

RECORD OF DISCUSSIONS

FOR

**THE PROJECT FOR FORMULATION OF WATER SUPPLY MASTER PLAN
IN SIEM REAP**

AGREED UPON BETWEEN

SIEM REAP WATER SUPPLY AUTHORITY

OF

THE KINGDOM OF CAMBODIA

AND

JAPAN INTERNATIONAL COOPERATION AGENCY

Dated February 6, 2026

The Japan International Cooperation Agency (hereinafter referred to as “JICA”) and the Siem Reap Water Supply Authority (hereinafter referred to as “SRWSA”) hereby agree on the following record of discussions (hereinafter referred to as “the R/D”) for the Project for Formulation of Water Supply Master Plan in Siem Reap (hereinafter referred to as “the Project”).

Based on the minutes of meetings on the Detailed Planning Survey for the Project signed on November 21, 2025, between JICA and SRWSA, JICA held a series of discussions with SRWSA and relevant organizations to develop a detailed plan of the Project.

The purpose of the R/D is to establish a mutual agreement for implementation of the Project by both parties and to agree on the detailed plan of the Project as described in the following main document and Annexes, which will be implemented within the framework of the Agreement on Technical Cooperation signed on June 17, 2003 and the Note Verbales exchanged on June 6, 2025 between the Government of Japan and the Government of Cambodia.

SRWSA is the implementing agency of Cambodia for the Project (hereinafter referred to as “the Counterpart”). The Counterpart will be responsible for implementing the Project in cooperation with JICA, coordinating with other relevant organizations, and ensuring that the Project’s self-reliant operation is sustained during and after the implementation period, in order to contribute toward the social and economic development of Cambodia.

Both parties also agreed that the Project will be implemented in accordance with the “Basic Principles for Technical Cooperation” published in September 2025 (hereinafter referred to as “the BP”), unless other arrangements are agreed upon in the R/D.

The R/D is delivered at Siem Reap as of the day and year first above written. The R/D, including Annexes 1 and 2, which are integral parts of the R/D, may only be modified by the amendment to the R/D between both parties. The amendment to the R/D will be signed by authorized persons of each side who may be different from the signers of the R/D. Meanwhile, both parties agreed that Annexes 3 to 4, which are categorized as references of the R/D, may be modified by mutual confirmation such as through Monitoring Sheets or written records of the Joint Coordinating Committee Meeting described in the BP.

For

JAPAN INTERNATIONAL
COOPERATION AGENCY




Mr. SANUI Kazumasa
Chief Representative
JICA Cambodia Office

For

SIEM REAP WATER SUPPLY
AUTHORITY




H.E. Chan Sengla
Director General

- Annex 1 Project Description
- Annex 2 Main Points Discussed
- Annex 2-2 Local Scenario aligned with the JGA Cluster Strategy
- Annex 2-3 Draft of TOR for Environmental and Social Considerations Studies
- Annex 3 Implementation Structure
- Annex 4 List of Proposed Members of Joint Coordinating Committee

PROJECT DESCRIPTION

(1) Title of the Project

The Project for Formulation of Water Supply Master Plan in Siem Reap

(2) Overall Goal

The implementation of the master plan to be developed in the Project will improve access to safe drinking water in the water supply area of the Siem Reap Water Supply Authority.

(3) Project Purpose

A water supply master plan will be developed for the water supply area of the Siem Reap Water Supply Authority, and a feasibility study for a priority project(s) will be conducted.

(4) Period of the Project

The duration of the Project will be 2 years. The Project will be officially commenced when JICA Mission Team members start the Project activities in Cambodia, after the signing of the R/D.

(5) Implementing Agency

The implementing agency is SRWSA. The implementation structure of the Project is attached as Annex 3.

(6) Project Inputs (Japanese side, Cambodian side, any important inputs)

[Japanese side]

- a. Dispatch of JICA Mission consisting of personnel covering the areas exemplified below, by covering all expenses including their transportation and accommodation costs.
 - Team Leader / Water Supply Plan
 - Water Source Plan
 - Water Intake Facility Plan
 - Water Treatment Facility Plan
 - Water Transmission and Distribution Facility Plan
 - Finance and Management Plan
 - Operation and Maintenance Plan
 - Human Resources Development Plan / Organization Plan
 - DX Plan
 - Climate Change Countermeasures
 - Sewerage and Drainage

- Environmental and Social Considerations / Gender Equality
- Cost Estimation

- b. Local costs necessary for organizing workshops/seminars for capacity development, such as room rental fee outside of SRWSA's offices, preparation of handouts, and refreshment.
- c. Equipment/software for capacity building purpose of C/Ps, if necessary

[Cambodian side]

- a. Assignment of counterpart (C/P)

SRWSA will assign C/P personnel to work with JICA Mission Team, to ensure the effective implementation of the Project. Both sides agreed that SRWSA will share the list of the C/P with JICA Cambodia Office after signing the R/D and before the commencement of the Project.

SRWSA will assign at least one C/P personnel to each member of the aforementioned JICA Mission Team (for each respective area of responsibility) to facilitate collaborative work and enhance the effectiveness of OJT.

SRWSA will provide support to the JICA Mission Team, including coordination with Cambodian authorities, arranging necessary interviews and site visits, obtaining permits required for conducting the survey, and securing access permits to relevant sites.

- b. Provision of data

SRWSA will provide the necessary data for the activities of the Project free of charge. Both sides agreed that existing data and information shall be utilized at most to maximize the efficient implementation of the Project. Details of the necessary data will be discussed after the commencement of the Project.

- c. Allocation of necessary budget and allocation of space

The following budget will be secured by SRWSA to ensure effective implementation of the Project.

- (a) Salaries for counterpart personnel of SRWSA
- (b) Internal expenses for counterpart personnel of SRWSA such as transportation, accommodation and per diem inside Cambodia
- (c) Provision of office space or room for the JICA Mission Team inside both SRWSA Office and Chreav Water Treatment Plant during the Project period
- (d) Expenses for utility such as electricity, water supply, communication environment, etc. for the project office
- (e) Provision of spaces and facilities for the training and workshops provided by JICA

Mission Team inside Cambodia

(7) Environmental and Social Considerations (B) under the 'JICA Guidelines for Environmental and Social Considerations (January 2022)'

(8) Outputs

Output 1 A water supply master plan (M/P) for SRWSA will be developed.

Output 2 A human resource development plan will be formulated.

Output 3 A feasibility study (F/S) for a priority project(s) will be conducted.

Output 4 Capacity of SRWSA for master plan development will be strengthened.

(9) Activities

Output 1

1-1 To collect existing data.

1-2 To confirm the current status of water supply, including service area, population served, water source, service hours, water quality, water pressure, water quantity, water distribution management, and non-revenue water.

1-3 To confirm the aging and operational status of existing facilities.

1-4 To understand the socioeconomic and natural conditions of the target area, including gender-sensitive social conditions.

1-5 To identify gender issues and needs, including the status of gender mainstreaming at SRWSA.

1-6 To confirm water supply, sanitation and hygiene conditions at medical facilities, delivery centers, schools, etc., and identifying targets for improvement through water supply infrastructure development and expected outcomes.

1-7 To confirm relevant laws and regulations, development plans and strategies, trends and plans for urban development and tourism development, and projects related to water supply, sewage and drainage, etc.

1-8 To discuss with the Provincial Department of Industry, Science and Technology Innovation (DISTI) and others the role of the SRWSA in the overall water supply development of Siem Reap Province.

1-9 To investigate current water demand and forecast water demand up to the target year.

1-10 To investigate current financial situation and debt service projections.

1-11 To review the current status of sewage and wastewater and measures taken and future plans, as well as the current status and outlook of water pollution at the water source.

1-12 To identify potential water sources for development and review the availability, including the issue of declining water levels in Tonle Sap Lake.

- 1-13 To develop a framework for M/P, including a vision for water supply, phasing goals, water sources, policies regarding facility planning, planning parameters, water treatment methods, and design criteria.
- 1-14 To compare alternatives based on the concept of Strategic Environmental Assessment (SEA), which also considers environmental and social impacts.
- 1-15 To develop a facility plan that includes improvement and repair of existing facilities and construction of new facilities.
- 1-16 To develop a climate change action plan, including mitigation and adaptation measures to climate change.
- 1-17 To develop a DX (digital transformation) plan.
- 1-18 To develop a sustainability plan that includes consideration of nature and biodiversity conservation, human rights, gender, etc.
- 1-19 To develop recommendations for sewage, wastewater, and water pollution control to protect water sources.
- 1-20 To consider the role to be played by SRWSA as a leading utility in Cambodia, including cooperation with other water utilities in the vicinity, cooperation with private operators, and cooperation with the Provincial Department of Industry, Science and Technology Innovation (DISTI).
- 1-21 To develop an operation and maintenance plan.
- 1-22 To investigate the current organizational structure and formulate an organizational strengthening plan.
- 1-23 To estimate project costs, develop an investment plan, and discuss financing.
- 1-24 To develop a financial plan for the target year.
- 1-25 To compile the results of the above studies into a draft master plan.
- 1-26 To select priority project(s) out of the master plan.
- 1-27 To explain and discuss the draft water supply master plan to relevant agencies and development partners in Cambodia, and finalize it as a water supply master plan.

Output 2

- 2-1 To conduct a survey and evaluation of the current organization with respect to SRWSA's operations (technical and business operations, financial management and accounting, and human resources).
- 2-2 To review current Standard Operating Procedures (SOPs) for all SRWSA departments/offices/units.
- 2-3 To forecast staffing needs based on factors such as business growth, expansion plans, and technological advancements.
- 2-4 To evaluate the current workforce within the organization, including staff skills, qualifications, experience, and performance levels.

- 2-5 To conduct a gap analysis to identify gaps between projected demand and existing talent supply.
- 2-6 To identify critical roles, assess the skills and competencies required for those roles, and develop a program to train staff.
- 2-7 To develop a human resource development plan through the target year, including gender mainstreaming.

Output 3

- 3-1 To conduct a feasibility study for a priority project(s).
- 3-2 To prepare detailed project implementation plan

Output 4

- 4-1 To provide on-the-job training in the M/P formulation process, referring also to the M/P formulation guidelines to be developed under the on-going Project for Formulation of the Development Plan for Urban Water Supply (2023-2026), implemented by MISTI with the cooperation of JICA.
- 4-2 To share the experience of M/P formulation to other water utilities in Cambodia through seminars, etc.

(10) Background

Improved access to water supply to urban population is one of the development priorities of the Royal Government of Cambodia. Rapid urbanization is occurring, because of accelerated economic development. This growth is exerting enormous pressure on the water supply systems. The development of water supply needs to meet not only the National Strategic Development Plan (NSDP) target, but also the Pentagonal Strategy Phase I to develop and implement water supply master plans in order to achieve the goal of 100% access to safe, affordable, and sustainable water supply by 2030. The Ministry of Industry, Science, Technology, and Innovation (MISTI) has focused on projects to improve performance in the urban water supply sector across the country. In addition, the Law on Water Supply was enforced to ensure sustainable development of this sector.

Siem Reap City has a population of about 276,258, equivalent to approximately 58,922 households according to the Provincial Profile on Socio-Economy 2023. Siem Reap is famous for the Angkor Wat World Heritage site, which brings a large influx of tourist. During the last 10 years, the city has increased its footprint and taken over peri-urban areas due to a rapid increase in population and economic activities. According to the statistics of the Ministry of Tourism, about 4.3 million tourists visited Siem Reap City in 2019.



There has been a rapid increase in water demand. SRWSA has been improving its water supply system by constructing two new water treatment plants and extensively upgrading its distribution network, with strong support from both supervising ministries. As a result, the total water production capacity has increased from 15,000 m³/day in 2018 to 90,000 m³/day by 2023, achieving a coverage of about 59%.

The water demand will reach the above production capacity around 2030 based on water demand estimates in previous JICA and AFD studies. However, there have been many changes which were not considered in the previous studies such as the impact of COVID-19, improvement of provincial roads, construction of a new international airport, and expansion of service areas permitted by MISTI recently from 12 Sangkats up to 23 Sangkats/communes (seven communes in Prasat Bakong District, two communes in Angkor Thom District, and two Sangkats in Run Ta Ek Techo Sen City were added). Furthermore, the Master Plan for Tourism Development in Siem Reap 2021-2035 has proposed many development projects and projections indicate that the number of tourists would increase from 3.4 million in 2023 to as much as 10.45 million in 2030 and 18.4 million in 2035.

As the above mentioned, an updated water supply master plan for Siem Reap is urgently needed to review and update water demand projection, financial plan and analysis, propose priority projects with short and long-term costs, direction and strategy for future water supply expansion with consideration of suitable digital technology for effective and sufficient management, human resource development, and identify priority project before a serious water shortage occurs.

(11) Target Year

The target year of the master plan (M/P) will be 2050.

(12) Target Area

The target areas for the master plan study are the water supply areas by SRWSA, namely 23 Sangkats/communes in Siem Reap City, Bakong district, Angkor Thom district, and Run Ta Ek Techo Sen City, including new international airport areas.

*Items from (8) onward may be modified by mutual confirmation, such as through written records of the Joint Coordinating Committee Meeting, without amendment to the R/D.

MAIN POINTS DISCUSSED

1. Application of the concept of JICA Global Agenda/Cluster Strategy to the Project
 JICA aims to show global impacts realizing the goals set under JICA's cooperation strategies for global issues, which are called "JICA Global Agenda" (hereinafter referred to as "JGA"). JICA will share JGA among partner countries and various development actors to enhance dialogue and collaborate each other and maximize the development impacts. Through these efforts, JICA will comprehensively contribute to the achievement of the Sustainable Development Goals (hereinafter referred to as "SDGs") by 2030.

Under the "JGA Sustainable Water Resources Management and Water Supply", JICA is promoting the "Cluster Strategy for Supporting the Growth of Water Utilities" as its cooperation policy in the urban water supply sector. This Cluster Strategy aims to increase the number of "Growing Water Utilities" that can raise funds for expansion and improvement of their water services to realize the vision of "universal and equitable access to safe and affordable drinking water for all".

Both sides confirmed that JICA will implement the Project aligning with the Cluster Strategy, through formulating the M/P that will allow SRWSA to expand water supply services on a stable basis, based on water tariff revenues and autonomously mobilizing investment funds, and promoting capacity development of SRWSA.

Both sides discussed the development scenario that the SRWSA aims to achieve based on the Cluster Strategy and agreed as shown in Annex 2-2.

2. Implementation Structure

Both sides agreed on the following points for the implementation structure of the Project shown in Annex 3.

- (1) C/P

Both sides confirmed that the C/P who are expected to work closely with the JICA Mission Team are staff of SRWSA. The C/P work proactively to develop the M/P and that the JICA Mission Team provide the necessary technical advice and guidance to the C/P in order for the SRWSA to acquire the capacity to develop the M/P.

(2) Role of JICA Mission Team

The role of the JICA Mission Team will be giving necessary technical guidance, advice, and recommendations to C/P on any matters pertaining to the implementation of the Project.

(3) Project Team

The Project Team consists of members from SRWSA and the JICA Mission Team, responsible for managing project progress and facilitating discussions. It also plays a crucial role as a platform for human resources development through planning activities.

(4) Joint Coordinating Committee (hereinafter referred to as "JCC")

JCC shall be established to facilitate coordination for the Project. JCC meetings will be held at least once a year and whenever it is deemed necessary. A list of proposed members and functions of JCC is shown in Annex 4. The role of the Project Director, Project Manager, and Project Coordinator is as follows:

- 1) Project Director is the Director General of SRWSA, who will bare overall responsibility for administration, implementation, monitoring and evaluation of the Project.
- 2) Project Manager is the Deputy Director General of SRWSA, who will bear overall responsibility for managerial matters of the Project.
- 3) Project Coordinator is the Director of Project Management of SRWSA, who will be responsible for the day-to-day coordination of the Project.

(5) Stakeholder Meeting

Both sides agreed that the M/P formulation process requires a mechanism for explaining and coordinating with relevant stakeholders, such as local administrative bodies, DISTI, tourism and heritage preservation stakeholders, organizations responsible for sewerage, and environmental administration. Both sides also agreed that exchanging views with stakeholders is necessary as part of environmental and social considerations. Details regarding the stakeholders to be included will be determined after the project commences.

3. Environmental and Social Considerations

With regard to Section 10.1 of the BP, since the Project is classified as Category B under the 'JICA Guidelines for Environmental and Social Considerations (January 2022)' (hereinafter referred to as "the Guideline"), the necessary procedures are taken in accordance with the Guideline. Some examples include;

(1) Strategic Environmental Assessment

The Project conducts Strategic Environmental Assessment in accordance with the

Guideline.

(2) Disclosure of information regarding environmental and social considerations

Both parties agreed that JICA discloses the front page of the R/D and drafts of the Terms of Reference (hereinafter referred to as "TOR") for environmental and social considerations studies, attached as Annex 2-3, as agreement documents designated by the 3.3.2.7 of the Guideline. The front page of the R/D and drafts of TOR are disclosed on JICA's website promptly after concluding the R/D.

4. Gender Equality and Women's Empowerment

According to the Detailed Planning Survey, gender issues including challenges related to women's water collection labor in areas without piped water supply, the burden of water management within households, insufficient water supply in medical facilities, delivery facilities, schools, and other settings, and the resulting issues for women regarding toilet use, handwashing, menstrual hygiene, etc., as well as challenges concerning organizational efforts for gender mainstreaming in SRWSA are confirmed in the target areas and implementing agency. Both parties discussed how to address these issues in order to contribute to gender equality and women's empowerment, and finally agreed to implement the following activities and set the corresponding inputs:

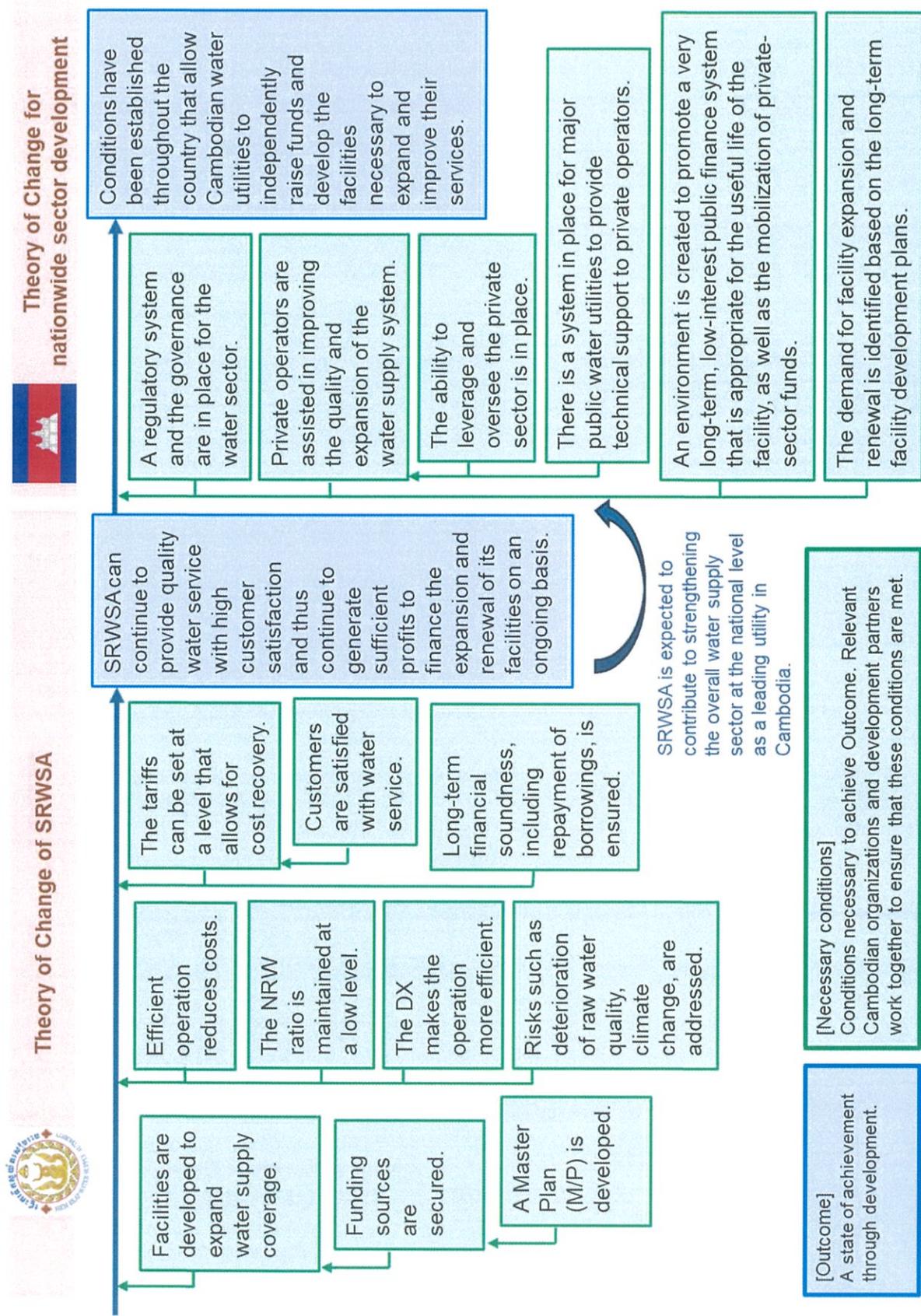
(1) Activities

- a. Identifying gender issues and needs through public consultations and focus group interviews
- b. Conducting gender-sensitive social condition surveys (e.g., utilizing the Water Insecurity Experiences (WISE) Scales)
- c. Surveying water supply and sanitation conditions at medical facilities, delivery centers, schools, etc., and identifying targets for improvement through water supply infrastructure development and expected outcomes
- d. Assessing the status of gender mainstreaming at SRWSA
- e. Developing a gender mainstreaming plan for SRWSA as part of the Master Plan (M/P)
- f. Incorporating a gender perspective into the plans included in the M/P

(2) Inputs

- a. Assignment of a consultant responsible for gender mainstreaming by JICA
- b. Fieldwork such as social condition surveys incorporating gender considerations
- c. Assignment of a counterpart personnel responsible for gender mainstreaming at SRWSA

LOCAL SCENARIO ALIGNED WITH THE JGA CLUSTER STRATEGY



DRAFT OF TOR FOR ENVIRONMENTAL AND SOCIAL CONSIDERATIONS STUDIES**Master Plan (M/P) Stage**

1. Consultant shall conduct Strategic Environmental Assessment in compliance with the Japan International Cooperation Agency (JICA) Environmental and Social Considerations Guidelines (January 2022) (the JICA Environmental Guidelines) for the Project. Emphasis shall be placed on comparing and examining the alternatives at the policy, plan, and program (PPP) levels above the project. Specifically, after conducting scoping (clarifying the environmental and social impact items that are extremely important in decision-making of policies, plans, programs, etc. and their assessment methods), Consultant shall conduct a comparative study of multiple alternatives, including the impact of environmental and social aspects.

2. Specifically, the following studies will be conducted.
 - (1) Examination of objectives and targets of policies, plans, etc. of the Master Plan
 - (2) Confirmation of environmental and social consideration systems and organizations of the host country
 - a. Laws, regulations, standards, etc. related to environmental and social considerations (environmental impact assessment, resident relocation, resident participation, information disclosure and others.)
 - b. Gap Analysis between the local law/regulation and the JICA Environmental Guidelines
 - c. Outline of related organizations
 - (3) Examination of the contents of policies and plans (development forecasts, lists of countermeasures, maps of routes and future development areas and others.)
 - (4) Consideration of alternatives to achieve the purpose within a reasonable range
 - (5) Implementation of scoping (clarification of extremely important environmental and social items in decision-making of policies, plans, programs, etc. and their evaluation methods)
 - (6) Confirmation of baseline environmental and social conditions (land use, natural environment, living areas of indigenous peoples, economic and social conditions.)

- (7) Impact prediction
- (8) Impact assessment and comparison of alternatives (PPP level)
- (9) Consideration of mitigation measures (avoidance, minimization, mitigation and compensation)
- (10) Examination of monitoring methods
- (11) Alternative analysis including “without project” option for the selected Priority Project of F/S. (Additional assessment as per JICA Environmental Guidelines FAQ to be conducted if the project site of the selected Priority Project includes protected area or critical habitat/forest.)
- (12) Support for holding stakeholder consultations (examination of the purpose, participants, method and content of discussions and others. See JICA Environmental Guidelines Appendix 5.)

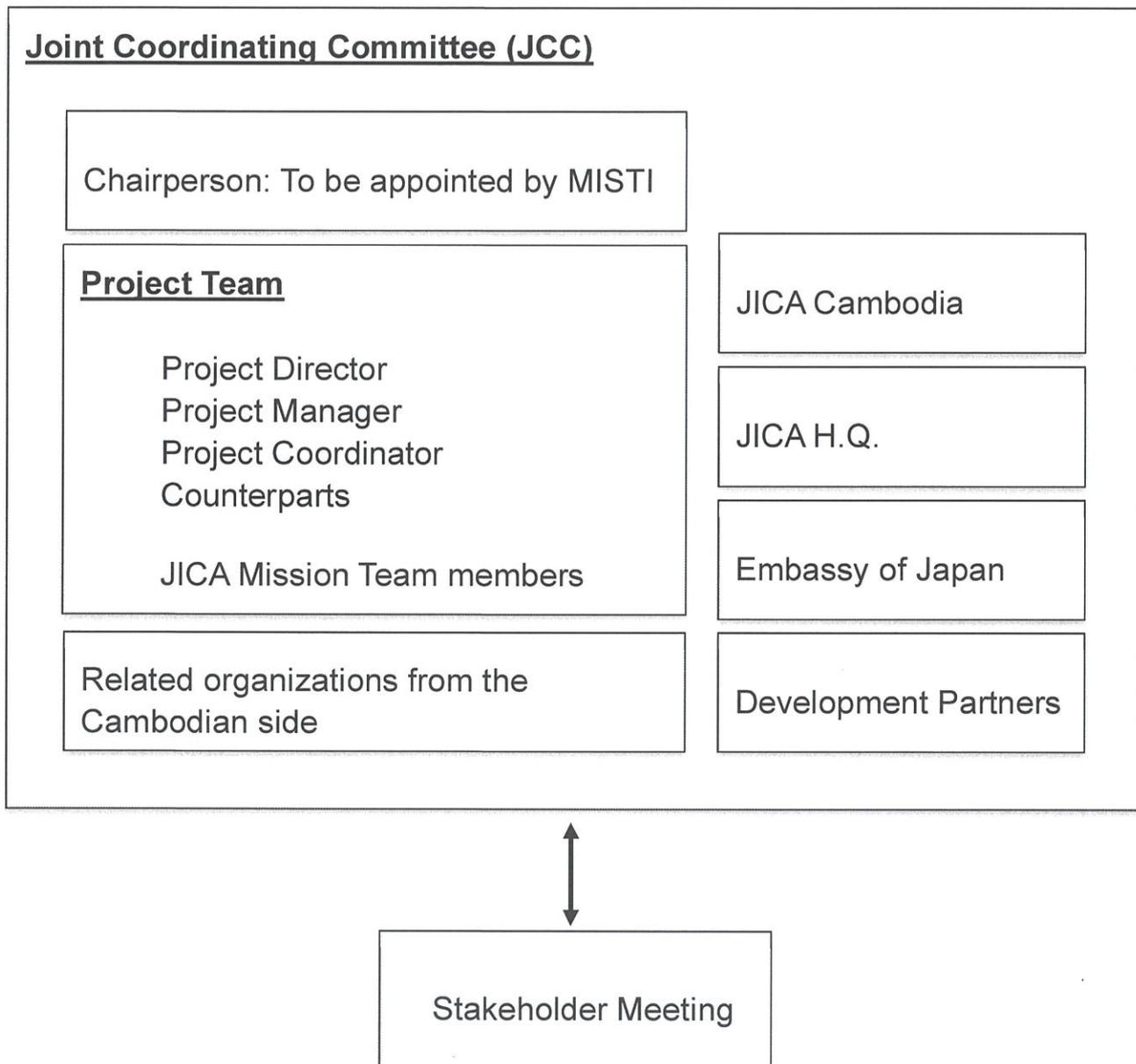
Feasibility Study (F/S) Stage

1. Consultant shall conduct Initial Environmental Examination in compliance with the Japan International Cooperation Agency (JICA) Environmental and Social Considerations Guidelines (January 2022) (the JICA Environmental Guidelines) for the selected Priority Project(s).
2. Specifically, the following studies will be conducted.
 - (1) Confirmation of environmental and social consideration systems and organizations of the host country
 - 1) Laws, regulations, and standards related to environmental and social considerations (Environmental Impact Assessment, Information Disclosure, and others)
 - 2) Gaps analysis between the JICA Environmental Guidelines and the legal framework on Environmental and Social Considerations and bridging the gap.
 - 3) Review of relevant organizations responsible for implementation of projects and their roles
 - (2) Scoping on possible environmental and social impacts and its evaluation methods
 - (3) Conducting baseline surveys for Environmental and Social Considerations, including pollution prevention measures, natural environment, designated area for conservation of

nature and cultural heritage, land use and data gathering of areas of social economic, social situation and others, such as inhabited by indigenous peoples, involuntary resettlement, land acquisition and others. Especially for pollution prevention measures, consultant shall gather baseline data through measurement in the project area if there are no secondary quotative data of the project area.

- (4) Prediction of likely impacts of the proposed priority project(s) based on the scoping
- (5) Assessment of likely impacts of the plans and comparative analysis of alternative proposed plans, including the “without project” option
- (6) Examination of mitigation measures (to be avoided, minimized, reduced, mitigated, and compensated)
- (7) Preparation of Draft Environmental Management Plan and Monitoring Plan (Implementation structure, method, cost, monitoring form and others)
- (8) Clarification of estimated cost, budget, and implementation structure
- (9) Implement stakeholder analysis and support for holding stakeholder consultations (examination of objective, participant, method, contents, and others. See JICA Environmental Guidelines Appendix 5.)
- (10) Preparation of Draft IEE (Initial Environmental Examination)/EIA (Environmental Impact Assessment) report based on result of above survey, if necessary

IMPLEMENTATION STRUCTURE



LIST OF PROPOSED MEMBERS OF JOINT COORDINATING COMMITTEE

1. Chair: To be appointed by MISTI
2. Project Team
 - (1) Project Director, Director General, SRWSA
 - (2) Project Manager, Deputy Director General, SRWSA
 - (3) Project Coordinator, Director of Project Management, SRWSA
 - (4) Personnel from the Counterpart
 - (5) Members of JICA Mission Team
 - (6) Other persons that both sides consider necessary
3. Related organizations from the Cambodian side
 - (1) Council for the Development of Cambodia
 - (2) Ministry of Economy and Finance
 - (3) Tonle Sap Authority
 - (4) Siem Reap Provincial Administration
 - (5) APSARA National Authority
 - (6) Siem Reap Provincial Department of Industry, Science, Technology and Innovation
 - (7) Siem Reap Provincial Department of Tourism
 - (8) Siem Reap Provincial Department of Land Management, Urban Planning and Construction
 - (9) Siem Reap Provincial Department of Planning
 - (10) Siem Reap Provincial Department of Environment
 - (11) Siem Reap Provincial Department of Water Resources and Meteorology
 - (12) Siem Reap Provincial Department of Agriculture, Forestry and Fishery
 - (13) Siem Reap Provincial Department of Public Works and Transport
 - (14) Siem Reap Provincial Department of Women's Affairs
 - (15) Development Partners
 - (16) Other persons that the Cambodian side might consider necessary
4. Other members from the Japanese side:
 - (1) Chief Representative, representative and staff of JICA Cambodia Office
 - (2) Staff from JICA Headquarters

- (3) Staff from the Embassy of Japan
- (4) Other persons that the Japanese side might consider necessary