



UNDP's TECHNICAL ASSISTANCE TO THE MINISTRY OF ENVIRONMENT ON:

*Cambodian Environmental Management Information System
Sustainable financing
Monitoring and Evaluation of project activities*

To support the implementation of the
CAMBODIA SUSTAINABLE LANDSCAPE AND ECOTOURISM PROJECT
(World Bank's IDA Credit No. 6433-KH; Reference No. MOE-CS-16-SSS-CSLEP)

Semi-Annual Progress Report (January-June 2023)

Project ID & Title: 00118412; Cambodia Sustainable Landscape and Ecotourism Project (CSLEP)

Output ID: 00115244

Duration: 2021-2025

Total Budget: US\$ 1,367,596

Implementing Partner: UNDP

Country Programme Outcome: By 2023, women and men in Cambodia, in particular those marginalized and vulnerable, live in a safe, healthy, secure and ecologically balanced environment with improved livelihoods, and are resilient to natural, socio-economic and climate change related trends and shocks.

Table of Contents

- I. Executive summary..... 2***
- II. Implementation progress..... 3***
- III. Project implementation challenges or other issues for consideration 7***
- IV. Financial status and utilization..... 10***
- V. Annexes..... 11***

I. Executive summary

Key results and progress under each component of the technical assistance are included below.

1. Data/information management

- CEMIS/ISDS IT infrastructure plus the setup of server room and relevant devices has been completed.
- The CEMIS Version 1 has been officially launched by the Minister of Environment, and shared with stakeholders to test, use, and familiarize themselves with the system.
- Draft Spatial Data Infrastructure: The CEMIS Data User Agreement, Metadata Standard Operation (SOP), and Data Quality SOP have been drafted and under consultation with stakeholders.
- The first version of the Cambodia Protected Area Zonation “CamPAZ” Software, Tier 2, established and is being piloted to develop initial draft zone map of Protected Areas in key selected CSLEP target PAs. The draft zone maps will then be refined through consultation with stakeholders.
- Linux Server Installation
- Workplan and budget for CEMIS version 2.

2. Sustainable financing

- Stakeholder consultations for roadmaps for operationalization of ecotourism and payments for ecosystem services.

3. Monitoring and evaluation

- A revised Project results framework with yearly target has been developed.
- The draft manual of the revised monitoring and evaluation plan was also developed.
- Project Beneficiaries Satisfaction Survey designed, pre-tested and rolled out.
- Support to M&E progress reports provided.
- Support to M&E data collection provided.

II. Implementation progress

Output 1: Technical input and advice and other required support for the development of a robust Information Systems and Decision Support as part of the “Cambodian Environmental Management Information System” (CEMIS).			
Output Indicators	<i>Baseline (July 2021)</i>	<i>Target (Dec. 2023)</i>	<i>Current status (Jun. 2023)</i>
Extent of progress in for the development of a robust Information Systems and Decision Support as part of the “Cambodian Environmental Management Information System” (CEMIS).	1= Limited extent: initial function of CEMIS	2= Moderate extent: <ul style="list-style-type: none"> • A beta-version of CEMIS platform developed. • Procurement completed and IT/Network System is installed. • Agreement on three-tier models/products for ISDS system on Protected Area Zoning and a new methodology for Cambodia Protected Area Zonation (CamPAZ) has been developed. 	Delivery <i>in line with</i> plan
Narrative			
<p>The development of the CEMIS/ISDS has been the core responsibility of the Department of Geospatial Information Service (DGIS) of the General Department of Environmental Knowledge and Information, with technical support from UNDP. About 40 meetings with various stakeholders and with technical partners, two in-country international expert missions (each two-week duration), and one national event on official launch of CEMIS platform are the broad activities during the first semester of the year 2023. Moreover, the Minister, Cabinet and relevant senior management have been regularly reporting on CEMIS work progress and have also been engaged in various CEMIS activities. Following are the broad achievements during January – June 2023 under CEMIS/ISDS.</p> <ol style="list-style-type: none"> CEMIS Server Setup: With technical support from UNDP, the CEMIS team has completed the setup of CEMIS infrastructure using latest IT equipment and network infrastructure which includes a dedicated CEMIS server room and environmental monitoring system, IT infrastructure, network and peripherals. The team is currently working to transfer the CEMIS digital platform from a cloud-server of the service provider (Arbonaut) to be hosted under the CEMIS physical server located in the Department of Geospatial Information Service of GDEKI/MoE. The CEMIS server has been reviewed and independently assessed for quality of the equipment and the entire IT system by Slash IT company (Annex 1.1). CEMIS Platform Development and Official Launch of the CEMIS platform by the Minister of Environment: An initial version of the CEMIS platform has been developed. Following the intensive stakeholder consultations, the <u>CEMIS Version 1</u>¹ was completed and was officially launched in May 2023 presided over by H.E Minister of Environment²³⁴. About 250 participants of senior government officials with representations from relevant ministries, diplomatic missions, development partners, private sectors, and academies were present at the event. The current version (<u>CEMIS version 1</u>) and a comprehensive <u>CEMIS user manual</u> (Annex 1.2) were also disseminated among attendees of the launch event to test, use, and familiarize with the new CEMIS portal as well as provide feedback. 			

¹ <https://cemis.arbonaut.com>

² <https://ams.com.kh/central/detail/972743>

³ <https://www.postkhmer.com/national/2023-05-10-1116-249883.html>

⁴ <http://www.rathaaphiwatnews.com/?p=23890>

3. **Spatial Data Infrastructure (SDI)** (draft): In addition, the CEMIS Data User Agreement ([Annex 1.3](#)), Standard Operating Procedures (SOP) on Metadata ([Annex 1.4](#)), and Data Quality SOP ([Annex 1.5](#)) have been drafted, distributed, and discussed with various stakeholders. In this regard one consultation was organized in June 2023 with key stakeholders and relevant International NGOs. This will allow development of a new Memorandum of Understanding with partners in creating official user accounts in the CEMIS portal. A draft CEMIS working group with well-defined roles and responsibilities is also under development for discussion among CEMIS working group members and relevant MoE management levels.
4. **Cambodia Protected Area Zonation (CamPAZ)** software methodology and protocol – a new decision support system: As a part of developing a new decision support system, a methodological protocol of the Cambodia Protected Area Zonation “CamPAZ” Software, Tier 2 level, was also established and made available in July 2023, after critical assessment and discussion with various stakeholders ([Annex 1.6](#)). A joint field trip with sub-component 1.2 and with the PA/PDoE teams and three consecutive technical consultation workshops with various technical experts from various institutions/stakeholders were organized by DGIS/DGEKI/UNDP where different steps such as models, map criteria, GIS methods for PA zoning development, and the concept, structure, and operations of the CamPAZ software were consulted and feedback received. A detailed report outlining the Specifications for CamPAZ Software and the step-by-step description of the GIS methodology for zonation using existing QGIS tools was also prepared.
5. **Linux System Installation and VMware and vSphere Hypervisor Deployment** has been installed to ensure better security and safety of the network system while CEMIS is fully operational and run under production environment. A comprehensive technical training manual has also been developed to train and operational maintenance in the future ([Annex 1.7](#)).
6. **CEMIS version 2**: Following project mid-term review by independent reviewer, a new scope for CEMIS has been identified in consultation with project stakeholders. A new work plan and corresponding cost estimation for CEMIS version 2 has been completed. The budget and work plan has been approved and in the process of implementation. A detailed work plan including the budget is attached in [Annex 1.8](#).
7. Other deliverables: Relevant technical reports and documentation of the process information such as CEMIS system design and specifications, development and adoption of CEMIS platform, prototype of ISDS, outline on metadata, etcetera have been attached with this report in attachment, in “[Other Technical Report Folder](#)”.

Key activities in July - December 2023

- **Support for PDoEs**: Assess and identify further IT tools to continuously maintain and support CEMIS platform, SMART, and for the Provincial Department of Environment (PDoE) levels.
- **Capacity building**: Organize three capacity building events – CEMIS platform installation, upgradation and maintenance; GIS training; system/IT administration. This also includes technical training from Slash Company on administration of the CEMIS server.
- **Finalize spatial data infrastructure**: data user agreement, Metadata SOP, Data Quality SOP and CEMIS working groups.
- **Improvement and maintenance of CEMIS Platform**: Continue developing dashboard, feature, and news tabs in CEMIS platform. In addition, refine, update and public release of the final CEMIS platform in production environment.
- **CamPAZ software**: Testing, finalization and official launch of CamPAZ software based on free and open-source programming languages and software platform to ensure long-term sustainability.
- Prepare **Terms of References** for CEMIS System Administrator, IT Specialist, National UN Volunteers and National UN Interns as well as for CEMIS version 2 design and functional elements.

- Continuous [engagement](#) of relevant stakeholders
- Develop a five-year [sustainability plan](#) (2024-2028)

Output 2: Technical input and advice and other required support for the design of sustainable financing mechanisms

Output Indicators	Baseline (July 2021)	Target (Dec. 2023)	Current status (Jun. 2023)
Level of technical input/advice and other required support for the design of sustainable financing mechanisms effectiveness	1= Limited effective: initial assessment and analysis	2= Moderate effective: A set of preliminary action steps (roadmap) for priority sustainable finance mechanisms finalized and adopted by PIU/MoE	Delivery <i>not in line with plan</i>

Key activities from January to June 2023

- In 2022, UNDP developed the Inception Report, which is the final deliverable for the first phase of the CSLEP work on sustainable financing. It provides a summary of all the previous tasks/actions and includes roadmaps for the prioritization of the prioritized sustainable financing solutions, namely: REDD+, Payments for Ecosystem Services, Ecotourism and ODA/Blended Finance. It also provides recommendations for improvement of the general enabling environment for sustainable financing of protected areas. UNDP and MoE decided to organize a series of targeted consultations with a smaller number of selected stakeholders to review and discuss specific sections of the reports. It is expected this will help receive meaningful inputs and ensure a higher level of buy-in.
- In 2023, two stakeholder consultations were held: one on ecotourism, one on payments for ecosystem services. Two more consultations were planned to complete the process: one with the Environmental and Social Fund (ESF) and a final meeting between MoE, UNDP and the WB to decide on the way forward for the second phase of technical assistance. However, despite numerous follow up from UNDP, the PMU/MoE have not yet succeeded in organizing these two meetings.

Key activities from July to December 2023

- Finalize and adopt the roadmaps.
- Start implementation of the roadmaps.

Output 3: Technical input and advice and other required support for effective Monitoring and Evaluation (M&E) of project activities

Output Indicators	Baseline (July 2021)	Target (Dec. 2023)	Status (Jun. 2023)
Level of technical input/advice and other required support for Monitoring and Evaluation (M&E) effectiveness	1= Limited effective: initial M&E functioning	2= Moderate effective: A set of project M&E requirements including M&E manual, tracking tools, updated projects beneficiaries' satisfaction survey and assessment tools drafted.	Delivery <i>in line with plan</i>

Narrative

Mid-Term Evaluation: Support was provided to both PIU/WB commissioned project mid-term evaluation (MTR) as well as the mid-term impact evaluation by the M&E consulting firm contract by PIU. Based on the findings and recommendations from the evaluations, intensive and in-depth discussion with the CSLEP project managements, project implementation unit and the World Bank in Phnom Penh were conducted by PIU from 13-17 March 2023 followed by a weeklong workshop in Seim Reap from 21-24 March to review

and revised the project results framework, project development objectives, performance indicators considering MTR recommendations with an annual target.

Annual Target Setting: Based on the revised project result framework, support was provided to coordinate and agree with the project team to define and finalize the new yearly target for revised project results framework which will be used as a basis for project planning and monitoring and evaluation. This was done through a series of meetings with the project team.

M&E Manual: The draft manual of the M&E plan based on the revised project result framework was also developed in consultation and coordination with the Project National Consultant Lead and Focal Point for each component and subcomponent, MRD M&E Consultant, WB and CRCC Consulting Firm. As a result, the M&E plan, an M&E management information system and tracking templates have been developed to track the results achieved against the project target indicators and outputs. The current proposed tracking system will be an online system using google sheet app and the Microsoft project App for work planning. The M&E tracking system will be gradually integrated into the CEMIS System currently being developed with the support from the project to ensure visibility and continuity of the system. Work is under progress to incorporate spatial information in the CEMIS/ISDS. The tools will be accessible to the users after the CEMIS platform is transferred into CEMIS/ISDS severer based in DGIS/MoE, sometime around the end of 2023.

Project coordination: To ensure synergy and complementary between project subcomponents as well as to align project workplan and budget to achieve the agreed target indicators, several meetings were also conducted between CEMIS, PA and Law Enforcement Team, Conservation International (CI) and UNDP to discuss SMART roll out implementation. The meeting has concluded and agreed to pilot SMART roll out implementation in three target PAs covering in six provinces The required budget needed to support implantation of SMART rollout in the three PAs was also developed with the agreed complementary budget portions from both sub-component 1.1 and 1.2.

M&E Progress Report: The 2022 annual progress report and the first six months (Jan-June) 2023 progress report was finalized incorporated substantive comments and inputs from project team. The AWPB tracking tools for all subcomponents and project service providers were also developed and submitted to PIU. The tools were used by PIU to monitor implementation progress against the plan and key prioritized infrastructure investment as well as the service contracts with different partners to improve project delivery of the project.

M&E Data Collection: Coordination and technical support was provided to the PIU and M&E team to continue to regularly collect, assess and record data and supporting documentations on project implementation progress, using the M&E tracking tools. Data and supporting documents collected were analyzed and consolidated and used as a basis for regular monitoring and follow up as well as for preparing the progress reports. In addition, to ensure proper and effective data filing and management, in close consultation with PIU, a data filling system was structured and is currently available online through google share drive.

Supports were also provided to PIU in the preparation and review of:

- Meeting programme and preparation of presentation for project meetings.
- Presentations on implementation progress and revised result framework 2023-2027 for PIU meetings.

Key activities from July to December 2023

Coordinate and support PIU for effective M&E of project activities:

- Support M&E Team to finalize the revised M&E plan and supervise data collection.
- Continue to work with CEMIS team to integrate M&E system in CEMIS platform.

- Support regular monitoring and reporting of project progress including project bottlenecks and compliance issues.
- Support development of AWPB tracking tools to track progress against the project plan key prioritized infrastructure investment to improve delivery of project.
- Support regular planning and progress review meeting as required by PIU.

III. Project implementation challenges or other issues for consideration

General challenges

The scope of work for CEMIS/ISDS under the current contract is expected to end by the end of December 2023. During the Mid-Term Review (February-March 2023) and through follow-up discussions on work planning and budgeting in Siem Reap with Project Implementation Unit (MoE), the World Bank, and all other project partners, a general agreement has been reached on a new scope for CEMIS/ISDS (2023-June 2027) for UNDP's role in technical support services (see [Annex 1.8](#)). This will require revision and amendment of the current agreement as soon as possible (October 2023) and delay in formalizing of the agreement will affect the continuation of TA support of UNDP for sub-component 1.1 (CEMIS-ISDS).

CEMIS/ISDS component

1. **Dedicated Internet Service:** For the CEMIS platform to run smoothly there is a need to subscribe to high speed and stable internet connections. CEMIS activities are dependent on internet services to connect its users from anywhere and to maintain servers remotely for the technical team based in Finland. The current internet connection based in MoE does not allow remote access. Independent assessment of CEMIS Server by Slash also recommended an alternative internet service. An alternate internet connection through a private Internet Service Provider is critical for smooth implementation and management of CEMIS activities through remote access and optimum services for the CEMIS users. In this regard, a principal letter to request for around 300 Megabyte Per Second (Mbps) internet speed installation to PIU has already been approved. However, the CEMIS team is still waiting for internet service upgrade and/or installation.
2. **Geo-spatial/Primary Data from various stakeholders for Zonation:** Designing Cambodia Protected Area Zonation "CamPAZ" Software required incorporating the right model with relevant data layers for the multi-criteria analysis. There is a need to secure agreements and engagement from all relevant stakeholders in designing the final format for data sharing compatible with the designed CamPAZ model to test the implementation of the model.
3. **Coordination and engagement** with other CSLEP project components through CEMIS have been realized by all project entities and organizations engaged in implementation. For example, CEMIS has been identified to provide support for a new collaborative activity with sub-component 1.2 - piloting of Spatial Monitoring and Reporting Tool (SMART) in three protected areas - will need active engagement and coordination. Similarly, CEMIS could simplify and support activities of M&E, protected area planning, management, and law-enforcement (sub-component 1.2) and support livelihood for PA

dependent communities (sub-component 1.3) and other components/sub-components of CSLEP. This needs strong commitment from PIU and the World Bank.

4. **Sustainability and transition following Mid-Term Review:** The CEMIS version 1 needs sustainability and continuous technical support to serve the desired purposes to the users of CEMIS. Following mid-term review in Feb-Mar 2023 and budget revision in Mar-Jun 2023, a new plan and costing for CEMIS (CEMIS version 2, see [Annex 1.8](#)) has been designed to ensure continued support for current CEMIS (version 1) and extend functionalities (CEMIS version 2) have been identified and agreed between World Bank and PIU. In addition, an administrator and an IT Specialist/Technician are needed to be recruited to support CEMIS maintenance and support activities. Appropriate provision and budgeting are needed, see [Annex 1.8](#), to ensure that CEMIS meets its desired standards and functionalities and offers desired services to the stakeholders and to MoE.

Sustainable financing component

- The process to engage stakeholders (within and outside MoE) to review and provide feedback on the various reports has been quite lengthy, resulting in the delay of some activities. To address this issue, and also to facilitate coordination within the Ministry on sustainable financing activities, the project agreed to recruit a consultant to be based at the Department of Biodiversity. Due to a number of reasons, this recruitment was cancelled.
- Challenges by PMU in organizing the needed consultations to finalize the roadmaps.

Monitoring and evaluation component

- The lack of clear guidance and sophisticated procedures to settle funds advance for the implementation of the community mini project contracts have affected and delayed the contract implementation. This challenge affected not just only on delaying financial disbursement to complete the planned deliveries on time but may also lead to demotivate community interest to engage in the implementation and engagement in the project activities. There is a need to provide a clear guidance and discuss common agreement to address the current problem as many more community contracts will come into effect next year.
- There is a need to strictly verify the work plan and budget of components and subcomponents to ensure that adequate consideration and priority must be given to achieve the agreed target results in the project results framework before submission for approval. In other way, the preparation of the annual workplan and budget (AWPB) must be based on marching the resources provided or allocated to components and subcomponents on achieving the target results. Failing to do so will affect the target results. In addition, experience from past project implementation indicated that implementing a single activity or a particular step across several target locations made it difficult for the project to report or count as a completed results achieved against a particular indicator within a reporting year despite a lot of tasks have been conducted by the team. Moving forward, there is a need to sequence the activity plans and stay focused on implementing a package of activities or completed steps against the agreed yearly target.
- Planning for activity implementation must be based on a holistic plan and needs to sequence and connect from one activity to another to achieve anticipated results/outputs. For instance, project has procured and distributed law enforcement/SMART equipment's

followed by trainings on the use of SMART at the beginning of project implementation while the LE strategy includes SMART system and other standard operation procedures and models have not yet been developed and set up in place. Even the recent TOT training provided by a service organization Conservation International, officials who have participated in the TOT training have no/limit access to the law enforcement equipment that was distributed by the project to serve the purpose nor the official that have been sent to participate in the training may have roles in managing and implementing SMART. Therefore, after a few training courses and provision of equipment, target PAs have yet to be able to implement SMART. SMART is a long-term and complex technical activity. It required that the official appointed by the institution at all levels committed for long term sustainability. There is a need to set up a SMART Technical Working Group who will be responsible for managing and implementing SMART at National and PDoE levels with clear roles and responsibilities, before further training should be carried out. In addition, adequate support, including equipment, system set up and financial support needed to enforce SMART on the ground are adequately supported and provided to the right individuals that are assigned to implement the tasks.

- The location for some activities have changed many times. The responsible team should undertake details and indept technical assessment on the proposed location before submitting for final decision by the project management. This will help to save time and avoid doing the same activities many times. In addition, given the differnt types and large number of infrasructure investments that need to be built by the project, there is a need to fasten the designing plan as well as the decision making process on it to move to developing its on the ground as fast as possible if we want to realize the impact of the project interventions.
- The pilot harvesting of bamboo from Chambak CPA have commenced, however the management plan and the bamboo sustainable havest plan have not been prepared yet. To ensure sustainable supply of bamboo raw materials from the 6 target CPAs, the bamboo sustainable havesting plan should be immediately developed and community are trained before havesting commenced.
- All the components and subcomponents should provide edequate space to safeguards team to participate in the events and activities to be carried out. This will allow the safeguards team to provide in hand support and advice to ensure that safeguards compliences related concerns are well considered and addressed before and during the implementation of project activities.
- The recent publication of the new PA Sub-Decree anounced by the Royal Government of Cambodia, there are some key changes that has affected the target results in the project agreement and the progress made during the year by the project which may need to discuss and clarify. Those changes include, the combining of a few PAs into single PA, increase and discrease of PA size etc.
- Given the complexity of M&E activities and the capacity of the current project M&E team, and that the revised M&E plan will involve with number of assessments, it is strongly recommended to outsource those activities to a third-party to ensure that they are carried out on time, transparently and with more independent feedback on reality on the ground.

IV. Financial status and utilization

Table 1: Contribution Overview

Donor Name	Contributions		Outstanding contribution
	Committed	Received	
MOE-WB-00084	1,154,896.00	727,110.50	427,785.50
UNDP-00012	243,062.28	151,062.28	92,000.00
Total	1,397,958.28	878,172.78	519,785.50

Table 2: Additional UNDP co-financing

Donor Name	Contributions		Outstanding contribution
	Committed	Received	
UNDP	532,044.81	431,749.69	100,295.12

Table 3: Cumulative Expenditure by Outputs for semester 1, 2023

Outputs	2022 PO And 2023 Budget	Expenditure Semester 1, 2023	Balance	Delivery
Output 1: Technical input and advice and other required support for the development of a robust Information Systems and Decision Support as part of the “Cambodian Environmental Management Information System” (CEMIS).	394,463.89	120,011.69	274,452.20	30%
Output 2: Technical input and advice and other required support for the design of sustainable financing mechanisms	116,267.55	12,913.04	103,354.51	11%
Output 3: Technical input and advice and other required support for effective Monitoring and Evaluation (M&E) of project activities	65,471.76	55,448.55	10,023.21	85%
Project Management	50,800.64	9,900.65	40,899.99	19%
Total	627,003.84	198,273.93	428,729.91	32%

V. Annexes

Annex 1: CEMIS/ISDS

Annex 1.1: Inspection Report on CEMIS/ISDS Server and IT Network

Annex 1.2: CEMIS User Manual

Annex 1.3: CEMIS Data Sharing and User Agreement

Annex 1.4: CEMIS Metadata Standard Operating Procedures

Annex 1.5: CEMIS Data Quality Standard Operating Procedures

Annex 1.6: CEMIS/ISDS Cambodia Protected Area Zonation (CamPAZ) Software Methodology

Annex 1.7: CEMIS/MoE Network Virtualization and Storage Implementation Documentation

Annex 1.8: CEMIS Version 2 activities and budget after mid-term review

[Annex others: Other Technical documents](#)

Annex 2: Sustainable Financing

Annex 2.1: Draft report on Examination of Existing Revenue Streams

Annex 2.2: Final draft report in reviewing existing economic valuation studies

Annex 2.3: Report on prioritization of Potential Sustainable Finance Mechanisms for Cambodia's PA

Annex 2.4: Revised draft report on Operationalization of priority financing options

Annex 2.5: Revised draft inception report and action plan for priority sustainable finance mechanisms

Annex 3: M&E

Annex 3.1: Final draft Six-Month Progress report (Jan-Jun) 2023

Annex 3.2: Restructuring results framework

Annex 3.3: Revised draft M&E Plan

Annex 3.4: Draft worksheet M&E Plan