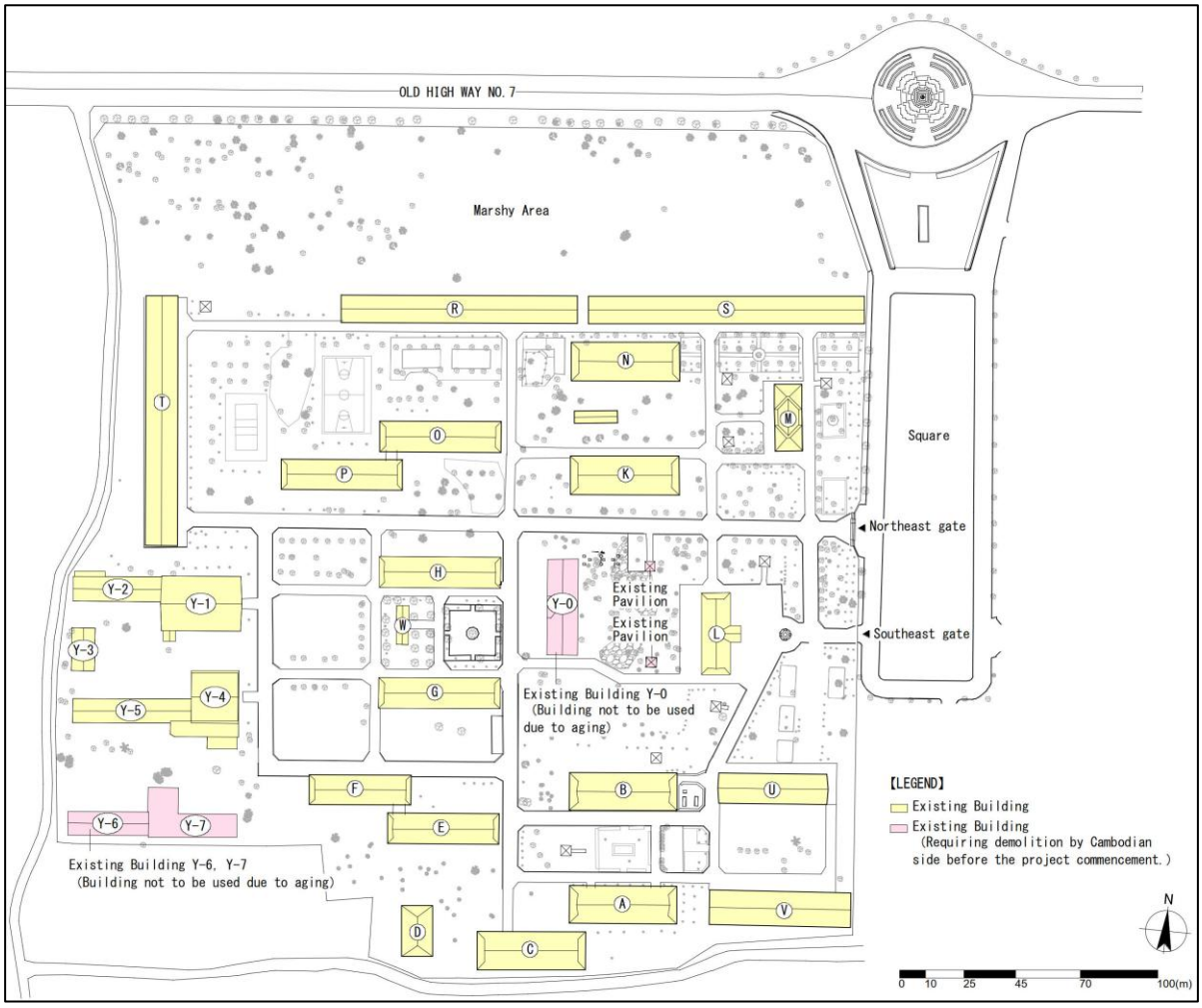
In particular, common crimes such as theft and robbery are on the rise in urban areas. Therefore, all Project members shall strictly implement security measures, including anti-theft precautions, to ensure their safety during the Project period.

2-2-2 Basic Plan (Construction Plan / Equipment Plan)

2-2-2-1 Site / Building Layout Plan

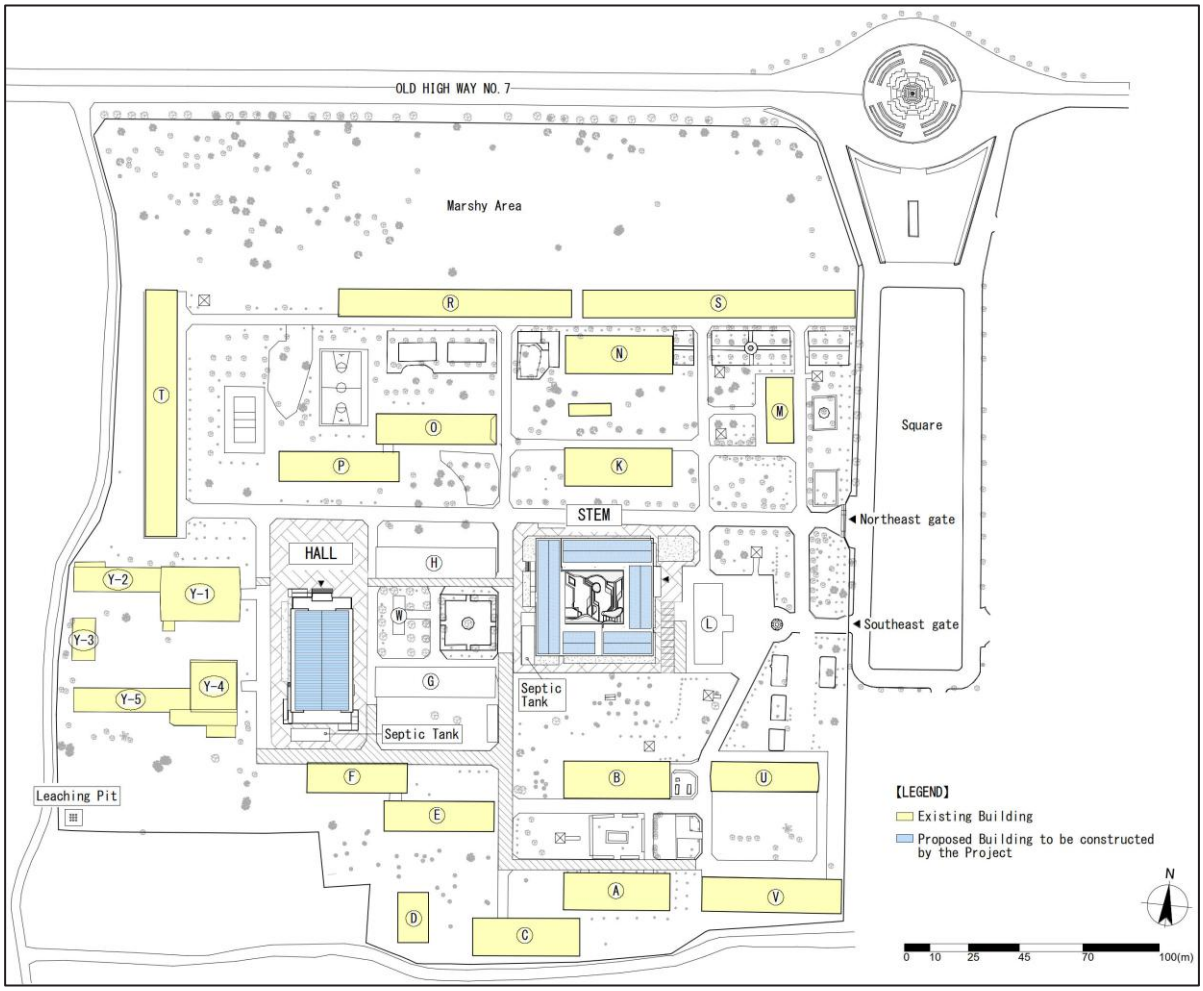
The STEM building will be constructed in the east-central part of the campus, near the current main entrance (Northeast Gate) of RTTC campus, on the site where existing lecture buildings are to be demolished and removed. The assembly hall building will be constructed in the vacant lot in the southwestern part of the same RTTC campus.

The comparison between the current site layout of RTTC and the proposed site layout is shown below.



Source: The Survey Team

Figure 2-2 Current Site Layout of Kampong Cham RTTC



Source: The Survey Team
(Note) This site layout reflects the campus after the implementation of the Project and does not include future plans to be carried out by MoEYS outside the scope of the Project.

Figure 2-3 Proposed Site Layout of KCTEC

2-2-2-2 Architectural Planning

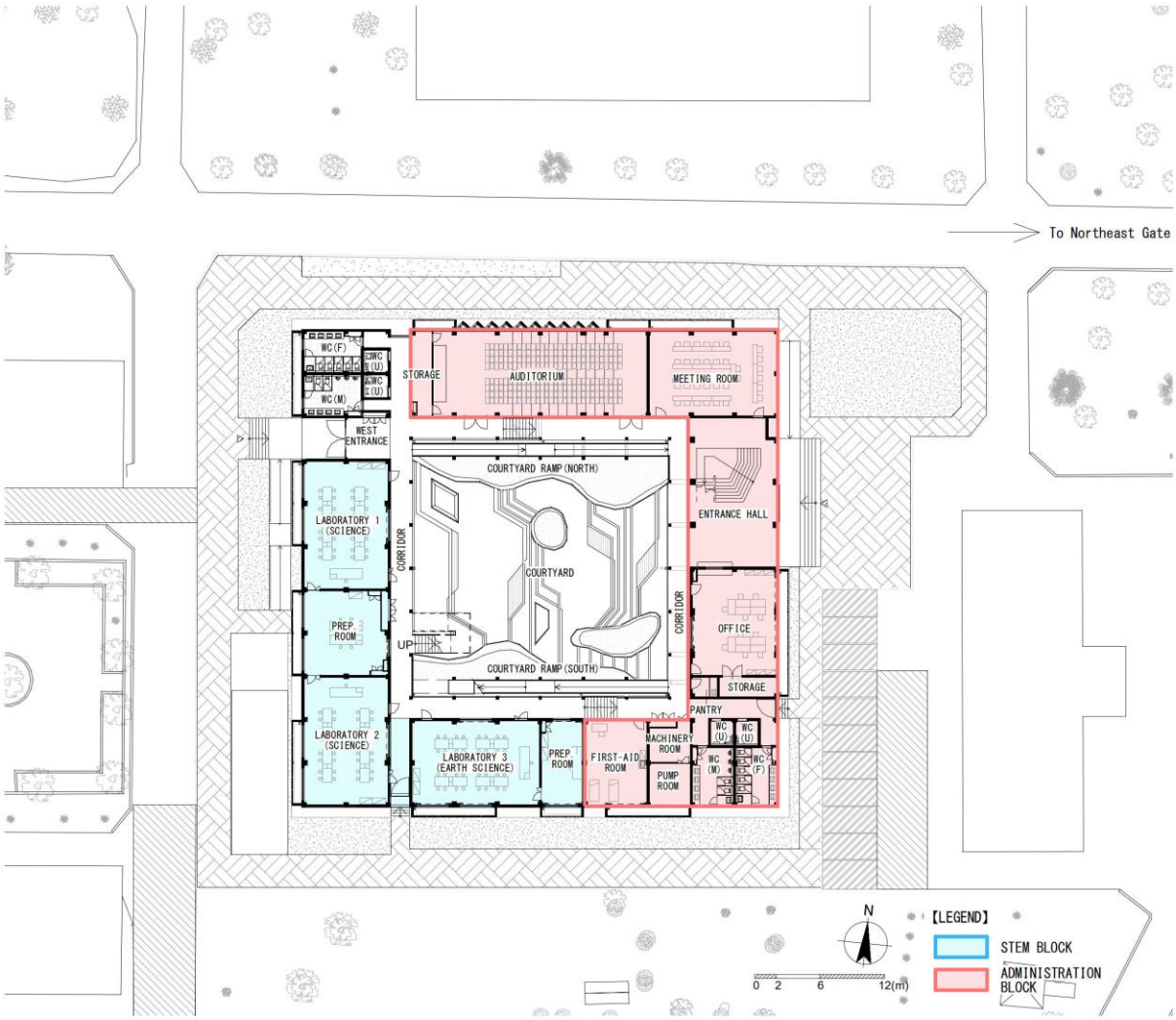
(1) Floor Plan

1) STEM Building

Considering access for external visitors from the east gate of the campus, an "Administration Block" consisting of administrative offices will be located on the eastern side of the STEM building, facing the gate. The entrance hall of the administration block will feature a void to create an open and spacious environment, with bulletin boards installed on the walls to display campus information. Furthermore, sufficient floor space will be ensured to accommodate the flow and temporary stay of people using the meeting rooms and the large lecture hall. Among the administrative offices, the first aid room and other rooms expected to have relatively high visitor traffic will be located on the Mezzanine (MG) floor for the convenience of users.

On the western side, a "STEM Block" consisting mainly of laboratories will be situated, and an entrance primarily for student access to each room in the STEM Block will be installed on the western side of the STEM building. A courtyard will be provided in the center of the STEM building to offer

space for relaxation, social interaction, and events for facility users. Aiming for inclusive facility use, ramps will be provided at the main eastern and western entrances, and a ramp connecting the lower and upper floors will be planned facing the courtyard. As a nighttime security measure for the entire STEM building, including the courtyard, gates with doors will be installed at the building entrances.

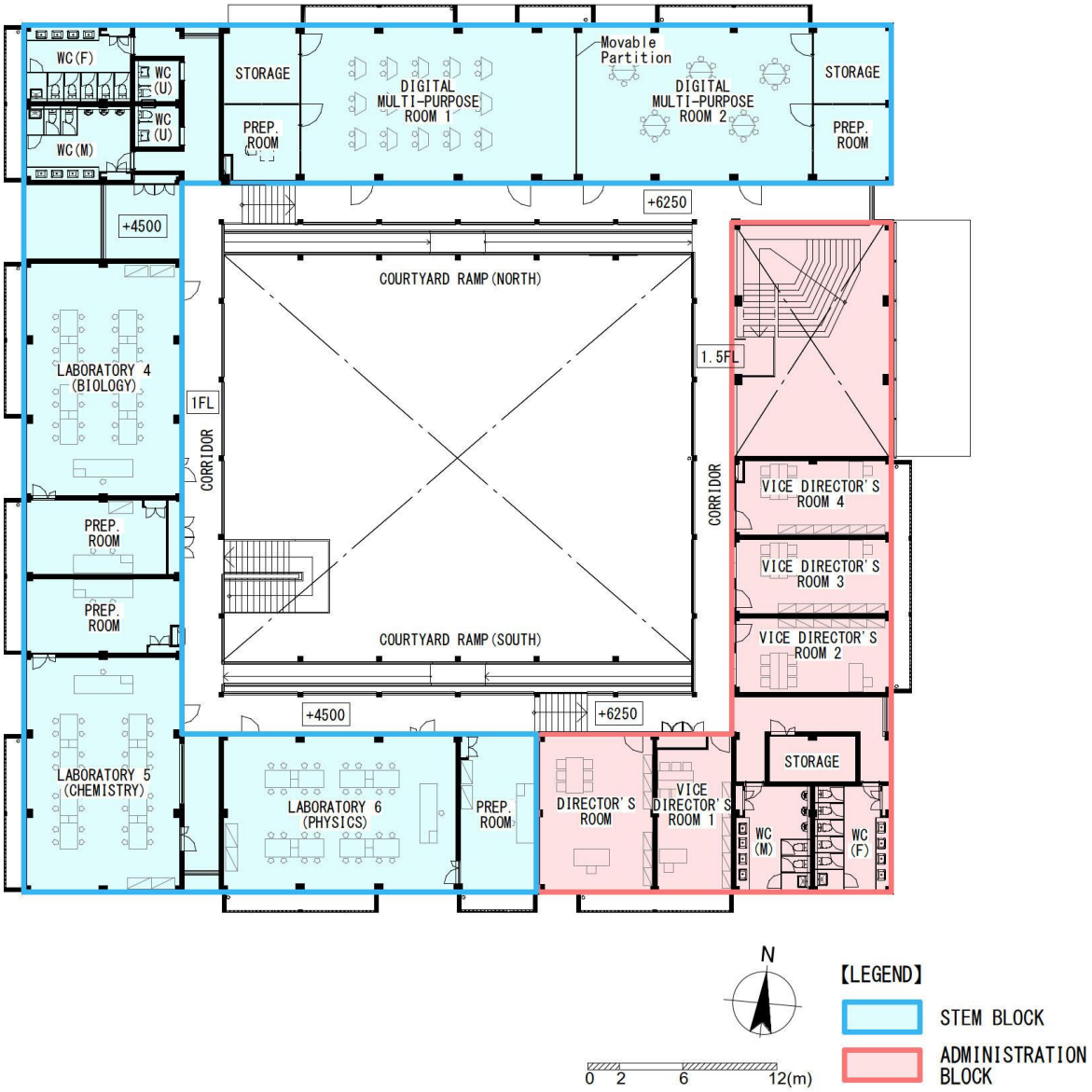


Source: The Survey Team

Figure 2-4 Site Layout and Functional Zoning of the STEM Building

The upper floors of the STEM building will be accessible via stairs and ramps planned in the entrance hall and the inner courtyard. On the western side, the STEM Block will be arranged, centering on laboratories, while the digital multi-purpose room and administrative rooms will be located on the eastern side.

A fixed glass partition will be installed between the digital multi-purpose room and the corridor, allowing visitors and student teachers to observe the classes and activities inside from the corridor.



Source: The Survey Team

Figure 2-5 Functional Layout of the STEM Building (1F and 1.5F)

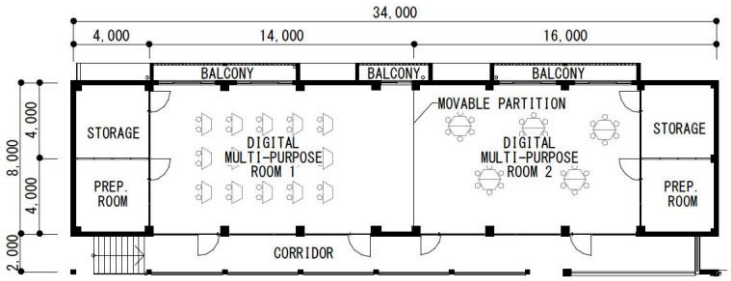
The floor plans for each room in the STEM building are as follows.

① Digital Multi-purpose Room

Two digital multi-purpose rooms will be planned in the STEM building—one for primary teacher training and one for lower secondary teacher training—each with a capacity of 30 people. To flexibly accommodate diverse usage patterns and future functional changes, the layout consists of two rooms (total 208 m², 8m x 26m) that can be integrated into a single space by removing movable partitions. The facility and M&E plan include OA floors (free access floors) to allow for future modifications to the information infrastructure.

A preparation room and a storage (16 m² each) will be attached. The storage is designed with specifications that allow for future conversion into a server room.

Under the equipment plan, desks shaped for various group discussions, single-seater chairs, projectors, and screens will be provided.



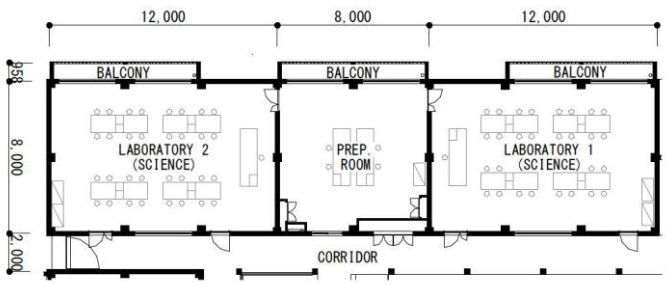
Source: The Survey Team

Figure 2-6 Floor Plan of Digital Multi-purpose Rooms 1 & 2, Preparation Room, and Storage (STEM Building, 1.5F)

② Science Laboratories

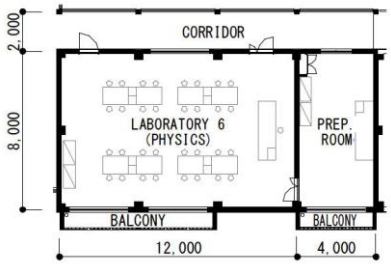
A total of six laboratories will be planned in the STEM building: two science laboratories for primary teacher training, and four specialized laboratories (physics, chemistry, biology, and earth science) for lower secondary teacher training.

Consistent with the previous project, each laboratory will have a capacity of 30 student teachers and a floor area of 96 m² (8m x 12m). To accommodate 30 student teachers for practical training, the equipment plan includes four sets of 8-person laboratory tables, an instructor's demonstration table, and storage cabinets for various equipment. Each laboratory will feature two entrances/exits and be equipped with a projector and screen. Additionally, a preparation room (32 m²) with an instructor's workbench will be attached to each laboratory. Regarding the science laboratories for primary teacher training, a layout will be adopted in which two laboratories share a single centrally located preparation room (64 m²) to ensure efficient equipment management and operations.

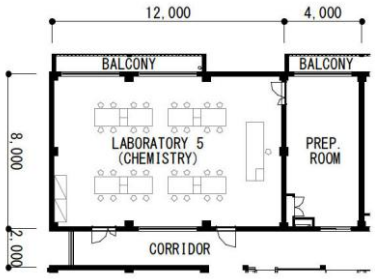


Source: The Survey Team

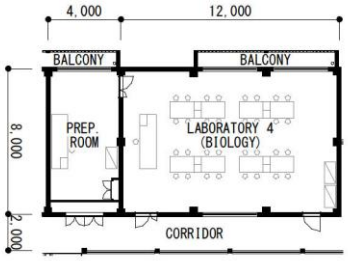
Figure 2-7 Floor Plan of Science Labs and Prep. Rooms (STEM Building, GF)



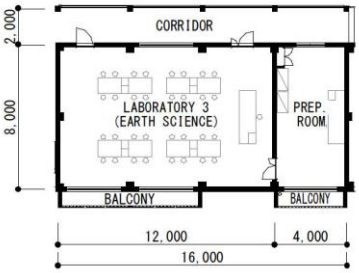
Physics Lab with Prep. Room



Chemistry Lab with Prep. Room



Biology Lab with Prep. Room



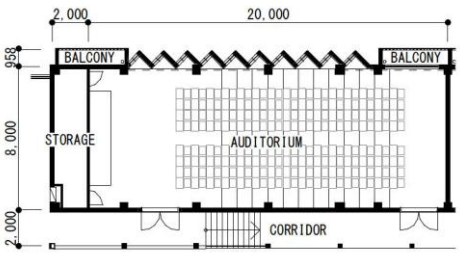
Earth Science Lab with Prep. Room

Source: The Survey Team

Figure 2-8 Floor Plan of Science Labs with Prep. Rooms for Lower Secondary (STEM Building, GF & 1F)

③ Auditorium

An Auditorium will be planned in the STEM building. The room size will be 160 m² (8m x 20m), designed as a tiered (stadium-style) classroom with a capacity of 120 student teachers. Integrated desk-and-chair units specifically for lecture halls will be installed. The room will feature two entrances/exits and an attached storage. In addition to a projector and screen, a large-screen monitor will be installed to facilitate online classes and connection with other TECs.



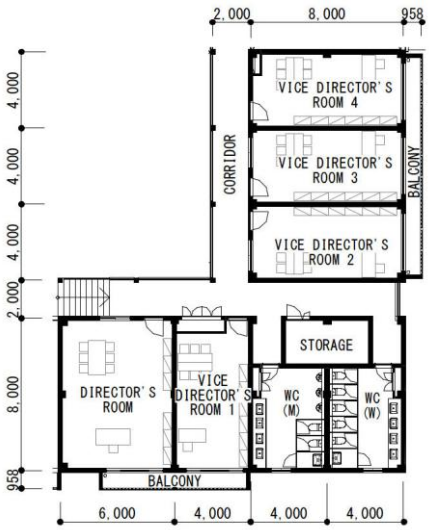
Source: The Survey Team

Figure 2-9 Floor Plan of Auditorium with Storage (STEM Building, GF & MGF)

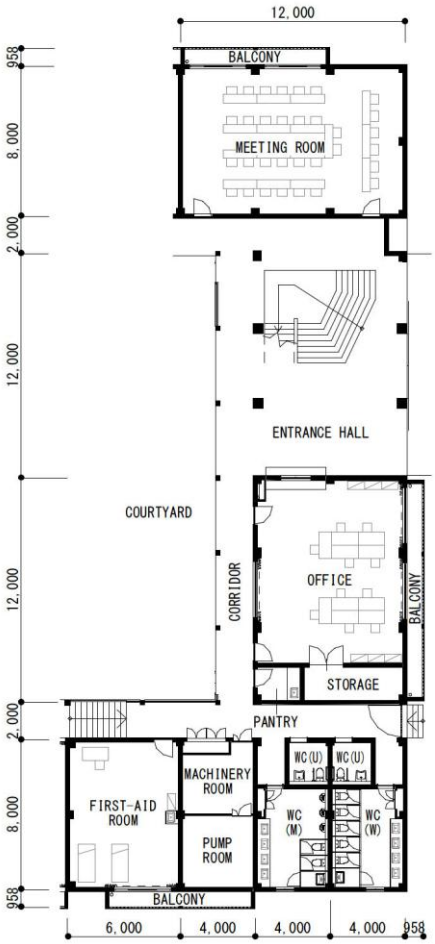
④ Administration Block (STEM Building)

The administration department rooms—including the director's office, deputy director's offices (4 rooms), admin. office with storage, meeting room, first aid room, and pantry—will be planned within the administration block located in the eastern section of the STEM building.

The meeting room will be sized equivalent to the "large meeting room" from the previous project (capacity: 30 people), and the admin. office will provide workspace for 10 staff members. Each room will be furnished with desks, chairs, and steel cabinets, while the first aid room will be equipped with a bed as part of the equipment plan.



（Plan of MGF）



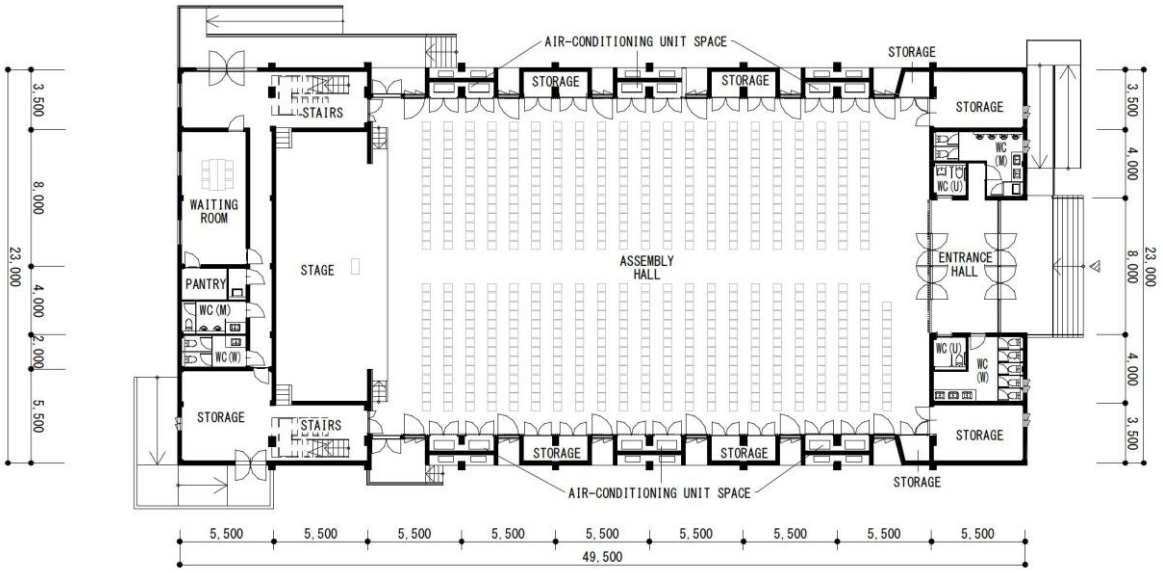
（Plan of 1.5F）

Source: The Survey Team

Figure 2-10 Floor Plan of Admin. Department Block (STEM Building, MGF and 1.5F)

2) Assembly Hall Building

The assembly hall will be designed as a multi-purpose facility equipped for both gatherings and sports. The hall, with a capacity of 600 people, will have a floor area of 33 m x 20 m (660 m^2). For assembly purposes, a stage and waiting rooms will be planned. For sports purposes, volleyball and badminton courts, along with their respective posts, will be provided.



Source: The Survey Team

Figure 2-11 Floor Plan of Assembly Hall (Assembly Hall Building, 1F)

(2) Elevation and Cross-section

- The structures will be based on a two-story building design with gable roofs. To avoid flooding from localized torrential downpours, the floor levels of the GF and MGF will be set at a height of 100 cm above the ground level (STEM building and assembly hall building).
- By installing insulation material beneath the roofing and securing an attic space above the ceiling, both thermal insulation performance and sound insulation against rainfall will be enhanced. (STEM building and assembly hall building).
- To shield the building from the morning and evening sun and to reduce the thermal load on the AC system, balconies and eaves will be strategically placed. Additionally, open-block louvers will be installed on the balconies outside the windows. (STEM building and assembly hall building).
- Taking advantage of the site's topography, which ramps downward toward the west, a skip-floor design will be adopted with a half-story level difference between the Administration Block on the east and the STEM Block on the west, with a courtyard situated in the center of the building. For vertical circulation, in addition to two staircases located in the entrance hall and the courtyard, a ramp with a 1/12 ramp will be installed in the courtyard to connect the upper and lower floors (STEM building).

(3) Structure and Construction Plan

- The design will focus on ease of construction and simple component fabrication, taking into account the technical skill levels of local contractors and laborers.
- The structural system will be a RC rigid frame, with exterior and partition walls consisting of non-structural brick masonry walls.

- The roof structure will employ a steel truss system in consideration of structural rationality, as it includes the long-span framing required for the auditorium and the assembly hall building.
- As a result of structural calculations based on the geotechnical investigation, the design bearing capacity is set at 300kN/㎡, and a direct foundation (isolated footing) will be adopted.
- The design live loads will be based on values compliant with the Building Standards Act of Japan.
- Seismic design loads will not be considered, as there is no historical record of earthquakes in Cambodia.
- The design wind load is estimated at 74.5 mph (equivalent to 34 m/s, which is comparable to Tokyo).
- The primary structural materials are planned as follows:
  - Concrete : Fc 21, Fc 24
  - Reinforcing steel bar（D10-D20） : SD390
  - Structural steel : SS400（Yield stress＝235N/mm^2）
- Ready-mixed concrete is planned to be adopted.
- According to JASS 5, the strength correction factor of reinforced concrete is set as follows.
  - Daily average temperature below 25 degrees Celsius : 3N/mm^2
  - Daily average temperature above 25 degrees Celsius : 6N/mm^2

(4) Electrical and Mechanical System Plan

1) Electrical System

① Electrical Power Receiving System

With the construction of the STEM building and assembly hall building, a new electrical capacity of 300kVA is expected to be required for RTTC. Consequently, it is necessary to install a new transformer with a capacity of at least 500kVA – taking into account the existing, new, and future expansion buildings – and distribute power to each building via the existing Main Distribution Board (MDB) room. Power will then be distributed to each building via the existing MDB room. In the Project, a new MDB will be added to the existing MDB room. Power to the two new buildings will be distributed via underground cables within the campus, while the existing buildings will continue to be supplied using the existing facilities.

Extension of the existing medium-voltage distribution network and the installation of the aforementioned new transformer shall be work to be borne by the recipient side.

Table 2-9 Electrical Power Receiving System

Load Description / Load Name	Load Density (VA/㎡)	Floor Area (㎡)	Load Capacity (kVA)
STEM building			
Lighting and receptacle loads	80	2,960	237
AC and ventilation system	80	2,960	237
Pumps	-	-	5
Fire pump	-	-	5
Subtotal (1)			484
Assembly hall building			
Lighting and receptacle loads	30	1,290	39
AC and Ventilation System	50	1,290	65
Plumbing and sanitary fixtures	-	-	5
Subtotal (2)			109
Total（1）＋（2）			593
Assuming a demand factor of 50%, the estimated load for the new buildings is: 583KVA×0.5＝292KVA Determination of transformer capacity: (292kVA（New）＋150kVA（Existing）)x1.1（10% for future expansion）＝486kVA<500kVA			

Source: The Survey Team

As no automatic voltage regulators (AVR) are installed near the existing campus transformers and the power supply is stable as mentioned above, an AVR will not be included in the Project.

However, for precision equipment (such as desktop computers) that can be affected by even brief outages or minute voltage fluctuations, individual uninterruptible power supplies (UPSs) with voltage stabilization functions will be provided as part of the equipment components.

As stated above, the power supply condition is favorable, and the campus currently lacks both emergency generators and a dedicated maintenance budget for them. Consequently, the necessity for an emergency generator is considered low at this stage, and therefore, it will not be planned for the Project.

② Trunk Cable System

As previously described, power for the Project will be distributed from a transformer installed outside the campus, through the existing MDB room within RTTC, to the new buildings. A new MDB will be added to the existing MDB room as part of the Project, and power will be distributed to the new buildings via underground cables within the campus.

The size of the main feeder cables will be determined based on the load capacity of each connected piece of device/equipment to ensure that voltage drop and allowable current values remain within appropriate ranges. For the wiring method, a cable rack system will be used in principle within shafts, while a conduit wiring system will be adopted for other sections.

Furthermore, to prevent damage from small animals such as rodents, all main feeders and distribution cables will be protected by conduits or cable trunks with covers. The distribution system shall be as follows:

- Main Feeders: 3-phase 4-wire system, 380V/220V

- Single-phase Loads: Single-phase 2-wire system, 220V
- Power Loads: 3-phase 3-wire system,380V

③ Lighting and Power Outlet System

Lighting fixtures for each room will be planned primarily using LED lamps, with consideration for maintenance and running costs. Based on international standards, Japanese Industrial Standards (JIS) average illuminance standards, and the current conditions in Cambodia, the illuminance standards (general illuminance) are set as follows:

Table 2-10 Illuminance of Rooms

Room	Illuminance (lx)
STEM building	
Laboratory, Digital multi-purpose room, Auditorium	500
Office, Meeting room	500
Director's room, Vice-director's room, First aid room, prep. room	400
Entrance Hall, Corridor, Toilet, Pantry	200
Storage, Machinery room	150
Stairs	100
Assembly hall building	
Stage	500
Assembly hall, Waiting room	300
Pantry, Storage, Toilet	200
Stairs	100

Source: The Survey Team

Lighting control will, in principle, be provided for each room, with circuits divided into necessary sub-zones to allow for localized switching.

Power outlets will be planned in the required quantities and locations according to the use, function, and equipment layout of each room and common area. Since the laboratory benches provided under the equipment plan come equipped with built-in outlets, the electrical work will cover the piping and wiring (stub-up) to the bench positions. Furthermore, for the digital multi-purpose room, piping and wiring will be installed within the raised access floor (OA floor) to allow for power supply from the floor, accommodating future changes in layout or usage.

④ Telecommunication System

RTTC currently has two fiber-optic lines drawn from a telecommunications provider (ISP) via the southern road outside the campus. These lines are distributed to each building via aerial wiring through fiber termination boxes, media converters, and switching hubs located in the Administrative Building.

The communication speed is approximately 80 Mbps (downlink) and 90 Mbps (uplink), showing high stability.

In the Project, fiber-optic cables will be laid from the Administrative Building to the two new buildings, utilizing the existing on-site ICT infrastructure and provider. While the current communication speed is stable and sufficient capacity is secured including backup lines, the project will also install empty conduits to accommodate future expansion of fiber-optic lines. This considers KCTEC's role as a model school for digitalization and its future vision as a COE for DX teacher training. Additionally, LAN cable piping and wiring will be installed to establish both wired LAN and Wi-Fi environments within the buildings.

As mobile phones are the primary means of communication on campus and landline telephones are not in use, no telephone system installation work will be planned in the Project.

⑤ Public Address (PA) and AV Systems

Since public address (PA) services and emergency broadcasting are not currently utilized within the existing campus, no PA system will be planned for the Project.

Regarding the sound system, the audio equipment will be procured under the equipment plan, while the building electrical work will cover the provision of power supplies and conduits.

⑥ Fire Alarm System / Automatic Fire Alarm System

Based on interviews with the local police and fire departments, it was found that while fire safety regulations are currently being developed, the specific fire-fighting equipment requirements for the planned facilities remain unclear.

For the Project, with the objectives of early fire detection, notification, and evacuation, and in accordance with precedent projects and Japanese Fire Service Act regulations, smoke or heat detectors will be installed in rooms where fire usage is anticipated (laboratories, preparation rooms, and pantries).

Wiring to the fire alarm terminal box (Integrated Panel) will be implemented using synthetic resin conduits, fire-resistant cables, and alarm cables. The integrated panel will be installed in the administration office.

⑦ Lightning Protection System

A lightning protection system (LPS) will be installed to protect the entire building from direct lightning strikes and internal lightning surges, thereby preventing structural damage and the failure of electronic equipment. The lightning protection components and devices will be planned in accordance with the standards locally adopted in the region.

⑧ Security System

To prevent the intrusion of unauthorized persons and the theft of equipment, security cameras will be installed at key locations throughout the planned facilities. A network-based camera system will be adopted, with video recorded on a cloud server and accessible via PCs or mobile devices. In addition, recording Hard Disc Drives (HDD) and monitoring displays will be installed in administrative rooms

(director's office and administration office).

2) Mechanical System

① Water Supply System

The water main (110 mm ϕ) is installed under the perimeter roads of the existing campus. Through interviews with the Water Supply Authority, it was confirmed that there are no water outages throughout the year and the water pressure is stable at 4 Bar (0.4 MPa).

As the existing campus already has two water service connections, the Water Supply Authority does not grant permission for a new connection. Therefore, the Project plans to branch off from the existing service pipe located on the west road outside RTTC, which is currently dedicated to the student dormitory, to supply water to the two new buildings. In consideration of initial and running costs, a direct-connection water supply system will be adopted.

Furthermore, based on the curriculum for the laboratories in the STEM building, the water consumption will be calculated assuming an occupancy rate (utility rate) of 60%.

Calculation of Water Demand

STEM building Number of Users =	Student teachers : Occupancy capacity 360 persons × 60% (Utility Rate)	=216 persons
	Faculty and staff :	=56 persons
Assembly hall building Number of Users =	Occupancy capacity	=600 persons

Unit Water Demand

The water consumption is typically set at 70–100 L/person/day for school buildings (student teachers, faculty and staff) and 25 L/person/day for the Assembly Hall (occupants) based on the unit water demand by building type from the "Society of Heating, AC system and Sanitary Engineers of Japan". However, considering that actual water usage in Cambodia is lower than in Japan due to factors such as the common use of bottled water for drinking, the unit water demand for the Project is set as follows:

Calculation of Daily Water Consumption per Person

STEM building	Student teachers : 70L/person/day x70%	=49L/L/person/day
	Faculty and staff : 70L/(day, person)x70%	=49L /person/day
Assembly hall building	Occupancy capacity : 25L/ /person/day x70%=	= 18L//person/day

Daily Water Consumption

STEM building	Student teachers: 216 persons × 49 L/person/day + Staff: 56 persons × 49 L/person/day	=13,328 L/day
Assembly hall building	Occupancy: 600 persons × 18 L/person/day	=10,800 L/day
	Total	24,128L/day ➔ 25 ㎥/day

② Drainage Systems

Public sewerage lines are installed under the road to the north of the existing P/RTTC (former National Road 7) and the road to the east of PTTC. However, since the existing campus terrain slopes downward toward the southwest, natural gravity flow to the public sewer cannot be achieved even if the drainage pipes from the two planned buildings are extended with a proper gradient.

Therefore, similar to the drainage treatment method used for existing buildings, the Project plans to treat sewage and wastewater in on-site septic tanks. Only the treated supernatant will then overflow into adjacent soak pits to be infiltrated into the ground.

Daily Wastewater Discharge

The daily wastewater discharge is assumed to be equivalent to the daily water supply, as detailed below.

STEM building : 13,328 L/day → 13 ㎥/day

Assembly hall building : 10.800 L/day→ 11 ㎥/day

③ Sanitary Fixtures and Appliances

Toilets for males, females, and wheelchair-accessible toilets (universal toilets) will be installed on each floor of the two new buildings. Western-style water closets (WCs) will be adopted, and hand-held bidet sprays will be provided in accordance with local customs. Additionally, a sink will be installed in the first aid room.

④ AC Systems

AC systems will be installed in all rooms of the STEM building and the assembly hall building. The systems will basically consist of package-type air conditioners that allow for individual operation and control in each room. Regarding the specifications of the indoor units, the STEM building will utilize ceiling-mounted cassette types (4-way blow), while the assembly hall building will utilize floor-standing types. (In the assembly hall, these will be installed within compartments with wooden louver doors to protect the units from balls and other objects.)

Design Indoor Temperature (Cooling)

The outdoor design conditions for the Project will be based on the values for Ho Chi Minh City, Vietnam—the closest location listed by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). In addition, an indoor design temperature (cooling) of 26℃ will

be adopted.

- Dry Bulb Temperature 34.9℃
- Mean Coincident Wet Bulb Temperature 25.7℃

⑤ Ventilation Systems

Mechanical ventilation systems will be installed in specific rooms to remove odors, exhaust heat, and moisture. The design criteria for the ventilation systems applied to the Project are shown in the table below.

Table 2-11 Design Conditions for Ventilation Systems

Room Name	Ventilation Type	Unit Ventilation Volume	Remarks
Laboratory	Exhaust fan only	10 times /h	Emergency: Safety and hazardous substance removal
	Exhaust fan and fresh air intake	$30m^2$/person/h	Normal operation
Digital multi-purpose room	Supply fan with pre-filter	$30m^2$/person/h	To introduce fresh air
Storage	Exhaust fan only	5 times /h	-
Toilet	Exhaust fan only	10 times /h	To remove odors

Source: The Survey Team

⑥ Fire Protection System

As there are no clear fire protection regulations in Cambodia, Fire Protection Systems for the STEM building will be designed in accordance with the Fire Service Act of Japan. The system will include indoor fire hydrants, fire pumps, a fire water tank (pit), and a jockey pump. Indoor fire hydrants will be strategically located to ensure full coverage of the protected areas, within a 25m radius from the discharge outlet and a 37m hose extension distance. Furthermore, fire extinguishers effective for initial fire suppression will be provided based on the building's use and scale.

Table 2-12 M & E Specifications

Building	Room	Water Supply System	Drainage System	Air Conditioning System	Ventilation System	Ceiling Fan	Lighting	Socket-outlet	Telephone System	LAN	Wifi	AV System	Television Master Antenna	Emergency Exit Light	Smoke/ Heat Detector
STEM Bldg.	Science Lab	●	●	●	●	N/A	●	●	N/A	●	●		N/A		●
	Physics Lab	●	●	●	●		●	●		●	●				●
	Chemistry Lab	●	●	●	●		●	●		●	●				●
	Biology Lab	●	●	●	●		●	●		●	●				●
	Earth Science Lab	●	●	●	●		●	●		●	●				●
	Prep. Room for Labs.	●	●	●	●		●	●		●					●
	Digital Multi-purpose Room			●	●		●	●		●	●				
	Prep. Room for DMR				●		●	●		●	●				
	Auditorium			●			●	●		●	●	●		●	
	Director's Room			●			●	●		●	●				
	Vice-Director's Room			●			●	●		●	●				
	Office			●			●	●		●	●				
	Meeting Room			●			●	●			●				
	First Aid Room	●		●	●		●	●			●				
	Pantory	●	●		●		●	●			●				●
Assembly Hall Bldg.	Assembly hall			●			●	●			●	●		●	
	Stage			●			●	●		●					
	Waiting Room			●	●		●	●		●	●				
	Pantory	●	●		●		●	●							●
Common	Toilet	●	●		●		●	●							
	Storage				●		●	●							

Source: The Survey Team

(5) Construction Materials

The facilities to be newly constructed in the Project are designed, in principle, with specifications that allow for the use of construction materials and equipment available locally. The construction material plan for the Project is shown below.

Table 2-13 Construction Materials List

Position \ Building	STEM building	Assembly hall building
Main structure		
Number of Floors	2 floors	1 floor (partially 2 floors)
Roof	Steel roof trusses	Steel beam structure
Wall	Brick masonry	Same as the left
Column Beam	Reinforced concrete	Same as the left
Foundation	Direct foundation	Same as the left
Exterior finish		
Roof	Cement tile roofing	Standing seam metal roofing
Wall	Mortar base, paint finish	Same as the left
Door/ Window	Aluminum windows and steel Doors	Same as the left
Floor	Floor tiles	Same as the left

Position \ Building	STEM building	Assembly hall building
Interior finish		
Ceiling (exposed structural ceiling)	Concrete surface repair and paint finish	Same as the left
Ceiling (suspended ceiling)	T-bar grid ceiling rock wool acoustic panels	Glass wool board
Wall	Mortar base, paint finish	Decorative plywood
Wall (toilets)	Ceramic tiling	Same as the left
Doors and windows	Aluminum windows, and steel or wooden doors	Same as the left
Floor	Floor ceramic tiles, raised access floor with carpet tiles, cast-in-situ terrazzo	Hall: Resin flooring Stage: Resin flooring1st floor Others: Ceramic tiling 2nd Floor: Mortar finish
Floor (Toilets)	Ceramic tiling	Same as on the left

Source: The Survey Team

(6) External Works, Removal of Existing Structures

The following removal of existing structures and external works will be implemented. There is no plan for land reclamation or site preparation works.

- For the installation of the temporary construction gate, the existing wall will be demolished and later restored.
- Rainwater from the roofs of the planned facilities will be collected through gutters, catch basins, and underground pipes, then directed into a rainwater leaching pit in the low-lying western part of the campus for infiltration.
- Interlocking block pavement will be used for the walkways surrounding the planned facilities.
- Solar-powered LED streetlights will be installed around the exterior of the planned facilities to ensure campus security at night. To reduce the future maintenance burden and prevent any impact on other electrical systems in the event of a failure, standalone units that are not connected to other wiring systems will be provided.
- The courtyard of the STEM building will be designed to utilize the natural slope of the site and accommodate events. It will be equipped with walkways, stairs, landscaped areas, power outlets, and garden lights.

(7) Furniture and Other Fixtures

1) Furniture

Furniture planned for the Project are as follows.

Table 2-14 Furniture List

Building	Name of Room	Furniture Provided by Architectural Work Q'ty per room	Remarks (Equipment Procurement)
STEM Bldg.	Digital multi-purpose room (DMR)	—	Desks and chairs
	Science lab	—	Lab tables, chairs, and cabinets
	Physics lab	—	ditto
	Chemistry lab	—	ditto
	Biology lab	—	ditto
	Earth science lab	—	ditto
	Prep room for labradorites	—	Lab tables, chairs, and cabinets
	Prep room for digital multi-purpose room	—	—
	Auditorium	Desks and chairs (4-seater x 30)	—
	Meeting room	Meeting tables (16), Chairs (32)	—
	Director's room	Desk and chair (1), Double-door cabinets (4), Glass-door cabinets (2), Meeting table (1), Meeting chairs (6)	—
	Vice director's room	Desks and chairs (4), Desk wagons (4), Double-door cabinets (12), Glass-door cabinets (12), Meeting tables (8), Chairs (24)	—
	Office	Desks and chairs (10), Desk wagons (10), Open cabinets (2), Double-door cabinets (2), Glass-door cabinets (2)	—
	First aid room	Office desk and chair (1), Desk wagon (1), Glass-door cabinet (1)	Bed
Assembly Hall Bldg.	Assembly Hall and Stage	Lectern (1), Chairs (600), Chair storage carts (20)	—
	Waiting room	Tables (2), Chairs (6)	—

Source: The Survey Team

2) Whiteboards and Bulletin Boards

Whiteboards will be installed at the front of the laboratories and auditorium. In addition, bulletin boards will be installed in the entrance/entrance halls of both buildings, the laboratories in the STEM building, the rear of the auditorium, and the waiting room in the assembly hall building.

3) Sign and Pictogram

Building information signage will be installed near the entrance of each building, and room nameplates will be placed at the entrance of each room. Additionally, emergency evacuation signs for corridors and pictogram signs for toilets and stairs will be provided.

4) Project Plaque, etc.

In the Project, a total of two project plaques will be installed, with one for each building. In addition, a sticker of the Japanese national flag (Nisshoki) will be affixed to each individual item of furniture.

2-2-2-3 Equipment Plan

The equipment to be procured under the Project is intended for teacher training to be conducted at KCTEC and will be installed both in the new facilities to be constructed through Grant Aid and the existing facilities planned for renovation by MoEYS. Regarding the conditions in the installation site, there are no topographical or environmental concerns that would hinder the delivery and installation of the equipment. Furthermore, the utilities required for the equipment to be installed in the new facilities will be provided by the Japanese side, while the utilities in the already renovated lower secondary library are of sufficient capacity for installation. For the facilities scheduled for renovation, utility works will be carried out on the premise that the planned equipment will be installed.

The requested equipment list was finalized based on the selection criteria for verifying the validity of the requested items and the following checkpoints:

- Whether the necessity and appropriateness of the planned equipment are recognized.
- Whether reconsideration is required in light of usage frequency and cost-effectiveness.
- Whether alternative methods are available, or whether the equipment could be purchased independently by own budget in the future.
- Whether competitiveness in the bidding process can be ensured.

The equipment specifications were aligned with those of P/BTEC, which have previously been equipped with similar items. They have been determined based on perspectives such as the experience of use in teacher training at both TECs, cost-effectiveness, operation and maintenance, and the assurance of competitiveness in the bidding process, with the assumption that the products will be procured in accordance with the local procurement conditions in Cambodia. Based on the results of the considerations and scrutiny, the planned equipment list has been formulated. The major equipment items are shown below:

Table 2-15 Major equipment list

Code No.	Equipment Name	Country of Procurement	Country of Origin	Specifications	Q'ty	Purpose of use
11	Server	Cambodia	China	Composition: Main unit x1 Main unit: Type: Rack mounted type Mother board: Dual port 1Gb Ethernet (on board, LOM or equivalent) Chassis: 2U Processor: Intel Xeon Silver 4509Y 32GB Memory: 16GB DDRS, 5,200MT/s Storage card: HWRAID 1, 2 x M.2 NVMe SSDs/USB without RAID or equivalent RAIDC: 3, 2HDD/SSD RAID 1 Storage: SATA HD 16TB Hard drive or more Power supply unit: Dual, hot-pluggable(1＋1), 600W Power cable: 1 unit Embedded systems management: iDRAC9(Rails)	2	For practical training and for lectures at a teacher education college

Code No.	Equipment Name	Country of Procurement	Country of Origin	Specifications	Q'ty	Purpose of use
				Bezel: Available Client Access License: WindowsServer 2022/2019 User CAL,5-pack Server rack: Equipped		
62	Instrument set for electrical current and magnetic field	Cambodia	Japan	Composition: Magetizing coil x1, Induction coil x1, Crookes tube x1, Cross vacuum gauge x1, Discharge tube x1, Variable autotransformer x1, Electric motor x1, Electromagnet x1, Study kit for electrical circuits x1, Electrostatic generator x1, Magent set x1, Wire with clips x10, Accessories x1 Accessories: Manufacturer's standard	1	For practical training and for lectures at a teacher education college
73	Glass tool set for chemistry	Cambodia	Japan, China, Germany	Composition：beakers (4 types) x16, Erlenmeyer flask (4 types) x16, Round-bottom flask (2 types) x16, Round-bottom distillation flask x16, Petri dish x16, Graduated cylinder (2 types) x16、Test tube x8, Pipette x16, Gas collection bottle x8, Funnel x16, Stirring rod x8, Glass tube x8, L-shaped glass tube x8, Liebig condenser set x8	1	For practical training and for lectures at a teacher education college
146	Projector for Assembly Hall	Cambodia	China	Composition: Main unit x1, Remote controller x1, Accessories x1 Main unit: 1) Projector Type: Short focus DLP Projector Maximum brightness: 4,000 Lumens or more 2) Screen Size: 250 inches 16：9 or 16：10 Type: Electric lifting type Remote controller: Installed remote control switch near system rack or equipped wireless remote controller Accessories: Manufacturer's standard	1	For practical training and for lectures at a teacher education college
147	Sound equipment set for Assembly hall	Cambodia	Japan, USA, German, China	Composition: Hand-held Wireless Microphone x2, Lavaliere Wireless Microphone x2, Wireless Tuner set x1, Rack mount clasp set x2, Wireless antenna divider x1, Rack mount clasp x1, UHF Wireless Antenna x2, Hand-held Dynamic Microphone x2, Microphone Stand (Table-top type) x2, Microphone Stand (Floor type) x2,Digital Stereo Mixer x1, Power Amplifier (for main speaker) x1, Power Amplifier (for back speaker) x1, Power Amplifier (for FB/Monitor) x1, Line Array Speaker x2, Back speaker x2, Stage FB speaker x1, Rack monitor speaker x1, Speaker Stand x1, System Rack x1, Power Supply Switch Unit x1, Stage connection box x1, Connection panel (System rack) x1, Microphone cable x4, HDMI cable x1, Installation materials x1 1) Hand-held Wireless Microphone: 2units Receiving frequency: 48KHz、frequency selectable type (30ch) 2) Lavaliere Wireless Microphone: 2units Receiving frequency: 48KHz、frequency selectable type (30ch or more)	1	For practical training and for lectures at a teacher education college

Code No.	Equipment Name	Country of Procurement	Country of Origin	Specifications	Q'ty	Purpose of use
				3) Wireless Tuner set: 1 unit ① Wireless Tuner：4Units ② Wireless Tuner：4Units ③ Rack mount clasp set：2 sets ④ Wireless antenna divider：1 unit ⑤ Rack mount clasp：1set 4) UHF Wireless Antenna Type: Wall-mount type dipole antenna or wideband flat panel antenna 5) Hand-held Dynamic Microphone：2 units Type：Dynamic, Frequency response：70～16,000Hz 6) Microphone Stand (Table-top type)）：2 units 7) Microphone Stand (Floor type)：2 units 8) Digital Stereo Mixer：1 unit Channel for input：16ch, Channel for output：8ch 9) Power Amplifier (for main speaker)：1unit Output:500W(8Ω)/ch, Frequency response：20～20,000Hz(±1dB) 10) Power Amplifier (for back speaker)：1unit Output : 300W(8Ω)/ch, Frequency response：20～20,000Hz(±1dB) 11) Power Amplifier (for FB/Monitor)：1unit Output : 300W(8Ω)/ch, Frequency response：20～20,000Hz(±1dB) 12) Line Array Speaker: 2 units Frequency response: 50～20,000Hz, Power handling capacity: 350W		

Source: The Survey Team

The planned equipment list is as follows.

Table 2-16 Planned equipment list

No.	Equipment Name	Q'ty	Unit
1	Laptop computer	94	sets
2	Cart for laptop computer	10	sets
3	Interactive flat panel	3	sets
4	Monitor	20	sets
5	Projector	8	sets
6	Screen	1	set
7	Multi-function inkjet printer	2	sets
8	Document camera	2	sets
9	3D scanner	2	sets
10	3D printer	2	sets
11	Server	2	sets
12	Web camera	8	sets
13	Sound equipment	8	sets

No.	Equipment Name	Q'ty	Unit
14	Electronic balance A	20	sets
15	DC ammeter	20	sets
16	Digital multimeter	10	sets
17	DC voltmeter	20	sets
18	Magnetizing coil	2	sets
19	Astronomical telescope	2	sets
20	Binoculars	18	sets
21	Pendulum apparatus	18	sets
22	Instrument shelter	1	set
23	Experimental lever	18	sets
24	Air extraction kit	18	sets
25	Monocular microscope	31	sets
26	Binocular stereomicroscope	31	sets
27	Chemical locker	1	set
28	Iron support	18	sets
29	DC power supply	18	sets
30	Specimen set	2	sets
31	Arm joint model	2	sets
32	Skelton model of human body	1	set
33	Anatomical model of human body	1	set
34	Eyeball model	1	set
35	Ear model	1	set
36	Glass tool set	2	sets
37	Experimental tool set	2	sets
38	Digital thermometer A	20	sets
39	Protection material set	2	sets
40	Pulley A	10	sets
41	pH meter A	18	sets
42	Dissection instrument set	18	sets
43	Calculation practice card for demonstration	1	set
44	Number line sheet	1	set
45	Explanation kit for superficial measure of triangle and tetragon	1	set
46	Weight set	1	set
47	Explanation kit for polygon	1	set
48	Explanation kit for sum of the internal angles	1	set
49	Diagram congruity model	9	sets
50	Study kit for volume	9	sets

No.	Equipment Name	Q'ty	Unit
51	Liter square/measure	9	sets
52	Experimental apparatus of slope	9	sets
53	Dynamic movement apparatus	1	set
54	Pulley B	1	set
55	Experimental lever	9	sets
56	Vacuum apparatus set	1	set
57	Experimental apparatus for dynamics (slope)	1	set
58	Optical bench and experimental apparatus	1	set
59	School Oscilloscope	1	set
60	Primary and secondary coils	9	sets
61	DC AC power supply	9	sets
62	Instrument set for electrical current and magnetic field	1	set
63	Collision balls	1	set
64	Experimental apparatus for energy conversion	1	set
65	Timer ticker	9	sets
66	Digital thermometer B	10	sets
67	Protection material set	2	sets
68	Electronic balance B	10	sets
69	Precision balance A	9	sets
70	Chemical locker	2	sets
71	Refrigerator-Freezer	1	set
72	Iron support	9	sets
73	Glass tool set for chemistry	1	set
74	Experimental tool set	1	set
75	Protection material set	1	set
76	Distillator	1	set
77	Mendel's laws experiment machine	9	sets
78	Monocular microscope	31	sets
79	Binocular stereomicroscope	31	sets
80	Magnifying mirror with polarization	9	sets
81	Digital camera system for microscope	1	set
82	Microscope cabinet	4	sets
83	Laboratory wagon	2	sets
84	Magnifier for field	1	set
85	Skelton of vertebrates	1	set
86	Anatomy of (in)vertebrate specimens	1	set
87	Cell division model	1	set

No.	Equipment Name	Q'ty	Unit
88	Skelton and organ structure model set A	1	set
89	Stick thermometer A	10	sets
90	Digital thermometer C	10	sets
91	Precision balance B	10	sets
92	Scale balance	10	sets
93	Protection material set	2	sets
94	Tripartite model	1	set
95	Transparent celestial globe	1	set
96	Moon phase model	1	set
97	Rain gauge	1	set
98	Specimens set of rock, mineral and fossil	1	set
99	Astronomical telescope	2	sets
100	pH meter B	1	set
101	Soil moisture meter	1	set
102	Stick thermometer B	10	sets
103	Digital thermometer D	10	sets
104	Glass tool set	1	set
105	Development model of formula	2	sets
106	Diagram congruity model	9	sets
107	Plane parallel study apparatus	9	sets
108	Solid model	9	sets
109	Three dimensional model	9	sets
110	Pythagorean theorem experiment kit	9	sets
111	Laboratory table for student	8	sets
112	Laboratory table for teacher	2	sets
113	Laboratory table for preparation room	1	set
114	Laboratory table (Physics) for student	4	sets
115	Laboratory table (Physics) for lecturer	1	set
116	Laboratory table (Chemistry) for student	4	sets
117	Laboratory table (Chemistry) for lecturer	1	set
118	Laboratory table (Biology) for student	4	sets
119	Laboratory table (Biology) for lecturer	1	set
120	Laboratory table (Earth Science) for student	4	sets
121	Laboratory table (Earth Science) for lecturer	1	set
122	Stool A	192	sets
123	Chair	6	sets
124	Desk for student	60	sets

No.	Equipment Name	Q'ty	Unit
125	Desk for lecturer	2	sets
126	Chair for student	60	sets
127	Chair for lecturer	2	sets
128	Whiteboard	12	sets
129	Cabinet set	33	sets
130	Electric saw	4	sets
131	Electric jig saw	4	sets
132	Bench-top drilling machine	4	sets
133	Belt sander	4	sets
134	Safety glass	32	sets
135	Apron	32	sets
136	Manual wind cord reel	4	sets
137	Wood work tool	8	sets
138	Worktable	4	sets
139	Stool for workshop B	32	sets
140	Desk and chair set for lecturer	1	set
141	Cabinet	2	sets
142	Projector for Auditorium	1	set
143	Sound equipment set for Auditorium	1	set
144	Interactive flat panel for Auditorium	1	set
145	Monitor for Auditorium	2	sets
146	Projector for Assembly hall	1	set
147	Sound equipment set for Assembly hall	1	set
148	Desktop computer	10	sets
149	Computer desk and chair set	10	sets
150	Multi-function printer	2	sets
151	Book scanner	2	sets
152	Barcode reader	2	sets
153	Equipment for first aid	1	set
154	AED	1	set

Source: The Survey Team

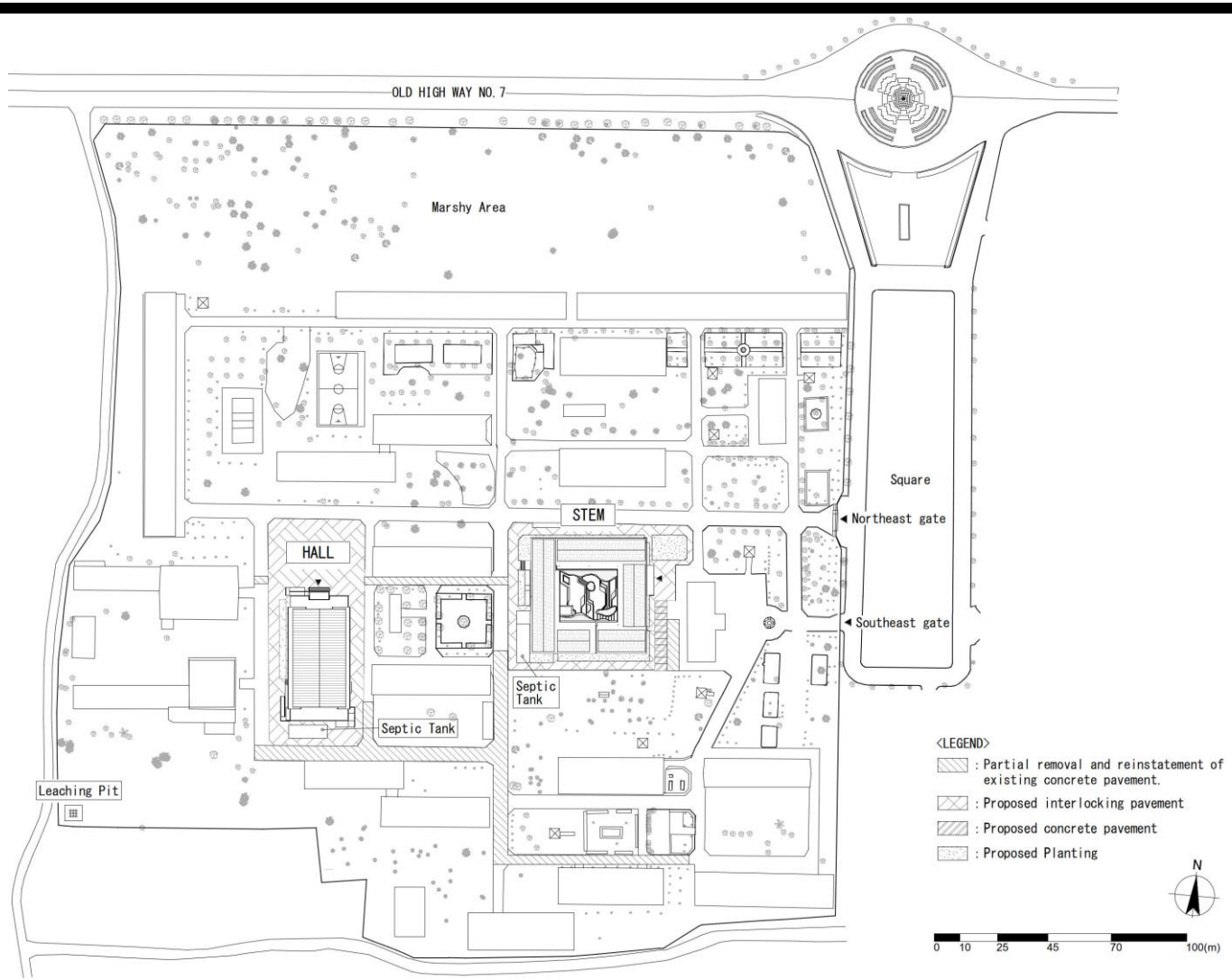
2-2-3 Outline Design Drawings

The outline drawings for this Project are listed below.

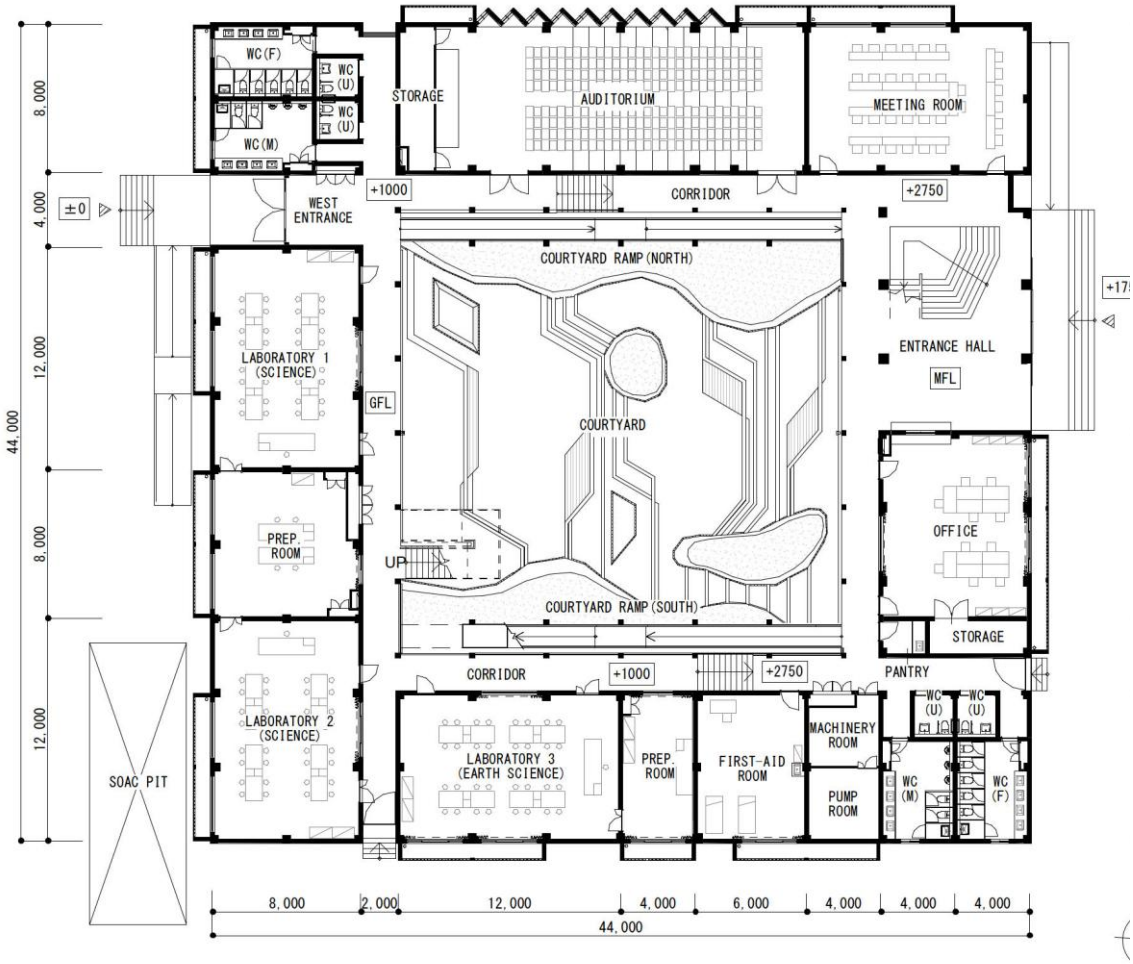
Table 2-17 List of Outline Design Drawings

Drawing		Page
Site Layout Plan		**2-43**
STEM building	Elevation (GF, MGF)	**2-44**
	Floor Plan (1F, 1.5F)	**2-45**
	Floor Plan (RF)	**2-46**
	Elevation	**2-47**
	Section	**2-48**
Assembly hall building	Floor Plan (GF, 1F, RF)	**2-49**
	Elevation	**2-50**
	Section	**2-51**

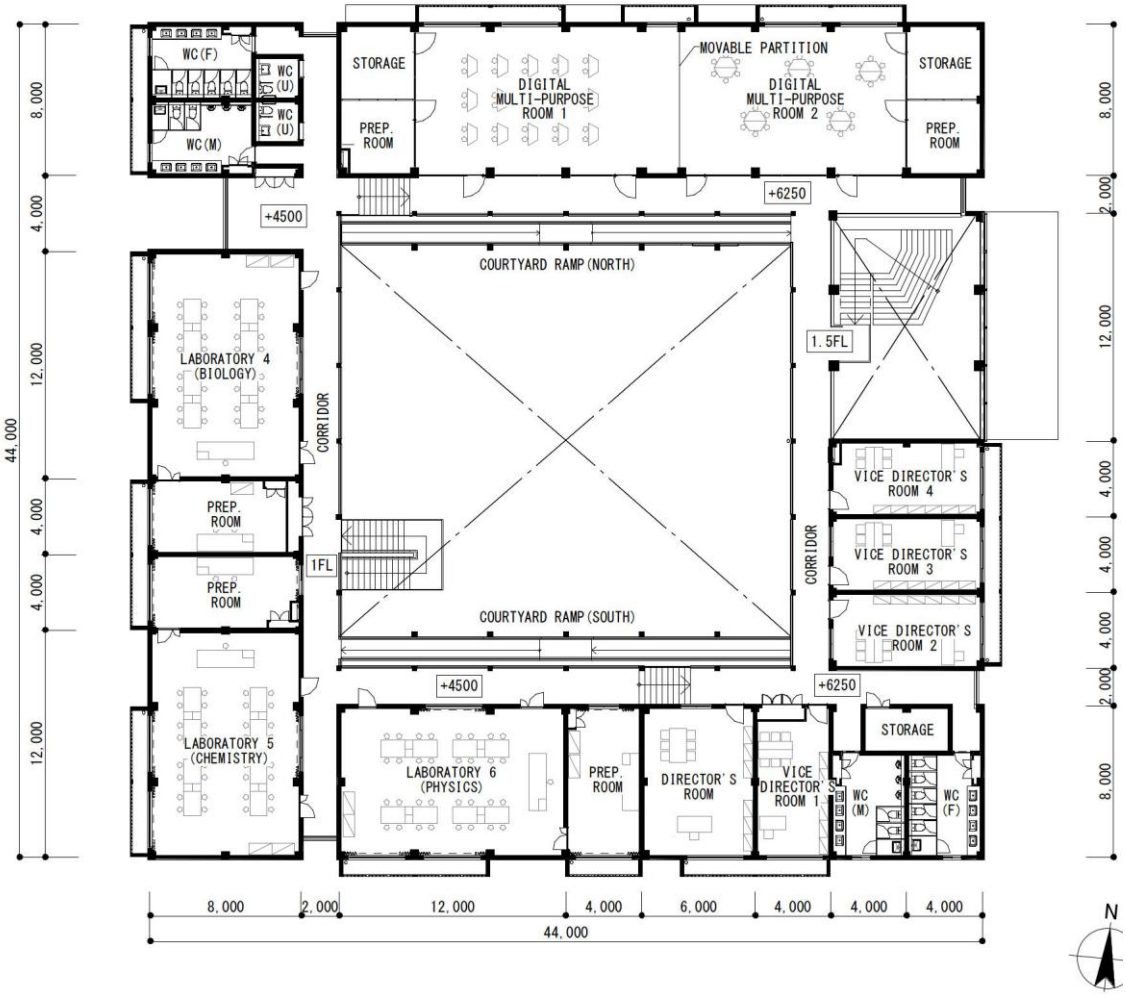
KCTEC Site Layout Plan (Existing RTTC Campus)



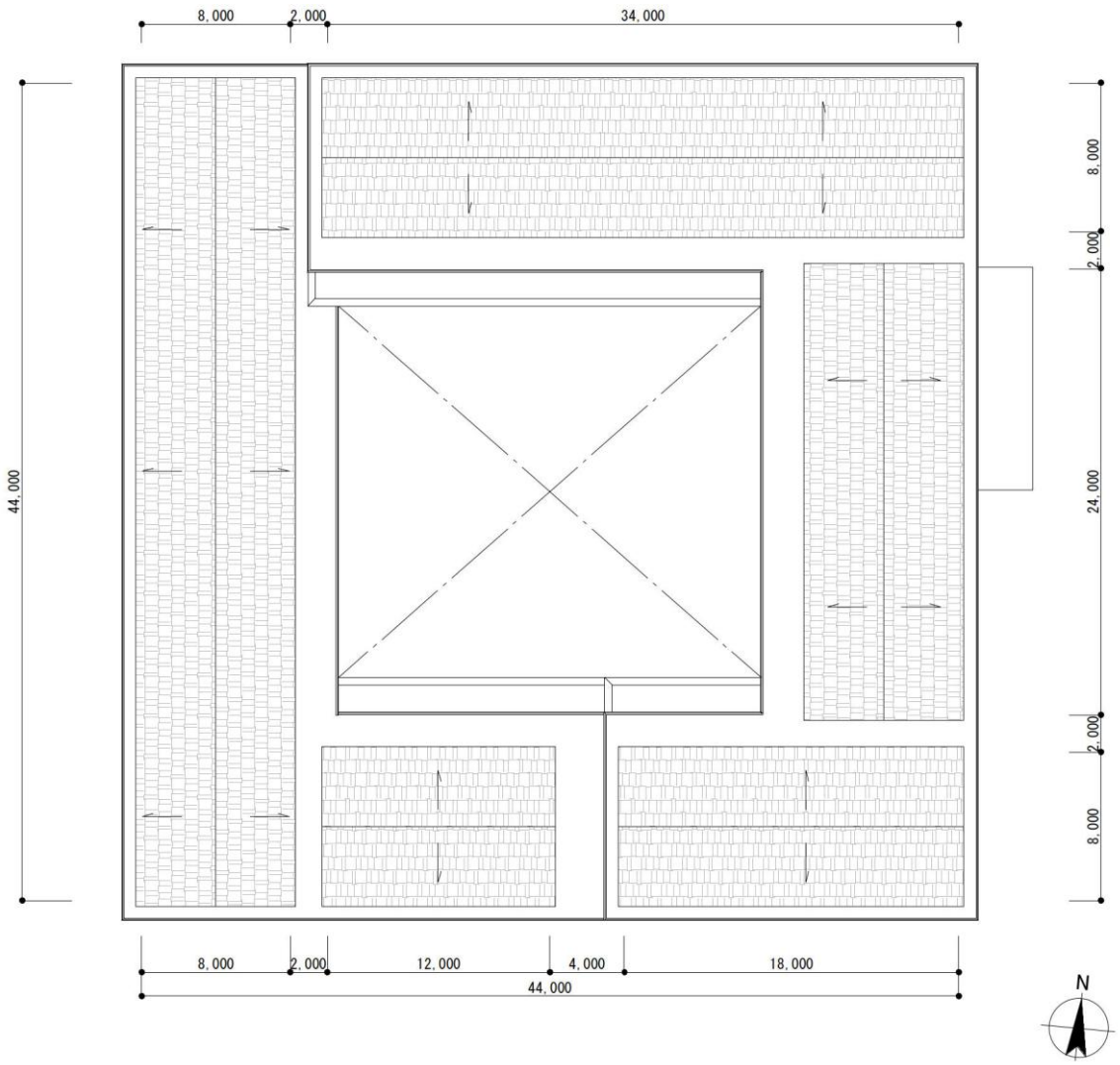
STEM Building Floor Plan (GF, MGF)2-44



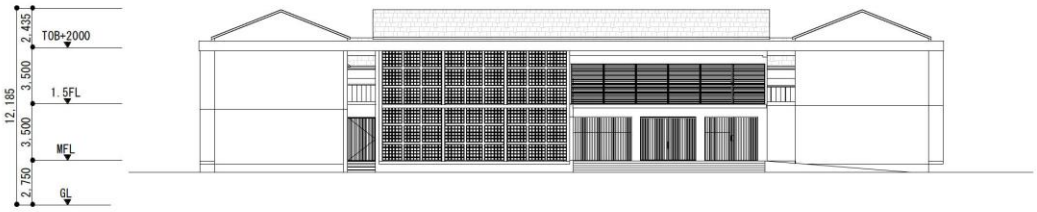
STEM Building Floor Plan (1F, 1.5F)



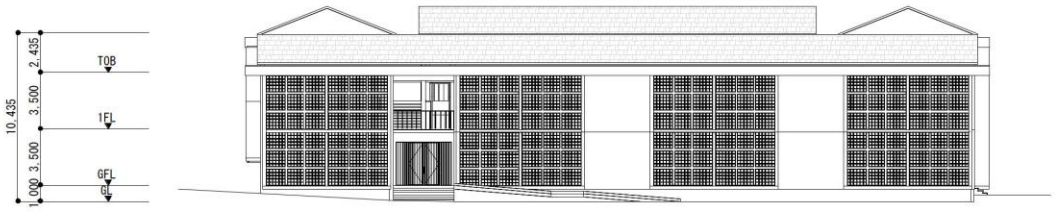
STEM Building Floor Plan (RF)



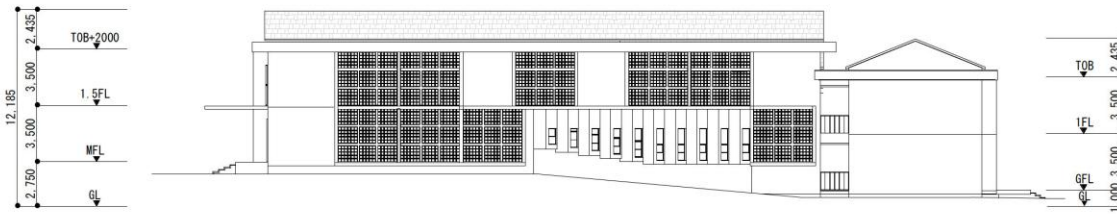
STEM Building Elevation



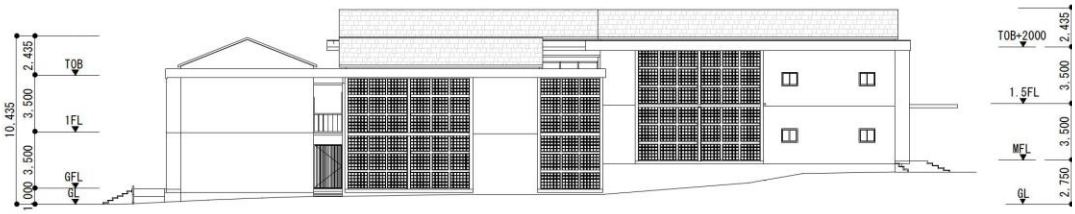
EAST ELEVATION



WEST ELEVATION

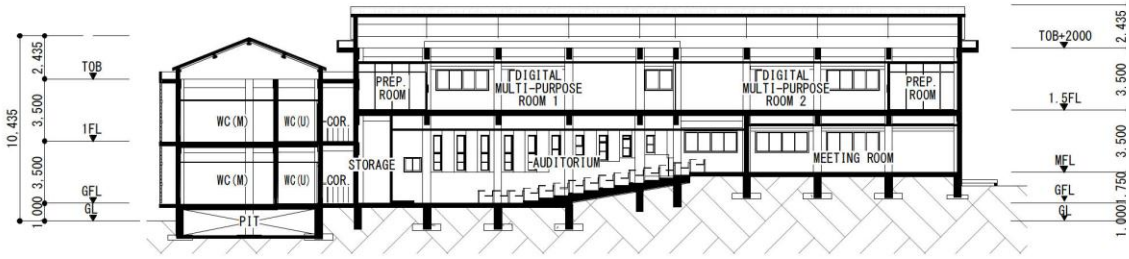


NORTH ELEVATION



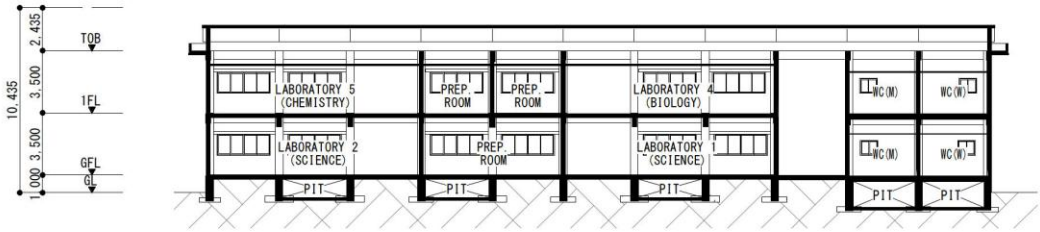
SOUTH ELEVATION

STEM Building Section



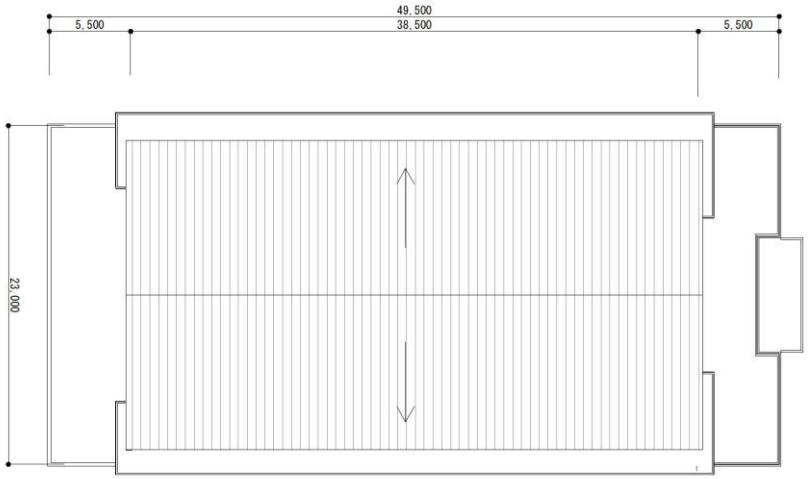
SECTION 1

SECTION 2

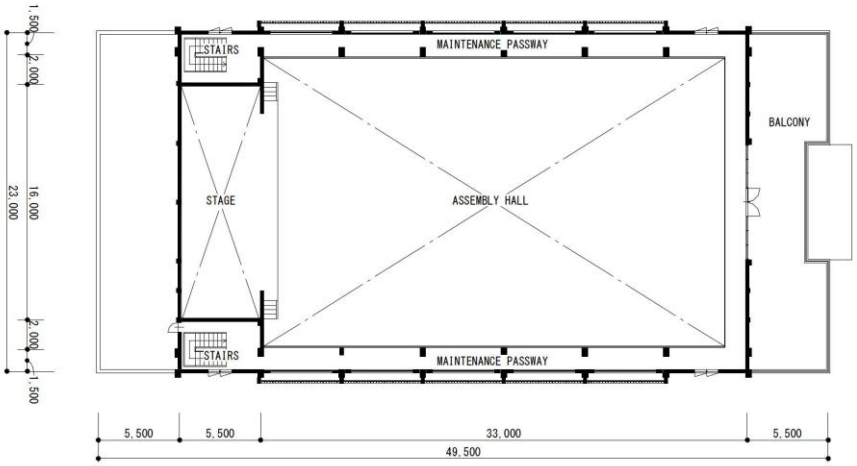


SECTION 3

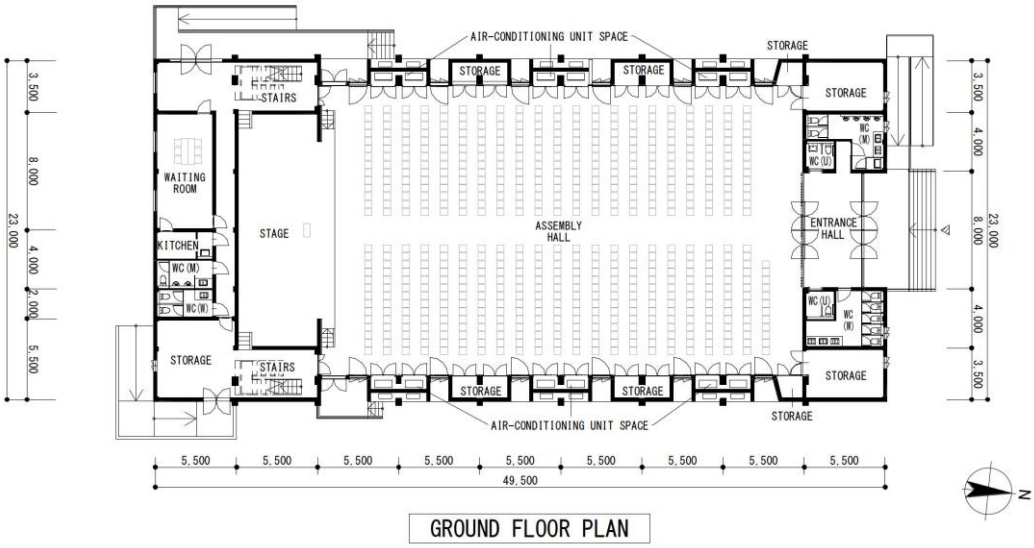
Assembly Hall Building Floor Plan



RFL PLAN

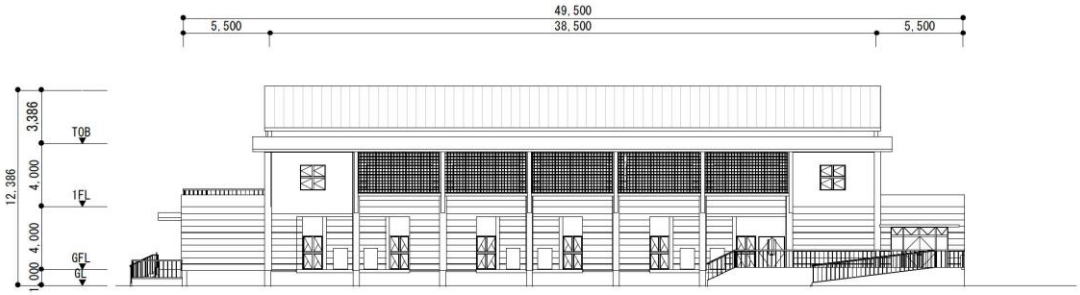


1st FLOOR PLAN

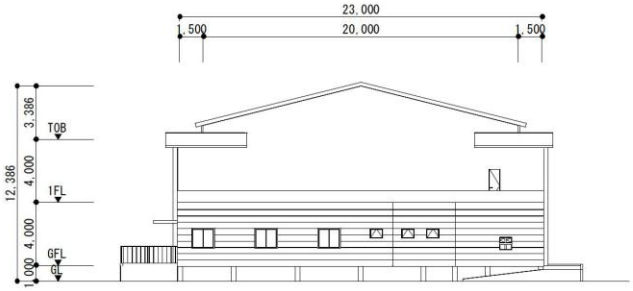


GROUND FLOOR PLAN

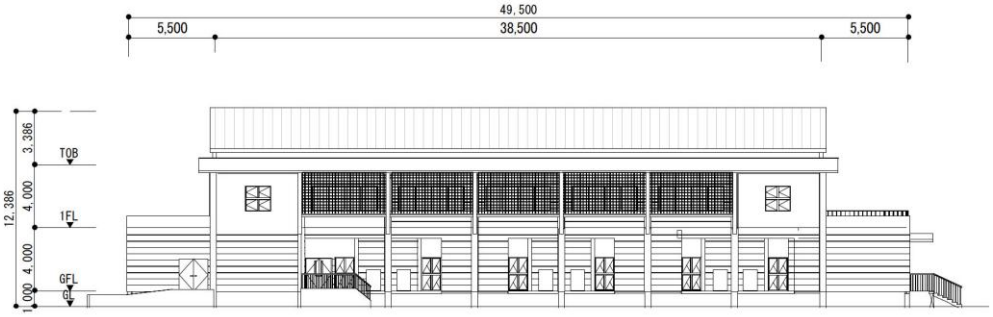
Assembly Hall Building Elevation



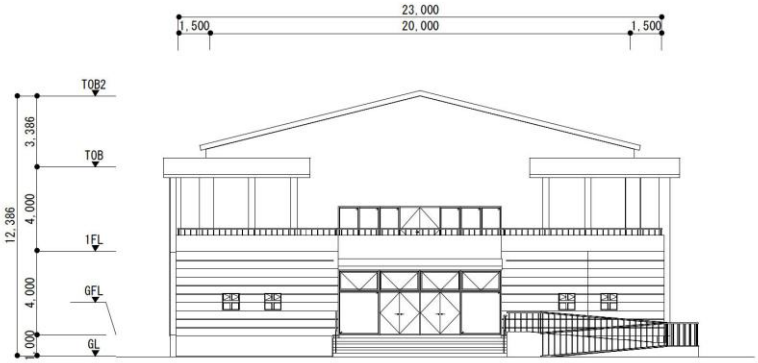
WEST ELEVATION



EAST ELEVATION

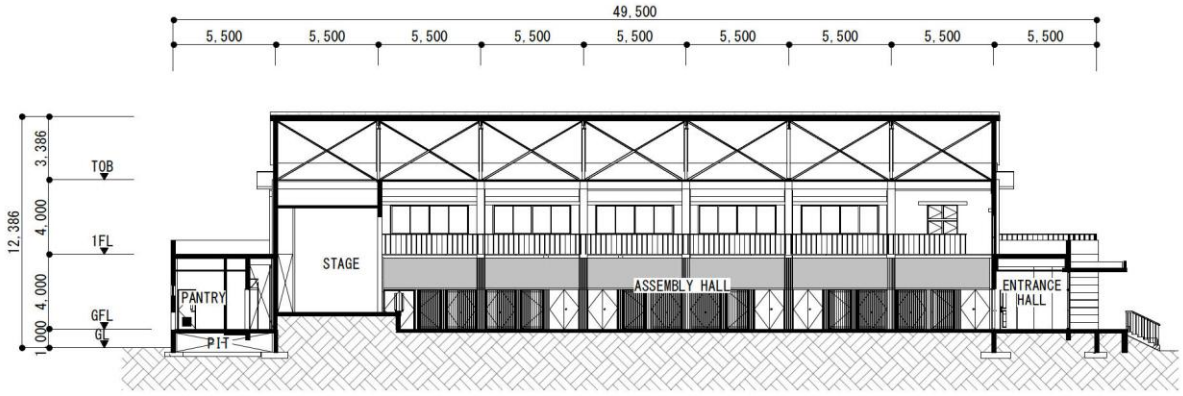


SOUTH ELEVATION

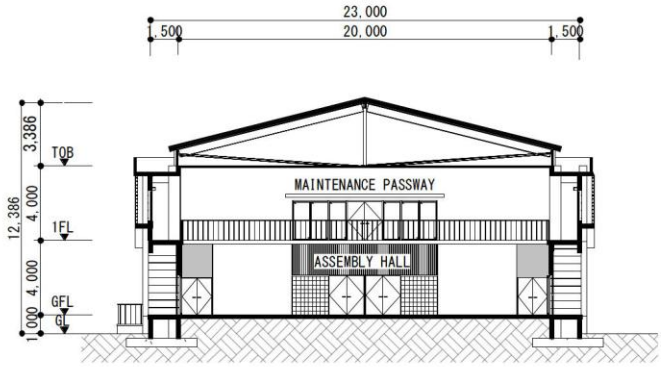


NORTH ELEVATION

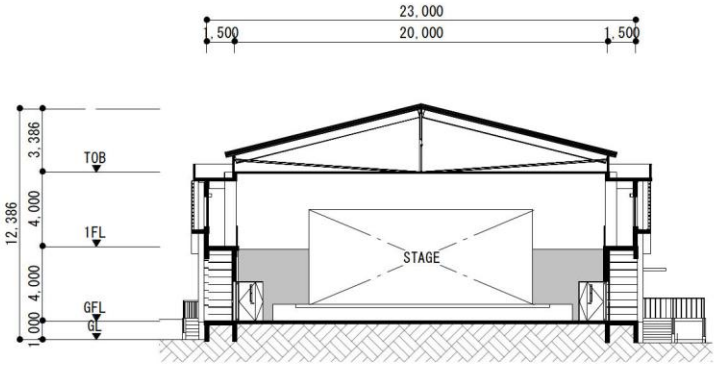
Assembly Hall Building Section



SECTION 1



SECTION 2



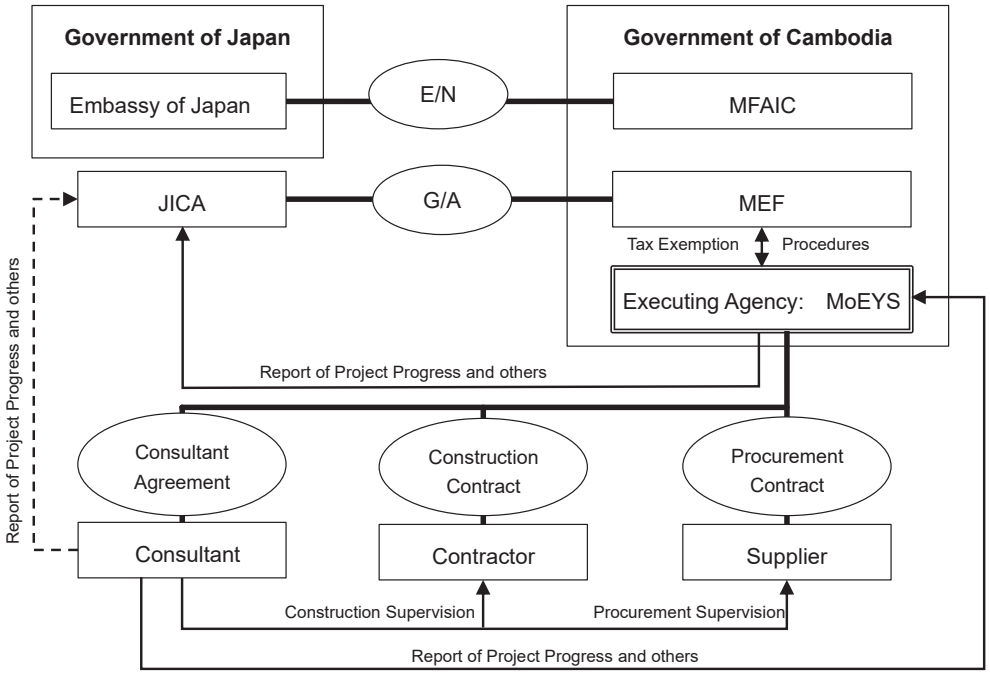
SECTION 3

2-2-4 Implementation Plan

2-2-4-1 Implementation Policy

The Project involves the construction of facilities and the procurement of equipment for KCTEC under the framework of the Japanese government's Grant Aid. The implementation will commence following the Cabinet decision by the Japanese government, and the subsequent signing of the Exchange of Notes (E/N) regarding project implementation between both governments, as well as the Grant Agreement (G/A) between the Cambodian government and JICA.

On the Cambodian side, within the G/A framework, MoEYS will serve as the executing agency, the Ministry of Foreign Affairs and International Cooperation (MFAIC) will be the signatory of the E/N, and the Ministry of Economy and Finance (MEF) will be the signatory of the G/A.



<Legend>
MFAIC :Ministry of Foreign Affairs and International Cooperation
MEF :Ministry of Economy and Finance
MoEYS :Ministry of Education, Youth and Sport

Figure 2-12 Project Implementation Organogram

(1) Executing Agency

The executing agency for this Project is MoEYS, which will act as the contracting party for the consulting services agreement as well as the contractor/supplier contracts (facility construction and equipment procurement). Within MoEYS, the department in charge of the project and educational planning is the Directorate General of Teacher Education Development (DGTED). This directorate will be responsible for the operation and maintenance of the facilities and equipment in collaboration with KCTEC even after the project's completion. The department responsible for facility and equipment procurement will be the Department of State Property and Construction (DSPC). During the project implementation, MoEYS, as the executing agency, will take the lead in coordinating with relevant ministries and agencies.

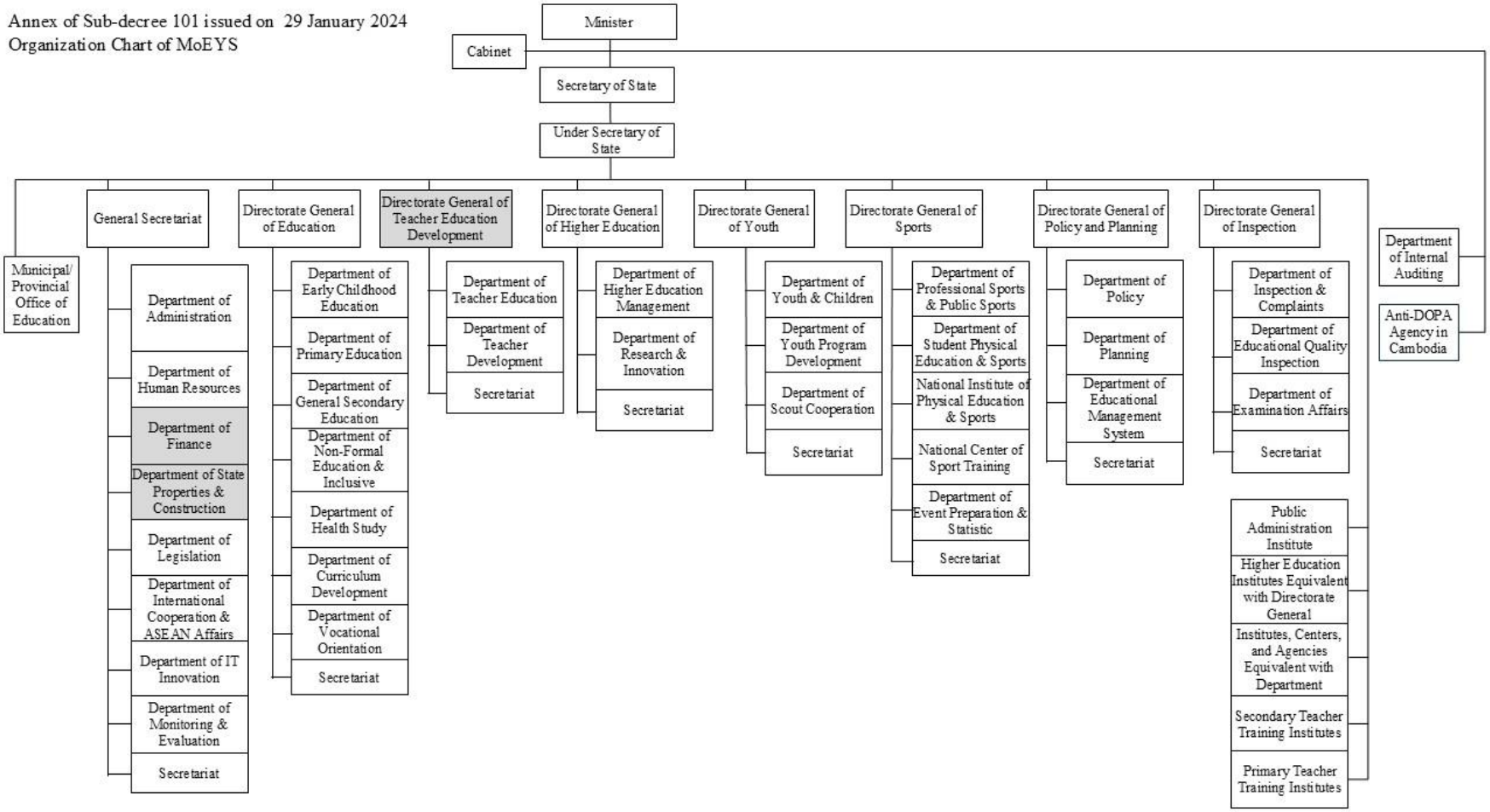
The aforementioned SOP stipulates that an organization with delegated authority to execute the project (PMU/PIU) may be established within the executing agency. The PMU/PIU is responsible for day-to-day project management and administrative operations, as well as the execution of all procurement activities. While the SOP defines the key positions comprising the PMU/PIU as follows, these may be adjusted depending on the specific characteristics of the project.

- Project Director：Senior official in charge of overall project supervision
- Project Manager：Full-time manager responsible for overall project management, including day-to-day operations.
- Administrative Officer： In charge of administrative and support services.
- Finance Officer：In charge of financial management and payment processing.
- Technical Officer：Senior technical specialist employed by the project (non-consultant).
- Procurement Officer：In charge of coordinating and executing project procurement activities.

While the establishment of a Project Management Unit and Project Implementation Unit (PMU/PIU) is not mandatory and projects can be implemented using existing organizational structures, it is anticipated that there will be a significant volume of administrative and support tasks for the executing agency under the "Japanese Grants (for Japanese consultant and local contractors) (Tentative Type II) " framework applied to the Project.

During Filed Survey II, the following matters were discussed and confirmed with MoEYS:

- A PMU shall be established, comprising members from DGTED, DSPC, the Department of Finance (DOF), and the procurement department. Other MoEYS departments or MEF shall be invited to join the PMU as necessary.
- The PMU shall coordinate with relevant departments to ensure the smooth implementation of the Project.
- DGTED shall lead the establishment and the activities of the PMU.



Source: Prepared by the Survey team based on MoEYS documents.

Figure 2-13 Organizational Chart of MoEYS

(2) Consultant

After signing of E/N and G/A for the Project, the Executing Agency of the Project and the Consultant in Japan will sign an agreement for the consulting services. The Consultant will carry out the following works.

1) Detailed Design Stage

Preparation of bidding documents for facility construction and equipment procurement—including detailed design drawings, technical specifications, BOQ, and general conditions of contract—as well as procedures for the approval of these bidding documents.

2) Bidding Stage

Support services for the entire process from bidding to contract awarding by the executing agency, including tender announcement, distribution of bidding documents, responses to inquiries, bid opening, bid evaluation, and contracting.

3) Construction and Procurement Stage

- Supervision services for facility construction and equipment procurement, including installation, operational training, and maintenance guidance.
- Financial planning for the Project, and assistance with disbursement procedures to the contractor and the supplier.

4) Search Over the Defects (One Year Inspection)

Attendance and verification for the defect inspection of the facilities one year after handover.

(3) Contractor and Supplier

In accordance with the "Procurement Guidelines for Japanese Grant Aid (for Japanese consultant and local contractors) (Tentative Type II)," contractors for facility construction and suppliers for equipment procurement will be selected through open competitive bidding targeting eligible Cambodian legal entities. The selected contractors and suppliers will enter into construction and procurement contracts, respectively, with the Cambodian executing agency. They will then execute the construction of facilities and the procurement and installation of equipment within the specified contractual deadlines in compliance with the contract documents.

(4) JICA

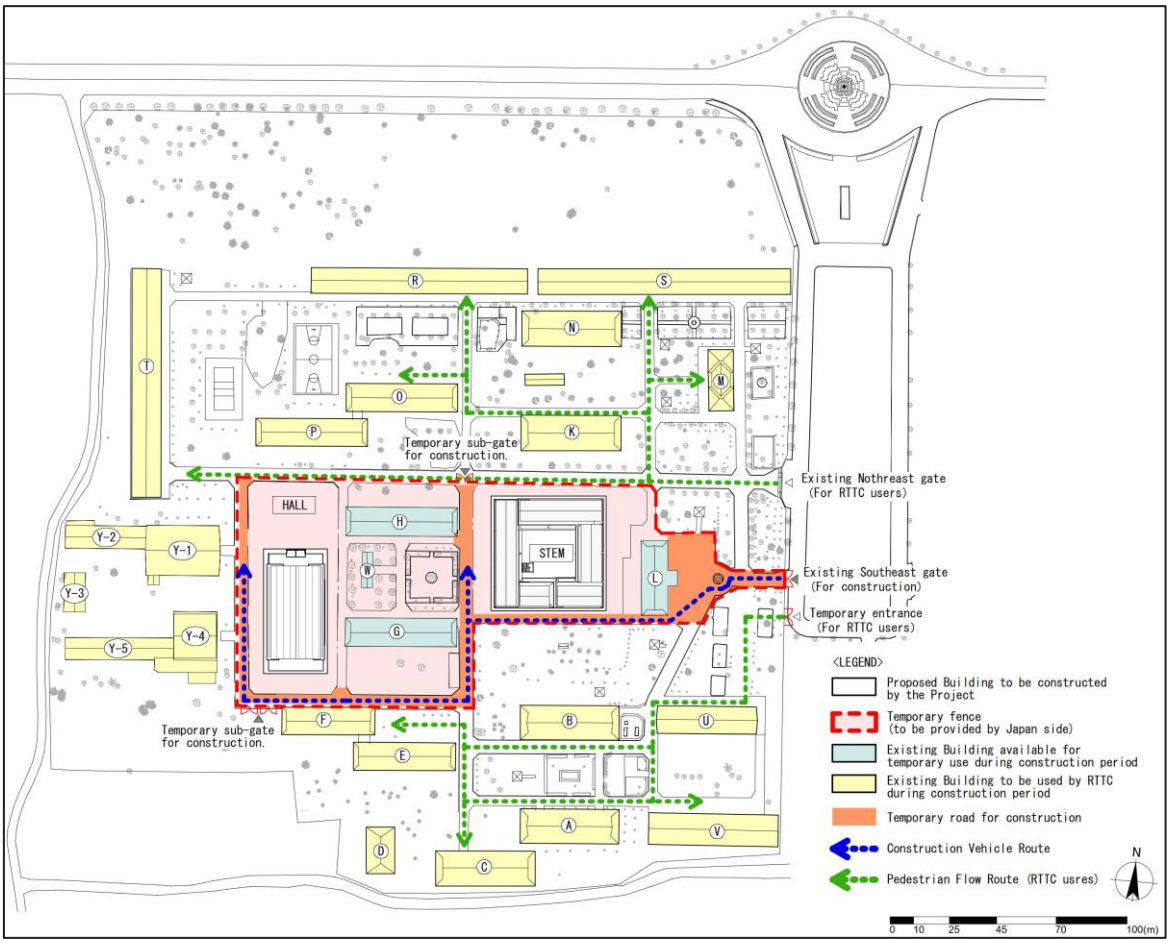
JICA has signed a G/A with the Cambodian government for the Project and will provide implementation supervision to ensure that the project is carried out appropriately in accordance with Japan's Grant Aid scheme.

2-2-4-2 Implementation Conditions

(1) School Operation Plan and Temporary Works Plan during Construction

In the Project, construction will be conducted while school operates within the same campus. As the current RTTC campus has many existing buildings scattered throughout, the available area for construction is limited. It is also necessary to secure access routes to the construction sites. Therefore, it is required to secure construction land by restricting the use of a certain area beyond just the immediate surroundings of the buildings to be constructed, which will inevitably have some impact on school operations. These matters were discussed with DSPC of MoEYS during Field Survey I. During Field Survey II, the following policies were explained to the Cambodian side regarding the scope of areas to be used for RTTC operations during the construction period, the scope of Japanese construction work (enclosure area), and the separation of flow between RTTC personnel and construction personnel.

- Of the two campus gates on the east side, the southern gate shall be designated exclusively for construction personnel and vehicles, and its use by college personnel shall be prohibited. The widening of this gate and its restoration after completion shall be carried out as part of the Japanese scope of works.
- A temporary entrance shall be installed on the south side of the construction-only gate to ensure access to facilities on the southern part of the campus. College personnel shall use the northern gate and the newly installed southern temporary entrance. The installation of this temporary entrance and its restoration after completion shall be conducted under the Japanese scope of works.
- During the construction period, the areas shown in the figure below—including the two candidate sites and certain existing facilities—shall be designated as construction zones. Temporary fencing will be installed, and entry by college personnel will be prohibited.
- Additional construction-only gates shall be installed at the center-north and southwest sections of the temporary fencing.
- Although the leaching pit will be located at the southwest corner of the campus outside the temporary fencing, the fencing will be temporarily extended during its construction to prevent school personnel from entering the work area.
- Existing buildings within the fenced area may be utilized as temporary construction facilities (site office, supervision office, material storage, workers' camp, etc.) as necessary. If utilized, their restoration after construction shall be carried out as part of the Japanese scope of works.



Source: The Survey team

Figure 2-14 Plan for the Japanese Construction Area and Campus Circulation during the Construction Period

(2) Safety Control for Construction Work

In formulating the Construction Supervision Plan and the Construction Safety Plan, JICA's "Guidance for the Management of Safety for ODA Construction Works" shall be incorporated. Furthermore, safety measures shall be planned to address specific conditions of the Project, such as Cambodian laws and regulations, local construction practices and customs, site locations, and the scope of works. On-site, it is essential to maintain and update appropriate safety measures and to enhance safety awareness through the contractor's safety activities (including accident prevention efforts such as tool box meetings, safety assemblies, and safety patrols) and the Consultant's supervision and guidance in accordance with the plans.

(3) Coordination between Facility Construction and Equipment Procurement

- Since equipment will be delivered and installed during the facility construction phase, the construction and procurement schedules shall be coordinated with both parties as soon as the contractor and the supplier are selected.
- Coordination shall be conducted regarding key considerations for equipment delivery,

including anti-theft measures, liability for potential damage, and temporary storage locations.

(4) Tax Exemption

In the M/D for Field Survey, it was explained and confirmed that the Cambodian side is responsible for ensuring exemptions from customs duties, internal taxes, and other fiscal levies on the products and services provided under the Project. A meeting was held with the General Department of Taxation (GDT) of Cambodia to confirm the Value Added Tax (VAT) exemption measures for the implementation of the Grant Aid project. In principle, tax items requiring exemption, including the items listed below, must be clearly specified in the E/N. It should be noted that in past Grant Aid projects involving Japanese firms, the process of verifying exemption eligibility and the overall administrative procedures have sometimes taken several months or longer; therefore, careful attention must be paid during the actual tax exemption process.

1) Value Added Tax (VAT)

VAT exemption can be obtained for materials procured within Cambodia for the Project, as well as for subcontracts between the main local contractor/supplier and local subcontractors, by obtaining a VAT exemption certificate issued by the GDT. The main contractor/supplier must submit a VAT exemption application to MoEYS, accompanied by a list of equipment and materials to be procured in Cambodia and copies of contracts between the main contractor and subcontractors, and complete the prescribed procedures. Furthermore, in order to qualify for VAT exemption, both the main local contractor/supplier and the local subcontractors must be registered for VAT.

2) Import Tax

Equipment and materials imported by the main local contractor/supplier for the Project can be exempted from import duties upon obtaining an import tax exemption certificate issued by the Council for the Development of Cambodia (CDC). To obtain this certificate, the main contractor/supplier must submit a master list to MoEYS and complete the necessary procedures.

3) Stamp Tax

Normally, a stamp tax of 0.1% of the contract amount is levied on contracts under Cambodian government procurement. In the case of the "Tentative Type II" scheme, it is necessary to explicitly state in the E/N that the stamp duty for the contract between MoEYS and the main local contractor/supplier is exempted.

2-2-4-3 Scope of Work

The scope of work for the Japanese and Cambodian sides is determined as follows.

(1) Japan Side

- Construction of the planned buildings
- Procurement and installation of the planned equipment for the Project, including trial runs,

adjustments, and instruction on initial operations and maintenance management.

(2) Cambodian Side

- Land leveling and grading
- Cutting and grubbing of obstructing trees
- Demolition and removal of existing dilapidated buildings
- Removal of existing gazebos
- Removal of rocks exposed on the ground surface
- Temporary relocation of furniture and equipment in existing facilities that may be used for the site office, warehouse, workers' camps, etc.
- Removal of other existing obstacles, including curb blocks
- Relocation of existing electrical lines
- Renovation of existing facilities
- Power connection (New power intake: installation of a new transformer on the south road of RTTC, including the connection from the existing medium voltage (MV) distribution network to the primary side of the new transformer)
- Water supply connection (Installation of water meter only)
- Communication connection (Connection to the existing fiber-optic internet line)

Details of the scope of work to be undertaken by the Cambodian side are described in "2-4 Obligations of Recipient Country”."

2-2-4-4 Consultant Supervision

The basic policies and points to be noted for the smooth implementation of the project under the Japanese Grant Aid scheme are as follows:

(1) Building Construction Supervision

- Aim to complete the project without delay by maintaining close communication with the personnel of relevant organizations from both countries and coordinating facility construction and equipment procurement.
- Provide prompt and appropriate guidance and advice to the facility construction contractor and its stakeholders from an impartial standpoint, specifically from the perspective of schedule, quality, and safety management.
- Establish a robust reporting and communication system with the implementing agency and relevant ministries, and strive to address any issues or challenges promptly as they arise.
- Coordinate to ensure that the construction work to be undertaken by the Cambodian side is implemented without delay.

(2) Equipment Procurement Supervision

- The Consultant will maintain close liaison with the relevant authorities of both countries to

ensure the timely completion of equipment procurement.

- The Consultant will provide prompt and appropriate guidance and advice to the equipment suppliers and related parties from an impartial standpoint.
- The Consultant will provide appropriate guidance and advice regarding the installation of the equipment by the suppliers and the operation and maintenance after handing over.
- Upon confirming that the installation of equipment is completed and that all contractual conditions have been met through a final inspection before handing over, the Consultant will witness the acceptance and handing over, and conclude the assignment upon obtaining approval from the Cambodian side.

2-2-4-5 Quality Control Plan

(1) Building Construction

The Contractor shall submit method statements, shop drawings, fabrication drawings, and samples of materials to the Consultant for approval prior to the commencement of each work item, in accordance with the contract documents (including technical specifications and drawings). The Consultant will review, examine, and approve various types of submittals provided by the Contractor. Furthermore, the Contractor shall conduct various inspections based on the technical specifications and method statements; the Consultant will carry out necessary witnessing of these inspections and verify the inspection results submitted by the Contractor. Main items of quality control for the construction of facilities under the Project are shown below.

Table 2-18 Main Items of Quality Control for Structural Works (Provisional)

Work	Item	Inspection/Test	Frequency
Earth works	Bottom of excavation	Excavation bottom level, soil properties	Upon completion of excavation
Re-bar works and formworks	Steel bar material	Verification of mill test certificates	Upon Delivery, At Material Approval
	Re-bar arrangement	Rebar inspection	Prior to concrete casting
	Formwork	Formwork inspection	Prior to concrete casting
Concrete works	Materials	Verification of type of cement Aggregate gradation, specific gravity, chloride content	Mix Design Stage
	Trial mix	According to the mix design, the unit cement content, unit water content, aggregate content, water–cement ratio, and slump value are determined.	Trial mix stage
		Trial mixes and compressive strength tests on specimens(slump, air content, concrete temperature, chloride content, air content)	
	Concrete quality (at Discharge)	Slump, air content, concrete temperature, chloride content	Every concrete casting
	Concrete quality (post-casting)	Compressive strength test	Every concrete casting
	Work execution	Post-stripping visual inspection	Per pouring location

Work	Item	Inspection/Test	Frequency
	management		
Structural steel works	Steel materials	Shop inspection, visual inspection	Prior to fabrication
		Fabrication accuracy, shop assembly accuracy, connection inspection	Prior to fabrication
	Steelwork accuracy	Plumbing-up accuracy, connection inspection	Post-erection

Source: The Survey team

(2) Equipment Procurement

Regarding the procurement management of the equipment suppliers registered in Cambodia, since the Consultant will supervise the process remotely from Japan, the plan includes hiring local consultant (local staff) to conduct procurement management until the equipment arrives at the sites. The local consultant will provide follow-up on procurement management in accordance with the Procurement Guidelines for Japanese Grant Aid (for Japanese consultant and local contractors) (Tentative Type II), including the management and confirmation of equipment delivery schedules and items to be delivered, as well as checking the preparation status of documents required for completion. They will also support the preparation of monthly reports and attend web meetings with the Consultant. During the installation, operation test, and instruction that commence after the equipment arrives at the sites, both the Consultant and the local consultant, acting as local procurement supervision technical assistants, will conduct on-site procurement supervision. At the final inspection before handing over, the manufacturer name, model number, and specifications of each item will be checked based on the Contract for equipment procurement. The equipment procured in the Project is planned to undergo provisional inspection and pre-handing over by the Consultant at the site upon completion of installation work, followed by final inspection and handing over by MoEYS.

2-2-4-6 Procurement Plan

(1) Building Construction

Most of the construction materials for the Project are available locally; for instance, ready-mixed concrete can be procured from concrete plants within Kampong Cham City. However, for certain construction materials that are difficult to procure domestically in sufficient quantities and with a required quality level (such as metal products, finishing materials, and M & E devices), the plan is to procure imported products from neighboring countries such as Thailand and Vietnam. The procurement sources and countries of origin for major materials and equipment are shown in the table below.

Table 2-19 Sources of Major Construction Materials

Materials	Source of procurement			Remarks (Country of origin)
	Cambodia	Japan	Third country	
Materials for Architectural Works				
Portland cement	○		○	Domestic or imported products (Thai, China, etc.)
Concrete	○			
Aggregate for concrete	○			

Materials	Source of procurement			Remarks (Country of origin)
	Cambodia	Japan	Third country	
Steel bar	○		○	Domestic or imported products (Thai, Vietnam, etc.)
Structural steel	○		○	Domestic or imported products (Thai, Vietnam, etc.)
Forms	○			
Plywood	○		○	Imported products (Thai, Vietnam, Chinca, etc.)
Concrete block	○			
Liquid waterproofing membrane			○	Imported products (Thai, etc.)
Ceramic tile	○		○	Domestic or imported products (Thai, China, etc.)
Brick	○			
Wood / Timber	○			
Stainless steel	○		○	Imported products (Thai, Vietnam, etc.)
Aluminum/ Steel doors and windows	○		○	Imported products (Thai, Vietnam, etc.)
Glass products	○		○	Imported products (Thai, Vietnam, etc.)
Painting material	○		○	Domestic or imported products (Thai, etc.)
Light-gauge steel	○		○	Imported products (Thai, etc.)
Gypsum board/ Fiber cement board	○		○	Imported products (Thai, etc.)
Rockwool acoustic ceiling board	○		○	Imported products (Thai, etc.)
Materials for Electrical work				
Distribution boards	○		○	Imported products (Thai, etc.)
Electric cable	○		○	Imported products (Thai, etc.)
Conduit pipe	○		○	Imported products (Thai, etc.)
Lighting fixture	○		○	Imported products (Thai, etc.)
Low-voltage electric materials	○			Imported products (Thai, Vietnam, etc.)
Materials for AC system, Plumbing and Sanitary				
Steel pipes for water supply	○		○	Imported products (Thai, etc.)
PVC pipes for water supply	○		○	Imported products (Thai, etc.)
Drainage pipes	○		○	Imported products (Thai, etc.)
Galvanized steel pipes	○			Imported products (Thai, Vietnam, etc.)
PVC pipe	○			Imported products (Thai, Vietnam, etc.)
Valves and piping accessories	○		○	Imported products (Thai, etc.)
Sanitary ware	○		○	Imported products (Thai, etc.)
AC unit	○		○	Imported products (Thai, etc.)

Source: The Survey team

(2) Equipment Procurement

As mentioned above, the procurement for the Project will be conducted through local agents. Accordingly, the plan assumes that the equipment will be procured by companies registered in Cambodia. While the plan is based on equipment available in the Cambodian domestic market, certain

restrictions will be applied to ensure quality, such as limiting the country of manufacturer to Japan, Development Assistance Committee (DAC), or OECD member countries for specific items, thereby preventing selection based solely on price. The equipment for the Project will be procured in four separate lots, as described below. If the bidding for procurement were conducted as a single lot, there is a risk that the bidding might fail because no single supplier in Cambodia is capable of providing all the required equipment. Therefore, by dividing the procurement into lots based on equipment categories—such as ICT equipment and science and mathematics teaching materials—aligned with the specialized fields of prospective local bidders, the procurement design ensures that multiple companies can participate in each lot, thereby maintaining competitiveness.

Table 2-20 Lot Composition of Equipment

Lot No.	Equipment Category	Equipment Description
1	ICT Equipment, E-Library Equipment	Laptop computers, desktop computers, book scanners, etc.
2	Science and Mathematics Teaching Materials	Teaching materials for practical training, laboratory instruments, microscopes, human anatomical models, etc.
3	ICT Equipment (specifically items requiring connection with AV equipment), AV Equipment	Interactive flat panels, monitors, projectors, webcams, audio equipment, etc.
4	Educational Furniture, Equipment for Developing Teaching Materials, First Aid Room Equipment	Science laboratory tables, tables and chairs for digital multi-purpose room, power tools, workbenches, beds, wheelchairs, AED, etc.

Source: The Survey Team

2-2-4-7 Operational Guidance Plan

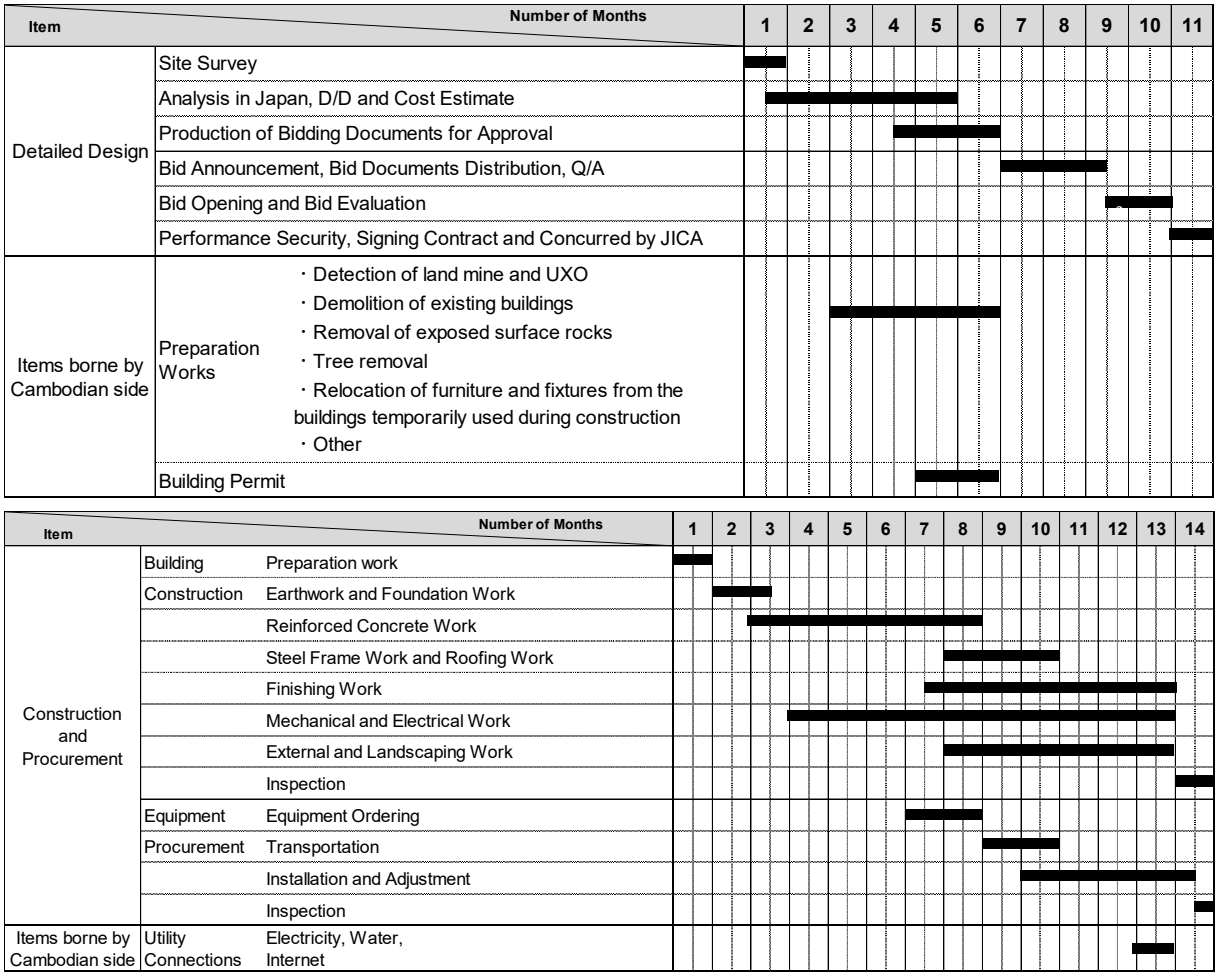
The plan includes providing instruction as initial operational training following the delivery, installation, operation test by the Supplier. During the instruction, the Consultant shall supervise the training to ensure that the personnel in charge of equipment management are appropriately instructed on the operation and maintenance methods (including daily inspections, cleaning/adjustment, and troubleshooting for minor issues) for all equipment procured under the Project. Upon handing over, the content of the training and the level of understanding shall be confirmed by KCTEC representative, the Consultant, and the Supplier. Furthermore, following the on-site inspection, a report shall be submitted to the MoEYS representative. It should be noted that the operation training is not included in the Project.

2-2-4-8 Soft Component Plan

The Project does not include any soft components.

2-2-4-9 Implementation Schedule

The draft implementation schedule for the Project is shown below.



Source: The survey team

Figure 2-15 Project Implementation Schedule (Provisional)

2-2-5 Security Plan

The Project shall, in principle, take safety measures in accordance with JICA's safety rules. As of December 2025, although the entire territory of Cambodia, with the exception of the border areas with Thailand, is categorized as "Level 1 (be cautious)" by the overseas safety information of the Ministry of Foreign Affairs of Japan, common crimes such as theft are on the rise, particularly in urban areas. Therefore, all Project members shall thoroughly implement safety measures, including anti-theft precautions.

2-3 Obligations of Recipient Country

Specific obligations of Cambodian side for the Project to be implemented are as follows. It should be noted that they shall not be funded by Japan side.

(1) Before Bidding

1. To establish PMU
2. To sign the Banking Arrangement (B/A) with a bank in Japan (the Agent Bank) to open bank account for the Grant
3. To issue Authorization to Pay (A/P) to a bank the Agent Bank for the payment to the consultant
4. To bear the following commissions to a bank in Japan for the banking services based upon the B/A.
    1) Advising commission of A/P (Consultant Agreement)
    2) Payment commission for A/P (Consultant Agreement)
5. To secure and clear the following lands as follows
    1) Construction lots for the STEM building
        - To remove existing dilapidated building and two (2) gazebos, including their foundations.
        - Removal of existing concrete pavement.
        - Removal of existing curb blocks.
        - Removal and uprooting of existing trees.
        - Removal of other existing structures and obstacles (exposed rocks on the surface, water taps, outdoor lights, etc.)
        - Rerouting of existing electrical lines.
    2) Construction lots for the assembly hall building
        - Removal of existing concrete pavement.
        - Removal of existing curb blocks.
        - Removal and uprooting of existing trees.
        - Removal of other existing structures and obstacles (exposed rocks on the surface, water taps, outdoor lights, etc.)
    3) Construction area for the leaching pit
        - Removal of existing dilapidated buildings, including their foundations.
    4) Additional areas for a temporary land for construction activities
    5) To temporarily move furniture and equipment of the existing buildings repurposed as temporary facilities during the construction period. (as may be needed)
6. To obtain a building permit and other necessary permit/procedure for the construction activities
7. To obtain the certificate of clearance of landmine: carry out detection and removal of landmines and unexploded ordnance within the project site (depth 0-2m, 2-4m respectively)
8. To submit Project Monitoring Reports (PMR) (with the result of Detail Design)
9. To ensure smooth implementation of the bidding procedure and to bear necessary expenses relevant

to the bidding procedures

(2) During the Project Implementation

1. To bear the following commissions to a bank in Japan for the banking services based upon the B/A.
   1) Payment commission of A/P (Consultant Agreement)
   2) Remittance charge (contract with local companies, i.e. the Contractor(s)/the Supplier(s))
2. To conduct necessary procedures such as "Request for disbursement" to JICA (upon contract with construction firms and/or procurement firms (suppliers)), "Application of remittance" to Bank (upon contract with construction firms and/or procurement firms (suppliers))
3. To ensure prompt unloading and customs clearance at ports of disembarkation in the country of the Recipient and to assist the Supplier(s) with internal transportation therein
4. To accord Japanese physical persons and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work
5. To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the products and/or the services be exempted
6. To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project
7. To notify JICA promptly of any incident or accident, which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers
8. To submit a report concerning completion of the Project
   1) To submit PMR
   2) To submit Project Completion Report (PCR)
9. To submit a report concerning completion of the Project (within 6 months after the Project completion)
10. To provide facilities for distribution of electricity, water supply and drainage and other incidental facilities necessary for the implementation of the Project outside the site
    1) Electricity: To carry out the new power supply work, including the installation of a new transformer on the road south of RTTC and the connection from the existing MV distribution network to the primary side of the new transformer.
    2) Water supply: To install a new water meter for the Project.
    3) Internet Connection
    4) Other incidental facilities
11. To renovate existing buildings (one building will be converted from a laboratory into a workshop at RTTC, and the other one into an E-library at PTTC[13]).

[13] For the effective utilization of the procured equipment.

12. To ensure the safety of persons engaged in the implementation of the Project
13. Measures necessary to ensure the safety of the project site where necessary

    [measures for safety]

    1) maintaining the safety of workers and the general public by thorough implementation of safety measures and immediate action in the case of accident
    2) traffic control around the site(s) and on transportation routes of construction materials
    3) installation of fences around the sites where necessary

(3) After the Project

1. To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid
    1) Provision of fixtures and furnishing necessary for using the new facilities (e.g., curtains)
    2) Allocation of maintenance cost
    3) Establishment of Operation and maintenance structure
    4) Routine check/Periodic inspection
2. The products to be purchased under the Project

    - shall not be used for military purposes;
    - shall never be transferred to any third party without prior consultation with the Japanese government;
    - shall need prior notification to the Japanese government for major alteration such as permanent installation of machine guns;
    - shall be monitored at least one year and three years after completion of the Project by the Embassy of Japan in Cambodia and JICA Cambodia Office in accordance with procedures designated by the Japanese government; and,
    - shall be reported the status of utilization of the products by MoEYS to the Embassy of Japan in Cambodia and JICA Cambodia Office upon requests at any time.

2-4 Project Operation Plan

2-4-1 Management and Operational Plan for KCTEC

The Sub-decree on the establishment of KCTEC is expected to be issued around January 2026.

2-4-2 Launch Schedule

The opening of KCTEC is scheduled for November 2026.

2-4-3 Student Enrollment Plan

MoEYS has indicated a policy to transition the Kampong Cham P/RTTC into a four-year program. Accordingly, student recruitment for the two-year program is scheduled to cease from the 2025/26 academic year onwards. The admission quota for KCTEC is planned to follow that of P/BTEC, as outlined below:

- Primary Teacher Training Course: 250 student teachers
- Lower Secondary Teacher Training Course: 100 student teachers

Based on this policy, the number of student intakes for the first four years after opening is projected as shown in the table below.

Table 2-21 Projected Student Composition and Enrollment Capacity by Academic Year

	2026/27	2027/28	2028/29	2029/30
Primary Teacher Training Course				
Year 1	250	250	250	250
Year 2	-	250	250	250
Year 3	-	-	250	250
Year 4	-	-	-	250
Sub-total	**250**	**500**	**750**	**1,000**
Lower Secondary Teacher Training Course				
Year 1	100	100	100	100
Year 2	-	100	100	100
Year 3	-	-	100	100
Year 4	-	-	-	100
Sub-total	**100**	**200**	**300**	**400**
Total	**350**	**700**	**1,050**	**1,400**

Source: Prepared by the survey team based on interviews with MoEYS

2-4-4 Management Structure

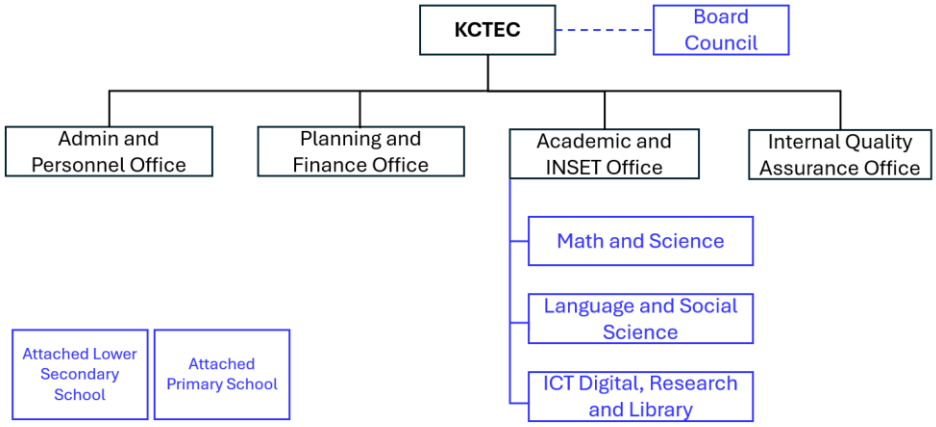
2-4-4-1 Operating Organization

The organizational structure of KCTEC is expected to be similar to that of P/BTEC, and the projected organizational chart is shown in the figure below. However, as of December 2025, only the four offices indicated in black in the chart have been confirmed[14], while other details remain undecided. It is anticipated that the following policies will be included in the aforementioned Sub-decree. Similar to the establishment of P/BTEC, the organizational details are expected to be determined by a Ministerial

[14] The specific names can be confirmed in the letter dated December 15, 2025, from the Ministry of Civil Service to the MoEYS.

Ordinance (Prakas) following the issuance of the Sub-decree.

- Establishment of KCTEC through the integration of Kampong Cham P/RTTC
- Appointment of one Director (Director-General level) and four Deputy Directors (Deputy Director-General level).
- The position of Director will be equivalent to the Director of Department for the time being.[15]
- Existing faculty and staff of Kampong Cham P/RTTC will continue to work at KCTEC for the time being.



Source: Draft Appendix of Prakas -- on the Organizational structure of KCTEC (MoEYS)
Notes: Organizations in blue are yet to decide as of Dec 2025, e.g. details of Faculty and Department and which Office will the attached schools fall under, etc.

Source: Prepared by the survey team based on interviews with MoEYS

Figure 2-16 Projected Organizational Chart of KCTEC[16]

2-4-4-2 Requirements for Faculty and Staff

To be accredited as a higher education institution, it is a requirement that more than half of the faculty and staff at KCTEC hold a Master's degree or higher[17].

- Director and Deputy Directors: Candidates are required to be qualified higher education lecturers with a Master's degree or higher and a certain level of professional experience. Additionally, they must possess the necessary English language and ICT skills to conduct academic operations with international institutions.
- Faculty Members: In addition to holding a Master's degree or higher in their respective subjects, faculty members are expected to lead academic research in the field of teacher education. Accordingly, high proficiency in English and ICT is also required.

Furthermore, faculty members are classified into three ranks based on their qualifications, competencies, experience, achievements, and level of commitment (promotions are governed by

[15] The Director's position is expected to be upgraded to Director General upon receiving Accreditation Committee of Cambodia (ACC) accreditation (a similar phased approach was adopted for P/BTEC).
[16] Items confirmed as of December 2025 are indicated in black, and those (whether the faculties, departments, and attached schools will be under) that are undecided are indicated in blue.
[17] Standard 4 (Program Resources) of the TEPS (MoEYS, 2016) states that "at least 50% of the academic staff teaching in a program must have a qualification at least one level higher than the qualification they are teaching (Master's or Doctoral degree) and have at least three years of teaching experience" (p. 4).

"Regulation No. 2484 on the Evaluation and Promotion of Professors").

Table 2-22 Classification of TEC Lecturers

Level	Position	Key Duties and Qualifications
Level I	Assistance Lecturer	• At least 2 years of teaching experience; basic proficiency in ICT and English. • Conduct classes under the authorization and guidance of a Senior Lecturer or Lecturer. • Responsible for preparing teaching materials, student advising, and providing research assistance. • The term of office is 3 to 5 years. If the individual is not promoted, they may be transferred to an administrative position or another institution. • The number of staff allocated is limited to a maximum of 10% of the total number of faculty and staff.
Level II	Associate Lecturer	• Master's degree, or Bachelor's degree with equivalent experience; proficiency in ICT and English. • Responsible for conducting classes from 1st to 4th year according to the area of specialization. • Also responsible for supporting Assistant Lecturers and preparing evaluation reports. • Application to the evaluation committee is required for promotion.
Level III	Lecturer	• Doctoral degree, or Master's degree with at least 5 years of experience; proficiency in ICT and English. • Required to have a record of book publications, government awards, MoEYS certifications, or equivalent. • Responsible for conducting classes from 1st to 4th year, as well as providing support and evaluation for Assistant Lecturers. • The number of staff allocated is determined based on the needs of the educational institution.

Source: Prepared by the Survey Team based on MoEYS Prakas (No. 963) on Guidelines for Evaluation and Promotion of TEC Lecturers.

2-4-4-3 Staffing Plan and Challenges in Human Resource Development

(1) Current Situation Analysis of Faculty and Staff at Kampong Cham P/RTTC

1) Number of Faculty and Staff

The number of faculty and staff at Kampong Cham P/RTTC is as follows (see the table below).

- PTTC: 43 staff members (including 23 females), of which 27 are lecturers (including 16 females).
- RTTC: 57 staff members (including 21 females), of which 42 are lecturers (including 16 females).

The total is 100 staff members (including 44 females), which accounts for only about half of the total number of faculty and staff at PTEC (193 members).

Table 2-23 Number of Faculty and Staff at Teacher Education Institutions (2024/25)

	Number of Staff		Number of Lecturers		Total	Female
	Sub-total	Female	Sub-total	Female		
PTEC	42	14	151	58	193	72
BTEC	42	15	92	36	134	51
Kampong Cham PTTC	16	7	27	16	43	23

	Number of Staff		Number of Lecturers		Total	Female
	Sub-total	Female	Sub-total	Female		
Kampong Cham RTTC	15	5	42	16	57	21

Source: Prepared by the Survey Team based on data from Kampong Cham P/RTTC (June 2025) and MoEYS (2025) "Strategic Plan for Teacher Education Reform in Cambodia 2024-2030," p. 31.

2) Academic Qualifications and Certifications of Faculty and Staff

The breakdown of Faculty and Staff by highest academic degree is as follows.

【PTTC】

- Management Sector: 8 Master's degree holders
- Academic Sector: 10 Master's degree holders (5 in Science, 5 in Social Science)

【RTTC】

- Management Sector: 6 Master's degree holders
- Academic Sector: 1 Doctoral degree holder (Social Science), 34 Master's degree holders (7 in Science, 27 in Social Science)

Table 2-24 Breakdown of Faculty and Staff at Kampong Cham P/RTTC by Academic Qualification (2024/25)

	Number of Faculty by Highest Degree (Kampong Cham PTTC)				
	Below Bachelor's	Bachelor's	Master's	PhD	Total
Administrative Dept.	**3**	**5**	**8**	**0**	**16**
Management	0	1	2	0	3
Administration	3	4	6	0	13
Academic Dept.	**4**	**13**	**10**	**0**	**27**
Academic (Science)	**0**	**2**	**5**	**0**	**7**
Mathematics	0	1	4	0	5
Science	0	1	1	0	2
Academic (Social Science)	**4**	**11**	**5**	**0**	**20**
English	0	0	1	0	1
Khmer & English	0	2	0	0	2
French	0	1	0	0	1
History	0	0	2	0	2
Geography & History	0	1	0	0	1
Home Economics	0	1	0	0	1
Khmer	0	0	1	0	1
Khmer & Home Economics	1	2	0	0	3
Art	0	1	0	0	1
Arts & History	0	2	0	0	2
Psychology	0	1	1	0	2
Physical Education	2	0	0	0	2
Pre-school Education	1	0	0	0	1

	Number of Faculty by Highest Degree (Kampong Cham RTTC)				
	Below Bachelor's	Bachelor's	Master's	PhD	Total
Administrative Dept.	**4**	**2**	**6**	**0**	**12**
Management	0	1	2	0	3
Administration	4	1	4	0	9
Academic Dept.	**3**	**7**	**34**	**1**	**45**
Academic (Science)	**0**	**2**	**7**	**0**	**9**
Mathematics	0	0	3	0	3
Physics	0	1	1	0	2
Chemistry	0	1	1	0	2
Biology	0	0	1	0	1
Earth Science	0	0	1	0	1
Academic (Social Science)	**3**	**5**	**27**	**1**	**36**
Agriculture	1	0	0	0	1
Agricultural Science	0	1	0	0	1
Agri. Science & Home Ec.	0	0	1	0	1
Agriculture & ICT	0	1	0	0	1
Art	0	1	0	0	1
Economics & Geography	0	0	1	1	2
Economics	0	0	1	0	1
Geography	0	0	1	0	1
History	1	0	1	0	2
ICT	0	0	3	0	3
English	0	0	11	0	11
Khmer	0	0	2	0	2
Moral Education	0	1	0	0	1
Philosophy	0	0	2	0	2
Physical Education	1	0	0	0	1
Psychology & Pedagogy	0	1	4	0	5

Note: The academic background column in the table indicates the field of the highest degree and does not indicate the subject they teach at Kampong Cham P/RTTC.
Source: Prepared by the Survey Team based on interviews with Kampong Cham P/RTTC.

The total number of faculty and staff holding a Master's degree or higher is 59. Compared to the expected full scale of TEC (199 persons in case of PTEC), the ratio of those with at least a Master's degree remains at approximately 30%. To be accredited as a Higher Education Institution (HEI), it is necessary to meet the criteria stipulated in Teacher Education Provider Standard (TEPS), which requires at least 50% of the staff to hold a Master's degree or higher. Therefore, MoEYS is required to recruit approximately 40 additional Master's degree holders and to provide further education for staff members who have not yet obtained one. The anticipated number of faculty and staff for the new organization, based on DGTED's recruitment plan (as of November 2025) and PTEC-standard staffing levels, is shown in the table below.

Table 2-25 Projected Staffing Plan for KCTEC

Post		Total Staff Count	
Administration Division	Director	1	
	Vice Director	4	
	Head of Administration (Academic Affairs and Teacher Training Office)	1	
	Deputy Head of Administration (Academic Affairs and Teacher Training Office)	1	
	Staff (Academic Affairs and Teacher Training Office)	3	*
	Head of Administration (Administration, Personnel, and Finance Office)	1	
	Deputy Head of Administration (Administration, Personnel, and Finance Office)	1	
	Staff (Administration, Personnel, and Finance Office)	3	*
	Head of Internal Quality Assurance (IQA Office)	1	
	Deputy Head of IQA Office	1	
	Staff (IQA Office)	3	*
	First Aid Room Staff	1	*
	Maintenance, Cleaning, and Security	4	*

Post		Total Staff Count
Academic Division	Head of Department	3
	Vice Head of Department	3
	Head of Division	7
	Vice Head of Division	7
	Academic Staff	146
	Head of Digital Center	1
	Vice Head of Digital Center	1
	Digital Administrator	1
	Librarian	1
	Staff	4
	Total	**199**

Note*: As the total quota for administrative staff has not yet been determined, provisional values have been calculated based on the standard figures for PTEC.
Note**: Calculated as 146 persons, which excludes management, digital administrators, librarians, and general staff from the total required personnel for the education sector (174 persons) planned by DGTED.
Source: Prepared by the Survey Team based on interviews with PTEC, the initial establishment plan, and the "Action Plan to Support the Transformation of Kampong Cham Regional and Provincial Teacher Training Colleges into Kampong Cham Teacher Education College" (DGTED, Nov 2025).

(2) Challenges and Strategic Approaches for Human Resource Recruitment and Capacity Development for KCTEC Establishment

MoEYS needs to strategically proceed with human resource recruitment and capacity development for the establishment of KCTEC, while taking the following perspectives into account.

1) Key Challenges

- If the field of a faculty member's degree does not match their assigned subject, there is a possibility that they will not be accredited as holding a master's degree or higher. (Some of the 59 candidates may fail to meet the requirements depending on their assigned subjects.)
- Only 18 faculty members (17 from RTTC and 1 from PTTC) have experience in writing a master's thesis. This poses a challenge in ensuring the research functions required for a Higher Education Institution.
- Student-faculty ratio of 1:30[18](The planned ratios by field are as follows: 1:25 for Arts, 1:18 for Mathematics, Science, and ICT, 1:25 for Social Sciences, and 1:20 for Foreign

[18] Based on ACC regulations

Languages.)

2) Recruitment Plan

According to the recruitment plan developed by DGTED in November 2025 (see the table below), management and staff are scheduled to be recruited and undergo capacity development during approximately the same period. In particular, a large number of recruitments are anticipated for 2026–2027[19]. DGTED expects that 56 graduates from the National Institute of Education (NIE) will be available for assignment at KCTEC in November 2026, which is anticipated to increase the number of faculty members with master's degrees. Additionally, recruiting P/BTEC graduates will be effective for further organizational capacity development at KCTEC.

Table 2-26 Recruitment Schedule for KCTEC Faculty and Staff

Year/Month	Overall	Director/Vice Director	Head of Office / Head of Faculty	Teaching Staff	Administrative Staff	Digital Center
2025						
1st Quarter	Establishment of the Selection Committee					
2026						
1st Quarter		Establishment of roles and criteria, recruitment, and selection	Establishment of roles and criteria	Current Staff Evaluation & Committee Establishment		Committee Setup & Criteria Definition
2nd Quarter		Selection and Appointment	Recruitment and selection	Criteria Development & Recruitment	Calculation of Required Personnel	Recruitment, Selection & Appointment
3rd Quarter		Capacity Building (Continuous)	Appointment	Selection & Recruitment	Committee Setup & Criteria Definition	Capacity Building (Continuous)
4th Quarter		ditto	Capacity Building (Continuous)	Capacity Building (Continuous)	Recruitment, Selection & Appointment (Continuous through 2029)	ditto
2027-2029						
1st Quarter		ditto	Ditto	ditto	Capacity Building (Continuous)	ditto
2nd Quarter		ditto	Ditto	ditto	ditto	ditto
3rd Quarter		ditto	Ditto	Recruitment (As needed)	ditto	ditto
4th Quarter		ditto	Ditto	Capacity Building (Continuous)	Recruitment (As needed)	ditto

Source: Developed by the Survey Team based on DGTEC's "Action Plan to Support the Transformation of Kampong Cham Regional and Provincial Teacher Training Colleges into Kampong Cham Teacher Education College."

[19] According to the "Action Plan to Support the Transformation of Kampong Cham Regional and Provincial Teacher Training Colleges into Kampong Cham Teacher Education College" (DGTED, Nov 2025), the number of teacher recruitments is planned to be 43 in 2026, 41 in 2027, 29 in 2028, and 4 in 2029.

3) Securing Specialized Digital Personnel

Since KCTEC will serve as a COE for DX in teacher education, there are plans to establish a Digital Center will within the ICT Department[20]. This initiative includes the newly proposed appointment of a new digital administrators (engineers) to facilitate the effective utilization of digital technologies. Among the six ICT staff members currently at Kampong Cham P/RTTC, those from the private sector possess advanced IT skills and are expected to play a central role in distance education at KCTEC.

4) Development of Teaching Materials and Adaptation to Learning Modalities

The current technical cooperation project (The Project for Strengthening Teacher Education Colleges for Basic Education Quality :S-TEC) makes the necessary preparations so that existing TECs (i.e. PTEC) can support new TECs (i.e. KCTEC) in implementing teacher training programs through the use of digital technology. There is a plan to enhance the capacities of KCTEC faculty candidates – primarily those who meet the "Lecturer" requirements – through the development of Year 1 blended learning course materials (lecture videos, assessments, and lesson plans) with the support of PTEC faculty.

2-4-5 Maintenance Plan

2-4-5-1 Facility

Periodic maintenance is essential to ensure that the facilities developed under the Project remain in optimal condition. Based on the current maintenance status of existing P/RTTC and PTEC facilities, it is expected that a similarly high standard of management will be maintained once Kampong Cham P/RTTC is upgraded to KCTEC. By securing dedicated personnel for the maintenance and cleaning of the newly constructed facilities—similar to the staffing at P/BTEC—it will be possible to implement periodic maintenance in addition to daily cleaning and troubleshooting.

2-4-5-2 Equipment

Since the equipment to be provided under the Project is primarily at a level used in primary and secondary schools, no specialized maintenance is required. While the staff planned for deployment at the time of KCTEC's establishment will perform general maintenance, subject teachers will be responsible for the daily inspection and maintenance of equipment related to their respective fields. Furthermore, as the equipment will be procured from local suppliers in Cambodia, after-sales service will be provided based on the support systems established by suppliers.

[20] Based on the document prepared by DGTED (as mentioned above), while it is considered desirable to establish the digital center within KCTEC, the host institution has not yet been finalized. Depending on future deliberations within MoEYS, there is a possibility that it may be established in another institution, such as a PTEC.

2-5 Project Cost Estimation

2-5-1 Initial Cost Estimation

(1) Total Cost to be borne by the Cambodian Side

354,800 USD (about 51.7 million JPY)

Table 2-27 Breakdowns of the Cost to be borne by the Cambodian side

Item	Amount (USD)	Amount (in million JPY)
Preparatory work(Demolition and removal of existing buildings, removal of obstacles, etc.)	89,000	13.0
Infrastructure Connections (New power supply, water meter installation, and internet connection)	105,100	15.3
Renovation of existing buildings (for equipment installation)	158,000	23.0
Banking commission	2,700	0.4
Total	**354,800**	51.7

Source: The Survey Team based on the M/D signed during Field Survey II.

(2) Conditions of Estimation

① Time of estimation : July, 2025

② Exchange rate : 1 USD＝145.59 JPY
1 KHR＝0.035725 JPY

③ Construction/procurement period : As per the Project implementation schedule

④ Others : The cost estimation was conducted in accordance with the guidelines of the Japan's Grant Aid scheme.

2-5-2 Operation and Maintenance Cost

According to MoEYS/DGTED, the operational budget for KCTEC will be estimated at approximately the same level as that of PTEC. As a specific budget has not been formulated yet, the actual operational expenses of PTEC as full scale, are shown in the table below for reference.

Table 2-28 Actual Operational Expenses of PTEC (2019-2025) and Budget (2026), excluding Personnel Costs

Item	2019	2020	2021	2022	2023	2024	2025	2026
Faculty and Staff Salaries	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Student Teacher Allowances	564.10	339.10	363.10	341.40	346.70	2,856.20	5,917.60	6,130.40
Allowances, Equipment Management Expenses, Consumables and Others	330.60	285.10	66.90	535.60	422.50	422.90	390.50	163.60
Utility Costs	121.70	115.20	115.20	219.80	360.00	360.00	360.00	281.80
Water Expenses	16.00	60.00	60.00	105.00	112.50	133.50	133.50	150.00
Research Expenses	-	-	-	-	94.60	184.70	100.70	14.00
Professional Development Expenses for Faculty and Staff	1,228.92	728.00	799.40	653.90	521.40	329.60	437.80	386.30
Total (Million KHR)	**2,261.32**	**1,527.40**	**1,404.60**	**1,855.70**	**1,857.70**	**4,286.90**	**7,340.10**	**7,126.10**
Total (Million USD)	**565,330**	**381,850**	**351,150**	**463,925**	**464,425**	**1,071,725**	**1,835,025**	**1,781,525**
Total (1,000 JPY)	**81,905**	**55,322**	**50,875**	**67,213**	**67,286**	**155,272**	**265,858**	**258,107**

Notes:
Staff salaries are managed by the Department of Personnel and are not administered by the TEC; therefore, they are presented in a separate table.
Unless otherwise specified, all figures are in millions of KHR
Applied exchange rates: JICA rate as of July 2025 (USD 1 = JPY 144.743, KHR 1 = JPY 0.036220) and market rate (USD 1 = KHR 4,000).
Source: Prepared by the Survey Team based on data from MoEYS/DGTED and PTEC.

The total operational expenses for 2025 (excluding staff salaries[21]) amounted to 7,340.1 KHR million (approx. 265.85 million JPY). The main breakdowns are as follows:

- Student Allowances: approx. 214.33 million JPY (Increased since 2024 in accordance with Sub-decree No. 375 on student teacher allowances)
- Non-salary Allowances, Equipment Maintenance, and Consumables: approx. 14.14 million JPY
- Utility Costs: approx. 13.03 million JPY
- Water Supply Costs: approx. 4.73 million JPY
- Student Allowances: approx. 214.33 million JPY
- Professional Development Costs for Staff: approx. 15.85 million JPY (Decreased to approx. 35% compared to 2019[22])

MoEYS is required to secure the budget from either the government budget or funds provided by development partners.

2-5-3 Personnel Cost

Reference values for the total annual staff salaries are shown in the table below. It is difficult to determine the exact amounts, as salaries vary depending on positions and years of experience. Therefore, the total annual personnel costs for KCTEC have been estimated based on the standard staffing and allowance system of PTEC.

[21] The Japanese Yen (JPY) conversion in the text is based on the JICA exchange rate as of July 2025 (1 KHR = 0.036220 JPY)
[22] The professional development and research budget, which was allocated the largest amount at 1,228.92 million KHR (approx. 44.51 million JPY) when PTEC opened in 2019, has decreased to approximately 35.62% of that level in 2025.

Overview of Salary Structure

- Functional Allowances: Provided according to position (e.g., Director, Deputy Director, three ranks of Teachers, etc.).
- Grade-based Allowances: Classified into Cadres A to C based on educational background/qualification (Refer to Sub-decree No. 80 on functional allowances to civil servants).

Table 2-29 Reference Values for Total Annual Staff Salaries at TEC

	Standard Staff (TEC)*	Monthly Salary / Person**			month	Annual Salary / Person			Total		
		(k KHR)	(k USD)	(k JPY)		(k KHR)	(k USD)	(k JPY)	(k KHR)	(k USD)	(k JPY)
Director	1	2,426.93	0.61	87.90	12	29,123.10	7.28	1,054.84	29,123.10	7.28	1,054.84
Vice-Director	4	2,249.43	0.56	81.47	12	26,993.10	6.75	977.69	107,972.40	26.99	3,910.76
Head of Department	3	2,249.43	0.56	81.47	12	26,993.10	6.75	977.69	80,979.30	20.24	2,933.07
Deputy Head of Department	12	2,209.43	0.55	80.03	12	26,513.10	6.63	960.30	318,157.20	79.54	11,523.65
Dean	5	2,036.93	0.51	73.78	12	24,443.10	6.11	885.33	122,215.50	30.55	4,426.65
Vice Dean	20	2,026.93	0.51	73.42	12	24,323.10	6.08	880.98	486,462.00	121.62	17,619.65
Teaching Staff	125	2,057.64	0.51	74.53	12	24,691.67	6.17	894.33	3,086,458.93	771.61	111,791.54
Staff	29	1,994.74	0.50	72.25	12	23,936.85	5.98	866.99	694,168.65	173.54	25,142.79
Total	**199**								**4,925,537.08**	**1,231.38**	**178,402.95**

(Note*) Calculated based on the standard staffing (Sub-decree No. 114) and the operational scale of PTEC (Prakas No. 449).
(Note**) Staff Salary consists of the total of (1) Functional Allowance and (2) Cadre Allowance.
①Functional Allowance: Provided according to positions/grades (e.g., Director, Deputy Director, Head of Department, Chief of Office, Associate Professor, Lecturer, Assistant Professor, Higher Education Trainer, Basic Trainer, Primary Trainer, Administrative Staff, and Secretary).
②Cadre Allowance is categorized into three levels based on the educational background required for each position: Cadre A (Higher Education), Cadre B (Secondary Education), and Cadre C (Primary Education), in accordance with Royal Decrees No. 240, 241, and 341. The allowance is provided based on the individual's years of service at MoEYS. According to Sub-decree No. 80, the allowance ranges for each category are KHR 907,350 to 1,446,500 for Cadre A, KHR 789,000 to 1,236,100 for Cadre B, and KHR 696,950 to 1,025,700 for Cadre C.
Based on this system, the monthly salary per person was estimated by calculating the average amounts of both the Functional Allowance and the Cadre Allowance. The calculation applies the JICA exchange rates as of July 2025 (1 USD = 144.743 JPY, 1 KHR = 0.036220 JPY) as well as the market rate (1 USD = 4,000 KHR).
Source: Prepared by the Survey Team based on materials from MoEYS, DGTED, and PTEC.

Annual Total

- Total Staff Salaries: 4,925.53 million KHR (approx. 178.40 million JPY)

When establishing KCTEC, securing a budget of a similar scale at most serves as the benchmark. In addition, it is necessary to take into account the supplementary costs associated with the establishment of the Digital Center and the maintenance of ICT-related equipment.

2-5-4 Estimation of Utility Costs and Other Expenses

(1) Electricity Cost

The electricity costs for the facilities to be developed under the Project are preliminarily calculated as follows.

Table 2-30 Estimation Annual Electricity Costs

Electricity capacity	Actual load (30%)	Demand rate	Operation hours/day	Operation days/year	Assumed electricity usage /year	Unit Price [23] (KHR/kWh)
450 kW	135 kW	50%	8 hours/day	200 days	108,000 kWh	730 KHR
Total Annual Amount		**78,840,000**	**KHR** (Approx. JPY 2.82 million /Approx. 19,350 USD)			

Source: The Survey Team

(2) Water Supply Cost

Water supply cost for the facilities to be developed under the Project are preliminarily calculated as follows.

Table 2-31 Estimated Annual Water Supply Cost

Name of Building	No. of Users	General Consumption/ day-person	Consumption /day	Total Consumption / Year	Unit Price [24] (KHR/m^3)	Total Cost
STEM building	272	49 L	13.4 m^3	4,020 m^3	1,600KHR	6,432,000 KHR
Assembly hall building	600	18L	10.8 m^3	520 m^3 (48 times/yr)		832,000 KHR
Total Annual Cost			**7,264,000 KHR** (Approx.0.26 mil. JPY)			

Source: The Survey Team

(3) Telecommunication Cost

After the implementation of the Project, it is expected that the frequency of internet use and the required bandwidth will increase compared to the current level. Therefore, it is necessary to consider a new contract with an Internet Service Provider (ISP) as needed. Assuming the use of a fiber-optic connection at the maximum carrier speed (100 Mbps), the annual fee is estimated at 3,000,000 KHR (approx. 110,000 JPY or 740 USD).

(4) Building Maintenance Cost

While it is considered that periodic maintenance beyond daily cleaning will not be required for the first year after handover, the following items—such as repainting and inspection/replacement of equipment—are anticipated as subsequent maintenance costs.

[23] Electricity tariff for government institutions, MV (22kV).
[24] Water tariff for government institutions.

Table 2-32 Estimated Annual Building Maintenance Cost for new facilities

Item		Frequency	Annualized Expenses (KHR)		
			STEM Building	Assembly Hall Building	Total
Repainting	Exterior	Every 10 years	2,370,000	9,160,000	32,860,000
	Interior		7,480,000	12,930,000	20,410,000
	Others[25]		11,980,000	6,270,000	18,250,000
Mechanical, Electrical, and Plumbing (MEP) systems[26]	Replacing consumables	As required	3,350,000	4,550,000	7,900,000
	Maintenance inspection	Every 1 month			
	Cleaning	Daily			
Total Annual Amount: 79.42 million KHR (Approx. 2.84 Million JPY)					

Source: The Survey Team

(5) Maintenance Cost for Equipment

The operation and maintenance (O&M) costs for the equipment to be provided under the Project are estimated as follows.

Table 2-33 Estimated Annual Maintenance Cost for Equipment

Item	Q'ty	Consumables, spare parts	Amount (USD)	Assumptions
Projector	-	Lamps and Filters	274.75	The replacement of lamps and filters is projected to occur once every two to three years.
Inkjet Multi-Function Printer	Ink cartridges, paper feed rollers, etc.	Printhead	343.44	Ink cartridges: Expected to be replaced approximately three times a year. Paper feed rollers and print heads: Anticipated replacement cycle is once every two to three years.
3D Printer	Resin	-	137.38	Replacement frequency: Approximately twice a year
Digital Thermometer	Resin	Sensor	45.80	Batteries and sensors are anticipated to be replaced approximately once every two to three years.
pH Meter	Calibration solutions	Electrode	1,337.67	Electrodes and calibration solutions are anticipated to be replaced approximately once every one to two years.
Oscilloscope	-	Probe	16.03	Replacement is projected to occur approximately once every 2-3 years.
Electric Saw	Replacement blades	-	1,254.00	Anticipated to be replaced approximately once every 2 months.
Electric Jigsaw	Jigsaw blades	-	277.00	Anticipated to be replaced approximately once every 2 months.
Bench Drill Press	Drive belts and drill bits	-	1,099.00	Replacement is projected to occur annually.

[25] Re-application of urethane waterproof coating, re-sealing around doors and windows, etc.
[26] Maintenance and operation include the cleaning of septic and soak pits for plumbing, the inspection and filter cleaning for HVAC, and the periodic check of power and fire prevention systems for electrical installations.

Belt Sander	Sanding belts	-	1,248	Expected replacement: Approximately twice a year
Printer	Toner cartridges, drum units, fuser units, etc.	-	539.00	Toner cartridges and drum units are expected to be replaced approximately once every 3 years.
AED	Separation Pad	Battery	121.00	Pads are expected to be replaced once every two years.
Costs for replacement of parts and technician dispatch for repairs in the event of failure.			1,604.48	200.56 USD x 2 persons x 4 days
Total Annual Amount			**8,297.23**	**1,207,994JPY**

Source: The Survey Team

2-5-5 Total of Operation and Maintenance Cost

The operation and maintenance (O&M) costs for the facilities and equipment provided under the Project, as estimated in sections (1) through (5) above, are summarized in the following table. Once the facilities and equipment become operational, an additional 202.33 million KHR (approximately 7.23 million JPY or 49,650 USD) must be allocated annually, in addition to the existing O&M budget.

Table 2-34 Estimated Annual Operation and Maintenance Cost for Buildings and Equipment to be provided by the Project

Item		Amount in KHR	Amount in JPY	Amount in USD
Electricity Cost	refer to (1)	78.84 mil KHR	Approx. 2.82 mil JPY	Approx. 19,400 USD
Water Supply Cost	refer to (2)	7.26 mil KHR	Approx. 0.26 mil JPY	Approx. 1,800 USD
Telecommunication Cost	refer to (3)	3 mil KHR	Approx. 0.11 mil JPY	Approx. 700 USD
Sub-total for utility cost		**89.10 mil KHR**	Approx. 3.18 mil JPY	Approx. 21,900 USD
Maintenance cost for buildings	refer to (4)	79.02 mil KHR	Approx. 2.82 mil JPY	Approx. 19,500 USD
Maintenance cost for equipment	refer to (5)	33.81 mil KHR	Approx. 1.21 mil JPY	Approx. 8,300 USD
Sub-total for maintenance cost		**113.23 mil KHR**	Approx. 4.05 mil JPY	Approx. 27,800 USD
Operation and maintenance cost		**202.33 mil KHR**	Approx. 7.23 mil JPY	Approx. 49,700 USD

Source: The Survey Team

Chapter 3 Project Evaluation

Chapter 3 Project Evaluation

3-1 Preconditions

The Project involves the development of facilities on a site within the existing campus; therefore, there are no prerequisites regarding land acquisition. However, it is a prerequisite that the undertakings to be borne by the recipient country, as described in Chapter 2, be implemented without delay.

3-2 Necessary Inputs by Recipient Country

The following items shall be carried out by the Cambodian side for the effects of the Project to be produced and sustained.

1. Implementation of the undertakings by the Cambodian side as described in Chapter 2.
2. Securing of an appropriate number of student teachers by MoEYS.
3. Implementation of education and research activities in accordance with the curriculum and syllabus as a four-year TEC.
4. Assignment of teaching and administrative staff who meet the requirements for the operation of a four-year university.
5. Budgetary measures, including personnel costs for staff and expenses for O&M of facilities and equipment.
6. Establishment of an O&M system for KCTEC facilities and equipment, and the implementation of appropriate maintenance.
7. Establishment of an educational system (blended learning system that MoEYS intends) that combines online learning (synchronous: distance learning, asynchronous: e-learning) and face-to-face instruction through collaboration between KCTEC and PTEC.
8. Formulation and implementation of plans for KCTEC to serve as a COE for DX in teacher education.

3-3 Important Assumptions

The important external factors to ensure that the Project outcome is effective and sustainable, but cannot be controlled by the Project activities, are as follows:

1. There will be no political changes, deterioration of security, natural disasters, or pandemics which may cause the cancellation or significant delay of the Project;
2. There will be no inflation higher than expected due to drastic changes in the economic situation, and the necessary materials and equipment are procured as scheduled;
3. There will be no major changes to the education plans of the Cambodian side regarding KCTEC.

3-4 Project Evaluation

3-4-1 Relevance

The Project is evaluated to be relevant and eligible for a Grant Aid project of Japan by the reasons mentioned below.

(1) Target of the Project

The direct beneficiaries of the Project are student teachers, faculty and staff of KCTEC. Through the construction of buildings and equipment procurement under the Project, education and research will be conducted in alignment with university-level curricula, which is expected to result in the training of high-quality primary and lower secondary teachers.

As these Bachelor's degree-holding teachers trained at KCTEC are deployed nationwide, including Northeast provinces, the Project is expected to contribute to the nationwide dissemination of quality basic education. In the medium to long term, this will lead to overall human resource development, including the highly skilled professionals who will lead Cambodia's industrial sector, thereby contributing to the country's economic growth. Consequently, the entire nation will be indirect beneficiaries of the Project.

(2) Contribution to the Upstream Policies of Cambodia

The "Pentagonal Strategy Phase 1 (2023)" of the Cambodian government sets human capital development and the promotion of a digital economy and society as strategic priorities. Furthermore, the "Education Strategic Plan (ESP 2024-2028)," formulated in response to the Pentagonal Strategy, positions the reform of the teacher training system as an essential pillar for improving educational quality and fostering the 21st-century skills. It aims to achieve fundamental systemic reforms, enhance the quality of education, and ensure equal educational opportunities. Notably, the ESP 2024-2028 targets increasing the percentage of teachers holding a Bachelor's degree from 30% in 2023 to 50% by 2028.

In addition, the "TPAP 2024-2030," which aims for comprehensive reform toward improved educational quality and sustainable human resource development, includes a strategy to upgrade all existing RTTCs to TECs by 2029. Therefore, the Project – which supports the integration of Kampong Cham P/RTTC and the establishment of KCTEC as a four-year college through the construction of buildings and equipment procurement – is highly consistent with the upstream policies and education strategies of Cambodia.

(3) Coherence with the Japan's Assistance Policy

The "Country Development Cooperation Policy for Cambodia (April 2024)" by the Japanese government explicitly states the importance of improving the quality of education, including basic education, and the development of digital infrastructure under its priority area, "Realizing sustainable and equitable growth." Furthermore, the "JICA Country Analysis Paper for the Kingdom of Cambodia (March 2024)" identifies "Industrial Diversification and Vitality Creation" as a key challenge. As the Project aligns with the priority policy of "Strengthening Teacher Capacity" in the JICA Global Agenda (JICA's strategy by issue), it is highly consistent with these national policies and analyses.

In addition, through the Grant Aid project "The Project for the Construction of Teacher Education Colleges (2017)," Japan supported the establishment of P/BTEC, the first four-year teacher education colleges in Cambodia. With further support from technical cooperation projects – "The Project for Establishing Foundations for Teacher Education Colleges (E-TEC: 2017-2022)" and S-TEC (2024-2027)" – both colleges have established robust systems for management, education, and research, and

are now producing highly qualified teachers. In supporting the establishment of KCTEC, the Project is expected to achieve even greater development effectiveness by leveraging the experience gained from the establishment and operation of P/BTEC, and by receiving support from PTEC to implement blended learning, including online lessons.

3-4-2 Effectiveness

The implementation of the Project is expected to bring about the following effects.

(1) Quantitative Effects

Table 3-1 Quantitative Indicators (Preliminary)

Indicator	Base value (Actual :202)	Target value (2032) [4 yrs. after completion]
Number of the pre-service student teachers and the in-service teachers in the teacher qualification upgrade programs (12+4, BA+1, and others) at KCTEC	0	1,400 (350 student teachers × 4 years)

It should be noted that, from the actual performance of the existing P/BTEC, a stable intake of new student teachers and consistent enrollment at KCTEC are not necessarily guaranteed every year. Furthermore, there is a possibility that the number of admissions may not reach the full capacity as initially projected.

(2) Qualitative Effects

- Improving the educational environment to advance pedagogical practices will enhance the quality of the teacher qualification upgrading program in Kampong Cham Province.

By combining the advancement of educational practices (through the use of blended learning and Learning Management System (LMS)) with the environmental improvements provided by the Project (the construction of the STEM building and provision of related equipment), a foundation for continuous institutional educational improvement—including tracking learning progress and providing teacher-to-student feedback—will be established. This is expected to lead to the continuous production of higher-quality teachers in the future.

Accordingly, the Project is deemed highly relevant and effective, and thus appropriate to be implemented by the Japan's Grant Aid.

Appendices

Appendix 1 Member List of the Survey Team

(1) Field Survey I (June 8 to July 12, 2025)

	Name	Assignment	Affiliation
1	Mr. Takeshi MATSUYAMA	Team Leader	Basic Education Group, Human Development Department, JICA
2	Ms. Tomoko FUKASAWA	Cooperation Planning	
3	Mr. Akira SUGIURA	Chief Consultant/ Architectural Planning	Mohri Architect & Associates, Inc.
4	Mr. Tomohiro TAMAKI	Deputy Chief Consultant/ Equipment Planning	INTEM Consulting, Inc.
5	Mr. Hisafumi MICHIKAWA	Architectural Design 1	Mohri Architect & Associates, Inc.
6	Ms. Tomoko FUJIKAWA	Architectural Design 2	Mohri Architect & Associates, Inc.
7	Ms. Yoko MIURA		Mohri Architect & Associates, Inc.
8	Mr. Takahiro MATSUO	Architectural M&E Design	Mohri Architect & Associates, Inc. * Supporting Member: System Planning Co., Ltd.
9	Ms. Keiko MATSUMOTO		
10	Mr. Tomoo YUASA	Construction Planning/ Cost Estimate	Mohri Architect & Associates, Inc.
11	Ms. Hikaru MIYAHARA	Procurement Planning/ Cost Estimate	INTEM Consulting, Inc.
12	Ms. Megumi SHIOTA	Education Planning	PADECO Co., Ltd.
13	Ms. Minako TAKAHASHI	Social Conditions Survey	Mohri Architect & Associates, Inc.

(2) Field Survey II (January 25 to 31, 2026)

	Name	Assignment	Affiliation
1	Mr. Takao MARUYAMA	Team Leader	Basic Education Team 1, Basic Education Group, Human Development Department, JICA
2	Ms. Tomoko FUKASAWA	Cooperation Planning	
3	Mr. Akira SUGIURA	Chief Consultant/ Architectural Planning	Mohri Architect & Associates, Inc.
4	Mr. Tomohiro TAMAKI	Deputy Chief Consultant/ Equipment Planning	INTEM Consulting, Inc.
5	Ms. Tomoko FUJIKAWA	Architectural Design 2	Mohri Architect & Associates, Inc.
6	Ms. Yoko MIURA		Mohri Architect & Associates, Inc.

Appendix 2　Study Schedule

(1) Field Survey I (June 8 to July 12, 2025)

			JICA Officials	a	b	c	d	d	f	g	h	i
			Team Leader, Cooperation Planning	Chief Consultant/ Architectural Planning	Deputy Chief Consultant/ Equipment Planning	Architectural Design 1	Architectural Design 2	Architectural M&E Planning	Construction Planning/ Cost Estimate	Procurement Planning/ Cost Estimate	Education Planning	Social Condition Survey
			Mr. Takeshi MATSUYAMA Ms. Tomoko FUKASAWA	Mr. Akira SUGIURA	Mr. Tomohiro TAMAKI	Mr. Hisafumi MICHIKAWA	Ms. Tomoko FUJIKAWA Ms. Yoko MIURA	Mr. Takahiro MATSUO (Ms. Keiko MATSUMOTO)	Mr. Tomoo YUASA	Ms. Hikaru MIYAHARA	Ms. Megumi SHIOTA	Ms. Minako TAKAHASHI
			7 days	28 days	28 days	21 days	11 days	18 days	21 days	14 days	21 days	21 days
1	2025/6/8	Su		Tokyo→Phnom Penh							Tokyo→Phnom Penh	
2	2025/6/9	Mo		Courtesy visit to JICA office/MoEYS							Same as a	
3	2025/6/10	Tu	Tokyo→Phnom Penh	Explanation of ICR to MoEYS, Visit to PTEC							Same as a	
4	2025/6/11	We	Courtesy visit to JICA office and MoEYS, Visit to PTEC								Same as a	
5	2025/6/12	Th	Visit to Kampong Cham RTTC/PTTC								Same as a	
6	2025/6/13	Fr	Discussion with MoEYS								Same as a	
7	2025/6/14	Sa	Team meeting、Documentation								Team meeting、Documentation	
8	2025/6/15	Su	Documentation								Documentation	Tokyo→Phnom Penh
9	2025/6/16	Mo	Discussion with MoEYS/ Discussion with MoCS								Same as a	Same as a
10	2025/6/17	Tu	Signin of Minutes of Meetings, Report to JICA and EoJ								Same as a	Same as a
11	2025/6/18	We		National Holiday			Tokyo→Phnom Penh			Tokyo→Phnom Penh	National Holiday	
12	2025/6/19	Th		Phnom Penh→Kampong Cham/ KCTEC Site Survey		Visit to PTEC /Phnom Penh→Kampong Cham/ KCTEC Site Survey				Same as a	Same as a	Same as a
13	2025/6/20	Fr		KCTEC site survey						KCTEC site survey	KCTEC site survey Kampong Cham→ Phnom Penh	KCTEC site survey
14	2025/6/21	Sa		Kampong Cham→Phnom Penh			Team meeting/ Documentation			Kampong Cham→ Phnom Penh	Documentation	Team meeting、Documentation
15	2025/6/22	Su		Documentation			Documentation （Miura）→Phnom Penh	Documentation	→Phnom Penh	Documentation	Documentation	Documentation
16	2025/6/23	Mo		Visit NIE Library, Japan Center, and ITC/ Discussion with Japanese Experts			（Miura）Phnom Penh→ Kampong Cham/ KCTEC site survey	KCTEC site survey	Phnom Penh→Kampong Cham/KCTEC site survey	Same as b	Education Planning survey	Social Condition Survey
17	2025/6/24	Tu		Discussion with MoEYS, and Library TECH			KCTEC site survey	Meeting with EDC and Water Authority/ KCTEC site survey	KCTEC site survey	Same as above	Same as above	Same as above
18	2025/6/25	We		Discussion with DSCP of MoEYS	Discsssion on Equipment and Electrical service	Discussion with DSCP of MoEYS/ Natural condition Survey	Kampong Cham→ Phnom Penh/ Natural condition Survey	Meeting with Fire Dept. KCTEC site survey	Kampong Cham→ Phnom Penh/ Cost survey	Equipment procurement survey	Same as above	Kampong Cham→ Phnom Penh
19	2025/6/26	Th		Discussion with MoEYS Visit to Local contractors	Discussion with DGTED of MoEYS	Survey on architectural design	Discussion with MoEYS Survey on architectural design	Kampong Cham→Phnom Penh	Cost survey	Discussion with DGTED of MoEYS/ Equipment procurement survey	Same as above	Same as a
20	2025/6/27	Fr		Discussion with Procurement Dept of MoEYS/Visit to Local contractors	Discussion with Procurement Dept of MoEYS/	Same as above Phnom Penh→	Same as above （Fujikawa）Phnom Penh→	Discussion with MoEYS Visit to Local contractors	Same as above	Discussion with Procurement Dept of MoEYS/ Equipment procurement survey	Same as above Phnom Penh→	Same as above
21	2025/6/28	Sa		Team meeting、Documentation		→Tokyo	（Fujikawa）→Tokyo （Miura）Phnom Penh→	Team meeting、Documentation			→Tokyo	Team meeting、Documentation
22	2025/6/29	Su		Documentation				Documentation	Documentation	Documentation		Documentation
23	2025/6/30	Mo		Phnom Penh→Kampong Cham/KCTEC site survey Kampong Cham→ Phnom Penh	Equipment planning survey			Visit to Local contractors	Same as a	Equipment procurement survey		Social Condition Survey
24	2025/7/1	Tu		Discussion with DSCP of MoEYS/ Visit to CADT	Visit to CADT			Discussion with MoEYS Visit to Local contractors	Cost survey	Phnom Penh→Tokyo		Same as a
25	2025/7/2	We		Discussion on Technical Notes				M&E planning survey	Same as above			Same as above
26	2025/7/3	Th		Same as above	Same as above			Visit to Local contractors	Same as above			Same as above
27	2025/7/4	Fr		Signing of T/N Report to JICA office, Phnom Penh→	Signing of T/N Report to JICA office,			Same as above Phnom Penh→	Same as above			Same as above Phnom Penh→
28	2025/7/5	Sa		→Tokyo	Phnom Penh→Tokyo			→Tokyo	Team meeting、Documentation			→Tokyo
29	2025/7/6	Su							Documentation			
30	2025/7/7	Mo							Phnom Penh→Kampong Cham/KCTEC site survey			
31	2025/7/8	Tu							KCTEC site survey Kampong Cham→ Phnom Penh			
32	2025/7/9	We							Cost survey			
33	2025/7/10	Th							Same as above			
34	2025/7/11	Fr							Same as above Phnom Penh→			
35	2025/7/12	Sa							→Vientiane			

(2) Field Survey II (January 25 to 31, 2026)

			JICA Officials	A	B	C
			Team Leader, Cooperation Planning	Chief Consultant/ Architectural Planning	Deputy Chief Consultant/ Equipment Planning	Architectural Design 2
			Mr. Takao MARUYAMA Ms. Tomoko FUKASAWA	Mr. Akira SUGIURA	Mr. Tomohiro TAMAKI	Ms. Tomoko FUJIKAWA Ms. Yoko MIURA
			7 days	7 days	7 days	7 days
1	2026/1/25	Sun	Arrived at Phnom Penh			
2	2026/1/26	Mon	Courtesy visit to JICA office, Explanation and discussion on the preparatory survey report (draft)			
3	2026/1/27	Tue	Site visit to Kampong Cham RTTC		Technical discussion on equipment	Same as A
4	2026/1/28	Wed	Discussion on M/D (draft)			
5	2026/1/29	Thr	Team meeting	Technical discussion on arch planning Meeting with GDT	Meeting with GDT	Same as A
6	2026/1/30	Fri	Discussion and signing on M/D			
			Report to EOJ			—
7	2026/1/31	Sat	Arrived at Tokyo			

Appendix 3 List of Parties Concerned in the Recipient Country

Ministry of Education, Youth and Sport (MoEYS)

Name	Position	Affiliation
H.E. Dr. Nath Bunroeun	Secretary of State	
H.E. Leang Senghak	Under-Secretary of State	
H.E. Vorng Phirun	Under-Secretary of State	
H.E.Dr. Khuon Vicheka	Director General	Directorate General of Teacher Education Development
Mr. Ngor Penglong	Deputy Director General	Directorate General of Teacher Education Development
Mr. Long Sovath	Deputy Director General	Directorate General of Teacher Education Development (DGTED)
Mr. Chhouk Chanchhaya	Deputy Director General	Directorate General of Teacher Education Development (DGTED)
Ms. Hor Sivy	Deputy Head	Directorate General of Teacher Education Development (DGTED)
Mr. Mon Munint	Director	Directorate General of Teacher Education Development (DGTED)
Mr. Kim Pheng	Deputy Director	Directorate General of Teacher Education Development (DGTED)
Mr. Thon Sopheak	Officials	Directorate General of Teacher Education Development (DGTED)
Ms. Tha Veachakta	Officer	Directorate General of Teacher Education Development (DGTED)
Mr. Ngin Vith	Chief of Officer	Directorate General of Teacher Education Development (DGTED)
Ms. Eang Senglim	Chief of Officer	Directorate General of Teacher Education Development (DGTED)
Ms. Phorn Sophea	Chief of Officer	Directorate General of Teacher Education Development (DGTED)
Ms. Yok Sokunveary	Chief of Officer	Directorate General of Teacher Education Development (DGTED)
Mr. Duch Sokneang	Officer	Directorate General of Teacher Education Development (DGTED)
H.E. Ung Chinna	Director General	Director General of Education
H.E. Tep Phiyorith	Secretary General	General Secretary
Mr. Sith Chey	Deputy Secretary General	General Secretary
H.E.Dr. Sorn Senghok	Director	Department of Legislation
Seng Sovirak	Deputy Director	Department of Human Resources
Mr. Ren Kun	Deputy Director	Department of Human Resources

Name	Position	Affiliation
Mr. Klork Vira	Head	Department of Human Resources
Mr. Muong Naroat	Deputy Director	Department of Finance
Ms. Chea Kim	Head	Department of Finance
Kim Meychou	Head	Department of Finance
Mr. Chhin Saosakarach	Deputy Chief	Department of Finance
Mr. Ros Monyruth	Intern Officer	Department of Finance
Mr. Vanny Sovannan	Officer	Department of Finance
Dr. Lim Sovanna	Director	Department of State Property and Construction (DSPC)
Mr. Chhoun Vanthan	Deputy Director	Department of State Property and Construction (DSPC)
Mr. Soeur Solida	Deputy Office	Department of State Property and Construction (DSPC)
Mr. Ki Lianghour	Deputy office	Department of State Property and Construction (DSPC)
Mr. Huot Teaug	Deputy	Department of State Property and Construction (DSPC)
Mr. Tea Bunleng	Office Chief (Environment)	Department of State Property and Construction (DSPC)
Mr. Kea Sokkheang	Engineer	Department of State Property and Construction (DSPC)
Mr. Meng Rem	Engineer	Department of State Property and Construction (DSPC)
Mr. Kea Sokkheang	Engineer	Department of State Property and Construction (DSPC)
Mr. Ki Leanghour	Engineer	Department of State Property and Construction (DSPC)
Mr. Han Rotha	Staff	Department of State Property and Construction (DSPC)
Mr. Va Seth	Director of Procurement Department	Department of State Property and Construction (DSPC)
Ms. Porn Sophea	Head of Procurement Unit	Department of State Property and Construction (DSPC)
Chea Sopha	Chief of Procurement Unit	Department of State Property and Construction (DSPC)
Mr. Luon Monkol	Head Office of Procurement	Department of State Property and Construction (DSPC)
Mr. Mok Sokun	Procurement officer	Department of State Property and Construction (DSPC)
Mr. Sok Tha	Director	Department of Digital Transformation
Mr. Uk Samphors	Chief of Office	Department of Digital Transformation

Name	Position	Affiliation
Mr. Kamnab Kuoch	Vice Chief of Office	Department of Digital Transformation
Mr. Kheng Piseth	Vice Chief of Office	Department of Digital Transformation
Ms. Than Setharoat	Head	Department of Planning

Ministry of Economy and Finance

Name	Position	Affiliation
Mr. Seng Cheasith	Director	Law, Tax Policy and International Tax Cooperation Department, General Department of Taxation (GDT)
Mr. Mong Lamy	Bureau Chief	Law, Tax Policy and International Tax Cooperation Department, General Department of Taxation (GDT)
Ms. Tae Tole	Officer	Law, Tax Policy and International Tax Cooperation Department, General Department of Taxation (GDT)
Ms. Bun Saroeun	Officer	Law, Tax Policy and International Tax Cooperation Department, General Department of Taxation (GDT)

National Institute of Education (NIE)

Name	Position	Affiliation
Mr. Lay Borey	Director General	
H.E.Dr. Seang Sovanna	Director	
Mr. Seng Lang	Deputy Director	General management Support Unit
Mr. Chhit Liengieng	Head	IQA
Ms. Bo Sokchan	Head	Library

Phnom Penh Teacher Education College (PTEC)

Name	Position	Affiliation
H.E. Dr. Set Seng	Director	
Dr. Dork Chea	Deputy Director	
Mr. Sorn Sokheam	Lecturer (Physics)	Department of Science, Faculty of Science Education
Mr. Moeung Vanna	Lecturer (Chemistry)	Department of Science, Faculty of Science Education
Ms. Hour Khim	Lecturer (Biology)	Department of Science, Faculty of Science Education

Mr. Koem Vannak	Lecturer (Earth Science)	Department of Science, Faculty of Science Education
Ms. Seang Sokhary	Lecturer (Primary Science)	Department of Science, Faculty of Science Education
Mr. Chor Sophea	Lecturer (ICT)	Department of ICT, Faculty of Science Education

Battambang Teacher Education College (BTEC)

Name	Position
H.E. Dr. CHEA Ratha	Director

Library-Tech

Name	Position
Mr. Kim Chantraboth	Project Director
Mr. Bora Mao	Project Manager

Kampong Cham PTTC

Name	Position
Mr. Prom Borath	Director
Mr. Sim Sinath	Vice Director
Mr. Kak Ratana	Trainer (ICT)
Mr. Doeun Y	Trainer (ICT)
Mr. Chea Phannha	Trainer (Math)

Kampong Cham RTTC

Name	Position
Mr. Seng Sim	Director
Mr. Chay Narin	Vice Director
Mr. Hort Bunhoeung	Chief
Mr. Khon Kong	Chief
Ms. Ouk Vanthat	Deputy Chief
Mr. Ky Leanghour	Deputy Chief
Mr. Long Sovang	Trainer (Economics/Geography)
Mr. Chhom Leang	Trainer (ICT)

Name	Position
Ms. Tum Sisophеareth	Trainer (English)
Mr. Duy Sopheak	Officer
Mr. Yean Rotha	Officer
Mr. Cheap Sarin	Officer

Kampong Cham Fire Department

Name	Position
Mr. Min Sokunvibol	Deputy Commissioner

Electricite de Cambodge (EDC)

Name	Position
Mr. Dudi Dava	

Embassy of Japan in Cambodia

Name	Position
Mr. Kamegai Einosuke	Second Secretary
Ms. Kojima Mayu	Second Secretary

JICA Cambodia Office

Name	Position
Mr. Sanui Kazumasa	Chief Representative
Ms. Miura Yoshiko	Senior Representative
Mr. Suzuki Mudai	Representative
Ms. Sawa Mari	Representative
Ms. Srun Danith	Program Officer
Ms. Matsuda Noriko	Education Policy Advisor

Appendix 4 Minutes of Discussions

Appendix 4-1 Minutes of Discussions 1 (signed on June 17, 2025)

Minutes of Discussions
on
the Preparatory Survey for the Project for
Establishing a Teacher Education College in Kampong Cham Province

Based on the several preliminary discussions between the Government of Kingdom of Cambodia (hereinafter referred to as "Cambodia") and Japan International Cooperation Agency (hereinafter referred to as "JICA"), JICA dispatched the Preparatory Survey Team for the Outline Design (hereinafter referred to as "the Team") of the Project for Establishing a Teacher Education College in Kampong Cham Province (hereinafter referred to as "the Project") to Cambodia. The Team held a series of discussions with the officials of the Government of Cambodia and conducted a field survey. In the course of the discussions, both sides have confirmed the main items described in the attached sheets.

Phnom Penh, 17th June, 2025

Mr. Takeshi Matsuyama	H.E. Nath Bunroeun
Leader	Secretary of State
Preparatory Survey Team	Ministry of Education, Youth and Sport
Japan International Cooperation Agency	Royal Government of Cambodia
Japan	Kingdom of Cambodia

ATTACHMENT

1. Objective of the Project

The objective of the Project is to improve the capacity of teachers trained at a Teacher Education College（hereinafter referred to as "TEC"）in Kampong Cham Province by providing educational facilities and equipment necessary to upgrade the existing teacher education institution to the TEC, thereby contributing to strengthen teacher education system and enhance the quality of basic education.

The Cambodian side indicated that Kampong Cham Teacher Education College（hereinafter referred to as "KCTEC"）should be the TEC to cover all the subjects, but both sides agreed that the facilities and equipment to be provided by Japanese side through the Project will be mainly focused on STEM education, given resource constraints by the Government of Japan for the Project.

2. Teacher education policy of the Government of Cambodia

To improve the capacity of teachers, the Cambodian side emphasized on transforming all pre-service teacher education institutions from 2-year system (12+2) of the teacher training to 4-year system (12+4) of TEC, and the Ministry of Education, Youth and Sport (hereinafter referred to as "MoEYS") will make an implementation strategy for establishment of new TECs. The Project is in line with the above policy, and roles of both sides for KCTEC establishment including the Project are as shown in Annex 1.

3. Vision of KCTEC and utilization of digital technologies

Both sides confirmed that KCTEC will be a model case to transform the remaining pre-service (12+2) teacher education institutions to TECs while using digital technologies.

The Cambodian side is considering making KCTEC a Centre of Excellence (CoE) for digital transformation of teacher education and is developing the digital technology utilization strategy for new TECs including KCTEC. Both sides agreed that the use of digital technology in this project would be limited to interactive lectures with P/BTEC and necessary facilities and equipment for KCTEC will be provided for that purpose.

4. Title of the Preparatory Survey

Both sides confirmed the title of the Preparatory Survey as "the Preparatory Survey for the Project for Establishing a Teacher Education College in Kampong Cham Province".

5. Project site

Both sides confirmed that the site of the Project is Kampong Cham Province.

6. Responsible authority for the Project

Both sides confirmed MoEYS will be the executing agency for the Project (hereinafter referred to as "the Executing Agency"). The Executing Agency shall coordinate with all the relevant authorities to ensure smooth implementation of the Project and ensure that the undertakings for the Project shall be managed by relevant authorities properly and on time. The organization charts are shown in Annex 2.

7. Items requested by the Government of Cambodia

As a result of discussions, both sides confirmed as follows:

7-1. Requested facilities are shown in Annex 3 with priorities.

7-2. Requested equipment categories are shown in Annex 4 with priorities. Also, both sides agreed that the equipment items will be prioritized based on the criteria shown in Annex 5.

JICA will assess the feasibility of requested items through the survey and will report the findings to the Government of Japan. The final scope of the Project will be decided by the Government of Japan.

7-3. The component of the Project including the specification will be designed based on local standards with necessary modifications.

8. Procedures and Basic Principles of Japanese Grant

8-1. The Cambodian side agreed that the procedures and basic principles of Japanese Grant (hereinafter referred to as the "Grant") as described in Annex 6 shall be applied to the Project.

As for the monitoring of the implementation of the Project, JICA requires Cambodian side to submit the Project Monitoring Report that the form is attached as Annex 7.

8-2. The Cambodian side agreed to take the necessary measures, as described in Annex 8, for smooth implementation of the Project. The contents of the Annex 8 will be

elaborated and refined during the Preparatory Survey and be agreed in the mission dispatched for explanation of the Draft Preparatory Survey Report.

The contents of Annex 8 will be updated as the Preparatory Survey progresses, and eventually, will be used as an attachment to the Grant Agreement.

8-3. Both sides agreed that the eligible nationality of the prime constructing and/or procurement firms, are nationals of the recipient country or other country(ies). The eligible nationality will be examined and will be agreed at the Preparatory Survey for the explanation of the Draft Preparatory Survey Report.

8-4. The bidding/selection and conclusion of contracts of the products and services covered by the Grant of the Project will be conducted at Cambodia based on the result of the Survey. The Cambodian side agreed that the products and services covered by the Grant of the Project will be solely procured in accordance with JICA's Procurement Guidelines for the Japanese Grants (for Japanese consultant and local contractors) (Tentative Type II).

8-5. The Cambodian side agreed that the currency for contract of prime construction and/or procurement firms is internationally traded foreign currency acceptable to JICA, that is US dollar, which will be stipulated in the Grant Agreement. The Cambodian side understood the flow of payment as shown in the Annex 3 and confirmed to take necessary measures for the payment in a timely manner. The Cambodia explained that National Bank of Cambodia as the "Recipient Bank" will conclude the banking arrangement (hereinafter referred to as "the Banking Arrangement") with a bank in Japan (hereinafter referred to as "the Agent Bank"), which will be stipulated in the Grant Agreement.

8-6. The Cambodian side agreed that procurement type of Japanese Project Grant and the feasibility of issues mentioned above in 8-3, 8-4, and 8-5 will be further examined by Japanese side based on the result of this field survey and that the result of examination will be explained at the Preparatory Survey for the explanation of the Draft Preparatory Survey Report.

9. Schedule of the Survey

9-1. The Team will proceed with further survey in Cambodia until 11th July 2025.

9-2. JICA will prepare a draft Preparatory Survey Report in English and dispatch a mission to Cambodia in order to explain its contents around January 2026.

9-3. If the contents of the draft Preparatory Survey Report are accepted and the undertakings for the Project are fully agreed by the Cambodian side, JICA will finalize the Preparatory Survey Report and send it to Cambodia around May

2026.

9-4. The above schedule is tentative and subject to change.

10. Environmental and Social Considerations

10-1. The Team explained that 'JICA Guidelines for Environmental and Social Considerations (January 2022)' (hereinafter referred to as "the Guidelines") is applicable for the Project.

10-2. The Project is categorized as C from the following considerations: The project is likely to have minimal adverse impact on the environment under the JICA guidelines for environmental and social considerations (January 2022).

10-3. The Cambodian side confirmed to give due environmental and social considerations during implementation, and after completion of the Project, in accordance with the Guidelines.

11. Other Relevant Issues

11-1. Plan of MoEYS for establishing KCTEC

- MoEYS explained that three parties (MoEYS, the Ministry of Civil Services, and the Ministry of Economy and Finance) are developing new civil servant recruitment policy including teachers, and it is awaiting approval by the Prime Minister. Both sides confirmed that MoEYS will keep the Japanese side updated on the policy time to time.
- MoEYS explained that Sub-Decree for the establishment of KCTEC will be issued by late 2025. The Team explained as the tentative implementation schedule that the Project will start in July 2026 and the construction will be completed in September 2028, but the final decision will be made by the Government of Japan.
- As mentioned in Article No. 2, MoEYS is developing the implementation strategy for the establishment of new TECs, and both sides agreed that MoEYS should inform the Japanese side the plan (number and schedule) of recruiting management, lecturers, staff, and digital administrators at KCTEC, and the expected admission number at KCTEC which are currently supposed to be equivalent to P/BTEC, by 31st October, 2025.

11-2. Measures to be taken in case that problems arise

The Cambodian side confirmed that when problems such as delay of construction works or procurement of equipment by contractors/suppliers arises during the implementation of the Project, the MoEYS will take necessary measures in

accordance with technical opinion of the consultant in a timely manner.

11-3. Measures against the cost overrun

The Cambodian side agreed that when the amount of the Grant, which includes the contingency, is not enough to cover the entire works or procurement of equipment on the implementation of the Project, the Cambodian side will modify the scope of works or procurement of equipment that are covered by the Grant based on technical opinion of the consultant and be in charge of the other scope by its own side.

11-4. Questionnaire

MoEYS shall answer to the Questionnaire submitted by the Team in English with relevant documents by 27th June, 2025.

11-5. Gender Mainstreaming

Both sides confirmed that gender elements will be duly taken into account in the scope of the Preparatory Survey such as:

a) Collection of information and data by gender to assess the needs of each gender.
b) Examination of gender-sensitive measures based on evaluation, such as:
   - Facility design that reflects the specific needs of each gender
   - Choice of equipment that reflects the specific needs of each gender and ensures ease of use for women

11-6. Climate Change

Both sides confirmed that the Project may contribute to climate change adaptation, and the detail will be discussed in the preparatory survey.

Annex 1 Overview of the establishment of KCTEC
Annex 2 Organization Chart of MoEYS
Annex 3 Requested Facilities with Priorities
Annex 4 Requested Equipment with Priorities
Annex 5 Criteria for Selecting Equipment
Annex 6 Japanese Grant
Annex 7 Project Monitoring Report
Annex 8 Major Undertakings to be taken by the Government of Cambodia

Annex 1

Overview of the establishment of KCTEC

Roles of the Cambodian side

- Developing Implementation Strategy for achieving 12+4 teacher education in newly established TECs
- Establishing TECs in Kandal, Prey Veng, and Takeo

- Providing necessary facilities and equipment for P/BTEC to deliver online lectures and instructions to KCTEC

- Developing the operation and management system e.g.
  - Governance/Management System as a College
  - Finance
    ...Securing budget from the government or external sources
  - Education/Curriculum
  - Human Development
    ...Recruiting and deployment of TEC lecturers
    ...Implementing CPD for the lectures
  - Research
  - Development of Partnership
- Providing facilities and equipment which will be not covered by the Grant Aid Project for KCTEC
- Maintaining and using properly and effectively the facilities constructed and equipment provided under the Grant Aid Project
- Admitting cohorts of 12+4 students in KCTEC every year based on the projection of future teacher needs

PTEC・BTEC

In order to implement 12+4 teacher education in KCTEC effectively and efficiently, P・BTEC supports KCTEC while utilizing digital technoloties, specifically providing satellite lectures, remote instructions and/or remote lessons.

KCTEC

Roles of JICA

- Making strategic document "Establishment of New TECs: Challenges, Solutions, and Actions" which supports policymakers, educational institutions and development partners in implementing and supporting consistent and effective teacher education reforms

Technical cooperation project
The Project for Strengthening Teacher Education Colleges for Basic Education Quality (S-TEC)

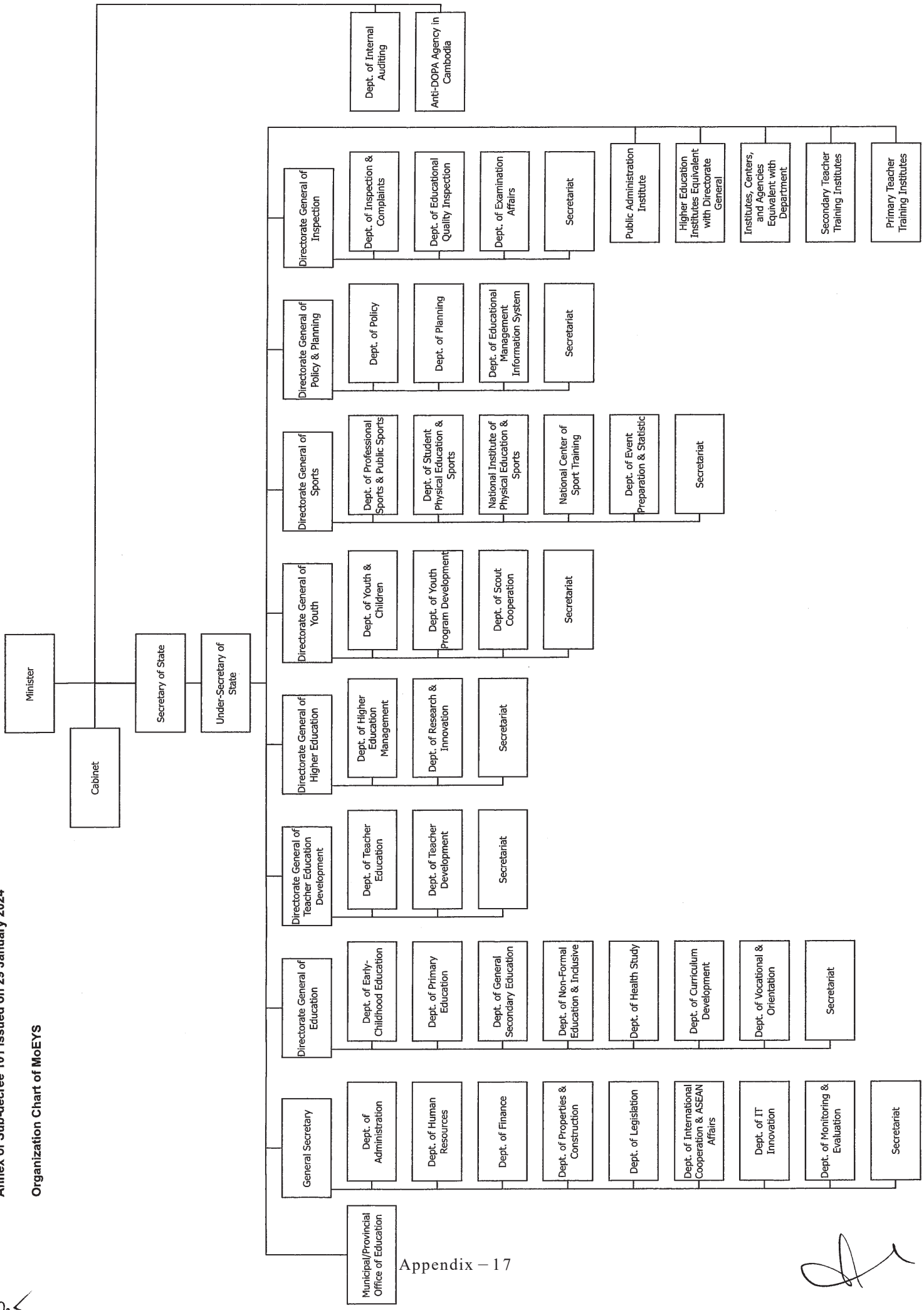
- Capacity development of teacher educators at PTEC/BTEC
- On-the-job training will be provided to KCTEC (output 4)
- Activities related to degitalization will be considered

Grant Aid Project
The Project for Establishing a Teacher Education College in Kampong Cham Province

- Providing facilities and equipment (The final scope of the Project will be decided by the Government of Japan)

Annex of Sub-decree 101 issued on 29 January 2024

Organization Chart of MoEYS



Annex 3

Requested Facilities with Priorities

Priority Order	Facilities
1	Administration Block with Auditorium
2	Multi-Purpose Hall
3	STEM Block with Science Laboratory for both secondary and Primary Education, and ICT Room
4	Library Block with E-library

Annex 4

Requested Equipment with Priorities

No.	Equipment Category	Priority
1	ICT Equipment for Interactive Lectures	A
2	Science Lab Equipment for Primary Education	A
3	Mathematics Equipment for Primary Education	A
4	Physics Lab Equipment for Lower Secondary Education	A
5	Chemistry Lab Equipment for Lower Secondary Education	A
6	Biology Lab Equipment for Lower Secondary Education	A
7	Earth Science Lab Equipment for Lower Secondary Education	A
8	Mathematics and Physics Equipment for Lower Secondary Education	A
9	Workshop Equipment for developing teaching materials	A
10	Audio Visual Equipment	A
11	E-Library Equipment	A
12	First Aid Equipment	A
13	Social Study Equipment for Primary Education	B
14	Social Study Equipment for Lower Secondary Education	B
15	Music Education Instruments and Equipment for Primary Education	B
16	Music Education Instruments and Equipment for Lower Secondary Education	B
17	Art Education Equipment for Primary Education	B
18	Art Education Equipment for Lower Secondary Education	B
19	Physical Education Equipment	B
20	Home Economics Equipment	C

Annex 5

Criteria for Selecting Equipment

The equipment will be narrowed down based on the following selection criteria.

1. Items meeting the upstream policies and TEC curriculum
2. Items to be used frequently and by a large number of students
3. Items, shortage of which hinder practicum and experiments
4. ICT equipment necessary for education using Digital Technology
5. Items for practicum/experiment which are crucial for education using Digital Technology
6. Items not overlapping with assistance by other development partners
7. Items featuring not overly advanced technology
8. Item which is not used for the administrative department

Annex 6

JAPANESE GRANT

The Japanese Grant is non-reimbursable fund provided to a recipient country (hereinafter referred to as "the Recipient") to purchase the products and/or services (engineering services and transportation of the products, etc.) for its economic and social development in accordance with the relevant laws and regulations of Japan. Followings are the basic features of the project grants operated by JICA (hereinafter referred to as "Project Grants").

1. Procedures of Project Grants

Project Grants are conducted through following procedures (See "PROCEDURES OF JAPANESE GRANT" for details):

(1) Preparation

- The Preparatory Survey (hereinafter referred to as "the Survey") conducted by JICA

(2) Appraisal

-Appraisal by the government of Japan (hereinafter referred to as "GOJ") and JICA, and Approval by the Japanese Cabinet

(3) Implementation

Exchange of Notes

-The Notes exchanged between the GOJ and the government of the Recipient

Grant Agreement (hereinafter referred to as "the G/A")

-Agreement concluded between JICA and the Recipient

Banking Arrangement (hereinafter referred to as "the B/A")

-Opening of bank account by the Recipient in a bank in Japan (hereinafter referred to as "the Bank") to receive the grant

Construction works/procurement

-Implementation of the project (hereinafter referred to as "the Project") on the basis of the G/A

(4) Ex-post Monitoring and Evaluation

-Monitoring and evaluation at post-implementation stage

2. Preparatory Survey

(1) Contents of the Survey

The aim of the Survey is to provide basic documents necessary for the appraisal of the the Project made by the GOJ and JICA. The contents of the Survey are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of

relevant agencies of the Recipient necessary for the implementation of the Project.

- Evaluation of the feasibility of the Project to be implemented under the Japanese Grant from a technical, financial, social and economic point of view.
- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of an outline design of the Project.
- Estimation of costs of the Project.
- Confirmation of Environmental and Social Considerations

The contents of the original request by the Recipient are not necessarily approved in their initial form. The Outline Design of the Project is confirmed based on the guidelines of the Japanese Grant.

JICA requests the Recipient to take measures necessary to achieve its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the executing agency of the Project. Therefore, the contents of the Project are confirmed by all relevant organizations of the Recipient based on the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Survey, JICA contracts with (a) consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms.

(3) Result of the Survey

JICA reviews the report on the results of the Survey and recommends the GOJ to appraise the implementation of the Project after confirming the feasibility of the Project.

3. Basic Principles of Project Grants (contract with Japanese consultant and local contractors)

(1) Implementation Stage

1) The E/N and the G/A

After the Project is approved by the Cabinet of Japan, the Exchange of Notes (hereinafter referred to as "the E/N") will be singed between the GOJ and the Government of the Recipient to make a pledge for assistance, which is followed by the conclusion of the G/A between JICA and the Recipient to define the necessary articles, in accordance with the E/N, to implement the Project, such as conditions of disbursement, responsibilities of the Recipient, and procurement conditions. The terms and conditions generally applicable to the Japanese Grant are stipulated in the "General Terms and Conditions for Japanese Grant (January 2016)."

2) Banking Arrangements (B/A) (See "Financial Flow of Grant" for details)

a) The Recipient shall open an account or shall cause its designated authority to open an account under the name of the Recipient in the Bank, in principle. JICA will disburse the Japanese Grant in Japanese yen for the Recipient to cover the obligations incurred by the Recipient under the verified contracts.

b) In case of Japanese consultant, the Japanese Grant will be disbursed when payment requests are submitted by the Bank to JICA under an Authorization to Pay (A/P) issued by the Recipient.

c) In case of local contractors, the Japanese Grant will be disbursed when requests for disbursement are submitted by the Recipient to JICA.

3) Procurement Procedure

The products and/or services necessary for the implementation of the Project shall be procured in accordance with JICA's procurement guidelines as stipulated in the G/A.

4) Selection of Consultants

In order to maintain technical consistency, the consulting firm(s) which conducted the Survey will be recommended by JICA to the Recipient to continue to work on the Project's implementation after the E/N and G/A.

5) Eligible source country

In using the Japanese Grant disbursed by JICA for the purchase of products and/or services, the eligible source countries of such products and/or services shall be Japan and/or the Recipient. The Japanese Grant may be used for the purchase of the products and/or services of a third country as eligible, if necessary, taking into account the quality, competitiveness and economic rationality of products and/or services necessary for achieving the objective of the Project. However, the prime consulting firm, which enter into contracts with the Recipient, are limited to "Japanese nationals", while the prime constructing firm(s), which enter into contracts with the Recipient, could be nationals of the recipient country or other country(ies) if deemed it necessary .

6) Contracts and Concurrence by JICA

The Recipient will conclude the consultant contract() denominated in Japanese yen with Japanese nationals and the construction/supplier contracts dominated in other internationally traded foreign currency acceptable to JICA with the local contractors. Those contracts shall be verified by JICA in order to be eligible for the Japanese Grant.

7) Monitoring

The Recipient is required to take their initiative to carefully monitor the progress of the Project in order to ensure its smooth implementation as part of their responsibility in the G/A, and to regularly report to JICA about its status by using the Project Monitoring Report (PMR).

8) Safety Measures

The Recipient must ensure that the safety is highly observed during the implementation of the Project.

9) Construction Quality Control Meeting

Construction Quality Control Meeting (hereinafter referred to as the "Meeting") will be held for quality assurance and smooth implementation of the Works at each stage of the Works, if necessary. The member of the Meeting will be composed by the Recipient (or executing agency), the Consultant, the Contractor and JICA. The functions of the Meeting are as followings:

a) Sharing information on the objective, concept and conditions of design from the Contractor, before start of construction.

b) Discussing the issues affecting the Works such as modification of the design, test, inspection, safety control and the Client's obligation, during of construction.

(2) Ex-post Monitoring and Evaluation Stage

1) After the project completion, JICA will continue to keep in close contact with the Recipient in order to monitor that the outputs of the Project is used and maintained properly to attain its expected outcomes.

2) In principle, JICA will conduct ex-post evaluation of the Project after three years from the completion. It is required for the Recipient to furnish any necessary information as JICA may reasonably request.

(3) Others

1) Environmental and Social Considerations

The Recipient shall carefully consider environmental and social impacts by the Project and must comply with the environmental regulations of the Recipient and JICA Guidelines for Environmental and Social Considerations (April, 2010).

2) Major undertakings to be taken by the Government of the Recipient

For the smooth and proper implementation of the Project, the Recipient is required to undertake necessary measures including land acquisition, and bear an advising commission of the A/P and payment commissions paid to the Bank as agreed with the GOJ and/or JICA. The Government of the Recipient shall ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the Recipient with respect to the purchase of the Products and/or the Services be exempted or be borne by its designated authority without using the Grant and its accrued interest, since the grant fund comes from the Japanese taxpayers.

3) Measures to ensure more efficient implementation of the Grant

i) In the event that the E/N and the G/A concerning a project cannot be signed by the end of the following Japanese fiscal year of the cabinet decision concerned by the GOJ, the authorities concerned of the two Governments will discuss the cancellation of the project.

ii) In the event that the period, specified in the G/A, during which the grant is available expires before the completion of the disbursement, the authorities concerned of the GOJ will thoroughly review the status, situation and perspective of the implementation of the project concerned before extending the said period. The authorities concerned of the two Governments will discuss the termination of the project including a refund, unless there are concrete prospects for its completion.

iii) Regardless of the period mentioned in ii) above, the authorities concerned of the two Governments will, in the event that five years have passed since the cabinet decision concerned by the GOJ before the completion of the disbursement, except as otherwise confirmed between them, discuss the termination of a project including a refund, unless there are concrete prospects for its completion.

4) Proper Use

The Recipient is required to maintain and use properly and effectively the products and/or services under the Project (including the facilities constructed and the equipment purchased), to assign staff necessary for this operation and maintenance and to bear all the expenses other than those covered by the Japanese Grant.

5) Export and Re-export

The products purchased under the Japanese Grant should not be exported or re-exported from the Recipient.

Attachment 1

PROCEDURES OF JAPANESE GRANT

Stage	Procedures	Remarks	Recipient Government	Japanese Government	JICA	Consultants	Contractors	Agent Bank
Official Request	Request for grants through diplomatic channel	Request shall be submitted before appraisal stage.	x	x				
1. Preparation	(1) Preparatory Survey Preparation of outline design and cost estimate		x		x	x		
2. Appraisal	(2)Preparatory Survey Explanation of draft outline design, including cost estimate, undertakings, etc.		x		x	x		
	(3)Agreement on conditions for implementation	Conditions will be explained with the draft notes (E/N) and Grant Agreement (G/A) which will be signed before approval by Japanese government.	x	x (E/N)	x (G/A)			
	(4) Approval by the Japanese cabinet			x				
3. Implementation	(5) Exchange of Notes (E/N)		x	x				
	(6) Signing of Grant Agreement (G/A)		x		x			
	(7) Banking Arrangement (B/A)	Need to be informed to JICA	x					x
	(8) Contracting with consultant and issuance of Authorization to Pay (A/P)	Concurrence by JICA is required	x			x		x
	(9) Detail design (D/D)		x			x		
	(10) Preparation of bidding documents	Concurrence by JICA is required	x			x		
	(11) Bidding	Concurrence by JICA is required	x			x	x	
	(12) Contracting with contractor/supplier	Concurrence by JICA is required Request for disbursement shall be made by the Recipient, in case of local contractor.	x		x		x	x
	(13) Construction works/procurement	Concurrence by JICA is required for major modification of design and amendment of contracts.	x			x	x	
	(14) Completion certificate		x			x	x	
4. Ex-post monitoring & evaluation	(15) Ex-post monitoring	To be implemented generally after 1, 3, 10 years of completion, subject to change	x		x			
	(16) Ex-post evaluation	To be implemented basically after 3 years of completion	x		x			

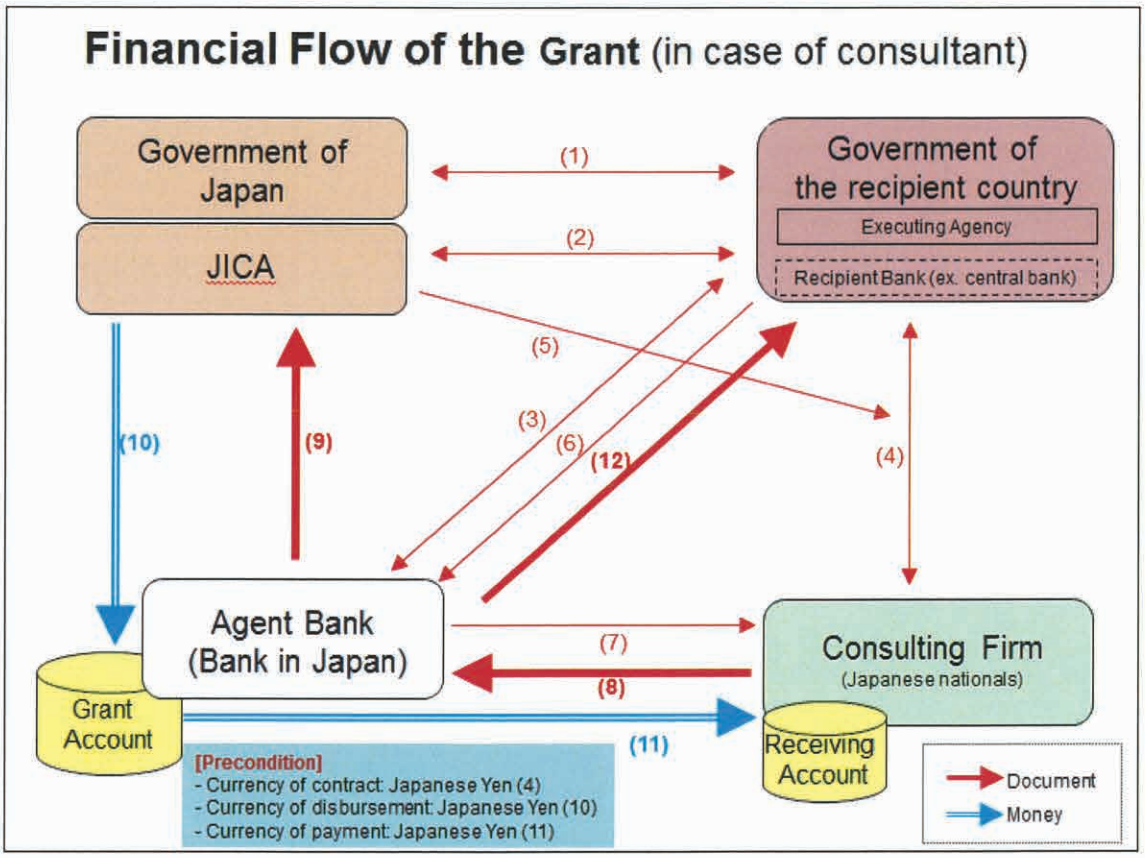
notes:

1. Project Monitoring Report and Report for Project Completion shall be submitted to JICA as agreed in the G/A.

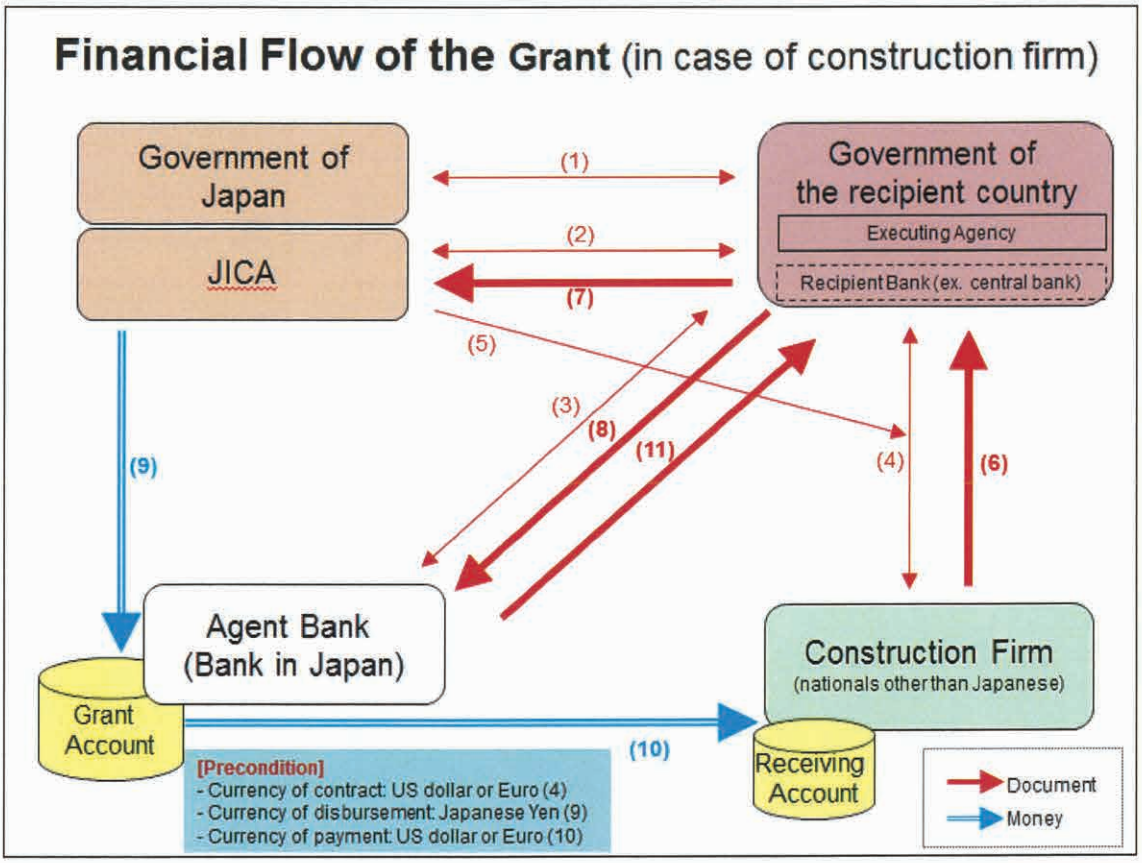
2. Concurrence by JICA is required for allocation of grant for remaining amount and/or contingencies as agreed in the G/A.

Attachment 2

Financial Flow of Japanese Project Grant
(contract with Japanese consultant and local contractors)



(1) E/N
(2) G/A
(3) Banking Arrangement/Opening an Grant Account
(4) Contract
(5) Concurrence and Verification of Contract
(6) Issuing Authorization to Pay (A/P) upon contract
(7) Notification of A/P
(8) Request for Payment
(9) Request for the Disbursement
(10) Disbursement of the Grant
(11) Payment
(12) Statement of Account



(1) E/N
(2) G/A
Submission of Evidence of Authority and Specimen Signatures from the Recipient to JICA (prerequisite for the process of no. (7))
(3) Banking Arrangement/Opening an Grant Account
(4) Contract
(5) Concurrence and Verification of Contract
(6) Request for Payment
(7) Request for Disbursement
(8) Transfer Instruction
(9) Disbursement of the Grant *
(10) Payment
(11) Statement of Account

* The amount of disbursement in Japanese Yen ((9) in above chart) shall be calculated at the Telegraphic Transfer Selling (TTS) rate quoted by the Bank in Japan two business days before the date on which the disbursement is made.

Annex 7
G/A NO. XXXXXXX
PMR prepared on DD/MM/YY

Project Monitoring Report
on
Project Name
Grant Agreement No. XXXXXXX

20XX, Month

Organizational Information

Signer of the G/A (Recipient)	Person in Charge (Designation) _____ Contacts Address: _____ Phone/FAX: _____ Email: _____
Executing Agency	Person in Charge (Designation) _____ Contacts Address: _____ Phone/FAX: _____ Email: _____
Line Ministry	Person in Charge (Designation) _____ Contacts Address: _____ Phone/FAX: _____ Email: _____

General Information:

Project Title	
E/N	Signed date: Duration:
G/A	Signed date: Duration:
Source of Finance	Government of Japan: Not exceeding JPY _____ mil. Government of (_____): _____

G/A NO. XXXXXXX
PMR prepared on DD/MM/YY

1: Project Description

1-1 Project Objective

1-2 Project Rationale

- Higher-level objectives to which the project contributes (national/regional/sectoral policies and strategies)
- Situation of the target groups to which the project addresses

1-3 Indicators for measurement of "Effectiveness"

Quantitative indicators to measure the attainment of project objectives		
Indicators	Original (Yr)	Target (Yr)
Qualitative indicators to measure the attainment of project objectives		

2: Details of the Project

2-1 Location

Components	Original *(proposed in the outline design)*	Actual
1.		

2-2 Scope of the work

Components	Original* *(proposed in the outline design)*	Actual*
1.		

Reasons for modification of scope (if any).

(PMR)

G/A NO. XXXXXXX
PMR prepared on DD/MM/YY

2-3 Implementation Schedule

Items	Original		Actual
	(proposed in the outline design)	*(at the time of signing the Grant Agreement)*	

Reasons for any changes of the schedule, and their effects on the project (if any)

2-4 Obligations by the Recipient

2-4-1 Progress of Specific Obligations

See Attachment 2.

2-4-2 Activities

See Attachment 3.

2-4-3 Report on RD

See Attachment 11.

2-5 Project Cost

2-5-1 Cost borne by the Grant(Confidential until the Bidding)

Components			Cost (Million Yen)	
	Original *(proposed in the outline design)*	Actual *(in case of any modification)*	Original[1),2)] *(proposed in the outline design)*	Actual
	1.			
Total				

Note: 1) Date of estimation:
2) Exchange rate: 1 US Dollar = Yen

2-5-2 Cost borne by the Recipient

Components			Cost (1,000 Taka)	
	Original *(proposed in the outline design)*	Actual *(in case of any modification)*	Original[1),2)] *(proposed in the outline design)*	Actual
	1.			

G/A NO. XXXXXXX
PMR prepared on DD/MM/YY

Note: 1) Date of estimation:
2) Exchange rate: 1 US Dollar =

Reasons for the remarkable gaps between the original and actual cost, and the countermeasures (if any)

(PMR)

2-6 Executing Agency

- Organization's role, financial position, capacity, cost recovery etc,
- Organization Chart including the unit in charge of the implementation and number of employees.

Original *(at the time of outline design)* name: role: financial situation: institutional and organizational arrangement (organogram): human resources (number and ability of staff):
Actual *(PMR)*

2-7 Environmental and Social Impacts

- The results of environmental monitoring based on Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- The results of social monitoring based on in Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- Disclosed information related to results of environmental and social monitoring to local stakeholders (whenever applicable).

3: Operation and Maintenance (O&M)

3-1 Physical Arrangement

- Plan for O&M (number and skills of the staff in the responsible division or section, availability of manuals and guidelines, availability of spareparts, etc.)

Original *(at the time of outline design)*
Actual *(PMR)*

3-2 Budgetary Arrangement

- Required O&M cost and actual budget allocation for O&M

Original *(at the time of outline design)*

G/A NO. XXXXXXX
PMR prepared on DD/MM/YY

Actual *(PMR)*

4: Potential Risks and Mitigation Measures

- Potential risks which may affect the project implementation, attainment of objectives, sustainability
- Mitigation measures corresponding to the potential risks

Assessment of Potential Risks *(at the time of outline design)*

Potential Risks	Assessment
1. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
	Contingency Plan (if applicable):
2. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
	Contingency Plan (if applicable):
3. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:

G/A NO. XXXXXXX
PMR prepared on DD/MM/YY

	Contingency Plan (if applicable):
Actual Situation and Countermeasures	
(PMR)	

5: Evaluation and Monitoring Plan (after the work completion)

5-1 Overall evaluation

Please describe your overall evaluation on the project.

5-2 Lessons Learnt and Recommendations

Please raise any lessons learned from the project experience, which might be valuable for the future assistance or similar type of projects, as well as any recommendations, which might be beneficial for better realization of the project effect, impact and assurance of sustainability.

5-3 Monitoring Plan of the Indicators for Post-Evaluation

Please describe monitoring methods, section(s)/department(s) in charge of monitoring, frequency, the term to monitor the indicators stipulated in 1-3.

G/A NO. XXXXXXX
PMR prepared on DD/MM/YY

Attachment

1. Project Location Map
2. Specific obligations of the Recipient which will not be funded with the Grant
3. Monthly Report submitted by the Consultant

Appendix - Photocopy of Contractor's Progress Report (if any)
- Consultant Member List
- Contractor's Main Staff List

4. Check list for the Contract (including Record of Amendment of the Contract/ Agreement and Schedule of Payment)
5. Environmental Monitoring Form / Social Monitoring Form
6. Monitoring sheet on price of specified materials (Quarterly)
7. Report on Proportion of Procurement (Recipient Country, Japan and Third Countries) (PMR (final)only)
8. Pictures (by JPEG style by CD-R) (PMR (final)only)
9. Equipment List (PMR (final)only)
10. Drawing (PMR (final)only)
11. Report on RD (After project)
12. Report on the Management of Safety for Construction Works

Attachment 6

Monitoring sheet on price of specified materials

1. Initial Conditions (Confirmed)

	Items of Specified Materials	Initial Volume A	Initial Unit Price (¥) B	Initial total Price C=A×B	1% of Contract Price D	Condition of payment	
						Price (Decreased) E=C−D	Price (Increased) F=C+D
1	Item 1	●●t	●	●	●	●	●
2	Item 2	●●t	●	●	●		
3	Item 3						
4	Item 4						
5	Item 5						

2. Monitoring of the Unit Price of Specified Materials

(1) Method of Monitoring : ●●

(2) Result of the Monitoring Survey on Unit Price for each specified materials

	Items of Specified Materials	1st ●month, 2015	2nd ●month, 2015	3rd ●month, 2015	4th	5th	6th
1	Item 1						
2	Item 2						
3	Item 3						
4	Item 4						
5	Item 5						

(3) Summary of Discussion with Contractor (if necessary)

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Attachment 7

Report on Proportion of Procurement (Recipient Country, Japan and Third Countries)
(Actual Expenditure by Construction and Equipment each)

Unit:Japanease Yen

		Domestic Procurement (Recipient Country) A	Foreign Procurement (Japan) B	Foreign Procurement (Third Countries) C	Total D
Construction Cost		000,000,000 (A/D%)	000,000,000 (B/D%)	000,000,000 (C/D%)	000,000,000
	Direct Construction Cost	000,000,000 (A/D%)	000,000,000 (B/D%)	000,000,000 (C/D%)	000,000,000
	others	000,000,000 (A/D%)	000,000,000 (B/D%)	000,000,000 (C/D%)	000,000,000
Equipment Cost		000,000,000 (A/D%)	000,000,000 (B/D%)	000,000,000 (C/D%)	000,000,000
Design and Supervision Cost		000,000,000 (A/D%)	000,000,000 (B/D%)	000,000,000 (C/D%)	000,000,000
Total		000,000,000 (A/D%)	000,000,000 (B/D%)	000,000,000 (C/D%)	000,000,000

Attachment 12

Report on the Management of Safety for Construction Works

Month/Year 月/年	Cumulative number of labor 労働延人数	Cumulative hours worked 延べ実労働時間数	Deaths/injuries and work-days lost due to industrial accidents 労働災害による死傷者数・労働損失日数				Frequency rate 度数率 (注 1, 4, 5)	Severity rate 強度率 (注 2, 4, 5)	Cumulative number of public accidents 公衆災害件数
				Deaths and injuries 死傷者数	Aggregated number of calendar days absent 延べ休業日数	Aggregated number of work-days lost 延べ労働損失日数 (注 3)			
This Month 当月			Death 死者						
			More than 4 calendar days absent 休業 4 日以上						
			1 to 3 calendar days absent 休業 1～3 日						
			Total 計						
Total including this month 当月迄累計			Death 死者						
			More than 4 calendar days absent 休業 4 日以上						
			1 to 3 calendar days absent 休業 1～3 日						
			Total 計						
This Japanese Fiscal Year (from April to March) 当該年度累計 (4 月～3 月)			Death 死者						
			More than 4 calendar days absent 休業 4 日以上						
			1 to 3 calendar days absent 休業 1～3 日						
			Total 計						

Note
注）

1. Frequency rate is the frequency of occurrence of industrial accidents.
   Frequency rate = (Number of deaths and injuries due to industrial accidents ÷ Cumulative hours worked) × 1,000,000
   度数率 ＝（労働災害［公衆災害ではない］による死傷者数÷延べ実労働時間数）×100 万時間

2. Severity rate is degree of seriousness of the industrial accident.
   Severity rate = (Aggregated number of work-days lost ÷ Cumulative hours worked) × 1,000
   強度率 ＝（延べ労働損失日数 ÷ 延べ実労働時間数）× 1,000 時間

3. Aggregated number of work-days lost = Aggregated number of calendar days absent × (300÷365)
   Death（7,500 days）= death as a result of an industrial accident includes not only instantaneous death but also death as a result of occupational injury or disease.
   Permanent total disability = disability as a result of an industrial accident; results in disability falling under the 1st – 3rd degree of physical disability as the table below
   Permanent partial disability = disability falling under the 4th – 14th degree of physical disability as specified in the table below and in which a part of the body is completely lost or the function of a part of the body is lost forever (50 to 5,500 days in accordance with degree)
   Temporary disability = accident in which a worker cannot work because of injury for at least one day or longer from the following day of occurrence of the accident, however, the injury will be cured after passing certain period of time, and which does not leave an injury that falls under the 1st – 14th degree of physical disability as specified in the table below

Working Days Lost

Degree of disability	1～3	4	5	6	7	8	9	10	11	12	13	14
Working days lost per injury	7,500	5,500	4,000	3,000	2,200	1,500	1,000	600	400	200	100	50

outline_of_survey_2009.pdf (mhlw.go.jp)

延べ労働損失日数 ＝ 労働災害による延べ休業日数 ×（300÷365）
死亡： 7500 日（即死のほか負傷が原因で死亡したものを含む）
永久全労働不能： 下表の身体障害等級 1～3 級の日数（7,500 日）
永久一部労働不能： 下表の身体障害等級 4～14 級の日数（級に応じて 50～5,500 日）

一時労働不能：　労働発生の翌日以降、少なくとも 1 日以上は負傷のため労働できないが、ある期間を経過すると治癒し、身体障害等級表の第 1 級～第 14 級に該当する障害を残さないもの

身体障害等級別労働損失日数表

身体障害等級(級)	1～3	4	5	6	7	8	9	10	11	12	13	14
労働損失日数(日)	7,500	5,500	4,000	3,000	2,200	1,500	1,000	600	400	200	100	50

厚生労働省：平成 20 年労働災害動向調査（事業所調査（事業所規模 100 人以上）及び総合工業業調査）結果の概況（mhlw.go.jp）

4. Frequency rate and severity rate should be rounded off to two decimal places.
度数率・強度率は小数点第 3 位で四捨五入

5. As mentioned above, frequency rate and severity rate should **calculated by the number of deaths/injuries of workers and work-days lost due to industrial accidents (not public accidents)**.
Do not include the number of deaths//injuries and work-days lost of third-party caused by public accidents in this calculation.
上述のとおり、度数率・強度率は**労働災害**による**労働者の死傷者数及び休業日数を用いて算出**するため、**公衆災害における第三者の死傷に関しては本集計の対象としない。**

Annex 8

Major Undertakings to be taken by the Government of Cambodia

1. Specific obligations of the Government of Cambodia which will not be funded with the Grant

(1) Before the Bidding

No.	Items	Deadline	In charge	Estimated Cost	Ref.
1	To sign the Banking Arrangement (B/A) with a bank in Japan (the Agent Bank) to open bank account	Within 1 month after the signing of the G/A	NBC/ MEF/ MoEYS		
2	To issue A/P to a bank in Japan (the Agent Bank) for the payment to the consultant	Within 1 month after the signing of the contract	NBC/ MEF/ MoEYS		
3	To bear the following commissions to the Agent Bank for the banking services based upon the B/A				
	1) Advising commission of Authorization to Pay (A/P)	Within 1 month after the signing of the contract(s)	MoEYS		
	2) Payment commission for A/P	Every payment			
4	To secure and clear the following lands as follows, where necessary 1) Demolition and/or relocation of any obstacles 2) To remove existing facilities 3) To level the project area	Before notice of the bidding document	MoEYS		
5	To obtain building permit	Before notice of the bidding document	MoEYS		
6	To obtain the certificate of clearance of landmine : If necessary, carry out detection and removal of landmines and unexploded ordnance within the project site (depth 0-2m, 2-4m respectively)				
7	To submit Project Monitoring Report (with the result of Detailed Design)	Before preparation of the bidding documents	MoEYS		

(2) During the Project Implementation

No.	Items	Deadline	In charge	Estimated Cost	Ref.
1	To bear the following commissions to the Agent Bank for the banking services based upon the B/A				
	1) Advising commission of A/P	Within 1 month after the signing of the contract(s)	MoEYS		
	2) Payment commission for A/P	Every payment for consultant	MoEYS		
	3) Remittance charge for local contractors and suppliers	Every payment	MoEYS		
2	To conduct necessary procedures such as "Request for disbursement" to JICA (upon contract with construction firms and/or procurement firms (suppliers)), "Application of remittance" to Bank (upon contract with construction firms and/or procurement firms (suppliers))	During the Project period	MoEYS		
3	To ensure prompt unloading and customs clearance at ports of disembarkation in the country of the Recipient and to assist the Supplier(s) with internal transportation therein	During the Project period	MoEYS/ MEF		
4	To accord Japanese physical persons and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work	During the Project period	MoEYS		
5	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the products and/or the servicesbe exempted	During the Project period	MoEYS/ MEF		
6	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project	During the Project period	MoEYS		
7	To notify JICA promptly of any incident or accident, which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers	During the construction	MoEYS		
8	To submit Project Monitoring Report	Every month	MoEYS		
	To submit Project Monitoring Report (final) (including as-built drawings, equipment list, photographs, etc.)	Within 1 month after signing of Certificate of Completion for the works under the contract(s)	MoEYS		
9	To submit a report concerning completion of the Project	Within 6 months after completion of the Project	MoEYS		
10	To provide facilities for distribution of electricity, water supply and drainage and other incidental facilities necessary for the implementation of the Project outside the site				
	1) Electricity: the distributing line to the site	Before start of the construction	MoEYS		
	2) Water Supply: the city water distribution main to the site	Before start of the construction			
	3) Internet connection: the distributing line to the site where necessary	Before start of the installation works			

	4) Other incidential facilities	Before start of the construction			
11	To ensure the safety of persons engaged in the implementation of the Project	During the construction	MoEYS		

(3) After the Project

No.	Items	Deadline	In charge	Estimated Cost	Ref.
1	To renovate existing facilities 1) Renovation work 2) Supply additional furniture	After the completion of the construction	MoEYS		
2	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid 1) Allocation of maintenance cost 2) Operation and maintenance structure 3) Routine check/Periodic inspection	After the completion of the construction	MoEYS		

NBC:National Bank of Cambodia/ MEF: Ministry of Economy and Finance / MoEYS: Ministry of Education, Youth and Sports

2. Other obligations of the Government of Cambodia funded with the Grant

*To be agreed in the mission dispatched for explanation of Draft Preparatory Survey Report

No.	Items	Deadline	Amount (Japanese Yen)
1	- Construction of facilities - Procurement of equipment	(To be confirmed)	(To be confirmed)
2	Consulting service: - Detailed design - Bidding support - Construction supervision	(To be confirmed)	(To be confirmed)
	Total		

Appendix 4-2 Minutes of Discussions 2 (signed on January 30, 2026)

Minutes of Discussions
on the Preparatory Survey for the Project for
the Establishment of a Teacher Education College in Kampong Cham Province

(Explanation on Draft Preparatory Survey Report)

With reference to the minutes of discussions signed between the Ministry of Education, Youth and Sport (hereinafter referred to as "MoEYS") and the Japan International Cooperation Agency (hereinafter referred to as "JICA") on 17th June, 2025 and in response to the request from the Government of Kingdom of Cambodia (hereinafter referred to as "Cambodia") dated 13th December, 2023, JICA dispatched the Preparatory Survey Team (hereinafter referred to as "the Team") for the explanation of Draft Preparatory Survey Report (hereinafter referred to as "the Draft Report") for the Project for the Establishment of a Teacher Education College in Kampong Cham Province (hereinafter referred to as "the Project").

As a result of the discussions, both sides agreed on the main items described in the attached sheets.

Phnom Penh, 30th January, 2026

丸山 隆夫	
Mr. Takao Maruyama	H.E. Dr. Nath Bunroeun
Leader	Secretary of State
Preparatory Survey Team	Ministry of Education, Youth and Sport
Japan International Cooperation Agency	Royal Government of Cambodia
Japan	Kingdom of Cambodia

ATTACHEMENT

1. Objective of the Project

The objective of the Project is to improve the capacity of teachers trained at a Teacher Education College (hereinafter referred to as "TEC") in Kampong Cham Province by providing educational facilities and equipment necessary to upgrade the existing teacher education institutions to the TEC, thereby contributing to strengthening the teacher education system and enhancing the quality of basic education.

2. Title of the Preparatory Survey

Both sides confirmed the title of the Preparatory Survey as "the Preparatory Survey for the Project for the Establishment of a Teacher Education College in Kampong Cham Province".

3. Project site

Both sides confirmed that the site of the Project is in Kampong Cham Province and the construction site is in the existing Regional Teacher Training Center (hereinafter referred to as "RTTC") compound, which is shown in Annex 1.

4. Responsible authority for the Project

Both sides confirmed the authorities responsible for the Project are as follows:

4-1. The Ministry of Education, Youth and Sport (MoEYS) will be the executing agency for the Project (hereinafter referred to as "the Executing Agency"). The Executing Agency shall coordinate with all relevant authorities to ensure the smooth implementation of the Project and ensure that the undertakings for the Project shall be taken care of by relevant authorities properly and in a timely manner. Also, the responsible Directorate General for the Project is the Directorate General of Teacher Education Development (hereinafter referred to as "DGTED"). The organization charts are shown in Annex 2.

4-2. MoEYS will establish the Project Management Unit (hereinafter referred to as "PMU") for the Project, involving DGTED, Department of State Properties and Construction, Department of Finance, and Procurement Unit in the Ministry. Also, a representative of the Ministry of Economy and Finance and other relevant departments of MoEYS will be involved as necessary. The Japanese Consultant in the Project supports the activities of PMU. The PMU works under the supervision

of the Executing Agency to coordinate with the relevant authorities for the smooth implementation of the Project, and DGTED will lead the planning and implementation of the activities of PMU. DGTED will also lead the process of establishment of PMU. PMU will be established within one (01) month after the signing of the Grant Agreement.

5. Contents of the Draft Report

After the explanation of the contents of the Draft Report by the Team, the Cambodian side agreed to its contents.

Both sides confirmed that when adjustments to the facility components become necessary due to budgetary constraints or other factors, reducing the scale of the assembly hall (i.e., reducing its seating capacity) is considered appropriate.

6. Cost estimate

Both sides confirmed that the cost estimate, including the contingency explained by the Team, is provisional and will be examined further by the Government of Japan for its approval. The contingency would cover the additional costs against natural disasters, unexpected natural conditions, fluctuation of exchange rate, etc.

7. Confidentiality of the cost estimate and technical specifications

Both sides confirmed that the cost estimate and technical specifications of the Project should never be disclosed to any third parties until all the contracts under the Project are concluded.

8. Procedures and Basic Principles of Japanese Grant

8-1. The Cambodian side agreed that the procedures and basic principles of Japanese Grant (hereinafter referred to as "the Grant") as described in Annex 3 shall be applied to the Project. In addition, the Cambodian side agreed to take necessary measures according to the procedures.

8-2. Eligible nationality

The eligible nationality of consultant shall be Japanese physical persons or Japanese juridical persons controlled by Japanese physical persons, in the case of the consultant that will contract directly with the Recipient for the implementation of the Project.

The eligible nationality of the other Supplier(s) shall be nationals of Cambodia or juridical persons incorporated and registered in Cambodia who have their appropriate facilities for producing or providing the products and/or services in Cambodia and actually conduct their business there, in the case of the other Supplier(s) that will contract directly with the Recipient for the implementation of the Project.

8-3. Flow of payment and currency of payment to prime contractor(s)

The Cambodian side understood the flow of payment as shown in Annex 4 and confirmed that it will take necessary measures for the payment in a timely manner. The Cambodian side explained that it will nominate "National Bank of Cambodia" as the "Recipient Bank" that conclude the banking arrangement (hereinafter referred to as "the Banking Arrangement") with a bank in Japan (hereinafter referred to as "the Agent Bank").

The Cambodian side agreed that the currency for contract of prime construction and/or procurement firms is internationally traded foreign currency acceptable to JICA, that is US dollar, which will be stipulated in the Grant Agreement.

The Cambodian side understood the flow of approval during the execution of the contract and required documents for payments to prime contractor(s)/supplier(s) as shown in Annex 4.

8-4. Bidding procedure and procurement guidelines

The bidding/selection and conclusion of contracts of the products and services covered by the Grant of the Project will be conducted in Cambodia. The Cambodian side understands that the products and services covered by Grant of the Project will be procured in accordance with JICA's Procurement Guidelines for the Japanese Grants (for Japanese consultant and local contractor).

9. Timeline for the project implementation

The Team explained to the Cambodian side that the expected timeline for the project implementation is as attached in Annex 5.

10. Expected outcomes and indicators

Both sides agreed that key indicators for expected outcomes are as follows. The

Cambodian side will be responsible for the achievement of agreed key indicators targeted in the year 2032 and shall monitor the progress by the Executing Agancy based on those indicators.

[Quantitative indicators]

Number of the pre-service students teachers and the in-service teachers in the teacher qualification upgrade programs (12+4, BA+1, and others) at Kampong Cham Teacher Education College (hereinafter referred to as "KCTEC"):

Target value 1400 in 4 years after the project completion (2032)

[Qualitative indicators]

The learning environment for student teachers in teacher training programs in Kampong Cham Province will be improved.

11. Ex-Post Evaluation

JICA will conduct ex-post evaluation after four (4) years from the project completion, in principle, with respect to six evaluation criteria (Relevance, Coherence, Effectiveness, Efficiency, Impact, Sustainability). The result of the evaluation will be publicized. The Cambodian side is required to provide necessary support for the data collection.

12. Undertakings of the Project

Both sides confirmed the undertakings of the Project as described in Annex 6. With regard to exemption of customs duties, internal taxes and other fiscal levies as stipulated in 1. (2) 5 of Annex 6, both sides confirmed that such customs duties, internal taxes and other fiscal levies shall be clarified in the bid documents by MoEYS during the implementation stage of the Project.

The Cambodian side assured that it will take the necessary measures and coordination including allocation of the necessary budget which are preconditions of implementation of the Project. It is further agreed that the costs are indicative, i.e. at Outline Design level. More accurate costs will be calculated at the Detailed Design stage.

Both sides also confirmed that the Annex 6 will be used as an attachment of G/A.

The Team explained that JICA's policy to prevent and address SEAH is based on the

DAC "Recommendation on Ending Sexual Exploitation, Abuse, and Harassment in Development Co-operation and Humanitarian Assistance" adopted by DAC in July 2019, and is announced below. MoEYS understood JICA's policy and agreed to make maximum efforts to eradicate SEAH throughout this project according to JICA's policy.

Ending Sexual Exploitation, Abuse, and Harassment | About JICA - JICA

13. Monitoring during the implementation

The Project will be monitored by the Executing Agency and reported to JICA by using the form of Project Monitoring Report (PMR) attached as Annex 7. The timing of submission of the PMR is described in Annex 7.

14. Project completion

Both sides confirmed that the Project is completed when all the facilities constructed and equipment procured by the Grant are in operation. The completion of the Project will be reported to JICA promptly, by using a format, but in any event not later than six months after completion of the Project.

15. Items and measures to be considered for the smooth implementation of the Project

Both sides confirmed the items and measures to be considered for the smooth implementation of the Project as follows:

15-1. The Cambodian side confirmed that when problems such as delay of construction works or procurement of equipment by contractor(s)/supplier(s) arise during the implementation of the Project, the MoEYS will take necessary measures in accordance with technical opinion of the consultant in a timely manner.

15-2. The Cambodian side agreed that in case the amount of the Grant, which includes the contingency, is not enough to cover the entire cost of components as planned by the outline design, the Cambodian side will take necessary measures such as revising specifications, reducing the Project scope, or absorbing the cost exceeding the amount of the Grant, based on technical analysis and opinions of the consultant.

16. Schedule of the Study

JICA will finalize the Preparatory Survey Report based on the confirmed items. The report will be sent to the Cambodian side around May 2026.

17. Environmental and Social Considerations

The Team explained that 'JICA Guidelines for Environmental and Social Considerations (January 2022)' (hereinafter referred to as "the Guidelines") is applicable to the Project. The Project is categorized as C because the Project is likely to have minimal adverse impact on the environment under the Guidelines. The Cambodian side confirmed that it will give due environmental and social considerations during implementation, and after completion of the Project, in accordance with the Guidelines.

18. Other Relevant Issues

18-1. Disclosure of Information

Both sides confirmed that the Preparatory Survey Report from which project cost is excluded will be disclosed to the public after completion of the Preparatory Survey. The comprehensive report including the project cost will be disclosed to the public after all the contracts under the Project are concluded.

18-2. Issuance of Sub-Decree on the establishment of KCTEC

MoEYS explained that the establishment of the KCTEC has been agreed by the concerned ministries and that the Sub-Decree is in the final process to be approved. MoEYS will keep JICA updated on the progress of the procedure. The KCTEC will be established right after the Sub-Decree is issued.

18-3. Human Resource Recruitment and Capacity Development for KCTEC Establishment

The Cambodian side explained that MoEYS will strategically advance personnel recruitment and capacity development for KCTEC's establishment in accordance with the recruitment plan formulated by DGTED in November 2025, in recognition of the requirement for half of KCTEC's faculty to hold master's degrees in their respective teaching fields for KCTEC to be accredited as a higher education institution.

18-4. Renovation works for existing buildings to be implemented by the Cambodian Side

The Cambodian side committed to utilizing the existing science laboratory building at Kampong Cham RTTC as a workshop after the Project. The Cambodian side also committed to renovating the existing building at Kampong Cham RTTC for its conversion into an e-library for primary teacher training.

Both sides confirmed that the Project will procure the necessary equipment for the two buildings, namely the workshop and the e-library for primary teacher training.

18-5. Unexploded Ordnance (UXO) and Landmine Clearance

Both sides confirmed that the initial detection and clearance survey at the construction areas for STEM building and assembly hall building was completed in December 2025. The Cambodian side explained that further CMAC detection and clearance will be conducted according the following timing, prior to the site survey of the detailed design stage, with the utmost consideration to safety:

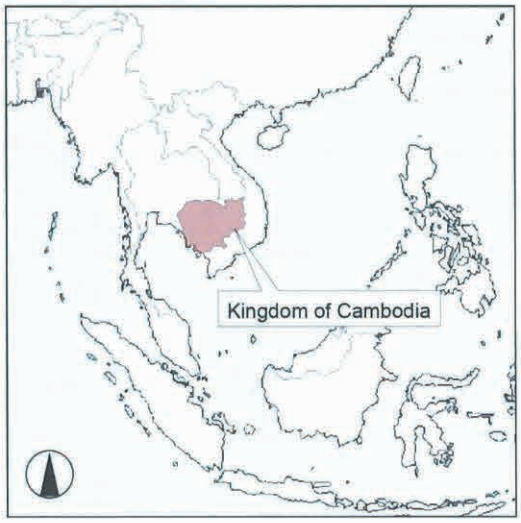
- Upon completion of the removal or demolition of existing buildings, relocation of obstacles, and site leveling for the STEM building, assembly hall building, and leaching pit.

Both sides also confirmed that the detection and clearance certificate will be shared with the Japanese side upon completion of the aforementioned survey, together with a map clearly indicating the surveyed areas.

Annex 1 Project Site
Annex 2 Organization Chart
Annex 3 Japanese Grant
Annex 4 Tentative Approval flow and required documents
Annex 5 Project Implementation Schedule
Annex 6 Major Undertakings to be taken by the Government of Cambodia
Annex 7 Project Monitoring Report (template)
Annex 8 Equipment List

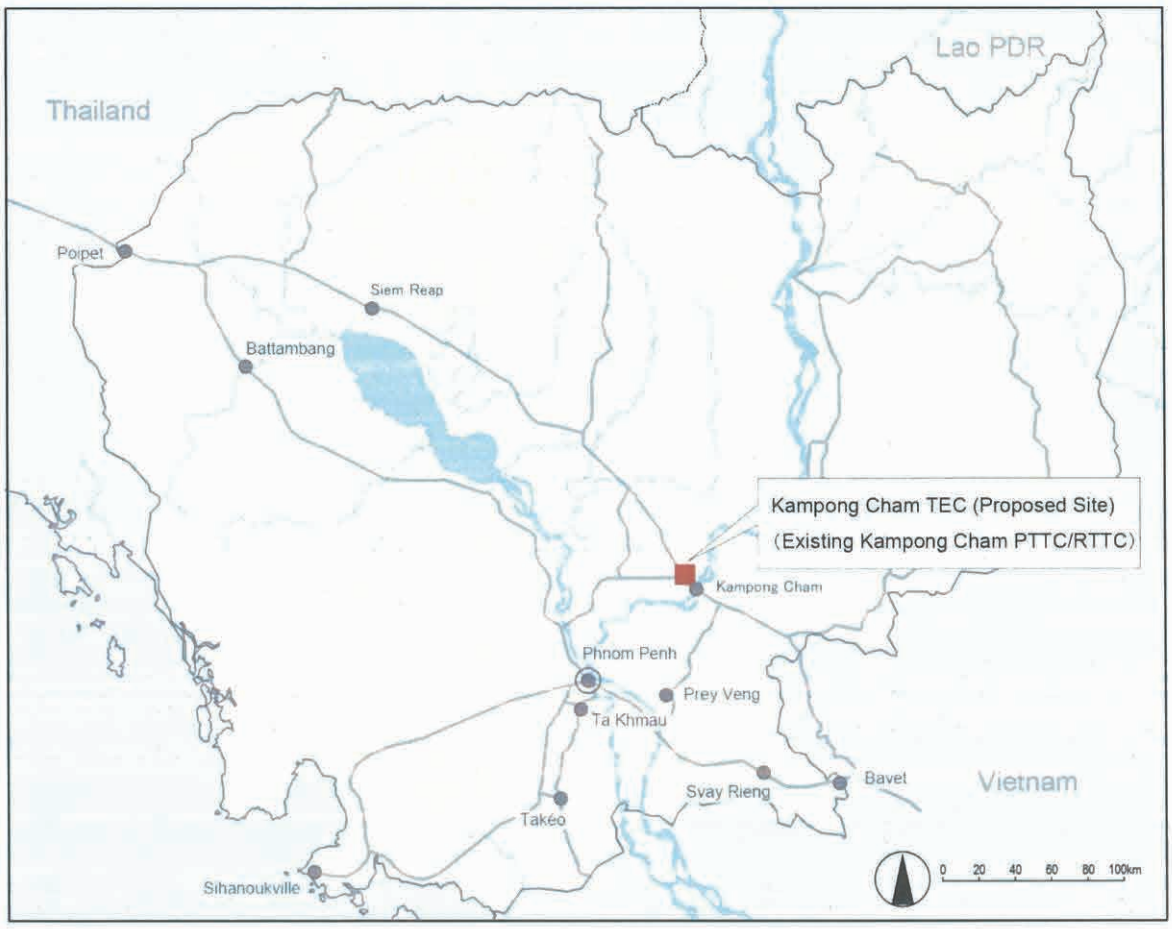
Annex 1

Project Site

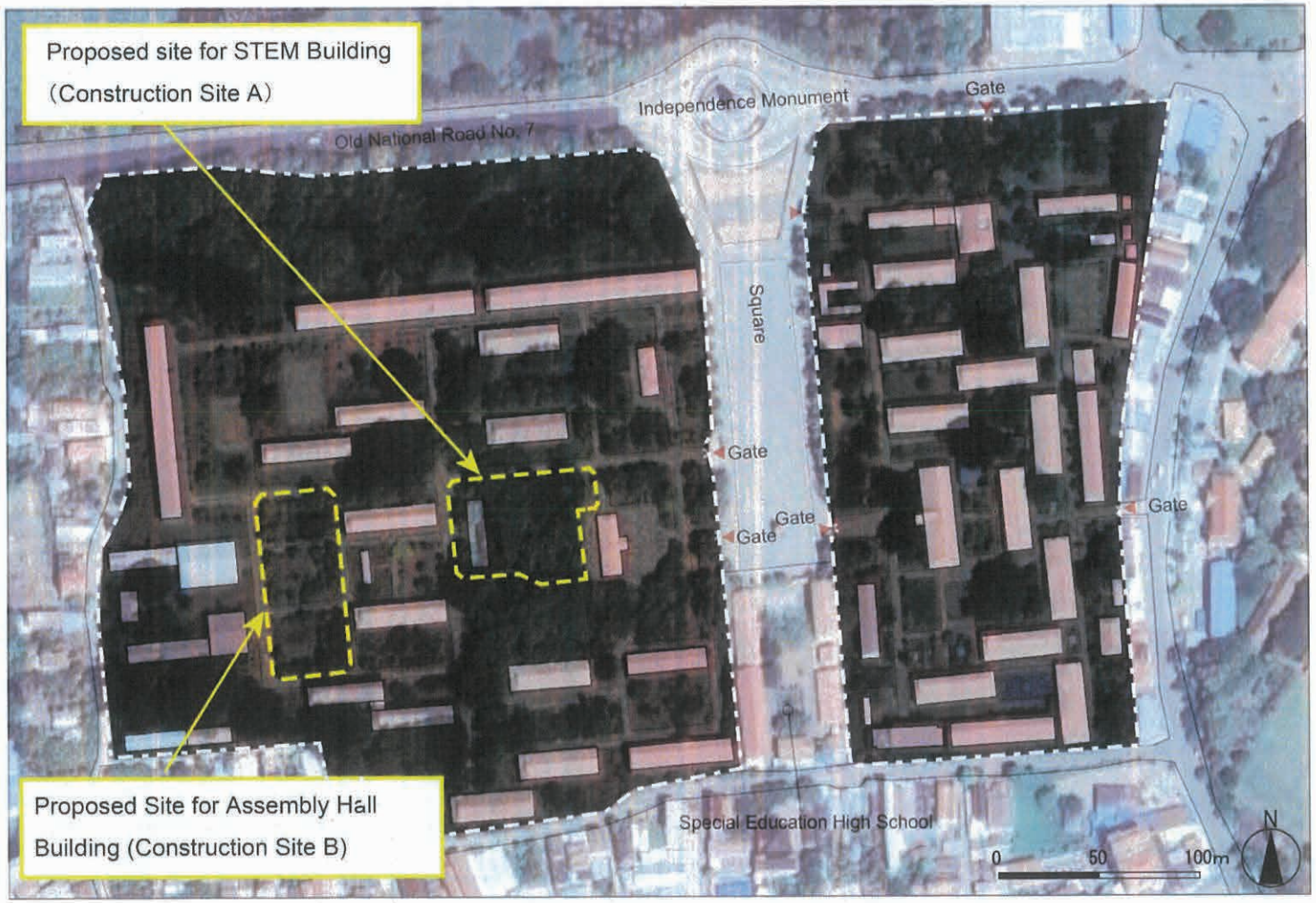


Legend :

- Project Site
- Capital
- Major Cities
- Major Roads
- Major Rivers & Lakes



Construction site



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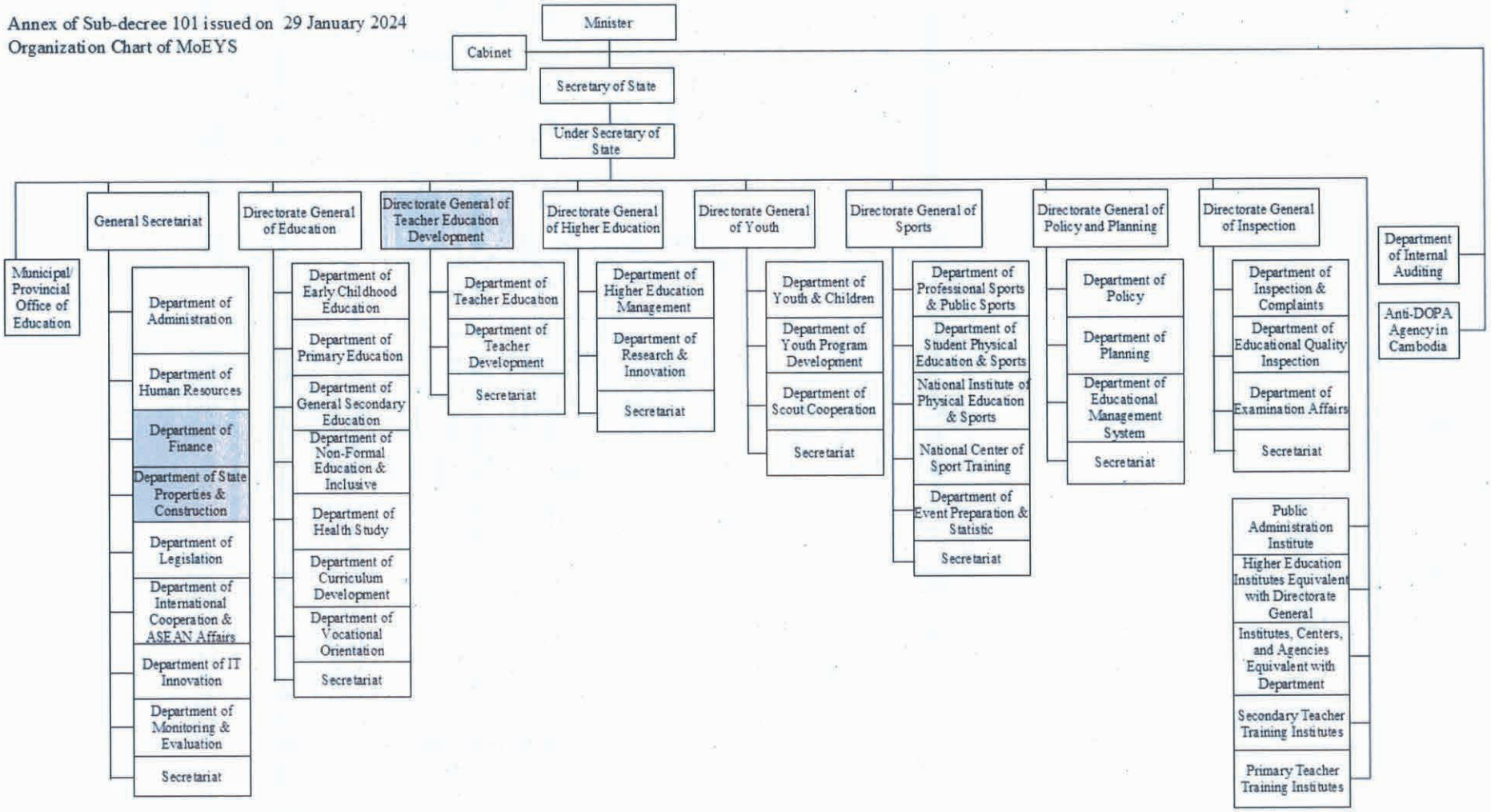
Annex 2

Organization Chart of MoEYS

Annex of Sub-decree 101 issued on 29 January 2024
Organization Chart of MoEYS



Annex 3

JAPANESE GRANT

The Japanese Grant is non-reimbursable fund provided to a recipient country (hereinafter referred to as "the Recipient") to purchase the products and/or services (engineering services and transportation of the products, etc.) for its economic and social development in accordance with the relevant laws and regulations of Japan. Followings are the basic features of the project grants operated by JICA (hereinafter referred to as "Project Grants").

1. Procedures of Project Grants

Project Grants are conducted through following procedures (See "PROCEDURES OF JAPANESE GRANT" for details):

(1) Preparation

- The Preparatory Survey (hereinafter referred to as "the Survey") conducted by JICA

(2) Appraisal

-Appraisal by the government of Japan (hereinafter referred to as "GOJ") and JICA, and Approval by the Japanese Cabinet

(3) Implementation

Exchange of Notes

-The Notes exchanged between the GOJ and the government of the Recipient

Grant Agreement (hereinafter referred to as "the G/A")

-Agreement concluded between JICA and the Recipient

Banking Arrangement (hereinafter referred to as "the B/A")

-Opening of bank account by the Recipient in a bank in Japan (hereinafter referred to as "the Bank") to receive the grant

Construction works/procurement

-Implementation of the project (hereinafter referred to as "the Project") on the basis of the G/A

(4) Ex-post Monitoring and Evaluation

-Monitoring and evaluation at post-implementation stage

2. Preparatory Survey

(1) Contents of the Survey

The aim of the Survey is to provide basic documents necessary for the appraisal of the the Project made by the GOJ and JICA. The contents of the Survey are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of

relevant agencies of the Recipient necessary for the implementation of the Project.

- Evaluation of the feasibility of the Project to be implemented under the Japanese Grant from a technical, financial, social and economic point of view.
- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of an outline design of the Project.
- Estimation of costs of the Project.
- Confirmation of Environmental and Social Considerations

The contents of the original request by the Recipient are not necessarily approved in their initial form. The Outline Design of the Project is confirmed based on the guidelines of the Japanese Grant.

JICA requests the Recipient to take measures necessary to achieve its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the executing agency of the Project. Therefore, the contents of the Project are confirmed by all relevant organizations of the Recipient based on the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Survey, JICA contracts with (a) consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms.

(3) Result of the Survey

JICA reviews the report on the results of the Survey and recommends the GOJ to appraise the implementation of the Project after confirming the feasibility of the Project.

3. Basic Principles of Project Grants (contract with Japanese consultant and local contractors)

(1) Implementation Stage

1) The E/N and the G/A

After the Project is approved by the Cabinet of Japan, the Exchange of Notes (hereinafter referred to as "the E/N") will be singed between the GOJ and the Government of the Recipient to make a pledge for assistance, which is followed by the conclusion of the G/A between JICA and the Recipient to define the necessary articles, in accordance with the E/N, to implement the Project, such as conditions of disbursement, responsibilities of the Recipient, and procurement conditions. The terms and conditions generally applicable to the Japanese Grant are stipulated in the "General Terms and Conditions for Japanese Grant (January 2016)."

2) Banking Arrangements (B/A) (See "Financial Flow of Grant" for details)

a) The Recipient shall open an account or shall cause its designated authority to open an account under the name of the Recipient in the Bank, in principle. JICA will disburse the Japanese Grant in Japanese yen for the Recipient to cover the obligations incurred by the Recipient under the verified contracts.

b) In case of Japanese consultant, the Japanese Grant will be disbursed when payment requests are submitted by the Bank to JICA under an Authorization to Pay (A/P) issued by the Recipient.

c) In case of local contractors, the Japanese Grant will be disbursed when requests for disbursement are submitted by the Recipient to JICA.

3) Procurement Procedure

The products and/or services necessary for the implementation of the Project shall be procured in accordance with JICA's procurement guidelines as stipulated in the G/A.

4) Selection of Consultants

In order to maintain technical consistency, the consulting firm(s) which conducted the Survey will be recommended by JICA to the Recipient to continue to work on the Project's implementation after the E/N and G/A.

5) Eligible source country

In using the Japanese Grant disbursed by JICA for the purchase of products and/or services, the eligible source countries of such products and/or services shall be Japan and/or the Recipient. The Japanese Grant may be used for the purchase of the products and/or services of a third country as eligible, if necessary, taking into account the quality, competitiveness and economic rationality of products and/or services necessary for achieving the objective of the Project. However, the prime consulting firm, which enter into contracts with the Recipient, are limited to "Japanese nationals", while the prime constructing firm(s), which enter into contracts with the Recipient, could be nationals of the recipient country or other country(ies) if deemed it necessary .

6) Contracts and Concurrence by JICA

The Recipient will conclude the consultant contract() denominated in Japanese yen with Japanese nationals and the construction/supplier contracts dominated in other internationally traded foreign currency acceptable to JICA with the local contractors. Those contracts shall be verified by JICA in order to be eligible for the Japanese Grant.

7) Monitoring

The Recipient is required to take their initiative to carefully monitor the progress of the Project in order to ensure its smooth implementation as part of their responsibility in the G/A, and to regularly report to JICA about its status by using the Project Monitoring Report (PMR).

8) Safety Measures

The Recipient must ensure that the safety is highly observed during the implementation of the Project.

9) Construction Quality Control Meeting

Construction Quality Control Meeting (hereinafter referred to as the "Meeting") will be held for quality assurance and smooth implementation of the Works at each stage of the Works, if necessary. The member of the Meeting will be composed by the Recipient (or executing agency), the Consultant, the Contractor and JICA. The functions of the Meeting are as followings:

a) Sharing information on the objective, concept and conditions of design from the Contractor, before start of construction.

b) Discussing the issues affecting the Works such as modification of the design, test, inspection, safety control and the Client's obligation, during of construction.

(2) Ex-post Monitoring and Evaluation Stage

1) After the project completion, JICA will continue to keep in close contact with the Recipient in order to monitor that the outputs of the Project is used and maintained properly to attain its expected outcomes.

2) In principle, JICA will conduct ex-post evaluation of the Project after three years from the completion. It is required for the Recipient to furnish any necessary information as JICA may reasonably request.

(3) Others

1) Environmental and Social Considerations

The Recipient shall carefully consider environmental and social impacts by the Project and must comply with the environmental regulations of the Recipient and JICA Guidelines for Environmental and Social Considerations (April, 2010).

2) Major undertakings to be taken by the Government of the Recipient

For the smooth and proper implementation of the Project, the Recipient is required to undertake necessary measures including land acquisition, and bear an advising commission of the A/P and payment commissions paid to the Bank as agreed with the GOJ and/or JICA. The Government of the Recipient shall ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the Recipient with respect to the purchase of the Products and/or the Services be exempted or be borne by its designated authority without using the Grant and its accrued interest, since the grant fund comes from the Japanese taxpayers.

3) Measures to ensure more efficient implementation of the Grant

i) In the event that the E/N and the G/A concerning a project cannot be signed by the end of the following Japanese fiscal year of the cabinet decision concerned by the GOJ, the authorities concerned of the two Governments will discuss the cancellation of the project.

ii) In the event that the period, specified in the G/A, during which the grant is available expires before the completion of the disbursement, the authorities concerned of the GOJ will thoroughly review the status, situation and perspective of the implementation of the project concerned before extending the said period. The authorities concerned of the two Governments will discuss the termination of the project including a refund, unless there are concrete prospects for its completion.

iii) Regardless of the period mentioned in ii) above, the authorities concerned of the two Governments will, in the event that five years have passed since the cabinet decision concerned by the GOJ before the completion of the disbursement, except as otherwise confirmed between them, discuss the termination of a project including a refund, unless there are concrete prospects for its completion.

4) Proper Use

The Recipient is required to maintain and use properly and effectively the products and/or services under the Project (including the facilities constructed and the equipment purchased), to assign staff necessary for this operation and maintenance and to bear all the expenses other than those covered by the Japanese Grant.

5) Export and Re-export

The products purchased under the Japanese Grant should not be exported or re-exported from the Recipient.

Attachment 1

PROCEDURES OF JAPANESE GRANT

Stage	Procedures	Remarks	Recipient Government	Japanese Government	JICA	Consultants	Contractors	Agent Bank
Official Request	Request for grants through diplomatic channel	Request shall be submitted before appraisal stage	x	x				
1. Preparation	(1) Preparatory Survey Preparation of outline design and cost estimate		x		x	x		
2. Appraisal	(2)Preparatory Survey Explanation of draft outline design, including cost estimate, undertakings, etc		x		x	x		
	(3)Agreement on conditions for implementation	Conditions will be explained with the draft notes (E/N) and Grant Agreement (G/A) which will be signed before approval by Japanese government	x	x (E/N)	x (G/A)			
	(4) Approval by the Japanese cabinet			x				
3. Implementation	(5) Exchange of Notes (E/N)		x	x				
	(6) Signing of Grant Agreement (G/A)		x		x			
	(7) Banking Arrangement (B/A)	Need to be informed to JICA	x					x
	(8) Contracting with consultant and issuance of Authorization to Pay (A/P)	Concurrence by JICA is required	x			x		x
	(9) Detail design (D/D)		x			x		
	(10) Preparation of bidding documents	Concurrence by JICA is required	x			x		
	(11) Bidding	Concurrence by JICA is required	x			x	x	
	(12) Contracting with contractor/supplier	Concurrence by JICA is required Request for disbursement shall be made by the Recipient, in case of local contractor	x		x		x	x
	(13) Construction works/procurement	Concurrence by JICA is required for major modification of design and amendment of contracts	x			x	x	
	(14) Completion certificate		x			x	x	
4. Ex-post monitoring & evaluation	(15) Ex-post monitoring	To be implemented generally after 1, 3, 10 years of completion, subject to change	x		x			
	(16) Ex-post evaluation	To be implemented basically after 3 years of completion	x		x			

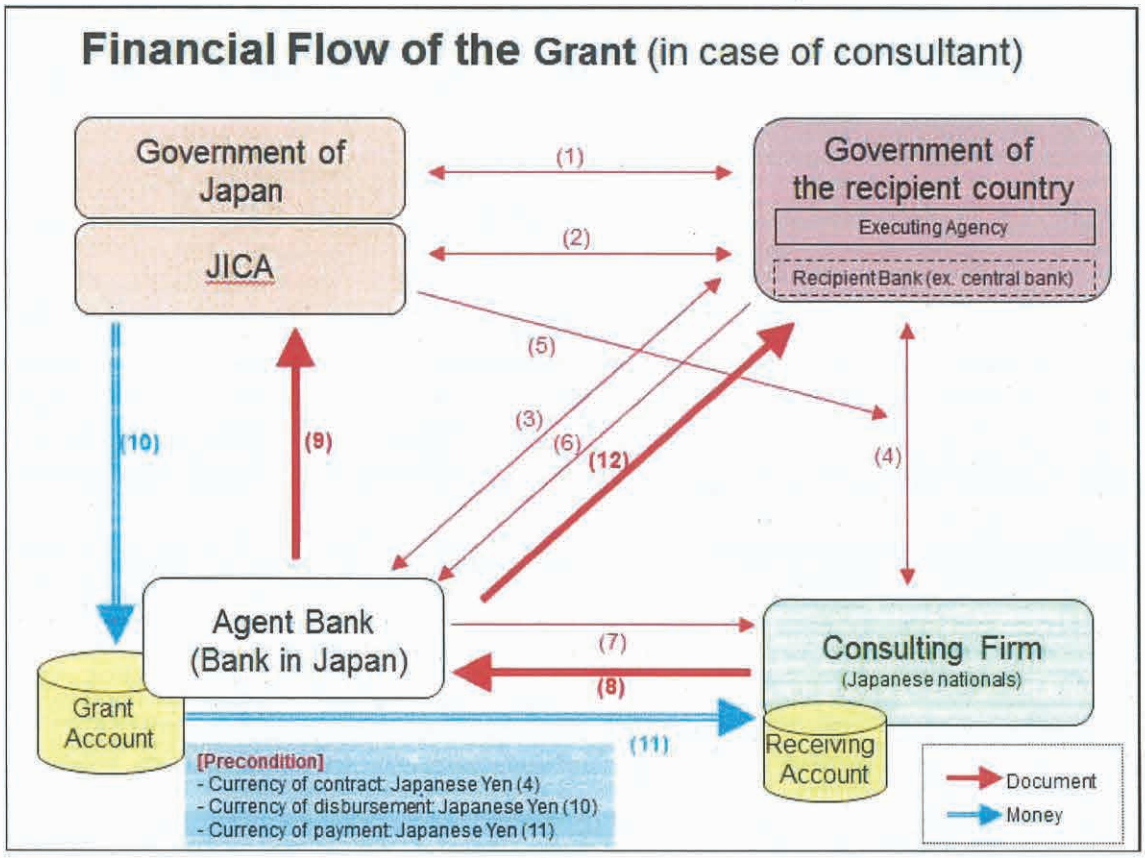
notes:

1. Project Monitoring Report and Report for Project Completion shall be submitted to JICA as agreed in the G/A.

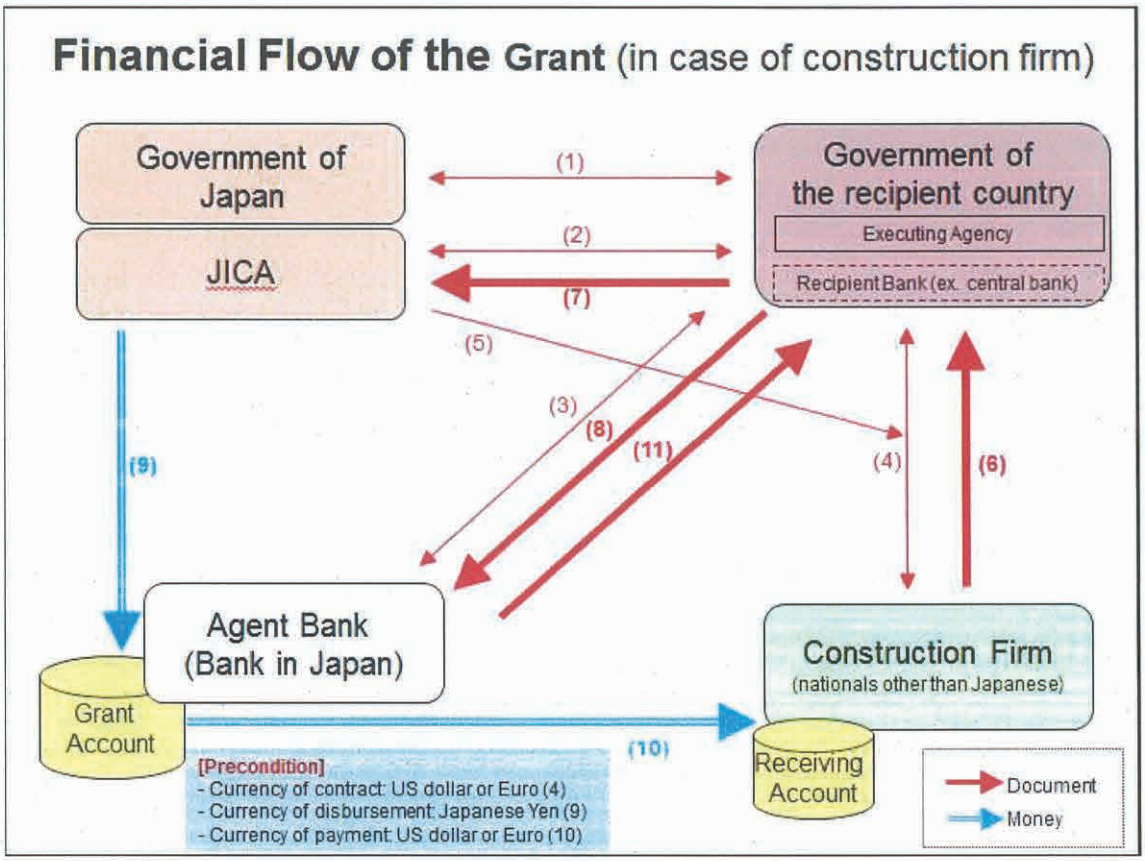
2. Concurrence by JICA is required for allocation of grant for remaining amount and/or contingencies as agreed in the G/A.

Attachment 2

Financial Flow of Japanese Project Grant
(contract with Japanese consultant and local contractors)



(1) E/N
(2) G/A
(3) Banking Arrangement/Opening an Grant Account
(4) Contract
(5) Concurrence and Verification of Contract
(6) Issuing Authorization to Pay (A/P) upon contract
(7) Notification of A/P
(8) Request for Payment
(9) Request for the Disbursement
(10) Disbursement of the Grant
(11) Payment
(12) Statement of Account

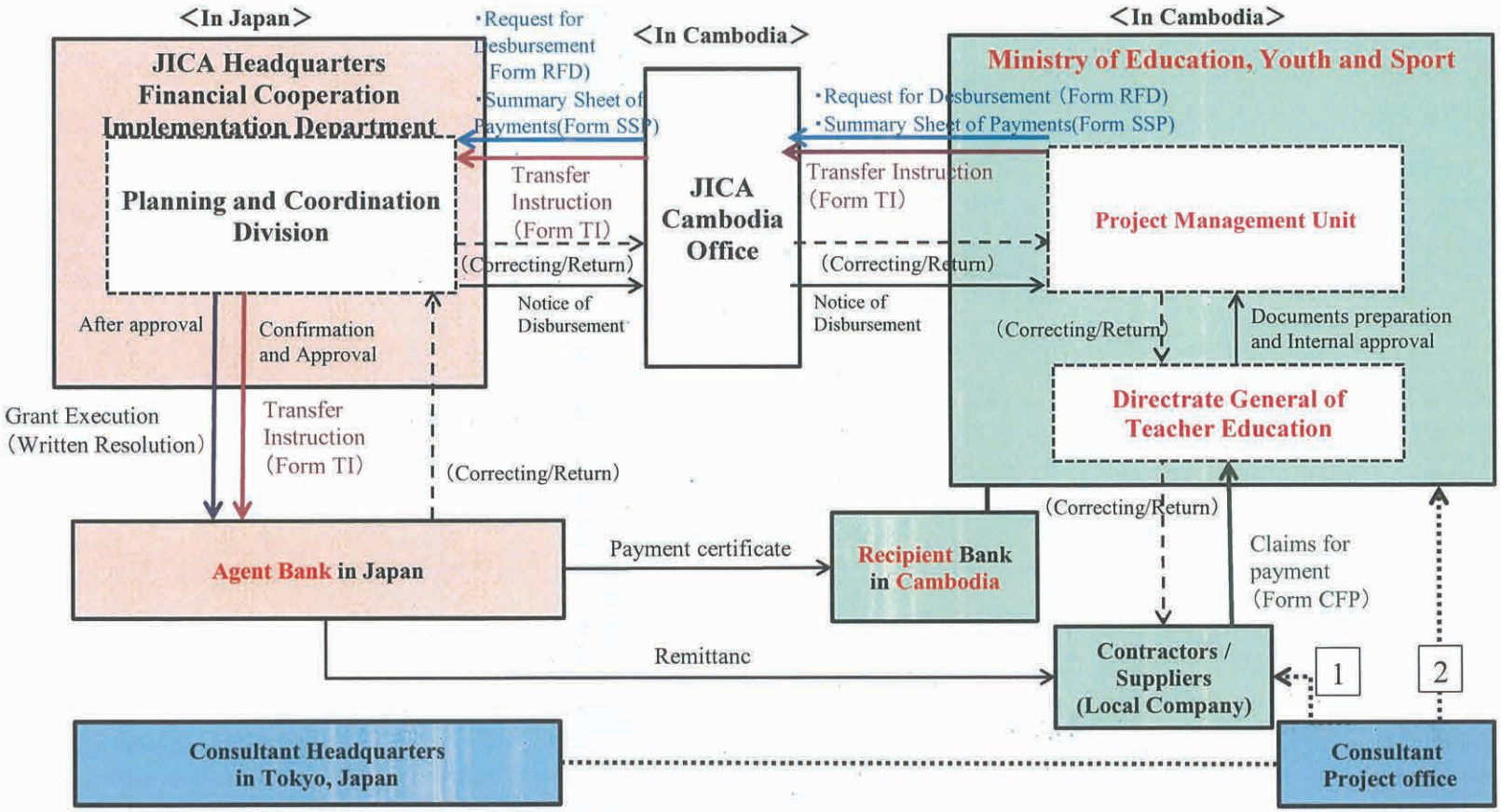


(1) E/N
(2) G/A
Submission of Evidence of Authority and Specimen Signatures from the Recipient to JICA (prerequisite for the process of no. (7))
(3) Banking Arrangement/Opening an Grant Account
(4) Contract
(5) Concurrence and Verification of Contract
(6) Request for Payment
(7) Request for Disbursement
(8) Transfer Instruction
(9) Disbursement of the Grant *
(10) Payment
(11) Statement of Account

* The amount of disbursement in Japanese Yen ((9) in above chart) shall be calculated at the Telegraphic Transfer Selling (TTS) rate quoted by the Bank in Japan two business days before the date on which the disbursement is made.

ANNEX4

Tentative Approval flow and required documents for payments to the contractors/suppliers (local company)



【Consultant's financial planning and payment support service】

1 Support for preparing invoice, pre-confirmation of documemts, promotion of document praparation, support for revision documents etc.

2 Promotion of approval of the Ministry(MoEYS), support for Request for Disbursement / Transfer Instruction, pre-confirmation of documents, promotion of document preparation, support for revision documents, etc.

Annex 5 Project Implementation Schedule

1. Detailed Design Stage

Item		Number of Months 1	2	3	4	5	6	7	8	9	10	11
Detailed Design	Site Survey											
	Analysis in Japan, D/D and Cost Estimate											
	Production of Bidding Documents for Approval											
	Bid Announcement, Bid Documents Distribution, Q/A											
	Bid Opening and Bid Evaluation											
	Performance Security, Signing Contract and Concurred by JICA											

2. Construction and Procurement Stage

Item			Number of Months 1	2	3	4	5	6	7	8	9	10	11	12	13	14
Construction and Procurement	Building	Preparation work														
	Construction	Earthwork and Foundation Work														
		Reinforced Concrete Work														
		Steel Frame Work and Roofing Work														
		Finishing Work														
		Mechanical and Electrical Work														
		External and Landscaping Work														
		Inspection														
	Equipment	Equipment Ordering														
	Procurement	Transportation														
		Installation and Adjustment														
		Inspection														

Annex 6

Major Undertakings to be taken by the Government of Cambodia

1. Specific obligations of the Government of Cambodia which will not be funded with the Grant

(1) Before the Bidding

No.	Items	Deadline	In charge	Estimated Cost (USD)	Ref.
1	To establish PMU	Within 1 month after the signing of the G/A	MoEYS	--	
2	To sign the Banking Arrangement (B/A) with a bank in Japan (the Agent Bank) to open bank account for the Grant	Within 1 month after the signing of the G/A	NBC/ MEF/ MoEYS	--	
3	To issue A/P to a bank in Japan (the Agent Bank) for the payment to the consultant	Within 1 month after the signing of the contract	NBC/ MEF/ MoEYS	--	
4	To bear the following commissions to the Agent Bank for the banking services based upon the B/A			886	
	1) Advising commission of Authorization to Pay (A/P)	Within 1 month after the signing of the contract(s)	MoEYS	69	
	2) Payment commission for A/P	Every payment		817	
5	To secure and clear the project site ● removal of existing structures (buildings and gazebos) including their foundation, ● removal and uprooting of existing trees, ● removal of concrete pavement, curb blocks, exposed rocks and other obstacles, ● rerouting of service utilities, ● and others	Before the detailed design	MoEYS	89,000	
6	To obtain building permit and other necessary permit/procedure for the construction activities	Before notice of the bidding document	MoEYS	--	
7	To obtain the certificate of clearance of landmine: carry out detection and removal of landmines and unexploded ordnance within the project site (depth 0-2m, 2-4m respectively)	Before the detailed design	MoEYS	--	
8	To submit Project Monitoring Report (with the result of Detailed Design)	Before preparation of the bidding documents	MoEYS	--	
9	To ensure smooth implementation of the bidding procedure and to bear necessary expenses relevant to the bidding procedures including, but not limited to, the following 1) printing and binding of bidding documents 2) notice of the bidding document on major newspapers, governmental gazette and /or web site 3) securing places for pre-bid meeting 4) securing places for bid opening	Before the bid notice	MoEYS	--	

(2) During the Project Implementation

No.	Items	Deadline	In charge	Estimated Cost (USD)	Ref.
1	To bear the following commissions to the Agent Bank for the banking services based upon the B/A			1,831	
	1) Payment commission for A/P	Every payment for consultant	MoEYS	831	
	2) Remittance charge for local contractors and suppliers	Every payment	MoEYS	1,000	
2	To conduct necessary procedures such as "Request for disbursement" to JICA (upon contract with construction firms and/or procurement firms (suppliers)), "Application of remittance" to Bank (upon contract with construction firms and/or procurement firms (suppliers))	During the Project period	MoEYS	--	
3	To ensure prompt unloading and customs clearance at ports of disembarkation in the country of the Recipient and to assist the Supplier(s) with internal transportation therein	During the Project period	MoEYS/ MEF	--	
4	To accord Japanese physical persons and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work	During the Project period	MoEYS	--	
5	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the products and/or the services be exempted	During the Project period	MoEYS/ MEF	--	
6	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project	During the Project period	MoEYS	--	
7	To notify JICA promptly of any incident or accident, which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers	During the construction	MoEYS	--	
8	1) To submit Project Monitoring Report	Every month	MoEYS	--	
	2) To submit Project Completion Report (PCR) (including as-built drawings, equipment list, photographs, etc.)	Within 1 month after signing of Certificate of Completion for the works under the contract(s)	MoEYS	--	
9	To submit a notice concerning completion of the Project	Within 6 months after completion of the Project	MoEYS	--	
10	To provide facilities for distribution of electricity, water supply and drainage and other incidental facilities necessary for the implementation of the Project outside the site			105,100	
	1) Electricity: The installation of a new transformer (3-phase, 50Hz, minimum 1000kVA including cable, poles, main boxes and accessories) on the road south of the RTTC and the connection from the existing medium voltage distribution network to the primary side of the new transformer.)	3 months before completion of the construction	MoEYS	105,000	
	2) Water Supply: The installation of a new water meter for the new buildings.	3 months before completion of the construction		100	
	3) Internet connection: the distributing line to the site where necessary	1 months before completion of the construction		--	

	4) Other incidental facilities	Before completion of the construction		--	
11	To renovate existing buildings (one building will be converted from a laboratory into a workshop at RTTC, and the other one into an E-library at PTTC.)	Before installation of the Equipment	MoEYS	158,000	
12	To ensure the safety of persons engaged in the implementation of the Project	During the construction	MoEYS		
13	To take necessary measures for safety of the Project site Where necessary (measures for safety) 1) maintaining the safety of workers and the general public by thorough implementation of safety measures and immediate action in the case of accident 2) traffic control around the site(s) and on transportation routes of construction materials 3)installation of fences around the site(s) where necessary	During the construction	MoEYS		

(3) After the Project

No.	Items	Deadline	In charge	Estimated Cost (USD)	Ref.
1	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid 1) Provision of fixtures and furnishing necessary for using the new facilities (e.g., curtains) 2) Allocation of maintenance cost 3) Establishment of Operation and maintenance structure 4) Routine check/Periodic inspection	After the completion of the construction/ Every year	MoEYS	49,650 per year	
2	The products to be purchased under the Project -shall not be used for military purposes; -shall never be transferred to any third party without prior consultation with the Japanese Government; -shall need prior notification to the Japanese Government for major alteration such as permanent installation of machine guns; -shall be monitored at least one year and three years after completion of the Project by the Embassy of Japan in Cambodia and JICA Cambodia Office in accordance with procedures designated by the Government of Japan; and, -shall be reported the status of utilization of the products by MoEYS to the Embassy of Japan in Cambodia and JICA Cambodia Office upon requests at any time.		MoEYS		

NBC: National Bank of Cambodia/ MEF: Ministry of Economy and Finance / MoEYS: Ministry of Education, Youth and Sport

2. Other obligations of the Government of Cambodia funded with the Grant

This part is closed due to the confidentiality.

Annex 7

Project Monitoring Report (PMR)
on
[Project Name]

~ *[Month]*, 202# ~

1. General Information

(a) Exchange of Notes (E/N):
(i) signed on *[date, year]*
(ii) grant amount up to *[amount]* yen
(ii) grant available until *[date, year]*

(b) Grant Agreement (G/A):
(i) signed on *[date, year]*,
(ii) grant amount up to *[amount]* yen
(iii) including contingency up to *[amount]* yen
(iv) grant available until *[date, year]*
(v) grant availability by Terms:[1]
Term 1: Amount: *[amount]* yen, available from the signing date
Term 2: Amount: *[amount]* yen, available from *[1st April, year]*
Term 3: Amount: *[amount]* yen, available from *[1st April, year]*
Term 4: Amount: *[amount]* yen, available from *[1st April, year]*
Term 5: Amount: *[amount]* yen, available from *[1st April, year]*

(c) Banking Arrangement (B/A):
(i) signed on *[date, year]*
(ii) with *[name of a bank in Japan]*

2. Contract/Agreement verified

(a) Consultant Agreement
(i) the Consultant: *[name of the Consultant]*
(ii) signed on *[date, year]*, and verified on *[date, year]*
(iii) Authorization to Pay (A/P)[2] is issued on *[date, year]*
(iv) 1st amended[3] on *[date, year]*, and verified on *[date, year]*
(v) amended A/P issued on *[date, year]*
(vi) 2nd amended on *[date, year]*, and verified on *[date, year]*
(vii) amended A/P issued on *[date, year]*

(b) Procurement Contract (works)
(i) the Contractor: *[name of the Contractor]*
(ii) signed on *[date, year]*, and verified on *[date, year]*
(iii) Authorization to Pay (A/P) issued on *[date, year]*

---

[1] *国庫債務負担行為の場合。*
[2] *A/P が未発給の場合は、"is scheduled to be issued by"等として、発給予定月を記入。以下同じ。*
[3] *契約変更を行った際に追記。以下同じ。*

(iv) 1st amended on [date, year], and verified on [date, year]
(vi) amended A/P issued on [date, year]
(vi) 2nd amended on [date, year], and verified on [date, year]
(vii) amended A/P issued on [date, year]
(viii) 3rd amended on [date, year], and verified on [date, year]
(ix) amended A/P issued on [date, year]

(c) Procurement Contract (goods I)
(i) the Supplier: [name of the Supplier]
(ii) signed on [date, year], and verified on [date, year]
(iii) Authorization to Pay (A/P) issued on [date, year]
(iv) 1st amended on [date, year], and verified on [date, year]
(v) amended A/P issued on [date, year]
(vi) 2nd amended on [date, year], and verified on [date, year]
(vii) amended A/P issued on [date, year]

(d) Procurement Contract (goods II)[4]
(i) the Supplier: [name of the Supplier]
(ii) signed on [date, year], and verified on [date, year]
(iii) Authorization to Pay (A/P) issued on [date, year]
(iv) 1st amended on [date, year], and verified on [date, year]
(v) amended A/P issued on [date, year]

(e) Remaining Balance
JPY ##,###,000- including contingency amount of JPY ##,000/

3. Payment Schedule and Status[5]

(a) Consultant Agreement: revised or confirmed 202X/XX/XX[6]

Stage[7]	Amount	Terms of Payment	Date of Payment
Advance Payment	JY ##,###,000	Verification of the Agreement by JICA	[date, year] [8] **[date, year]**[9]
1st Interim Payment		Verification of (all) the Contract(s) by JICA	
2nd Interim Payment			
Final Payment		Completion of the Service for design and supervision	

[4] 物品調達契約が複数ある場合は、記載を追加。建設工事契約が複数ある場合も同様。(goods I)、(goods II)という表記は、契約を分かりやすく区分する名称に変更してください。
[5] "Payment Schedule and Status"は、一般的な書式（支払条件等）を提示しています。現地企業活用型や人材育成奨学計画では若干書式が異なるため、個別に提示します。
[6] 支払スケジュールはGrant（無償資金）管理上極めて重要であるため、確認日を明記してください（PMR提出日とは異なる場合があることを想定。）。
[7] 国庫債務負担行為の案件では、Term区分も記載。
[8] 契約当事者の取引銀行に対する支払請求書の提出日または提出予定日をイタリック体で記入。また、当該月に提出予定日の変更があった場合は、"revised in this month"と付記。
[9] 着金があった場合は２行目に着金日を太字で記入。

Payment for Start-up Operation		Completion of Start-up Operation	
Payment for Defect Inspection		Completion of Defect Inspection	
		Expiry date of A/P[10]	

(b) Procurement Contract (works): revised or confirmed 202X/XX/XX

Stage	Amount	Terms of Payment	Date of Payment
Advance Payment	JPY ##,###,000	Verification of the Agreement by JICA	*[date, year]* **[date, year]**
1st Interim Payment		Completion of 50% of the Construction Works	
2nd Interim Payment		Completion of 85% of the Construction Works	
Final Payment		Completion of the Construction Works	
Payment for Operation Training		Completion of Operation Training	
		Expiry date of A/P	

(c) Procurement Contract (goods)[11]: revised or confirmed 202X/XX/XX

Stage	Amount	Terms of Payment	Date of Payment
Payment on 1st Shipment		Shipment of the said equipment	
Payment on 2nd Shipment		Shipment of the said equipment	
Payment on 3rd Shipment		Shipment of the said equipment	
Payment on 1st Delivery		Delivery of the said equipment	
Payment on 2nd Delivery		Delivery of the said equipment	
Payment for Installation Works		Completion of the Installation Works	
Payment for Operation Training		Completion of Operation Training	
Payment for Maintenance Services (2nd year)			
Payment for Maintenance			

[10] *A/P に規定される支払請求期限（deadline for presentation of the required documents stipulated in A/P）を記入。*

[11] *複数の契約がある場合は項目を追加。*

Services (3rd year)			
		Expiry date of A/P	

4. Summary of the Progress

業者契約ごとの進捗状況を端的に取りまとめて記載してください。
建設工事契約（Works）及びプラント契約（Plant：機材調達契約のうち相当規模の据付工事を伴うもの）については、進捗曲線付（進捗曲線は、計画と実績の２本）バーチャート工程表（Construction Schedule with bar-chart and cumulative curve）を作成・添付してください。

(a) Works

(b) Goods

5. Variation or Modification

業者契約締結後に発生した（または発生する見込みの）設計変更や追加作業等（Variation or Modification）について、以下の項目に分けて記載してください。
・当月の設計変更や追加作業等
・今後発生する可能性がある設計変更や追加作業等
・契約変更を伴った設計変更や追加作業等（過去の全ての契約変更実績を記載）
・契約変更を伴わない軽微な設計変更や追加作業等（過去の全ての実績概要を記載）

(a) Variation or modification of this month

(b) Variation or modification to be expected

(c) Variation or modification caused amendment of the Contract

i) 1st Amendment dated [date, year]
- Contract Price amended:
- Contents of amendment:

ii) 2nd Amendment dated [date, year]
- Contract Price amended:
- Contents of amendment:

iii) 3rd Amendment dated [date, year]
- Contract Price amended:
- Contents of amendment:

6. Potential Risk and Mitigation Measures

①受贈国実施機関（施主）等の実施責任事項の遅延によるプロジェクト全体進捗の支援や施工現場条件等による近い将来の追加工事（契約変更）の可能性、②住民紛争や工事事故等の発生、③その他受贈国実施機関と JICA で共通認識を持っておくべきリスク可能性、等々について、簡潔に記載してください。

案件の内容やその進捗状況に応じ、JICA から記載すべき項目を指示することがあります。 また、必要に応じ、より具体的な情報をコンサルタントから直接ヒアリングさせて頂きます。

Attachments :

- Construction Schedule with bar chart and cumulative curve
- Monthly Progress Report submitted by the Contractor(s)/Supplier(s)
- Environmental (Social) Monitoring Sheet *(if indicated in G/A)*

Date:
Ref. No.

JAPAN INTERNATIONAL COOPERATION AGENCY
JICA XXX OFFICE
Attention: Chief Representative
CC:
Director General
Financial Cooperation Implementation Department
Japan International Cooperation Agency

Notice concerning Progress of the Project

Reference: *[insert the name of the Project]*

In accordance with the Article 6 (3) of the Grant Agreement, I would like to report on the progress of the Project.

Please see the details as per attached Project Monitoring Report (PMR).

Very truly yours,

[Signature]
[Name of the signer]
[Title of the signer]
[Name of the executing agency]

[Option][1]
On behalf of the *[name of the executing agency]*

[Signature]
[Name of the signer]
Chief Consultant
[Name of the Consultant]

[1] *受贈国実施機関がコンサルタントに対し「直接 JICA へ PMR を提出する権限」を与えている場合は、このオプションにより、PMR を直接 JICA に提出願います。なおその場合、施主に CC: を入れてください。*

Annex 8

Planned Equipment List

No.	Code No.	Equipment Name	Q'ty
ICT Equipment for Interactive Lectures			
1	ICT-01	Laptop computer	94
2	ICT-02	Cart for laptop computer	10
3	ICT-03	Interactive flat panel	3
4	ICT-04	Monitor	20
5	ICT-05	Projector	8
6	ICT-06	Screen	1
7	ICT-07	Multi-function inkjet printer	2
8	ICT-08	Document camera	2
9	ICT-09	3D scanner	2
10	ICT-10	3D printer	2
11	ICT-11	Server	2
12	ICT-12	Web camera	8
13	ICT-13	Sound equipment	8
Science Lab Equipment for Primary Teacher Training			
14	SSC-02	Electronic balance A	20
15	SSC-04	DC ammeter	20
16	SSC-05	Digital multimeter	10
17	SSC-06	DC voltmeter	20
18	SSC-08	Magnetizing coil	2
19	SSC-09	Astronomical telescope	2
20	SSC-11	Binoculars	18
21	SSC-12	Pendulum apparatus	18
22	SSC-13	Instrument shelter	1
23	SSC-14	Experimental lever	18
24	SSC-15	Air extraction kit	18
25	SSC-16	Monocular microscope	31
26	SSC-17	Binocular stereomicroscope	31
27	SSC-18	Chemical locker	1
28	SSC-19	Iron support	18

No.	Code No.	Equipment Name	Q'ty
29	SSC-20	DC power supply	18
30	SSC-21	Specimen set	2
31	SSC-22	Arm joint model	2
32	SSC-23	Skelton model of human body	1
33	SSC-24	Anatomical model of human body	1
34	SSC-25	Eyeball model	1
35	SSC-26	Ear model	1
36	SSC-27	Glass tool set	2
37	SSC-28	Experimental tool set	2
38	SSC-29	Digital thermometer A	20
39	SSC-30	Protection material set	2
40	SSC-31	Pulley A	10
41	SSC-32	pH meter A	18
42	SSC-33	Dissection instrument set	18
Mathematics Equipment for Primary Teacher Training			
43	PMA-2	Calculation practice card for demonstration	1
44	PMA-4	Number line sheet	1
45	PMA-5	Explanation kit for superficial measure of triangle and tetragon	1
46	PMA-6	Weight set	1
47	PMA-7	Explanation kit for polygon	1
48	PMA-8	Explanation kit for sum of the internal angles	1
49	PMA-9	Diagram congruity model	9
50	PMA-10	Study kit for volume	9
51	PMA-11	Liter square/measure	9
Physics Lab Equipment for Lower Secondary Teacher Training			
52	SPH-01	Experimental apparatus of slope	9
53	SPH-02	Dynamic movement apparatus	1
54	SPH-03	Pulley B	1
55	SPH-04	Experimental lever	9
56	SPH-05	Vacuum apparatus set	1
57	SPH-06	Experimental apparatus for dynamics (slope)	1
58	SPH-08	Optical bench and experimental apparatus	1

No.	Code No.	Equipment Name	Q'ty
59	SPH-09	School Oscilloscope	1
60	SPH-11	Primary and secondary coils	9
61	SPH-12	DC AC power supply	9
62	SPH-13	Instrument set for electrical current and magnetic field	1
63	SPH-15	Collision balls	1
64	SPH-16	Experimental apparatus for energy conversion	1
65	SPH-18	Timer ticker	9
66	SPH-20	Digital thermometer B	10
67	SPH-21	Protection material set	2
68	SPH-23	Electronic balance B	10
Chemistry Lab Equipment for Lower Secondary Teacher Training			
69	SCH-01	Precision balance A	9
70	SCH-03	Chemical locker	2
71	SCH-04	Refrigerator-Freezer	1
72	SCH-05	Iron support	9
73	SCH-06	Glass tool set for chemistry	1
74	SCH-07	Experimental tool set	1
75	SCH-09	Protection material set	1
76	SCH-10	Distillator	1
Biology Lab Equipment for Lower Secondary Teacher Training			
77	SBI-01	Mendel's laws experiment machine	9
78	SBI-02	Monocular microscope	31
79	SBI-04	Binocular stereomicroscope	31
80	SBI-05	Magnifying mirror with polarization	9
81	SBI-06	Digital camera system for microscope	1
82	SBI-07	Microscope cabinet	4
83	SBI-08	Laboratory wagon	2
84	SBI-10	Magnifier for field	1
85	SBI-11	Skelton of vertebrates	1
86	SBI-12	Anatomy of (in)vertebrate specimens	1
87	SBI-13	Cell division model	1
88	SBI-14	Skelton and organ structure model set A	1

No.	Code No.	Equipment Name	Q'ty
89	SBI-16	Stick thermometer A	10
90	SBI-17	Digital thermometer C	10
91	SBI-18	Precision balance B	10
92	SBI-19	Scale balance	10
93	SBI-21	Protection material set	2
Earth Science Lab Equipment for Lower Secondary Teacher Training			
94	SEA-01	Tripartite model	1
95	SEA-02	Transparent celestial globe	1
96	SEA-04	Moon phase model	1
97	SEA-05	Rain gauge	1
98	SEA-06	Specimens set of rock, mineral and fossil	1
99	SEA-07	Astronomical telescope	2
100	SEA-10	pH meter B	1
101	SEA-11	Soil moisture meter	1
102	SEA-12	Stick thermometer B	10
103	SEA-13	Digital thermometer D	10
104	SEA-14	Glass tool set	1
Mathematics Equipment for Lower Secondary Teacher Training			
105	SMA-02	Development model of formula	2
106	SMA-03	Diagram congruity model	9
107	SMA-04	Plane parallel study apparatus	9
108	SMA-05	Solid model	9
109	SMA-06	Three dimensional model	9
110	SMA-07	Pythagorean theorem experiment kit	9
Educational furniture			
111	FUR-01	Laboratory table for student	8
112	FUR-02	Laboratory table for teacher	2
113	FUR-03	Laboratory table for preparation room	1
114	FUR-04	Laboratory table (Physics) for student	4
115	FUR-05	Laboratory table (Physics) for lecturer	1
116	FUR-06	Laboratory table (Chemistry) for student	4
117	FUR-07	Laboratory table (Chemistry) for lecturer	1

No.	Code No.	Equipment Name	Q'ty
118	FUR-08	Laboratory table (Biology) for student	4
119	FUR-09	Laboratory table (Biology) for lecturer	1
120	FUR-10	Laboratory table (Earth Science) for student	4
121	FUR-11	Laboratory table (Earth Science) for lecturer	1
122	FUR-12	Stool A	192
123	FUR-13	Chair	6
124	FUR-14	Desk for student	60
125	FUR-15	Desk for lecturer	2
126	FUR-16	Chair for student	60
127	FUR-17	Chair for lecturer	2
128	FUR-18	Whiteboard	12
129	FUR-19	Cabinet set	33
Workshop Equipment for Developing Teaching Materials			
130	WOK-01	Electric saw	4
131	WOK-02	Electric jig saw	4
132	WOK-03	Bench-top drilling machine	4
133	WOK-04	Belt sander	4
134	WOK-05	Safety glass	32
135	WOK-06	Apron	32
136	WOK-07	Manual wind cord reel	4
137	WOK-08	Wood work tool	8
138	WOK-09	Worktable	4
139	WOK-10	Stool for workshop B	32
140	WOK-11	Desk and chair set for lecturer	1
141	WOK-12	Cabinet	2
Audio Visual Equipment			
142	AVE-01	Projector for Auditorium	1
143	AVE-02	Sound equipment set for Auditorium	1
144	AVE-03	Interactive flat panel for Auditorium	1
145	AVE-04	Monitor for Auditorium	2
146	AVE-05	Projector for Assembly hall	1
147	AVE-06	Sound equipment set for Assembly hall	1

No.	Code No.	Equipment Name	Q'ty
E-Library Equipment			
148	LIB-01	Desktop computer	10
149	LIB-02	Computer desk and chair set	10
150	LIB-03	Multi-function printer	2
151	LIB-04	Book scanner	2
152	LIB-05	Barcode reader	2
First Aid Equipment			
153	FAE-01	Equipment for first aid	1
154	FAE-02	AED	1

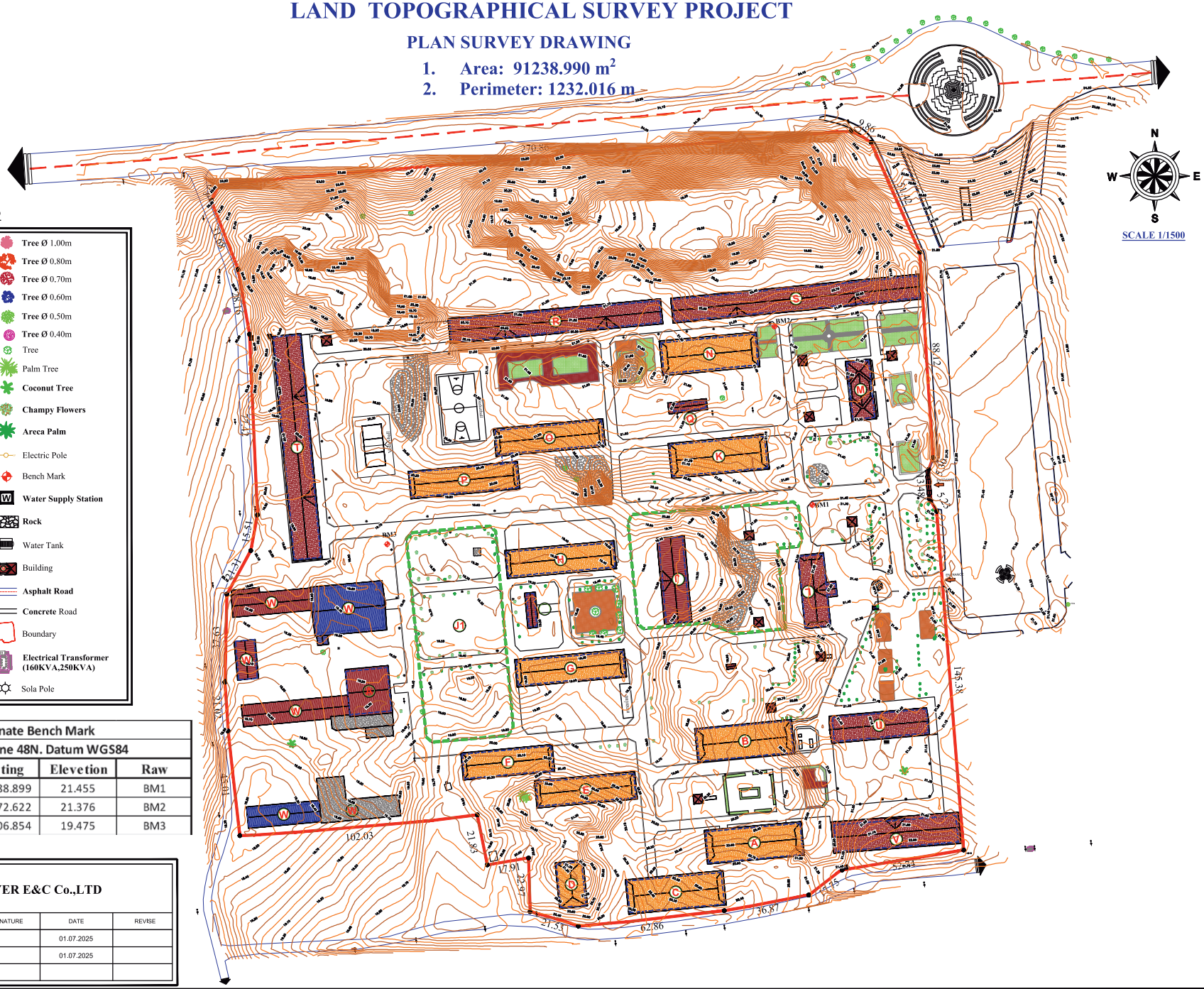
Appendix 5 Other Relevant Data

Appendix 5-1 Topographic Survey Map

LAND TOPOGRAPHICAL SURVEY PROJECT

PLAN SURVEY DRAWING

1. Area: 91238.990 m^2
2. Perimeter: 1232.016 m



LEGEND

A : Khmer Rouge Library	Tree Ø 1.00m
B : Library	Tree Ø 0.80m
C : Dormitory building	Tree Ø 0.70m
D : Old Water Closet	Tree Ø 0.60m
(E-F): Connected dormitory buildings	Tree Ø 0.50m
(G-H): Connected dormitory buildings	Tree Ø 0.40m
I : Old Water Closet	Tree
J : Tailoring and Art	Palm Tree
K : School Building	Coconut Tree
L : Instructor building	Champy Flowers
M : Samdach Techo Headquarter	Areca Palm
N : Science Lab	Electric Pole
(O-P): Old dormitory building	Bench Mark
Q : One Water Closet: dismantle	Water Supply Station
R : Samdach Techo School 1 building 30 room	Rock
S : Samdach Techo School 1 building 24 room	Water Tank
T : Student-teacher dormitory Samdach Techo 1 building	Building
U : Laboratory Building	Asphalt Road
V : Teacher dormitory1 building	Concrete Road
	Boundary
	Electrical Transformer (160KVA,250KVA)
	Sola Pole

Table Coordinate Bench Mark				
Projection UTM Zone 48N. Datum WGS84				
Point ID	Northing	Easting	Elevetion	Raw
1	1326319.688	549088.899	21.455	BM1
2	1326396.112	549072.622	21.376	BM2
3	1326302.891	548906.854	19.475	BM3

CLOVER E&C Co.,LTD

	NAME	SIGNATURE	DATE	REVISE
SURVEYED BY:	PICH CHANDARA		01.07.2025	
CHECKED BY:	PHOK MONIRATHA		01.07.2025	
APPROVED BY:				

Appendix5-1 Topographic Survey Map

Appendix 5-2 Outcome of Soil Investigation

(1) Test Location (BH: Boring test)

មន្ទីរពិសោធន៍ដី
Soil Testing Laboratory Co.,Ltd
For General Construction
Tel: (855 012) 52 72 79 – Tel: (855 016) 834 034
E-mail: stl368@yahoo.com
PHNOM PENH-CAMBODIA

Figure A1: Location of boreholes
Project: NEW BUILDING (RTTC)
Location: Phum Ti 6, Sangkat Veal Vong, Krong Kampong Cham, Kampong Cham Province

Figure A2.1: BORING LOG AND STANDARD PENETRATION TEST RESULTS

BOREHOLE: BH1

Project Name: NEW BUILDING (RTTC)

Project Location: PHUM TI 6, SANGKAT VEAL VONG, KRONG KAMPONG CHAM, KAMPONG CHAM PROVINCE

Coordinate:
X = 549019.310m
Y = 1326306.730m

Elevation: 19.61m
- Assumed: ☐
- Measured: ☒

Ground water:
- Water inflow ▽ :
- Water level ▼ : 4.30m (04/07/2025)

Depth of borehole: 10.0m

Borehole diameter: D = 110mm

Start date: 03/07/2025

Weather: Sunny

Drilling method: Rotary drilling with bentonite flushing

End date: 03/07/2025

Elevation (m)	LAYER: Bottom elevation (m)	Bottom depth (m)	Thickness of layer (m)	Layer No.	Soil description and classification	SAMPLE TYPE	N value (N_{30cm})
19.41	0.20	0.20	1		0.0m to 0.2m: Sandy lean CLAY with weathered basalt, reddish brown - grey		
		9.80	2		0.2m to 10.0m: BASALTIC ROCK include:		
					0.2m to 3.0m: Vesicular BASALT, dark grey	TCR=20%, RQD=0% TCR=25%, RQD=0% TCR=30%, RQD=10%	
					3.0m to 6.0m: Basalt, dark grey	TCR=40%, RQD=15% TCR=40%, RQD=20% TCR=20%, RQD=10% TCR=70%, RQD=0% TCR=65%, RQD=30% TCR=50%, RQD=0%	
					6.0m to 10.0m: Vesicular BASALT, dark grey	TCR=40%, RQD=10%	
9.61	10.00				Bottom of borehole at depth of 10.0m		

Legend: Asphalt concrete; Filling stone; Clayey Sand; Sand; Clay; Silt; Basalt

Equipment: XY-100

Logged by: NOCH

Compiled by: D.N. VO

Sheet: 1 of 1

Figure A2.2: BORING LOG AND STANDARD PENETRATION TEST RESULTS

BOREHOLE: BH2

Project Name: NEW BUILDING (RTTC)
Project Location: PHUM TI 6, SANGKAT VEAL VONG, KRONG KAMPONG CHAM, KAMPONG CHAM PROVINCE

Coordinate:
X = 549044.060m
Y = 1326282.110m
Depth of borehole: 20.0m
Weather: Sunny

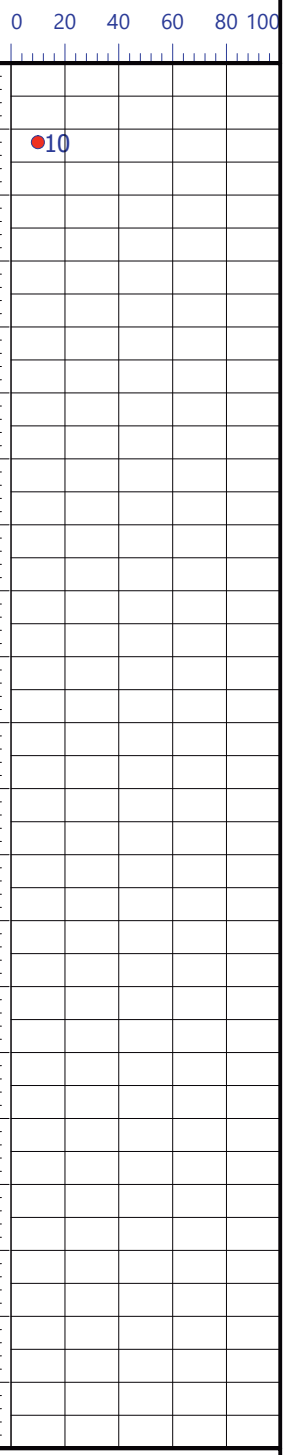
Elevation: 19.40m
- Assumed: ☐
- Measured: ☒
Borehole diameter: D = 110mm
Drilling method: Rotary drilling with bentonite flushing

Ground water:
- Water inflow ▽ :
- Water level ▼ : 4.40m (03/07/2025)
Start date: 01/07/2025
End date: 02/07/2025

Elevation (m)	LAYER: Bottom elevation (m)	LAYER: Bottom depth (m)	LAYER: Thickness of layer (m)	LAYER: Layer No.	Soil description and classification	SAMPLE TYPE	SPT: N value (N_{30cm})
19.0			1.50	1	0.0m to 1.5m: Sandy lean CLAY with weathered basalt, reddish brown - grey	UD1 (0.8m - 1.0m)	SPT1 05/05/05 (10)
18.0	17.90	1.50	18.50	2	1.5m to 20.0m: BASALTIC ROCK include:	TCR=30%, RQD=0%	
17.0					1.5m to 4.0m: Vesicular BASALT, dark grey	TCR=70%, RQD=10%	
16.0						TCR=50%, RQD=27%	
15.0					4.0m to 5.0m: Basalt, dark grey	TCR=87%, RQD=80%	
14.0					5.0m to 9.0m: Vesicular BASALT, dark grey	TCR=90%, RQD=0%	
13.0					9.0m to 12.5m: Basalt, dark grey	TCR=100%, RQD=70%	
12.0					12.5m to 14.0m: Vesicular BASALT, dark grey	TCR=80%, RQD=13%	
11.0					14.0m to 14.7m: Basalt, dark grey	TCR=95%, RQD=90%	
10.0					14.7m to 20.0m: Vesicular BASALT, dark grey	TCR=100%, RQD=95%	
9.0						TCR=70%, RQD=30%	
8.0						TCR=80%, RQD=42%	
7.0						TCR=84%, RQD=80%	
6.0						TCR=90%, RQD=67%	
5.0						TCR=85%, RQD=45%	
4.0						TCR=80%, RQD=40%	
3.0						TCR=100%, RQD=90%	
2.0						TCR=90%, RQD=60%	
1.0						TCR=10%, RQD=0%	
0.0	-0.60	20.00				TCR=20%, RQD=0%	
-1.0					Bottom of borehole at depth of 20.0m		

SAMPLE TYPE: Undisturbed; Disturbed; Core run; SPT

SPT Graph



Legend:
- Asphalt concrete
- Filling stone
- Clayey Sand
- Sand
- Clay
- Silt
- Basalt

Equipment: XY-100

Logged by: NOCH
Compiled by: D.N. VO
Sheet: 1 of 1

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Figure A2.3: BORING LOG AND STANDARD PENETRATION TEST RESULTS

BOREHOLE: BH3

Project Name: NEW BUILDING (RTTC)
Project Location: PHUM TI 6, SANGKAT VEAL VONG, KRONG KAMPONG CHAM, KAMPONG CHAM PROVINCE

Coordinate:
X = 549070.420m
Y = 1326275.630m
Depth of borehole: 10.0m
Weather: Sunny

Elevation: 20.30m
- Assumed: ☐
- Measured: ☒

Borehole diameter: D = 110mm
Drilling method: Rotary drilling with bentonite flushing

Ground water:
- Water inflow :
- Water level : 4.40m (05/07/2025)

Start date: 03/07/2025
End date: 04/07/2025

Elevation (m)	LAYER: Bottom elevation (m)	Bottom depth (m)	Thickness of layer (m)	Layer No.	Soil description and classification	SAMPLE TYPE	SPT: N value (N_{30cm})
20.0	20.00	0.30	0.30	1	0.0m to 0.3m: Sandy lean CLAY with weathered basalt, reddish brown - grey		
			9.70	2	0.3m to 10.0m: BASALTIC ROCK include:		
19.0					0.3m to 4.0m: Basalt, dark grey	TCR=55%, RQD=50%	
18.0					4.0m to 10.0m: Vesicular BASALT, dark grey	TCR=82%, RQD=80%	
17.0						TCR=62%, RQD=60%	
16.0						TCR=80%, RQD=80%	
15.0						TCR=78%, RQD=70%	
14.0						TCR=85%, RQD=82%	
13.0						TCR=89%, RQD=80%	
12.0						TCR=90%, RQD=72%	
11.0						TCR=50%, RQD=30%	
	10.30	10.00				TCR=50%, RQD=20%	
10.0					Bottom of borehole at depth of 10.0m		
9.0							
8.0							
7.0							
6.0							
5.0							
4.0							
3.0							
2.0							
1.0							
0.0							

Soil sample symbol

SAMPLE TYPE: Undisturbed; Disturbed; Core run; SPT

SPT Graph: 0 20 40 60 80 100

PHNOM PENH-CAMBODIA

Legend: Asphalt concrete; Filling stone; Clayey Sand; Sand; Clay; Silt; Basalt

Equipment: XY-100

Logged by: NOCH
Compiled by: D.N. VO
Sheet: 1 of 1

Figure A2.4: BORING LOG AND STANDARD PENETRATION TEST RESULTS

BOREHOLE: BH4

Project Name: NEW BUILDING (RTTC)
Project Location: PHUM TI 6, SANGKAT VEAL VONG, KRONG KAMPONG CHAM, KAMPONG CHAM PROVINCE

Coordinate:
X = 548957.710m
Y = 1326226.900m
Depth of borehole: 10.0m
Weather: Sunny

Elevation: 19.69m
- Assumed: ☐
- Measured: ☒
Borehole diameter: D = 110mm
Drilling method: Rotary drilling with bentonite flushing

Ground water:
- Water inflow :
- Water level : 0.60m (07/07/2025)
Start date: 06/07/2025
End date: 06/07/2025

Elevation (m)	LAYER: Bottom elevation (m)	LAYER: Bottom depth (m)	LAYER: Thickness of layer (m)	LAYER: Layer No.	Soil sample symbol	Soil description and classification	SAMPLE TYPE (Undisturbed / Disturbed / Core run / SPT)	N value (N_{30cm})
19.0			10.00	2		0.0m to 10.0m: BASALTIC ROCK include:	TCR=10%, RQD=0%	
18.0						0.0m to 5.0m: Vesicular BASALT, dark grey	TCR=20%, RQD=0%	
17.0						5.0m to 10.0m: Basalt, dark grey	TCR=10%, RQD=0%	
16.0							TCR=10%, RQD=0%	
15.0							TCR=40%, RQD=0%	
14.0							TCR=100%, RQD=70%	
13.0							TCR=50%, RQD=0%	
12.0							TCR=95%, RQD=80%	
11.0							TCR=80%, RQD=40%	
10.0	9.69	10.00					TCR=85%, RQD=80%	
9.0						Bottom of borehole at depth of 10.0m		
8.0								
7.0								
6.0								
5.0								
4.0								
3.0								
2.0								
1.0								
0.0								
-1.0								

SPT Graph: 0 20 40 60 80 100

PHNOM PENH-CAMBODIA

Legend: Asphalt concrete, Filling stone, Clayey Sand, Sand, Clay, Silt, Basalt

Equipment: XY-100

Logged by: NOCH
Compiled by: D.N. VO
Sheet: 1 of 1

Figure A2.5: BORING LOG AND STANDARD PENETRATION TEST RESULTS

BOREHOLE: BH5

Project Name: NEW BUILDING (RTTC)
Project Location: PHUM TI 6, SANGKAT VEAL VONG, KRONG KAMPONG CHAM, KAMPONG CHAM PROVINCE

Coordinate:
X = 548938.280m
Y = 1326261.480m
Depth of borehole: 20.0m
Weather: Sunny

Elevation: 19.23m
- Assumed: ☐
- Measured: ☒
Borehole diameter: D = 110mm
Drilling method: Rotary drilling with bentonite flushing

Ground water:
- Water inflow :
- Water level : 4.00m (06/07/2025)
Start date: 04/07/2025
End date: 05/07/2025

Elevation (m)	LAYER: Bottom elevation (m)	Bottom depth (m)	Thickness of layer (m)	Layer No.	Soil sample symbol	Soil description and classification	SAMPLE TYPE (Undisturbed / Disturbed / Core run / SPT)	N value (N_{30cm})
19.0	18.93	0.30	0.30	1		0.0m to 0.3m: Sandy lean CLAY with weathered basalt, reddish brown - grey		
			19.70	2		0.3m to 20.0m: BASALTIC ROCK include:		
18.0						0.3m to 5.0m: Vesicular BASALT, dark grey		
17.0								
16.0						5.0m to 17.0m: Basalt, dark grey		
15.0						17.0m to 20.0m: Vesicular BASALT, dark grey		
14.0								
13.0								
12.0								
11.0								
10.0								
9.0								
8.0								
7.0								
6.0								
5.0								
4.0								
3.0								
2.0								
1.0								
0.0	-0.77	20.00						
-1.0						Bottom of borehole at depth of 20.0m		

SPT Graph (0 20 40 60 80 100)

Depth (m)	SPT
0	TCR=10%, RQD=0%
1	TCR=10%, RQD=0%
2	TCR=20%, RQD=0%
3	TCR=50%, RQD=40%
4	TCR=50%, RQD=10%
5	TCR=80%, RQD=70%
6	TCR=50%, RQD=0%
7	TCR=71%, RQD=67%
8	TCR=100%, RQD=100%
9	TCR=100%, RQD=100%
10	TCR=100%, RQD=52%
11	TCR=90%, RQD=70%
12	TCR=70%, RQD=35%
13	TCR=70%, RQD=30%
14	TCR=95%, RQD=40%
15	TCR=100%, RQD=100%
16	TCR=100%, RQD=75%
17	TCR=100%, RQD=90%
18	TCR=100%, RQD=100%
19	TCR=30%, RQD=0%
20	
21	

PHNOM PENH-CAMBODIA

Legend: Asphalt concrete, Filling stone, Clayey Sand, Sand, Clay, Silt, Basalt

Equipment: XY-100

Logged by: NOCH
Compiled by: D.N. VO
Sheet: 1 of 1

Figure A2.6: BORING LOG AND STANDARD PENETRATION TEST RESULTS

BOREHOLE: BH6

Project Name: NEW BUILDING (RTTC)
Project Location: PHUM TI 6, SANGKAT VEAL VONG, KRONG KAMPONG CHAM, KAMPONG CHAM PROVINCE

Coordinate:
X = 548929.220m
Y = 1326273.850m
Depth of borehole: 10.0m
Weather: Sunny

Elevation: 19.28m
- Assumed: ☐
- Measured: ☒
Borehole diameter: D = 110mm
Drilling method: Rotary drilling with bentonite flushing

Ground water:
- Water inflow :
- Water level : 3.65m (07/07/2025)
Start date: 05/07/2025
End date: 06/07/2025

Elevation (m)	LAYER: Bottom elevation (m)	Bottom depth (m)	Thickness of layer (m)	Layer No.	Soil description and classification	SAMPLE TYPE	N value (N_{30cm})
19.0	18.98	0.30	0.30	1	0.0m to 0.3m: Sandy lean CLAY with weathered basalt, reddish brown - grey	TCR=10%, RQD=0%	
			9.70	2	0.3m to 10.0m: BASALTIC ROCK include:		
18.0					0.3m to 5.0m: Basalt, dark grey	TCR=20%, RQD=0%	
17.0						TCR=30%, RQD=0%	
16.0					5.0m to 9.0m: Vesicular BASALT, dark grey	TCR=100%, RQD=100%	
15.0					9.0m to 10.0m: BASALT, dark grey	TCR=80%, RQD=60%	
14.0						TCR=40%, RQD=20%	
13.0						TCR=30%, RQD=10%	
12.0						TCR=10%, RQD=0%	
11.0						TCR=60%, RQD=40%	
10.0	9.28	10.00				TCR=65%, RQD=60%	
9.0					Bottom of borehole at depth of 10.0m		
8.0							
7.0							
6.0							
5.0							
4.0							
3.0							
2.0							
1.0							
0.0							
-1.0							

SAMPLE TYPE: Undisturbed; Disturbed; Core run; SPT

SPT Graph: 0 20 40 60 80 100

PHNOM PENH-CAMBODIA

Legend: Asphalt concrete; Filling stone; Clayey Sand; Sand; Clay; Silt; Basalt

Equipment: XY-100

Logged by: NOCH
Compiled by: D.N. VO
Sheet: 1 of 1