



## 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)

## 2022 Annual Report

**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.

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## I. Executive summary

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

### 1. Data/information management

- Procurement of IT/network for the Cambodia Environmental Management Information System (CEMIS) and the Information Spatial Decision Support System (ISDS) completed.
- New beta platform of the CEMIS updated.
- Structure of Decision Support System (DSS) under the ISDS component for Protected Area (PA) zoning extensively discussed with various stakeholders.
- System specification and CEMIS User manual developed.
- 2023-2025 work plan for the CEMIS and ISDS developed.

### 2. Sustainable financing

- Prioritization of sustainable financing options for operationalization completed.
- Assessment of the most appropriate mechanisms for revenue management derived from these sustainable financing options carried out, including recommendations for improvement.
- Roadmap for operationalization of prioritized sustainable financing options developed and subjected to multi-stakeholder review.

### 3. Monitoring and evaluation

- Monitoring Effectiveness Tracking Tool (METT) baseline reports completed and submitted. Mid-term METT assessment completed, and report preparation is ongoing.
- 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

<b>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).</b>			
<b>Output Indicators</b>	<b>Baseline (July 2021)</b>	<b>Target (Dec. 2022)</b>	<b>Current status (Dec. 2022)</b>
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"> <li>• A beta-version of CEMIS platform developed</li> <li>• Procurement completed and IT/Network System is installed</li> <li>• Agreement on three-tier models/products for ISDS system on Protected Area Zoning</li> </ul>	Delivery <i>in line with</i> plan
<b>Narrative</b>			
<p><b>Establishment of CEMIS and ISDS</b></p> <ul style="list-style-type: none"> <li>• The team tested the basic CEMIS platform version and provided comments and suggestions to the designers to address Cambodia’s specific interests and needs. An updated version of the CEMIS platform was developed accordingly. As of December 2022, the platform hosts 112 geo-spatial layers, both in vector and raster formats.</li> <li>• Two in-country missions by international experts from Arbonaut took place. They focused on project management and planning and on CEMIS technical design. Each mission duration was around two weeks. Consultations with various stakeholders and one field mission were conducted during the missions.</li> <li>• Data collection is a long and time-consuming process. Since the inception phase, the list of data sets received from various stakeholders has been expanded gradually. Documents and/or reports have been developed by Arbonaut in consultation with DGIS, UNDP and other stakeholders are included as annex.</li> <li>• The Decision Support System (DSS) under the ISDS component for PA zoning has been extensively discussed with various stakeholders (WCS, USAID-GPL, RECOFTC, Birdlife International, CSLEP project consultant, GDNPA/MoE). Various zoning practices (methods and guidance) have been reviewed to develop a general understanding on the complexities and lessons learned through the various zoning practices.</li> </ul> <p><b>Stakeholder engagement</b></p> <ul style="list-style-type: none"> <li>• The success of CEMIS will not only depend on having high technology and perfect design, but also on meaningful engagement of all relevant stakeholders. The aim is to promote data sharing and motivate more partners to engage and share data with the public.</li> <li>• In this line, the first annual workshop on CEMIS was held in January 2022 with about 130 participants, represented from government, DPs and INGOs. The team has continued to engage these stakeholders throughout the year to ensure common understanding of the objectives, benefits of sharing data through CEMIS/ISDS, and the technical components of the systems. About 25 meetings with different stakeholders, two international expert missions, and one national event were conducted on various aspects of CEMIS/ISDS development and technical issues</li> <li>• Various partners such as JICA, IUCN, FFI, CI, USAID-GPL, RECOFTC, Servir-Mekong (Regional Initiative), UNEP-WCMC and GDLC have shown interests to open user accounts in CEMIS and are expected to use CEMIS as organizational data management, archiving and sharing platform.</li> <li>• Through a series of consultations between MoE and Ministry of Agriculture, Forestry and Fisheries (MAFF), a draft Memorandum of Understanding (MoU) between two ministries was developed and is currently being reviewed by the MoE.</li> </ul> <p><b>Procurement IT/Network equipment and Management of CEMIS/ISDS system</b></p> <ul style="list-style-type: none"> <li>• In close consultation and review through MoE (CSLEP-PIU and DGIS), UNDP, World Bank, Arbonaut, and Slash (IT company contracted for CEMIS IT and Network technical assistance), a detail list for procurement of IT/Network equipment for administering, sustainable use (at least for five years) and efficient functioning of a CEMIS/ISDS was developed. The review process was rigorous and cross-checked to ensure that the</li> </ul>			

specifications meet the planned infrastructure to support the CEMIS/ISDS system. A supplier company, OneCom Ltd. was selected by MoE through a standard bidding process. A new server room was developed in the DGIS office premise and the equipment in the procurement list was delivered. It will be installed by the first quarter of 2023.

#### Other

- The Cambodia ELSA map 2021 was finalized and made available for stakeholders through the CEMIS platform. A discussion is underway to develop a special connector for CEMIS which will allow CEMIS users to get direct access to the United National Biodiversity Lab (UNBL) (UN-led collaborative global platform). The UNBL is currently hosting 400+ geospatial layers on nature and biodiversity and allows it to conduct various spatial analyses. This connection will benefit CEMIS users to conduct additional analysis, resource access, and create new layers.

#### Key activities in 2023

- Official endorsement and launch of the CEMIS beta version.
- Testing and evaluation of the CEMIS/ISDS Server and Network, after installation by OneCom.
- Data sharing protocol/MoU (under development).
- Creation of an inter-ministerial and local government body for CEMIS/ISDS.
- Expert-level National Technical Consultations on Zonation of Protected Areas.
- Development of manual for data users and administration of the CEMIS platform.
- Field testing of models for decision support system on Protected Area Zoning.
- Testing of at least three models for PA-zoning.
- Final release of CEMIS platform and DSS for Protected Area Zoning.
- Capacity building and training on the CEMIS platform and ISDS systems on PA-zoning.

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

Output Indicators	Baseline (July 2021)	Target (Dec. 2022)	Current status (Dec. 2022)
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 identified	Delivery <i>in line with</i> plan

#### Narrative

- Building on the two studies carried out in 2021 (*1. Examination of existing revenue streams and gaps for sustainable financing of Cambodia's protected areas; 2. Review of existing economic valuation studies on specific ecosystems in CSLEP*), UNDP and MoE carried out an exercise to prioritize the sustainable financing mechanisms that will be operationalized by the CSLEP. This was the result of desk review, stakeholder survey and various stakeholder consultations: technical meeting with MoE on 15 March with 39 participants (6 female); meeting with Environmental & Social Fund (ESF) Secretariat; meeting with MEF; multi-stakeholder consultation meeting on 01 April 2022 with 85 participants (14 female). As a result of this process, the following sustainable financing solutions were prioritized: REDD+, Payment for Ecosystem Services (PES), ecotourism and blended finance.
- As next step, UNDP conducted an analysis to define the most appropriate mechanisms for revenue management derived from these sustainable financing options. An example of mechanism is the Environment and Social Fund. Through this work, UNDP prepared different scenarios, assessed strengths and weaknesses of different options, and provided recommendations for improving these domestic vehicles to make them fit for purpose. It is indeed critical to have in place one or more revenue management mechanisms that are solid enough to effectively support the implementation of Cambodia's environmental reforms. The report was reviewed by a lawyer to give a legal opinion on the recommendations provided in the report.
- UNDP also 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.
- The two deliverables indicated in the previous bullet points are strategic as they include actions to enhance

revenue management mechanisms and operationalize the prioritized sustainable finance solutions. Unless these documents are well understood and owned by relevant stakeholders, their implementation may not be smooth and effective. For this reason, 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. By the end of 2022, one stakeholder consultation (on REDD+) was held.

#### Key activities in 2023

- Complete stakeholder consultation process to review (and eventually adopt) the roadmaps to ensure ownership and buy-in.
- 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. 2022)	Current status (Dec. 2022)
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 METT, projects beneficiaries' satisfaction, job creation indicators and reporting drafted.	Delivery in line with plan

#### Narrative

**Monitoring Effectiveness Tracking Tool (METT):** Building on the METT baseline assessment and the METT workshop to present and discuss the results of the baseline survey on PA monitoring effectiveness tracking tools (METT) conducted in December last year, coordination and technical support was provided to prepare the METT baseline reports. The METT baseline survey report including the summary baseline reports for all the thirteen protected areas and the METT midterm assessment were completed and submitted. Currently, support is being provided to CSLEP M&E team and national consultant to validate the results of the assessment at provincial level, undertaking data analysis and preparing and finalizing the METT mid-term survey report.

**Project Beneficiaries Satisfaction Survey:** Coordination and technical support was provided to prepare the CSLEP Project Beneficiaries' Satisfaction Survey with CSLEP M&E National Consultant, the CRCC M&E Consulting Firm consultant and WBTT. The design of the survey tools was completed and pretested. The roll out survey have been incorporated in the project mid-term survey carried out by the M&E company contracted by the CSLEP project. The draft of the mid-term project assessment report incorporating the results of the satisfaction survey is being finalized by the M&E company.

**Jobs Creation Survey:** Coordination and technical support was provided to develop job creation indicators and the survey methodology. UNDP is working on the latest draft to incorporate the comments and inputs sent by the WBTT team. However, some data have already been collected using the initial set of indicators, focusing on direct job creation. Given the implementation status of the project, further investigation is needed to define the scope of indicators related to indirect job creation (i.e., looking at the broader impacts of the project). A revision of the core indicators might be a critical factor to consider which will eventually need a revision of the indicator list.

**M&E Progress Report:** The 2021 annual progress report was finalized incorporated substantive comments and inputs. The 2022 quarterly, semester and annual progress reports including progress tracking against the project target indicators were finalized and submitted to PIU for review and submission to WB and MEF.

**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 submitted to PIU for consideration.

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

- Individual project components/subcomponents of the 2022 work plan to ensure that clear achievable targets are set and that the sequence of the activities plan, social and environmental safeguards, gender mainstreaming plus clear timeline are well integrated to the extent possible.
- Meeting programme and preparation of presentation for 4<sup>th</sup> project steering committee meeting.
- Terms of reference, mission and interview programme and schedules for project mid-term evaluation.
- Assessment questionnaires for project mid-term impact assessment.
- Presentations on implementation progress for 2022 and priority plan for 2023 plus presentation progress against the project results framework and indicators for the 7<sup>th</sup> World Bank support mission.
- Detailed project implementation progress by component/sub-component for inclusion in annex of the aid memoir of the 7<sup>th</sup> World Bank support mission.
- Field visit schedule for the upcoming WB mid-term review mission to be carried out in March 2023.

#### **Key activities in 2023**

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

- Support finalization of mid-term METT assessment reports.
- Support M&E team and National Consultant to collect job creation data focusing on direct jobs creation resulting from project investments using initial set of indicator and questionnaires.
- Support regular monitoring and reporting of project progress including project bottlenecks as well as 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 (and related human resources requirements) was underestimated during the contract negotiation. This resulted in UNDP allocating more financial resources than initially agreed to cover salary gaps and consultancy costs.

#### **Data/information management component**

- The procurement process for the IT/Network system was supposed to be completed by Quarter 1 of 2022, but this delayed until December 2022. The installment is still ongoing. Without a fully functional and tested IT/Network system in place, CEMIS-ISDS cannot be operational. The delay has also resulted in the delay of related activities (such as CEMIS system testing, system upgradation, consultations, and deliverables of Arbonaut). Therefore, a revision/amendment of the contract between Arbonaut and UNDP had to be made.
- System administrator: after the installation of the IT/Network facilities and hosting CEMIS server, the entire system needs to be managed through a team of system administrator.
- Limited data sharing: CEMIS issues are cross-sectoral and cover various ministries.
- Trade-offs between Cloud vs Local Server for the CEMIS-ISDS.
- Need for adequate budget for field validation of CEMIS-ISDS.

#### **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. As of December 2022, the recruitment of the consultant was not yet completed.

**Monitoring and evaluation component**

- Cumulative delivery rate up to end 2022 is still very low (21%). This is mainly due to the slow progress of the ecotourism infrastructure and NTFPs value chains investment activities. No final decision has yet been made on the potential list of ecotourism infrastructures to be prioritized for investment support from the project. Given the time remaining and all the steps to be completed before starting construction, it is critical to agree on appropriate solutions with clear actions and timelines to move the implementation process faster so that the project can realize the intended impact.
- Procurement and safeguards screening have often been considered as a bottleneck of project slow delivery. This is also due to challenges in how information and detailed specifications and design of those project investment are defined and provided by responsible component/sub-components before the safeguards screening and procurement can further proceed. This resulted delay in the implementation of key project investment activities and thereby affected project delivery capacity. To improve the situation and depending on the total list and type of projects prioritized investments, safeguards requirements and estimated value of the procurement, the PIU could develop a time-bound process for each prioritized investment and activity with clear responsible focal point and or component responsible of the entire process and closely monitor the progress on a regular basis (bi-weekly or monthly).
- Some of the planned activities at local level were changed and/or delayed because the organization highly depends on the national level team in the PIU in Phnom Penh. The nature and the focus of project requires intensive facilitation and multi stakeholder engagement efforts at the local level (local community, indigenous people, CSOs, NGOs etc.) to ensure effective and long-term sustainability management. There is a need to find out a way to enhance and empower the project teams on the ground (facilitate the process on a timely manner, strengthening and delegating tasks including budget allocation to provincial team etc.) to avoid further delay.
- The CSLEP has certain expectations regarding private sector engagement in the NTFPs value chains and environmentally friendly livelihoods development activities, however the currently planned activities may not be able to reach those expectations given the small-scale size of the priority areas identified by the project team in the situation assessment stage.
- Given the complexity of M&E activities and the capacity of the current project M&E team, there may be the need to outsource some 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	94,309.60	148,752.68
<b>Total</b>	<b>1,397,958.28</b>	<b>821,420.10</b>	<b>576,538.18</b>

**Table 2: Additional UNDP co-financing**

Donor Name	Contributions		Outstanding contribution
	Committed	Received	
UNDP	532,044.81	331,454.57	200,590.24

**Table 3: Cumulative Expenditure by Outputs for year 2022 (as of 31 December 2022)**

Outputs	2021 PO And 2022 Budget	Expenditure 31 December 2022	Balance	Delivery
<b>Output 1:</b> 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).	320,898.93	257,335.45	63,563.48	80%
<b>Output 2:</b> Technical input and advice and other required support for the design of sustainable financing mechanisms	42,127.18	32,163.60	9,963.58	76%
<b>Output 3:</b> Technical input and advice and other required support for effective Monitoring and Evaluation (M&E) of project activities	55,392.79	55,448.55	-55.76	100%
<b>Project Management</b>	23,149.97	22,540.34	609.63	97%
<b>Total</b>	<b>441,568.87</b>	<b>367,487.94</b>	<b>74,080.93</b>	<b>83%</b>



## V. Annexes

### Component 1

1.1 CEMIS System design and specifications

1.2 List of data sets from stakeholders

1.3 List of open data sets

1.4 Metadata fields

1.5 WCS -KSWs zonation

1.6 Arbonaut's deliverables:

- 1.6a A report and PPT presentation with a list of existing data, systems and infrastructure and the technical gap analysis to identify the existing user experience, methodologies, and requirements of CEMIS.
- 1.6b Proposed design options and prototypes of CEMIS. This includes: 1) design of an open-source platform, 2) inventory of existing spatial data and 3) identification of existing DSSs including SMART to be integrated into CEMIS.
- 1.6c Development of a beta version of the platform with capabilities to integrate existing DSS.
- 1.6d A report (less than 10 pages) and PPT to include: 1) rapid assessment of existing data held by DGIS and 2) a plan to improve, supplement, create, maintain, and update data sets, with one annex of an inventory list of all spatial and non-spatial data including their attributes and characteristics required for implementing the ISDS and CEMIS.
- 1.6e CEMIS User Manual: Introduction to CEMIS and its design elements for its users.

1.7 Procurement specifications for CEMIS.

### Component 2

2.1 Report on prioritization of potential sustainable finance mechanisms for Cambodia

2.2 Presentation on prioritization of potential sustainable finance mechanisms for Cambodia

2.3 Draft report on revenue management mechanisms for sustainable financing solutions

2.4 Presentation on revenue management mechanisms for sustainable financing solutions

2.5 Draft inception report and action plan for priority sustainable finance mechanisms for Cambodia's Protected Areas

### Component 3

3.1 – 3.14: METT baseline reports

3.15 – 3.18: Project progress reports