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FINAL REPORT

PERFORMANCE EVALUATIONS OF THE KEO SEIMA CONSERVATION PROJECT (KSCP) AND THE WILDLIFE SANCTUARY SUPPORT PROGRAM (WSSP)

January 2021

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ACRONYMS

CCAP	Conservation Compatible Agricultural Practices
CF	Community Forests
CIRD	Cambodia Institute for Research and Rural Development
COVID-19	Coronavirus 2019
CPA	Community Protected Areas
CRDT	Cambodia Rural Development Team
CWT	Combating/Counter Wildlife Trafficking
EDM	Evaluation Design Matrix
EIA	Environmental Impact Analysis
ELC	Economic Land Concession
EMP	Environmental Management Plan
EOP	End-of-Project
EPL	Eastern Plains Landscape
EQ	Evaluation Question
ET	Evaluation Team
GHG	Greenhouse Gas
ICT	Indigenous Communal Land Titles
ILA	Integrated Landscape Approach
KI	Key Informant
KII	Key Informant Interview
KSCP	Keo Seima Conservation Project
KWS	Keo Seima Wildlife Sanctuary
LOP	Life-of-Project
LTFH	Land Titled Farmer Households
M&E	Monitoring and Evaluation
MELP	Monitoring, Evaluation, and Learning Plan
NGO	Non-Governmental Organization
NRM	Natural Resource Management
NTFP	Non-timber Forest Products
PDoe	Provincial Department of Environment
PI	Performance Indicators
PPWS	Phnom Prich Wildlife Sanctuary
REDD+	Reducing Emissions from Deforestation and Forest Degradation
RGC	Royal Government of Cambodia
SBCC	Social and Behavior Change Communication
SFB	Supporting Forests and Biodiversity
SI	Social Impact, Inc.
SO	Site Observation
SOW	Scope of Work
SWS	Srepok Wildlife Sanctuary
TL	Team Leader
TOC	Theory of Change
USAID	United States Agency for International Development
VMN	Village Monitoring Network
WCS	Wildlife Conservation Society
WSSP	Wildlife Sanctuary Support Program
WWF	World Wide Fund for Nature

EXECUTIVE SUMMARY

INTRODUCTION

In January 2018, the United States Agency for International Development in Cambodia (USAID/Cambodia) awarded the USAID **Wildlife Sanctuary Support Program (WSSP)** to World Wide Fund for Nature/United States (WWF/US) as a prime and World Wide Fund for Nature/Cambodia (WWF/Cambodia) as a subgrantee. In August 2018, USAID/Cambodia awarded the USAID **Keo Seima Conservation Project (KSCP)** to the Wildlife Conservation Society (WCS).

Both Activities occur in the Eastern Plains Landscape (EPL) in Mondulkiri Province. WSSP focuses on Srepok and Phnom Prich Wildlife Sanctuaries (SWS and PPWS). Its end date is March 2021. KSCP focuses on the Keo Seima Wildlife Sanctuary (KWS), and its end date is August 2021.

The objectives of both Activities are to (1) conserve biodiversity and ecosystems; (2) improve livelihoods of inhabitants in and near the wildlife sanctuaries; and (3) improve governance of the EPL. They were both designed using the nature, wealth, and power framework and are implemented using an extended landscape approach.¹

In September 2020, USAID/Cambodia contracted Social Impact, Inc. (SI) to conduct a performance evaluation of WSSP and KSCP (the Activities) to:

1. Learn the extent to which the Activities' objectives—at all result levels—have been achieved; and
2. Inform the design of a new Eastern Plains Activity.

EVALUATION QUESTIONS

The evaluation's scope of work (SOW) has the following evaluation questions (EQs):

1. What have the Activities achieved over the course of implementation?
 - a. Have the Activities achieved what they planned to achieve? If not, why?
 - b. Are there any results made by the Activities (either negatively or positively behind their targets)?
2. Does the livelihood training and technical support to the Activities' beneficiaries meet their needs and priorities?
 - a. How has it impacted their household economy?
 - b. How has it impacted forests and biodiversity conservation?
3. How does the issuance of mining licenses and other economic development Activities in the EPL impact the Activities' objectives?
 - a. What are the perspectives of the Activities' stakeholders on the issuance of the mining licenses and other economic development in the EPL?
 - b. What is the government's commitment to address the issues?
4. Does the Mission's landscape approach work?
 - a. What are the key lessons learned from this landscape approach implementation?
 - b. Are there any other areas (besides what KSCP and WSSP are doing now) of opportunity in which the Mission should focus on over the next 5 years?

¹ USAID (United States Agency for International Development). 2020. Service Request for Evaluations of the Keo Seima Conservation Project and the Wildlife Sanctuary Support Project.

METHODOLOGY

SI conducted the performance evaluation between mid-October 2020 and mid-January 2021. The evaluation team (ET) consisted of a team leader (TL) with expertise in forestry, two Cambodia-based social scientists, two Cambodia-based natural resource management (NRM) experts, and a GIS expert, supported by two translators/logisticians.

Data for the evaluation came from documents, key informant interviews (KIIs), and site observations (SOs). The principal documentary data were WWF and WCS's project documents, particularly their Monitoring, Evaluation and Learning Plans (MELPs) and September 30, 2020 Progress Reports. The ET conducted 51 KIIs with a total of 93 key informants (KIs), of whom 21 were women and 72 were men. KIIs included USAID staff; national, provincial, and local government officials; staff of implementing partners (mostly from WWF and WCS); and the Activities' beneficiaries, private sector representatives, and other knowledgeable stakeholders. KIIs with respondents in Phnom Penh were conducted virtually, led by the TL. KIIs conducted at field sites were conducted in-person by the in-country team members. Team members were divided into two field teams, each with a social science, NRM, and translator/logistics person. One team focused on WSSP and the other on KSCP.

FINDINGS AND CONCLUSIONS

EQ 1: What have the activities achieved over the course of implementation?

Through September 30, 2020, WSSP and KSCP together had achieved 12 of their total of 30 Life-of-Project (LOP) Performance Indicators (PI) for which data were available. WSSP had achieved 7 out of its 14 LOP PIs (one more PI will be measured only in 2021). KSCP has achieved 5 out of its 16 LOP PIs. Both Activities report that they expect to be able to achieve all, or nearly all, of their targets by the end of the Activities. The Activities' important achievements include engaging government officials in providing a technical basis for landscape governance through spatial planning, forest patrolling with the use of up-to-date technologies, support for Indigenous Communal Land Titles (ICT), use of reducing emissions from deforestation and forest degradation (REDD+) funds for small-scale infrastructure, initial trials of potential alternative livelihood activities, engagement of the Royal Government of Cambodia (RGC) on landscape governance, and stabilization of populations of two out of four key species in KSCP target areas.

KII data largely corroborate the Activity reports at the lower, or output, level of results. They do not, however, entirely corroborate them at the higher, or outcome and objective, levels of results. The qualitative data from KIs for this evaluation suggest that it is unlikely that they will fully achieve several of their higher level results. This apparent discrepancy between the quantitative and qualitative data may be because the quantitative PIs are not fully adequate for accurately measuring the Activities' stated results. While KSCP has recorded stable populations of two, and possibly three, of four key wildlife species in KSWs, key ungulate species in both WSSP and KSCP target areas have continued to decline. Moreover, although the quantitative PIs suggest a decline in deforestation rates, deforestation continues within the wildlife sanctuaries. The Activities have generated localized benefits for Bunong beneficiaries, but these will need to be scaled up to have significant landscape-level impacts, and further analysis should be conducted to assess the overall livelihood impacts of the interventions. Likewise, the qualitative data do not indicate that the Activities have improved governance of the EPL's natural resources. Although the Activities have put in place systems and support for improving protected area management, pervasive issues such as corruption influence governance and continue to undermine conservation goals. Accordingly, by the end of both Activities, despite their important advances, it is likely that populations of some key species will still be in decline, deforestation will continue, and landscape governance will still be limited by corruption and lack of engagement from key powerful stakeholders, including certain individuals from the Cambodian government and military and international investors particularly from China. However, each of these objective-level results were recognized by stakeholders as difficult to achieve within the time and resources included in the design of the Activities.

Factors external to the Activities that limit the Activities' results include ineffective governance, poor infrastructure, inadequate financing of wildlife sanctuaries, drought and excessive rains, and low technical capacity. Negative internal factors to the Activities include administrative problems, such as difficulties in contracting qualified staff and delays in procurement, and technical capacity of subcontractors. The Activities' monitoring and evaluation (M&E) systems also have limitations in their utility for adaptive management and tracking results, particularly at the outcome and objective levels, and results levels.

The Activities have adequately addressed women's equality and equity, although generally within the context of traditional differentiated responsibilities for men and women. That is, the Activities have successfully engaged women, in some cases specifically targeting them, but their participation has been mostly within the traditional gender roles. The Activities have implemented specific interventions that have improved the rights and access to land for Bunong, although we did not find evidence of systematic socioeconomic-cultural analysis of the most appropriate entry points for support of the Bunong, or other groups.

EQ 2: Does the livelihood training and technical support to the Activities' beneficiaries meet their needs and priorities?

The Activities' strategy for improving their beneficiaries' livelihoods has included agriculture, nontimber forest products (NTFP), and, in the case of KSCP, ecotourism. The Activities have not reported on the profitability of the alternative livelihood practices they are promoting, but qualitative data suggest that the Activities' livelihood alternatives will marginally improve their beneficiaries' household economies and may serve as a proof of concept for further scaling. It is unclear whether the incomes will be sufficient to offer viable, sustainable alternative livelihoods, but they may offer additional income as resources become increasingly degraded and NTFPs less available.

The Activities' land titling and infrastructure assistance to their beneficiaries do clearly benefit household economies. With a secure title, the beneficiaries can invest in productive Activities with more confidence. Improved infrastructure supported by the REDD+ initiative, especially for household and irrigation water, increases beneficiaries' productivity, though gaps in the M&E systems make it difficult to quantitatively assess the extent to which these activities affect household income or forest and biodiversity conservation. Qualitative evidence suggests they are contributing to positive gains, but the scale of intervention and impact appears to be marginal relative to the need and scope of the targeted area and population. Stakeholders consistently noted the importance of sustained, long-term engagement to appreciably affect household income and conservation at the landscape level.

EQ 3: How does the issuance of mining licenses and other economic development activities in the EPL impact the Activities' objectives?

KIs in four of the Activities' six categories of stakeholders (USAID officials, RGC government officials, partners, and knowledgeable stakeholders) tend to perceive mining and other large-scale economic activities other than tourism in the EPL negatively. Private enterprise stakeholders, by contrast, tended to view them more positively. All the opinions expressed about small-scale infrastructure were positive. Although most of the KIs, for example, perceived the Renaissance gold mine negatively, the only KI who provided data about the mine's scale, production methods, and environmental mitigation measures was the mining representative, and she, as might be expected of course, had a positive opinion about the mine. While there is potential for mining, particularly if implemented well, to support conservation and development goals including through generating revenue that can be used for conservation efforts, most stakeholders were skeptical that would happen in practice. Not all, but most KIs' responses to KII questions about the impact on forests and

biodiversity of large-scale forestry, agriculture, tourism, and infrastructure showed a similar lack of technical knowledge about these economic activities.

Cambodia's government includes a policy framework for addressing Cambodia's conservation issues, but stakeholders consistently noted gaps in enforcement of the country's legal frameworks or commitments. This was particularly the case with respect to powerful individuals whom stakeholders perceived as being much more able to circumvent policies or laws for resource extraction or land conversion.

EQ 4: Does the Mission's landscape approach work?

The most current definition of the landscape approach defines it as

“a range of multi-stakeholder interventions, initiatives, programs applied at sub-national/landscape levels in order to achieve lasting, landscape-wide improvements to natural resource management by catalyzing collaborative action of a group of stakeholders working with local government to institutionalize improved land-use governance and practice.”²

The Mission's landscape approach, as implemented through the Activities, have been unable to reduce substantially the level of involvement of financially and politically powerful EPL stakeholders in illegal logging, wildlife trafficking, and land conversion. Moreover, there is no evidence to indicate that the Activities have attempted to involve these stakeholders in the multi-stakeholder interventions that the integrated landscape approach (ILA) requires to be effective. However, it should be noted that many question whether those stakeholders would participate. Therefore, the principal lesson learned about the Mission's landscape approach is that it is not likely to work per USAID definitions because it does not use multi-stakeholder interventions that include all the stakeholders (particularly powerful stakeholders that are in many ways causing or driving the issues).

The main challenge of USAID's landscape approach implementation for KSCP and WSSP is the presence and influence of financially and politically powerful individuals in the illegal collection and transborder commerce of forest products (e.g., timber, wildlife) with highly profitable markets in Vietnam. However, there may be an opportunity to engage more closely with large-scale, legitimate private enterprises in multi-stakeholder interventions. For example, the KI from the Renaissance mine expressed interest and gave examples of how the mine is financing activities with the Ministry of Environment and the PPWS. However, the ET lacked sufficient data to evaluate the opportunity and feasibility of engaging large-scale private enterprises to conserve the EPL's biodiversity and forest through the ILA.³ Based on observations and KI responses, these are also concerns that the private enterprises may not fully follow through with conservation-related promises.

RECOMMENDATIONS

USAID should conduct additional data collection and analyses that are required to establish a reliable base of knowledge for the design of a future EPL conservation activity. Among the areas of knowledge that more complete data and analyses could help to provide are: the type, scale, and time period required to achieve effective conservation, governance, and equitable economic growth in the EPL through an integrated landscape activity; the profitability, competitiveness, and sustainability without subsidies of the Activities' current alternative livelihood activities; the financial, social, and ecological impacts of the Bunong changing from shifting to

² Redd, James, Amy Ickowitz, Colas Chervier, Houria Djoudi, Kaala B. Moombe, Mirjam Ros-Tonen, Malaika Yanou, Elizabeth L. Yuliani, and Terry Sunderland. 2020. Integrated Landscape Approaches in the Tropics: A Brief Stock-Take, in J. Reed, M. Ros-Tonen, and T. Sunderland, *Operationalizing Integrated Landscape Approaches in the Tropics*. Bogor, Indonesia: CIFOR, for a discussion of the private sector's essential role in implementing and financing the ILA.

³ Ibid., 2020.

permanent agriculture; the relative roles and influence of the Bunong, recent migrants into and near the wildlife sanctuaries and politically and financially powerful stakeholders on the processes and rate of forest and wildlife loss and degradation in the EPL; and the feasibility of engaging all stakeholders in a landscape approach, including powerful individuals who are currently seen to be circumventing restrictions.

USAID should clarify its landscape approach. WCS and WWF's landscape approaches and theory of change (TOC) do not engage all key stakeholders, including some powerful government and military officials and investors who have been directly or indirectly linked with resource exploitation whereas multi-stakeholder engagement is a core element of an ILA and best practice as described in the most recent literature about the ILA to achieving conservation. Before designing a follow-on landscape approach project, USAID/Cambodia should define and clarify how its "extended landscape approach" differs from the ILA based on multi-stakeholder engagement. Given their influence, the use of forests and biodiversity in the EPL, and its potential for financing conservation activities and economic growth, USAID/Cambodia should clearly define the role of the private sector in whatever approach it chooses for its next EPL conservation project. It should assess whether or how to engage powerful stakeholders who drive exploitation of biodiversity and forests, whether legally or illegally. Its TOC for a follow-on conservation project should reflect its definition of its "extended landscape approach" and the extent to which it includes the multi-stakeholder engagement that is the core of the best practice of an "ILA."

If it deems that a multi-stakeholder landscape approach is not feasible, then USAID should center future conservation Activities on assisting communities in and around forests to solve their problems, preventing encroachment from outside actors, and addressing the communities' priorities through the use, management, and community governance of natural resources. Since the principal conservation threats are perceived to come from outside of these communities, USAID could focus on strengthening these communities' abilities to counter those threats. WSSP and KSCP have supported some activities that might merit further USAID support, including strengthening of community governance, monitoring of illegal exploitation, land titling, infrastructure supported by REDD+, and development of eco-tourism at selected sites. It might also support additional activities, such as professional and technical training in conservation fields at a new academic and vocational institution in the EPL; support for social networks as a means to control illegal forest and biodiversity exploitation; management of charismatic wildlife species; control of transboundary wildlife trafficking; and support for an EPL biosphere reserve.

USAID could support the above approach with two components that extend beyond these communities. First, **USAID should explore social and behavior change communication (SBCC) and other approaches to increasing support for conservation among middle- and upper-class Cambodians.** This may help to generate additional support for conservation among more powerful decision makers and reduce demand among consumers. The EPL is increasingly a draw for domestic ecotourism, which can be used as an opportunity to increase awareness and support. Second, **USAID should support governance initiatives that seek to combat corruption and close loopholes that allow powerful actors to access resources that are off-limits to local communities.** This may include integrating its own governance and conservation programming and requires an integrated approach to development planning and implementation that recognizes the complex interplay of governance, economic growth, conservation, and the possible co-benefits of integrated programming across these sectors.

USAID should incorporate a more robust learning component and systematic scaling plan for an alternative livelihoods' component of a future conservation project. While some of the KSCP and WSSP's livelihood Activities show promise from both the perspective of livelihoods and conservation, for example, ecotourism, NTFPs, some forms of agriculture, the data and analyses required to confirm their sustainability, profitability, and competitiveness are lacking.

Without those analyses, it remains unclear if and how these Activities could be upscaled so that they would significantly contribute to the conservation of forests and biodiversity in the EPL. As previously recommended above, USAID should support more complete and rigorous research that would permit firm conclusions to be drawn on the degree to which the KSCP and WSSP alternative livelihoods Activities can be scaled up successfully and sustainably. Moreover, a scaling strategy should be determined at the outset, at least in broad strokes, that lays out how decisions regarding scaling will be made as well as, importantly, data that must be tracked and analyzed to support decisions on where and with whom to scale. This might include research or data on particular conditions in targeted communities that support or inhibit the success of the approach. Finally, USAID should commit resources to scale approaches that are shown to be successful, such as Conservation Compatible Agricultural Practices (CCAP).

USAID should design a useful, clear MELP for its next conservation Activity. The evaluation's conclusion is that the KSCP and WSSP MELPs have not provided the data and analyses that they were expected to provide. Without adequate data and analyses, WSSP and KSCP have not been able to judge their progress toward their results accurately and adjust their design and implementation accordingly. The lack of these data and analyses also limited this performance evaluation's ability to fully evaluate some aspects of their Activities. USAID/Cambodia should ensure its next conservation project has a strong MELP that continually provides up-to-date information on the project's progress. To achieve a useful MELP, USAID/Cambodia should lay out its TOC, its expected results at all levels, linkages between result levels, and key assumptions through a process that involves all the key stakeholders, whether their principal interest is conservation or not. It will be imperative for USAID/Cambodia to define its key assumptions when it may not be possible to engage some influential stakeholder groups in a multi-stakeholder process. USAID's implementers should use the TOC it develops with the stakeholders as a basis for identifying indicators at each result level that effectively measure that result and commit resources to measure these indicators regularly.

BACKGROUND

In January 2018, the United States Agency for International Development in Cambodia (USAID/Cambodia) awarded the USAID **Wildlife Sanctuary Support Program (WSSP)** to World Wide Fund for Nature/United States (WWF/US) as a prime and World Wide Fund for Nature/Cambodia (WWF/Cambodia) as a subgrantee. In August 2018, USAID/Cambodia awarded the USAID **Keo Seima Conservation Project (KSCP)** to the Wildlife Conservation Society (WCS).

Both Activities occur in the Eastern Plains Landscape (EPL), which lies mostly in Mondulkiri and Kratie Provinces. Its 28,000 square kilometers contain one of the largest intact blocks of forest in Southeast Asia. The diversity of its wildlife species and the severe threats to its biodiversity from logging, deforestation, and poaching makes it a priority biodiversity conservation. Large and lucrative Vietnamese and Chinese markets for forest and agricultural products are driving these threats.^{4,5}

The WSSP focuses on the Srepok Wildlife Sanctuary (SWS) and the Phnom Prich Wildlife Sanctuaries (PPWS) within the EPL. It is a \$2.5 million project with a 3-year time frame, and its end date is March 2021. KSCP focuses on the Keo Seima Wildlife Sanctuary (KSWS). It is a \$2 million project with a 3-year time frame, and its end date is August 2021. USAID/Cambodia intended them both to use its “nature, wealth, and power framework” and “extended landscape approach” to (1) conserve biodiversity and ecosystems; (2) improve livelihoods of inhabitants in and near the wildlife sanctuaries; and (3) improve governance of the EPL. WSSP and KSCP implement similar activities, including small-scale agricultural production and marketing, collection and processing of nontimber forest products (NTFP), land titling, organizational strengthening, wildlife surveys, forest patrolling, and land use planning.

In September 2020, USAID/Cambodia contracted Social Impact, Inc. (SI) to conduct an evaluation of the two Activities. The purpose of the evaluation is to (1) learn the extent to which the Activities’ objectives—at all result levels—have been achieved; and (2) inform the design of a new Eastern Plains Activity.

The audience for the evaluation report is USAID/Cambodia, specifically the Office of Food Security and Environment.

⁴ USAID (United States Agency for International Development). 2020. Service Request for Evaluations of the Keo Seima Conservation Project and the Wildlife Sanctuary Support Project.

⁵ Bernazzani, Paol, James Jolley, Phat Chandara, and Seak Sophat. 2019. USAID/Cambodia. Foreign Assistance Act 118/119 Tropical Forest and Biodiversity Analysis, 135 pp.

Figure 1: Location Map of the Srepok, Phnom Prich, and Keo Seima Wildlife Sanctuaries



Source:⁶

⁶ USAID (United States Agency for International Development). 2020. Service Request for Evaluations of the Keo Seima Conservation Project and the Wildlife Sanctuary Support Project.

METHODOLOGY

This is a performance evaluation based primarily on the analysis of qualitative data that the evaluation team (ET) obtained from key informant interviews (KIIs), site observations (SOs), and Activity documents. The ET consisted of a remote team leader (TL) with forestry expertise, four in-country experts, two with expertise in livelihoods and social sciences, two in NRM, and a GIS expert, supported by two translators/logisticians.

EVALUATION QUESTIONS

The evaluation questions (EQ) for the evaluation are:

1. What have the Activities achieved over the course of implementation?
 - a. Have the Activities achieved what they planned to achieve? If not, why?
 - b. Are there any results made by the Activities (either negatively or positively) beyond their targets?
2. Does the livelihood training and technical support to the Activities' beneficiaries meet their needs and priorities?
 - a. How has it impacted their household economy?
 - b. How has it impacted forests and biodiversity conservation?
3. How does the issuance of mining licenses and other economic development Activities in the EPL impact the Activities' objectives?
 - a. What are the perspectives of the Activities' stakeholders on the issuance of the mining licenses and other economic development in the EPL?
 - b. What is the government's commitment to address the issues?
4. Does the Mission's landscape approach work?
 - a. What are the key lessons learned from this landscape approach implementation?
 - b. What are the key challenges of landscape approach implementation, and are there any opportunities to improve this approach for both KSCP and WSSP?
 - c. Are there any other areas (besides what KSCP and WSSP are doing now) of opportunity in which the Mission should focus on over the next 5 years?

DATA COLLECTION

SI conducted the performance evaluation between mid-October 2020 and mid-January 2021.⁷ The ET had a TL, four Cambodia-based experts, and two translators/logisticians. Because of the ongoing COVID-19 pandemic, the TL did not travel to Cambodia. However, the team members in Cambodia formed two field teams, each with natural resource management (NRM) and livelihood experts and a translator/logistician. Field Team #1 collected KII and SO data about WSSP, and Field Team #2 collected data about KSCP. The field teams traveled to and around the SWS, as displayed in Figure 2 and Figure 3.

Data for the evaluation came from documents, KIIs, and SOs. The principal documentary data were WWF and WCS's project documents, particularly their Monitoring, Evaluation and Learning Plans (MELPs) and September 30, 2020 Progress Reports. Annex A contains a list of documents consulted. The ET summarized their initial review of the Activities' documents in an Evaluation Design Matrix (EDM), which was used to design the evaluation methodology.

USAID/Cambodia provided the ET a list of potential KIIs who all were government officials or partner staff. Through their contacts, the ET identified potential key informants (KIs) who were

⁷ Fieldwork partially overlapped with the rescheduled water festival holiday. Nevertheless, respondents were very flexible with their time, and the ET has no indication that the holiday led to missing any targeted respondents.

USAID officials, additional Cambodian government officials, or other individuals known to be knowledgeable about the EPL. SI evaluation support staff contacted all the potential KIs in these categories by emails and telephone calls to ascertain their willingness to be KIs and scheduled KIIs with those who responded.

The field teams identified potential KIs in the beneficiary and private enterprise categories by consulting WSSP and KSCP staff members in Sen Monorom, the capital of Mondulkiri Province. The ET chose routes for field trips that enabled them to interview these KIs. Some KIIs the team identified introduced other KIs. Table I describes the KI categories and the number and sex of KIs in each category the ET interviewed.

Table I: Summary of Number of KIs by Category, Activity, and Sex

Categories	Description	KSCP		WSSP		KSCP & WSSP		TOTAL
		Women	Men	Women	Men	Women	Men	
USAID	USAID/Cambodia officials	0	0	0	0	2	3	5
Royal Government of Cambodia (RGC)	National, provincial, and commune Cambodian government officials	0	3	2	6	0	8	19
Partner	WWF, WCS, and subgrantee staff members	3	3	3	13	0	0	22
Beneficiaries	Rural inhabitants in or near PPWS, SWS, and KSWS	3	21	3	9	0	0	36
Knowledgeable Stakeholders	People with experience and knowledge about conservation in Cambodia and the EPL	1	1	0	3	1	2	8
Private Sector	Large- and small-scale private enterprises	1	0	1	0	1	0	3
TOTAL		8	28	9	31	4	13	93

Source⁸

The ET prepared interview guides for each KI category, basing them on the nine EQ sub-questions, to guide semi-structured KIIs that included probing questions. Two or more team members participated in nearly all the KIIs, one member asked questions, and the other took notes. The team leader led virtual KIIs with KIs located in Phnom Penh, while field team members conducted field KIIs in person. Multiple KIs participated in some interviews because of the limited time available for fieldwork and the remote location of much of the targeted areas. KIs who resided or worked in particularly difficult-to-reach locations were paid travel expenses to attend interviews with the ET in Sen Monorom or local ranger outposts. Refreshments and snacks were provided to KIs who were required to travel.

⁸ ET and KII data.

Figure 2: Route for Fieldwork of Field Team #1

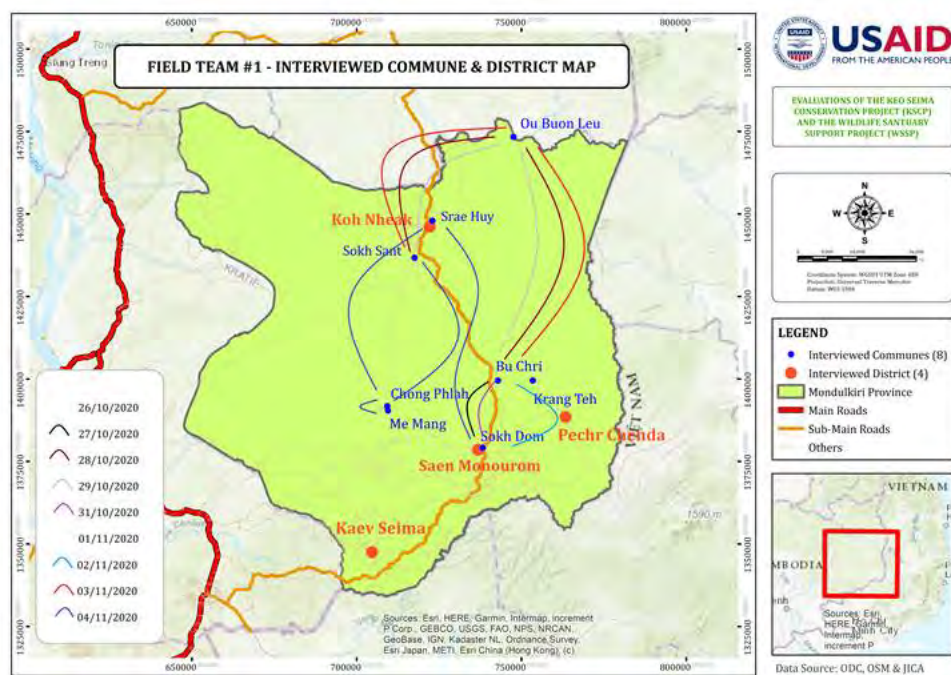
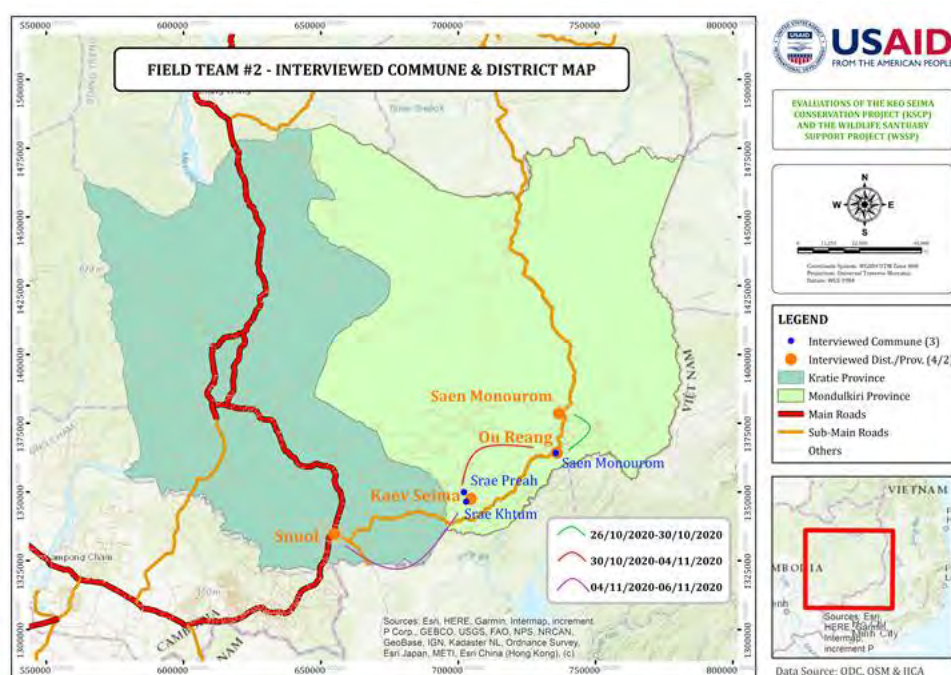


Figure 3: Route of Fieldwork for Field Team #2



DATA ANALYSIS

Data analysis followed standard qualitative analysis methodologies. Detailed notes were taken during each interview and analyzed by the field teams, and the TL transferred data relevant to each sub-EQ into analysis tables. The data were then categorized to identify themes, then the themes were triangulated with documentary and SO data to identify findings.

Quantitative performance indicators (PIs) are the measures USAID uses to detect progress toward the results included in a results framework.⁹ Therefore, EQ 1 was answered based on the status of the Activities' life-of-project (LOP) quantitative PIs as of September 30, 2020, the date of the Activities' latest progress reports. The scope of work (SOW) requires that the Activities' results be presented at all results levels, but neither the SOW nor the Activities documents defined these results levels. Therefore, the ET categorized the PIs into the standard log frame output, outcome, and objective levels. The MELP and the September 30, 2020 Progress Reports do not provide quantitative PI targets for September 30, 2020. The MELPs, however, do provide LOP quantitative targets. Therefore, the September 30, 2020, PI achievements were compared with the MELPs' LOP PI targets to determine which PIs were ahead or behind their LOP targets as of September 30, 2020, recognizing that the Activities still had 6 to 9 months left. Thus, PIs that were behind their LOP target as of September 30, 2020, could still be achieved by the end of the Activities. Upon request, WSSP indicated how it planned to achieve some, but not all, of its PIs by its end date; KSCP provided this information during the evaluation report review process. KII data were analyzed to provide verification and additional context for these achievements. Annex B, Annex C, and Annex D provide the supplementary analysis tables for EQs 1, 3, and 4, respectively.

LIMITATIONS

The principal data limitation was a lack of complete quantitative data on some key indicators. Activity documents provided no useful baseline data on the beneficiaries' financial situation, population, or location. Analyses were not available on value chains or the financial and ecological costs and risks associated with the Activities' alternative livelihoods (e.g., rice cultivation, honey collection, bamboo plantings, and handicrafts, etc.), especially as compared to the Bunong's traditional shifting agriculture practices. The Activities have not collected data, which would estimate impacts of their alternative livelihoods overall or on subgroups (e.g., on men versus women or ethnic groups). It was beyond the scope of this evaluation to collect systematic quantitative data on these indicators, which would have enabled a complete evaluation of some higher-level Activity results. By analyzing KII data, the ET mitigated this limitation.

This ET lacked the necessary contacts and time to identify by itself most of the potential KIs or sites for field visits itself. Consequently, most of the KIs and field site visit locations were suggested to the ET by USAID/Cambodia, WWF, and WCS staff. Moreover, USAID staff were present at many of the interviews with beneficiaries. Although appreciative of the essential assistance USAID, WCS, and WWF provided in the selection of the KIs and field observation sites, the ET does recognize that their involvement may have skewed that data. The ET did try to compensate for this possible bias identifying and interviewing KIs in the category of knowledgeable stakeholders who are without, so far as could be determined, any current link to USAID, WWF, or WCS.

Another limitation was the absence of the TL in Cambodia because of the COVID-19 pandemic. Qualitative evaluation methodologies depend strongly on the evaluators' direct, personal involvement in collecting data. This limitation was somewhat mitigated by having a team of four locally based experts to conduct data collection in frequent communication with the TL.

Language barriers posed a third limitation. None of the team members or translators could speak Bunong. They could not speak directly, therefore, with the Activities' principal beneficiaries. Local, ad-hoc translators were used to mitigate this limitation.

The evaluation relied principally on Activity monitoring data or reports, site observations, secondary literature, and qualitative interviews. The limited field time, remote locations, and need to cover two

⁹ USAID. Performance Monitoring Indicators. <https://www.usaid.gov/project-starter/program-cycle/cdcs/performance-monitoring-indicators>. Accessed December 14, 2020.

Activity areas restrict the amount of data collected, particularly with respect to qualitative interviews and site visits. The ET undertook the sampling approach described above to gather data that were as representative as possible. However, it is possible that there is still some degree of sampling and respondent bias. The team sought to mitigate this by triangulating data across sources and data types. We have noted below where data were limited or insufficient to draw conclusions.

FINDINGS

EQ 1: WHAT HAVE THE ACTIVITIES ACHIEVED OVER THE COURSE OF IMPLEMENTATION?

a) Have the activities achieved what they planned to achieve? If not, why?

As of September 30, 2020, the Activities had achieved 12 of their total of 30 LOP PIs for which data were available. As noted above, LOP targets were used as there were no other targets associated with the most recent semi-annual report. Table 2 shows the results of this comparison.

Table 2: WSSP and KSCP LOP Targeted vs. Achieved Results by Output, Outcome, and Objective Results Levels

PI Level	PI Results as of September 30, 2020, PIs vs. LOP Target PI Results					
	WSSP			KSCP		
	Achieved	Not Achieved	Total	Achieved	Not Achieved	Total
Output	2	33	55	2	4	6
Outcome	4	1 ^a	55	2	2	4
Objective	1	3	4	11	55	66
TOTAL	7	77	144	55	111	16

^a For one additional indicator, WSSP has not yet collected data, so achievement cannot be assessed.
Source¹⁰

As of September 30, 2020, WSSP had achieved two of its five output LOP PIs, four of its five outcome LOP PIs, and one of its four objective LOP PIs. KSCP had achieved two of its six output LOP PIs, two of its four outcome LOP PIs, and one of its six objective LOP PIs. Overall, the Activities had achieved 12 of their 30 LOP PIs. It was not feasible for the ET to independently confirm the quantitative PI data. However, the KII data verify most of the field-level Activities associated with the output PIs have been implemented to some extent. More detail on specific LOP PIs is provided in the next section.

b) Are there any results made by the Activities (either negatively or positively) beyond their targets?

As of September 30, 2020, WSSP has achieved its LOP PI targets for 7 of its 14 PIs for which data were available. Table 3 shows that WSSP had not yet achieved its LOP PIs for mobilizing investment for sustainable landscapes and laws, policies, and regulations that address biodiversity at the output level. With respect to patrolling the PPWS, three of the four aspects have already been achieved, including more than doubling the targeted patrol distance, although the targeted number of patrols has not been achieved. WSSP's PI for the prosecution rate of filed wildlife and forest crime cases was eliminated because it was judged to be unfeasible.

At the outcome level, WSSP had not yet achieved its LOP PI for farmers applying improved technologies. As of September 30, 2020, WSSP still had 6 months to achieve these LOP PIs. WSSP administration anticipates that they will be achieved by the WSSP's end-of-project (EOP) date March 31, 2021.

¹⁰ WCS 2019a; WCS. 2018. USAID Keo Seima Conservation Program, Proposal to USAID/Cambodia; WCS. 2020. Annual Report of Year 2: October 1, 2019–September 30, 2020; WWF 2020.

Table 3: WSSP: LOP Target vs. Achieved Results by Results Level through September 30, 2020

Output PIs	Target LOP PI	Achieved PI	Difference
6. The patrolling effort in PPWS as a result of U.S. Government assistance.			
• Patrol number	912	799	(113)
• Distance in km	36,423	78,216	41,793
• Days	2,496	3,308	812
• Nights	1,584	2,509	925
7. The percentage of wildlife and forest crime cases properly filed and sent to the provincial court	96	120	24
8. The prosecution rate of filed wildlife and forest crime cases	Eliminated	Eliminated	Eliminated
9. Number of people trained in sustainable NRM and/or biodiversity conservation	4,184	5,315	1,131
11. Amount of investment mobilized (in USD) for sustainable landscapes	100,000	53,623.9	(46,376.1)
16. Number of laws, policies, or regulations that address biodiversity	3	2	(1)
Outcome PIs			
1. Number of hectares of biologically significant areas under improved NRM	124,330	130,000	5,670
4. Number of institutions with improved capacity to address sustainable landscapes issues as supported	10	10	0
12. The percentage of land titled farming households (LTFH) in PPWS and SWS engaging in Conservation Compatible Agricultural Practices (CCAP)	14	24	10
13. Number of farmers and others who have applied improved technologies or management practices with U.S. Government assistance.	72	33	(39)
14. The percentage of people living in PPWS and SWS demonstrated at least a high level of understanding of environmental protection, biodiversity, and conservation	No Data	No Data	No Data
15. Number of people that apply improve conservation law enforcement practices	150	278	128
Objective PIs			
2. Number of hectares of biologically significant areas showing improved biophysical conditions	124,330	106,000	(18,330)
3. Greenhouse gas (GHG) emissions, estimated in metric tons of CO2 equivalent, reduced, sequestered, or avoided through sustainable landscapes activities.	290,170	247,660	(42,510)
5. The estimated population of key ungulate species (banteng, wild pig, and muntjac), yellow-cheeked crested gibbon, and white-shouldered ibis in PPWS and SWS	55	00	(5))
Banteng	1,024	856	(168)
Wild pig	7,375	4,017	(3,358)
Muntjac	4,155	3,350	(2,935)
Yellow cheeked crested gibbon	600	No data	No data
White shouldered ibis	49	19	(30)
10. Number of people with improved economic benefits derived from sustainable NRM and/or biodiversity conservation through a demonstration pilot project	137	172	35

Source¹¹

At the objective level, WSSP has not yet achieved its LOP PIs for hectares showing improved biophysical conditions, greenhouse gas (GHG) emissions, or populations of key wildlife species. Although the Activity's September 30, 2020 Progress Report states that 247,660 tons of GHG emissions have been reduced, sequestered, or avoided, this is still 42,510 metric tons short of the target LOP PI because of deforestation and illegal logging in the conservation and core zones of PPWS.

The progress report does not specifically explain why WSSP has not yet achieved its LOP targets for biophysical conditions and wildlife species. KI data, however, suggest that WSSP has not been able to strengthen the government's enforcement of conservation laws sufficiently to achieve these LOP PIs.

As of September 30, 2020, KSCP has achieved its LOP target for 5 of its 16 PIs. Table 4 summarizes the status of achievement for KSCP's PIs by results level as of September 30, 2020. KSCP had not achieved its output PIs for village events, conservation laws, or media articles because of COVID-19 and for management plans because KSWVS's zoning plan is scheduled to be finished in 2021.

At the outcome level, KSCP has already achieved two of its four PIs and has provided plans for how it intends to achieve the rest.

Table 4: KSCP: LOP Target vs. Achieved Results by Results Level through September 30, 2020

Output PIs	Target	Achieved	Difference
1.d. Number of village events designed and conducted to increase socially responsible behavior by communities	44	28	(16)
1.b. Number of people trained in sustainable NRM and/or biodiversity conservation	1000	1,217	217
2.b. Number of laws, policies, or regulations that address biodiversity conservation and/or other environmental themes officially proposed, adopted, or implemented	9	4	(5)
2.c. Amount of investment mobilized (in USD) for sustainable landscapes (e.g., 11-4)	800,000	870,648	70,648
3.b. Number of sustainable forestry and biodiversity management plans developed using participatory national and subnational planning processes	1	0	(1)
3.d. Number of media articles produced about KSWVS	60	28	(32)
Outcome PIs			
1.a. Number of hectares of biologically significant areas under improved NRM	272,000	272,000	0
1.c. Number of people that apply improved conservation law enforcement practices	180	99	(81)
3.a. Number of institutions with improved capacity to address sustainable landscapes issues	55	67	12
3.c. Number of ICTs and Community Protected Areas (CPAs) established and strengthened	16	15	(1)
Objective PIs			
1.e. Reduced deforestation in priority landscapes in hectares per year	1,900	1,747	(153)
1.h. Number of hectares of biologically significant areas showing improved biophysical conditions	166,000	166,000	0

¹¹ Compiled from the activities' MELPs and September 30, 2020 Progress Reports.

I.f. GHG emissions, estimated in metric tons of CO2 equivalent, reduced, sequestered, or avoided through sustainable landscapes activities	1,643,500	1,511,155	(132,345)
I.g. Population estimates of key species in KSWs	44	22	(2)
Gibbons	1,209	1,432	223
Doucs	23,628	24,929	1,301
Wild pig	1,367	1,162	(205)
Muntjac	1,194	732	(462)
2.a. Number of people with improved economic benefits derived from sustainable NRM and/or biodiversity	3,700	2,676	(1,024)
2.d. Income level (\$) of target community from ecotourism projects	32,000	27,760	(4,240)

Source¹²

At the objective level, KSCP data indicate that it has achieved one of its six PIs. It still lacks 1,024 people with improved economic benefits derived from sustainable NRM and/or biodiversity to achieve PI 2.a. Moreover, despite achieving 1,511,155 tons of avoided, sequestered, or reduced GHG emissions, the Activity still requires 132,345 to achieve its LOP target. According to its September 30, 2020, Progress Report, however, KSCP is on track to achieve most of these PIs by the end of the Activity.

The KSCP MELP selected four wildlife species to serve as PIs for the objective level result I.g. “Population estimates of key species in KSWs.” The populations of two of these species (gibbons and doucs) have increased while the populations of two have declined (wild pig and muntjac). The WCS report *Status of Key Species in Keo Seima Wildlife Sanctuary 2010–2020*¹³ provides data from the WCS monitoring program “of the populations and distributions within KSWs of 13 key species.” The report states:

“Population trends for six monitored primate species are reassuring with three primate species showing stable populations (black-shanked douc, langur, yellow-cheeked crested gibbon, long-tailed macaque), and one species showing an increasing population (pig-tailed macaque). ... However, the population of two primate species are declining (stump-tailed macaque and Germain’s silver langur) in KSWs. Green peafowl populations are increasing within KSWs. Five out of six monitored ungulate species either show significant population declines or have been assessed by experts as being in decline. Wild pig populations naturally fluctuate, so are considered to be stable. Northern red muntjac shows a 50 percent decline between 2014 and 2020. Since 2010, Eld’s deer and sambar have been at densities too low to monitor with line transects. Banteng and gaur are now at such low densities that future monitoring with line transects will not give robust population estimates. All four large ungulates are declining within KSWs. Rates of decline in KSWs are likely to be significantly slower than outside protected areas. However, protection and conservation efforts must be increased to prevent the total loss of large ungulates and to reverse the decline of northern red muntjac.”

The same report considers wild pig populations to be stable, not declining, since their populations naturally fluctuate, although the number measured in 2020 was lower than the target. The ET did not locate an explanation for why gibbons, doucs, wild pigs, and muntjac were selected for KSCP PIs rather than some of the other species.

¹² KSCP September 30, 2020, Progress Report.

¹³ Griffin, O., and M. Nuttall. 2020. *Status of Key Species in Keo Seima Wildlife Sanctuary 2010–2020*.

KII data corroborates the PI data on outputs but differs from PI data on outcomes and objectives. The KII data on project achievements were coded to the result level they referred to (outputs, outcomes, and objective results) to correlate the PI with the KII data about Activity results. Of the 152 total comments about results or achievements, the majority (74 percent) referred to outputs, while 19 percent and 8 percent referred to the outcome and objective levels, respectively. Only USAID and partner KIs made comments related to the Activities' objective level results. The preponderance of comments pertaining to output results may reflect the greater interest of most KIs in the immediate outputs of the Activities than their longer-term outcomes and objectives.

The KII data related to the output results level generally corroborates the PI data by indicating that the KIs were aware of and had participated in the Activities measured by the output result level PIs. They indicated that the Activities' had produced most of their planned output results. Typical KI comments express some opinion about the output level results and offer the hope that more of the same type of Activities will occur. For example, in relation to the Activities' work to control poaching, a government KI said, "So before the work with the WWF, we didn't have the prevention work [mobile ranger]. And we trace the routes for trafficking of wildlife, where it's coming, and where it's going. I'm very pleased with the project." Some partner KIs made quite positive comments about the Activities' results; one KI for example, said, "We deal with snares with lots of results and lots of success." Some KIs, however, were more critical. For example, one KI commented about the forest ranger posts, "Some substations don't have access to clean drinking water (water towers) and rely on streams. If you sent an international health and safety guy to look at the ranger facilities, they would close down the outpost." Another said, "our one uniform per year gets worn out within six months, including raincoats, which we can't enter the forest easily without." KSCP KIs were particularly enthusiastic about how reducing emissions from deforestation and forest degradation (REDD+) funds are financing wildlife sanctuary management and livelihood actions. Beneficiaries typically were pleased with having received Activity assistance and reported wanting more of it. A typical beneficiary's comment about output results was also, "the project has only been going for a year, so they achieved what was expected in this short time."

KII data at the outcome level tend to be broader and perhaps less optimistic about the results than at the output level and did not always correlate closely with the PI data. One KI, for example, commented about the livelihood activities, "We are not there yet. We have not got to scale yet. There is no way that anything can replace the income from illegal logging. You cannot replace it with anything else. It does not match illegal logging." Another said that the Activities, "Evidently prevented some deforestation, but it's not clear how many hectares or for how long." Another KI commented, "It's challenging here in terms of a lot of corruption, illegal logging going on, complex organized networks—it makes us feel powerless, and we can't influence some issues." These types of comments may indicate that the quantitative data of the outcome level PIs perhaps do not provide a completely accurate or nuanced understanding of the Activities' results at the outcome level.

At the objective level, the qualitative KII data convey a less optimistic assessment of the Activities' results than the quantitative PI data. Some of the KI comments even conveyed a sense of hopelessness. For example, one KI said, "It is a dream for us to achieve the outcomes. In reality, we are not able to affect the issues that much. The biodiversity will soon be gone." Another KI said, in general, about Cambodia, but also applicable to the Activities, "nobody would say any protected areas in Cambodia are doing well. We can only say they are not doing worse." A third KI made his comment about objective results brief, "Little achieved compared to the goal."

The analysis of KII data identified 153 comments about negative factors that have impeded the Activities' progress. We note that not all of these are factors that the Activities were designed to influence, but nevertheless they were perceived by stakeholders as important factors for limiting the Activities' progress.. These factors can be grouped into five areas:

- Governance:** KI comments about governance encompassed problems related partially to project administration, government administration, corruption, lack of laws, and regulations, such as unfinalized standard operating procedures for protected area management or weak enforcement, and tenure rights to forest and land resources. Fifty-eight of the 153 comments, or nearly 40 percent, were related to how governance problems are affecting the achievement of the Activities' results at the output, outcome, and objective levels. Beneficiaries made 21 such comments, perhaps reflecting a perception that their local and provincial governments have helped them little and hindered them a lot. USAID and partner KIs also repeatedly commented about the difficulty of achieving the Activities' results when governance is weak in Mondulkiri Province. Typical KI comments about the corruption problem in governance include: "Corruption and power are influential. High-level officials resist conservation laws," and "provincial officials can't fight decisions by powerful outsiders and national-level officials." KIs expressed concern about land security in comments such as "The challenge is no clear demarcation of the protected area" and "land grabbing is a big problem."
- Resources:** The category of resources includes problems related to lack of equipment, financing, water infrastructure, and personnel. Of the 153 comments analyzed, 38 comments concerned resources, making it the category with the second largest number of comments. Several KIs mentioned the lack of financing and the need for productive infrastructure, primarily to supply household and irrigation water. A KI commented, "The current funds for the two projects cannot finance the infrastructure aspects." Several forest rangers complained about how a lack of proper equipment affected their ability to work. One commented, "We have the station, but the equipment to use including raincoat and uniform is lacking," and "I want to request for more motorbikes to use—mostly at the outposts there are not enough." Another KI noted, "We could do with more resources since the budgets for the wildlife sanctuaries are quite minimal." Another KI noted the need for translators to enable communication with the Bunong and facilitate the work with them.
- Production:** Production problems include weather, water supplies, agricultural pests, markets, technical expertise, and training. Of the comments analyzed, 222 comments concerned production. Representative KI comments about production constraints on achieving the Activities' results are: "We cannot plant because of forest fires and lack of water"; and "We need regular production to sell to retailers, middlemen, and businesses."
- Activity Design:** The Activity design problems the KIs mentioned encompass monitoring and evaluation (M&E), training courses, the capabilities of the Activities' implementers, and the time period for which the Activities' were designed. Eighteen comments were made related to design problems, six from beneficiaries, six from partners, four from USAID, and two from knowledgeable stakeholders. About the Activities' MELP, one KI noted, "It's hard to quantify the number of hectares protected by the number of hectares patrolled." Many KIs commented that the Activities' time period is too short to permit much progress toward its outcomes and objectives; for example, "We likely need more time than 1 year"; "The project period is short, and we try to implement a lot. We need at least 5 years."
- Activity Administration:** Problems of administration by the implementers within KSCP and WSSP concern procurement, the design and implementation of training courses, and responses to implementation needs. KIs made 15 comments about this category of impediment to the Activities' progress. One KI said that delays occurred in recruiting staff and the consulting firm for spatial planning. A Bunong beneficiary KI said she understood little of a training course she attended. A forest ranger said that it takes a long time to go through the procedures to repair his motorcycle.

The Activities' M&E systems are not always providing the high-quality, timely data that adaptive management of a landscape Activity requires. USAID ADS 201 says excellent MELPs are necessary for effective adaptive management.¹⁴ Reed et al. emphasize how necessary effective monitoring, evaluation, and learning is for landscape approach projects to work, saying,

“To overcome uncertainty in effectiveness and capture the breadth of landscape approaches, we need to move beyond a project mentality focused on outcomes and develop evaluation methods that recognize landscape approaches as long-term endeavors that demand increased attention to complex processes.”¹⁵

KSCP's MELP says that KSCP “will be managed using an adaptive, results-based model that makes extensive consideration and analysis of all Activity results, outputs, and outcomes” and will obtain and use data and identify trends concerning the number of partners, activities, and beneficiaries; progress toward Activity's quarterly and annual targets; and qualitative data indicative of successes and impacts, and that analysis of these data will “permit incisive, informed, and timely conclusions about the Activity's effectiveness.”

WSSP's MELP says that, every quarter, WSSP will identify lessons learned from the findings of the monitoring and performance assessment process; conduct data quality assurance based on the five dimensions of data quality (Validity, Integrity, Precision, Reliability, and Timeliness); conduct regular evaluations of project data coming in from the field (this includes document M&E issues, accomplishments, and lessons learned); evaluate the project using measurable categories including the amount of progress being made toward the project's targets, and qualitative and quantitative data indicative of project successes and impacts; and analyze data to allow for incisive, informed, and timely conclusions about the Activity's effectiveness.

The ET did not find the abundance and detail of quantitative and qualitative data that these two MELPs suggest would be made available for the Activity evaluation. For example, the only documentary data it received were periodic progress reports. KIs mentioned nothing about qualitative reports or analyses with incisive, informed, and timely conclusions about effectiveness. The progress reports do not, for example, provide cumulative data for most of the Activities' PIs, which makes it difficult to evaluate the overall progress, rather than just the yearly progress, of their activities. Additionally, some PIs are not consistent between the output and outcome and the outcome and objective results levels. For example, KSCP has no clear outcome level PI that would derive from the KSCP output level PI 2.b., “number of laws, policies, or regulations that address biodiversity conservation and/or other environmental themes officially proposed, adopted, or implemented,” which suggests gaps in the Activity theory of change (TOC). Some of the PIs track data that is less relevant to the results than other seemingly similarly viable indicators. For example, a PI tracks an increase in beneficiaries' gross income. Still, no PI measures beneficiaries' net profit, which is much more significant to beneficiaries and much more critical to assessing livelihood activities' viability. Other PIs measure progress toward a large, ambitious objective with one, perhaps ineffectual output indicator. WSSP, for example, has achieved its PI of improved management of 260,000 hectares of forest solely because it financed forest patrols. However, other PIs indicate that significant wildlife snaring continues in the patrolled forest. Finally, the MELPs do not assess the sustainability of the Activities' results at the outcome and objective levels. Although the Activities

¹⁴ USAID. Discussion Note: Adaptive Management, https://usaidlearninglab.org/sites/default/files/resource/files/dn_-_adaptive_management.pdf. Accessed December 14, 2020.

¹⁵ Reed, James, Amy Ickowitz, Colas Chervier, Houria Djoudi, Kaala B Moombe, Mirjam Ros-Tonen, Malaika Yanou, Elizabeth L Yuliani, and Terry Sunderland. 2020. Integrated Landscape Approaches in the Tropics. A Brief Stock-Take, in J. Reed, M. Ros-Tonen, and T. Sunderland, *Operationalizing Integrated Landscape Approaches in the Tropics*. Bogor, Indonesia: CIFOR.

may improve forest management during their periods of implementation through forest patrols, the MELPs provide no measure of whether those in control will continue after the Activities' end.

EQ 2: DOES THE LIVELIHOOD TRAINING AND TECHNICAL SUPPORT TO THE ACTIVITIES' BENEFICIARIES MEET THEIR NEEDS AND PRIORITIES?

a) How has it impacted their household economy?

The Activities intend to impact household economies by providing alternative economic opportunities to their beneficiaries' traditional livelihood Activities. The Activities' livelihood training and technical support have been provided for small-scale agriculture, NTFP, and, for KSCP, also ecotourism. Table 5 summarizes the actions the WSSP's and KSCP's September 30, 2020 Progress Reports discuss, which were intended to improve their beneficiaries' household economies.

Table 5: WSSP and KSCP Results and Activities to Impact Beneficiaries' Household Economies According to Activities' September 30, 2020, Progress Reports

WSSP
Result 3: Increased economic opportunities for target farming households in PPWS and SWS
1) Revenue from sale of wild honey
2) Help Mondulkiri Wild Bee Conservation Association (MWBCA) to attain PGI certificate
3) Increase MWBCA capacity for internal control
4) Connect Mondulkiri Forest Venture (MFV) to honey wholesalers
5) Establish vegetable and rice demonstration fields
6) Identify traders to buy vegetables from LTFH farmers
7) Increase technical capacity-building of LTFH farmers
KSCP
Activity 2.2 Work toward the sustainable financing of KSWs through sale of REDD+ credits
Activity 2.3 Increase economic benefits from sustainable extraction of NTFPs and ecotourism
2.3.2 Identify markets for bamboo and link communities to buyers (ongoing)
2.3.3 Build capacity to target beneficiaries on bamboo cultivation and harvesting
2.3.4 Support habituation program, ecology, and behavior to improve touristic experience at Jahoo Gibbon Camp
2.3.5 Provide hospitality training to communities in KSWs (ongoing)
2.3.6 Improve marketing and communication for ecotourism
Activity 2.4 Develop and promote locally produced sustainable agricultural products
2.4.1 Produce compliance database and establish Village Marketing Network (VMN)
2.4.2 Build capacity in crop producer groups in target villages to grow crops according to conservation regulations
2.4.3 Link agriculture products to market

Sources¹⁶

Lack of data precludes a quantitative assessment of the impacts of livelihood training and technical support on beneficiaries' household economies. The Activities' have not been collecting systematic data on household economic indicators for beneficiaries, which would be necessary to track changes in household income or well-being income (or of the status of men versus women) over time. Moreover, given the natural year-to-year variability of production, costs, and prices, the Activities' 3-year implementation period is too short of producing reliable data on the likely permanent impacts on the Activities' beneficiaries' household economies. It is beyond the scope of the evaluation to conduct large-scale systematic quantitative data analysis on income, though we present results from our qualitative data collection below.

Qualitative data suggest that the Activities' livelihood training and technical support have impacted their beneficiaries' household economies. The following paragraphs present

¹⁶ WSSP September 30, 2020, Progress Report; KSCP September 30, 2020, Progress Report.

qualitative evidence for the impact of the Activities' livelihood training and technical support components on their beneficiaries' household economies in each of the five targeted areas.

KSCP

- **Ecotourism:** KSCP documents assert that ecotourism is a promising way to increase household income. However, it appears to base that assertion on only one ecotourism experience, the Jahoo Gibbon Camp in Andoung Kraloeng, which was started by the USAID/Cambodia-financed Supporting Forests and Biodiversity (SFB) project. KSCP has only continued to subsidize it on a small scale, with training for its staff. According to KIs associated with the camp, this enterprise was receiving a net revenue of about \$19,000 per year before COVID-19 deterred tourist visits. It is also important to note that some portion of the revenue was directed back into conservation efforts. The ET did not have access to financial data from the camp's operation to verify reported figures and assess its sustainability without subsidies. Nonetheless, the Jahoo Gibbon Camp experience suggests that small-scale ecotourism enterprises might positively impact some household economies in certain communities with particularly attractive natural features, such as waterfalls, or with opportunities to view charismatic wildlife. The available financial data about the Jahoo Gibbon Camp do not clarify how often the Jahoo Gibbon camp experience can be replicated by private enterprises, without subsidies, and with what profitability. Documentary data indicates that ecotourism is likely to be a profitable business in a few accessible sites that are highly attractive for their natural features or abundance of easily viewed, charismatic wildlife, such as the Bou Sra Waterfall, Doh Kromom Mount, the Sea Forest, Sen Monorom Waterfall, Romnea Waterfall, Chrey Thom Waterfall, Pine Tree Plantation, and Pu Tang Village.¹⁷ A report by professors at the Royal University of Phnom Penh indicates that such ecotourism enterprises would have to provide employment for local people, invest in adequate facilities, be well-administered, and have unique attractions able to attract sufficient numbers of tourists to make the enterprise profitable.¹⁸ The COVID-19 pandemic indicates how factors in which they have no control can make ecotourism enterprises risky investments.
- **IBIS Rice:** KSCP has attempted to replicate its success in another part of Cambodia by assisting small-scale farmers to grow and market IBIS organic rice.¹⁹ Beneficiary KIs indicated that KSCP did not assess the growing conditions in its beneficiaries' land for IBIS rice.²⁰ Therefore, it is uncertain that the soils and weather conditions on the Activities' beneficiaries' farms will make such yields attainable. KI data and the KSCP September 30, 2020, Progress Report indicate that so far, the beneficiaries' yields during a growing season, with average rainfall, have been between one and two tons/hectare. However, there was a drought during the first year, and the yield was only half a ton/hectare. KI data indicate that KSCP's rice training has not been effective in changing its beneficiaries' culture of "passive" rice cultivation. However, it was also noted that changing traditional agricultural practices may require significant time investments. For example, one KI commented that she had understood only about half of the rice cultivation training she had received. Site observations confirmed that there appear to be opportunities for increasing yield through improving practices, such as high seeding rates (about 100 kilograms of rice seed per hectare), high

¹⁷ Ngin, Sothun Nop, and Rido Thath. 2016. Indigenous Tourism Strategic Plan for the Northeast of Cambodia: Monduliri Province, Technical Report. <https://www.researchgate.net/publication/318768765>

¹⁸ Ibid.

¹⁹ IBIS rice refers to a particular type of rice that is certified as organically grown and "wildlife-friendly" by the IBIS Rice organization started by WCS.

²⁰ While multiple knowledgeable stakeholders commented that farmers in other parts of Cambodia had achieved yields of 3 to 5 tons/ha, Activity implementers report an average yield of 1.8 tons/ha in other locations.

planting density, and no weeding. Moreover, they lack the irrigation infrastructure required to optimize rice yields, especially during the July to September mini-dry season, or to produce rice in the main dry season.

- **Bamboo:** KSCP has provided livelihood training and technical support for bamboo production and processing to its beneficiaries in one village, Pu Char in Sre Preah Commune. KIs reported that so far, the Pu Char bamboo activity has made sales of US\$800. The Pu Char KIs noted that the high transportation costs probably make the production of unprocessed bamboo unprofitable. Consequently, KSCP is now assisting its beneficiaries to process bamboo into higher value items, such as cups, teapots, and containers.
- **Small-Scale Infrastructure:** The USAID/Cambodia-financed SFB and the current KSCP Activity has sold about 587,507 of carbon credits to international markets for the values of US\$3,881,352, of which US\$870,648 was generated during the KSCP implementation from 2019 to 2020. KSCP has used part of the income from these sales to finance infrastructure construction and improvements, including potable water systems, sewage systems and latrines, roads, education, and health facilities. Numerous beneficiary KIs commented, however, that such infrastructure can significantly improve their livelihoods. Potable water systems, for example, have relieved women from the time-consuming chore of carrying water to their houses, freeing them for more productive activities. Likewise, irrigation systems increase the productivity and quality of agricultural crops and reduce the risk of drought. Numerous beneficiary KIs commented, however, that such infrastructure can significantly improve their livelihoods. Potable water systems, for example, have relieved women from the time-consuming chore of carrying water to their houses, freeing them for more productive activities. Likewise, irrigation systems increase the productivity and quality of agricultural crops and reduce the risk of drought.

WSSP

- **Small-Scale Agriculture:** The WSSP September 30, 2020, Progress Report says that WSSP actions to promote small-scale agriculture and wild honey collection have increased household incomes of 165 members of its six target Community Protected Areas (CPA). It also says that its 120 Land Titled Farmer Households (LTFHs) have received training on agricultural techniques that comply with conservation compatible agriculture practices (CCAP) guidelines. The report does not, however, identify a direct link between this training and increased household incomes. It only says that 19 out of 120 LTFH farmers that set up vegetable demonstration farms have earned a total revenue of US\$7,355 by selling vegetables.²¹ One KI commented that Bunong do not grow vegetables, although they are the Activities' principal beneficiaries. However, the ET could not corroborate this KI's statement. Several KIs expressed doubts that small-scale agricultural activities, such as vegetable growing, could significantly increase the beneficiaries' income. These examples indicate that WSSP does not appear to have conducted the data collection or analysis required to precisely track productivity associated with its small-scale agricultural activities.
- **Wild Honey:** WSSP has continued support to beneficiaries for the improved collection and marketing of wild honey that a previous project started. So far, WSSP has been unable to assist the Bee Association to market the honey its members have collected over the last 2 years. KIs and documentary data indicate that there are two problems with marketing this honey. First, potential buyers worry that the honey may be adulterated. Second, WSSP has not obtained an official government-approved geographical patent from the Bee Association

²¹ WCS (Wildlife Conservation Society). 2020. Annual Report of Year 2: October 1, 2019–September 30, 2020.

for its honey. Consequently, KII data indicates that a number of honey producers have stopped attending the Bee Association meetings. However, a KI from the Cambodia Institute for Rural Development (CIRD), the organization assisting the Bee Association to find markets for its honey, noted that once the Bee Association obtains the patent, it will be able to market all its accumulated honey. KIs indicated that wild bees produce less honey in low rainfall areas, and in the areas where the trees are very tall, it is difficult and dangerous to collect the honey. The Activities have not made the requisite financial or technical analyses, but the ET speculates that these factors may make honey production less profitable or unprofitable in some areas. KII data indicate that women are more involved in the packaging, marketing, and selling of honey than their husbands or other men, and so are often the recipients of the profit. Talking about wild honey production, a beneficiary KI said, “women have a strong voice, have time to commit to activities and meetings, and have good market networks.”

The Activities’ livelihood training and technical support are still relatively small-scale.

Table 6’s data summarizes key results to-date on alternative livelihood Activities. None of the Activities, except the Jahoo Gibbon Camp in Andoung Kraloeng, have been operating for more than 3 years, so some are making progress in a relatively short time period. However, for context, it is important to note that according to the KSCP and WSSP grant proposals, about 31,000 people live in or near the KSWs, PPWS, and SWS wildlife sanctuaries. From this perspective, the progress remains relatively small compared with the total population in and near the wildlife sanctuaries. Furthermore, the data do not provide a sound basis for evaluating their likelihood of continuing and expanding after the Activities’ end in 2021, so that they would affect more people’s household incomes.

Table 6: Data Regarding the Scale of WSSP and KSCP Activities April to September 2020

Indicator	Period	Value
WSSP		
# People trained in honey commercializing	April–August 2020	428
# Members of honey enterprise groups	April–August 2020	146
# Participant in Mondulkiri Wild Bee Conservation Association (MWBCA)	April–August 2020	41
Value of honey sold	2020 harvesting season	US\$ 46,268
Value of vegetables sold	April–August 2020	US\$7,355
# Vegetable farmers	April–August 2020	16
# Rice demonstration plots	Since WSSP start	14
# Vegetable demonstration plots	April–August 2020	19
KSCP		
# People with improved economic benefits	Through September 30, 2020	2,676
# People trained	Through September 30, 2020	1,217
# Participants in market dialogue workshops		35
Gross income from ecotourism (US\$)	October 1, 2019–September 2020	\$17,619
# People trained in ecotourism		2
# Farmers growing IBIS rice		78
Value of bamboo products sold		\$824.50
# Members of CPAs		146

Source²²

The Activities’ livelihood activities appear to have benefited the Bunong indigenous people. Most of the 6,000 or so people who live within the boundaries of the three wildlife sanctuaries are indigenous Bunong people. The Activities’ progress reports imply that the Bunong are the Activities’ principal beneficiaries. The Bunong’s traditional religious beliefs and culture are strongly associated with the forest, so they appear to be natural advocates for forest conservation.

²² KSCP and WSSP September 30, 2020, Progress Reports.

KII data suggests, however, the language differences between the Khmer-speaking people who mostly run the Activities, and the Bunong may have made it difficult for the Bunong to participate fully in the training and technical assistance provided to them by the Activities. One Bunong KI said, for example, that she had understood only about half of a training course that she had attended, although no other KI expressed this problem. The Activities' progress reports do not track the participation of the Bunong in their Activities. They do say, however, that most inhabitants of the wildlife sanctuaries are Bunong. The Activities' land titling, livelihoods, training, and forest patrol Activities may, therefore, mostly benefit Bunong, but the Activities do not provide data to confirm. In particular, the Cambodia Rural Development Team (CRDT) has achieved land-titling registration for Koh Nhaek farmers who are Bunong. KIIs with these farmers indicated that secure land tenure rights had improved their household economies. Indigenous KIs were enthused about obtaining Indigenous Communal Land Titles (ICT). KIs in the Boursa commune thought that the establishment of ICTs might permit Bunong to operate ecotourism enterprises and improve their household incomes.

The costs and benefits to household economies of shifting agriculture compared to permanent agriculture remain uncertain. Shifting cultivation is the traditional agricultural practice for the Bunong people, who are the principal inhabitants of the SWS, PPWS, and KSWS.²³ Shifting agriculture in tropical regions permits forest growth to renew soil productivity and decrease crops' pests and diseases. Bunong KIs said that they now practice shifting agriculture on a 7-year rotation, which, according to the ET's livelihood's expert, is probably not long enough for the soil to regain its productive capacity. The Bunong KIs commented that they support ICTs because they are permitted to practice shifting agriculture and suggests that they find shifting agriculture to be a reasonable practice to meet their priorities and needs. Although they promote permanent agriculture as an alternative to shifting agriculture, the Activities do not appear to have analyzed the costs and benefits to the Bunongs' household economies of this change in their agricultural practices.

Changing community forests (CFs) to CPAs has secured small-scale Bunong livelihood assets, yet these assets are still exploited by outsiders. The SFB seems to have considered forest resources as an asset for the wildlife sanctuaries' principal inhabitants, the Bunong indigenous peoples, and promoted forest management in CFs. The WCS and WWF proposal documents say that they will continue SFB's Activities. Activity documents, however, indicate WSSP or KSCP do not promote large-scale forest management for timber. Instead, they promote CPAs, which permit only the use of NTFPs and a small amount of wood material for construction of homes. Documentary data do not fully explain the reasons for the conversion of CFs to CPAs. Several KIs, however, suggested that the CFs within the wildlife sanctuaries became CPAs because they were transferred from the Ministry of Agriculture, Forestry, and Fisheries to the Ministry of Environment.²⁴ Documentary and KII data indicate that the government does not effectively protect these forests from illegal logging from financially and politically powerful individuals. The ET could not determine the extent to which local people participate in and benefit financially from illegal logging. However, it appears that the change from CFs to CPAs has legally deprived the Bunong from directly benefiting financially from regenerating, growing, and selling legally a principal forest asset—high-quality timber, while the government is unable to control the illegal cutting and selling of existing high-quality timber.

²³ The Mondulkiri Project. The Bunong of Mondulkiri. <https://www.mondulkiriproject.org/blog/bunong/#:~:text=.> Accessed December 15, 2020.

The%20Bunong%20are%20subsistence%20farmers%20living%20in%20small,shifting%20cultivation%20as%20their%20main%20form%20of%20agriculture.%E2%80%A8

²⁴ CPAs are areas owned by communes where the collection of NTFP is permitted in sustainable use zones; CPAs also allow minimal timber harvesting in extraction zones for the construction of homes, and conservation zones of CPAs serve biodiversity conservation. CFs are owned by communes, and production of wood as well as NTFPs is possible.

The Activities have given special attention to providing opportunities to women. The Activities' progress reports indicate that both WSSP and KSCP have fully recognized that an important component of improving household economies is improving the capabilities of women.²⁵ Men and women have received approximately equal training. However, numerous KIs noted that in some livelihood activities, including honey collection, rice cultivation, vegetable growing, and marketing, men and women may be involved differently. For example, KIs said that women were more likely to process but less likely to collect. Several KIs said that women tend to be more involved in growing rice and cultivated nearby homes. By contrast, forest patrols have turned out to be a more attractive job for men than for women. One KI did note, "When we train rangers, they are all rangers, whether males or females, dangers are the same in the field." But many KIs said that the difficulties and dangers of forest patrols (e.g., life-threatening situations, nights away from home, lack of suitable equipment and running water, separate sleeping quarters for women) discouraged women from continuing as forest rangers. Several KIs said men participate more in patrol and heavy work, while women are good at problem solving and conflict resolution, especially with ideas about how to handle land encroachers.

b) How has it impacted forests and biodiversity conservation?

Quantitative analyses of the impact of the Activities' livelihood training and technical support on forests and biodiversity is not possible. KSCP has provided this support through REDD+, the Village Monitoring Network (VMN), and ecotourism. WSSP has provided this support through CCAP; (4) environmental awareness; (6) NTFP; and (7) ecotourism. Their strategy is to protect forests and biodiversity by encouraging the beneficiaries to adopt these alternative livelihoods rather than exploiting forest resources. The Activities have not collected systematic quantitative data to facilitate analysis of the impacts of livelihood training on forest and biodiversity conservation. While it is beyond the scope of this evaluation to collect large-scale quantitative data to support this analysis, we present evidence from qualitative data and documents below, divided by those KSCP has implemented, those WSSP has implemented, and those both projects have implemented.

The Activities' livelihood training and technical support related to forest and biodiversity conservation have been for the following activities:

KSCP

- **Ecotourism:** The benefits and risks of ecotourism to conservation partly depend on how profitable ecotourism is, as profitable enterprises provide incentives for conservation. A recent study of tourism based on indigenous cultures in Monduliri Province concluded that what the study calls "indigenous tourism, or tourism based on the cultures of indigenous people:

"appears to be a viable alternative, as a biodiversity conservation and self-determination strategy" but that "without proper planning, management, participation, and ownership of this initiative, indigenous ecotourism ... has often proved to be disastrous to indigenous communities, resulting in their displacement, conflict, and violence within the community, and disruptions of social and cultural practice."²⁶

²⁵ WCS. 2020. Annual Report of Year 2: October 1, 2019–September 30, 2020.

²⁶ Ngin, Sothun Nop, and Rido Thath. 2016. Indigenous Tourism Strategic Plan for the Northeast of Cambodia: Monduliri Province, Technical Report. <https://www.researchgate.net/publication/318768765>. Accessed November 2020.

The same study also notes that indigenous communities have often failed to implement successful tourism projects because of a combination of factors, including “isolation and a lack of financial resources, management skills, and infrastructure.”

- **REDD+:** KSCP technical support for the sale of REDD+ carbon credits has impacted biodiversity and forests in two ways. First, part of the REDD+ income finances improvements and operation of the beneficiaries’ infrastructure (e.g., roads, water systems, and school and health facilities). This infrastructure, in turn, contributes positively to the Activities’ beneficiary household economies. Improved household economies may reduce the Activities’ beneficiaries’ use of forest resources and protect forests and biodiversity. Second, the sale of REDD+ carbon credits require the Activities’ beneficiaries and the local, provincial, and national government to try to protect the forest and its biodiversity. A knowledgeable stakeholder KI noted that although the forest in the REDD+ program that KSCP is supporting is an exploited, degraded forest, its designation as a REDD+ forest has encouraged local, provincial, and national governments to enforce regulations against its exploitation more effectively than in other non-REDD+ forests.
- **VMN:** Through the VMN, KSCP has measured and mapped 316 hectares of land belonging to farmers who participate in its IBIS rice program. These data enable the IBIS farmers to monitor compliance with the IBIS rice regulations about not expanding agricultural land at the expense of forest land and WCS to calculate annual performance scores for each of the 20 participating villages. Villages with higher scores will receive more REDD+ funds. REDD+ funds thus serve as a financial incentive to farmers to not expand their agricultural fields into forest areas.
- **IBIS Rice:** Beneficiary KIs explained that to participate in the IBIS rice program, they must sign a contract requiring them to adhere to forest and biodiversity protection standards. Partner KIs and the KSCP September 30, 2020, Semi-Annual Report described how control committees enforce adherence to these standards. One Beneficiary KI commented that some IBIS farmers had violated their contract by converting forest to agricultural land within a wildlife sanctuary. It was not possible to determine the extent to which such violations of the IBIS rice agreements are occurring. A study of WCS’s IBIS rice project in another area of Cambodia demonstrated that the income increases it produced reduced farmers’ impact on nearby forests.²⁷ If expansion into protected areas is being recognized as “wrong,” it indicates that beneficiaries’ environmental awareness has increased. However, one government KI expressed his doubt that rice farming can compete with cutting timber as a source of income: “When we encourage farmers to stop doing illegal activity, we can compensate with a premium, but not as much as selling timber. A person might receive \$100 per year for rice but can make \$100 a day cutting and selling timber.”

WSSP

- **CCAP:** WSSP has made a subgrant to the CRDT to promote CCAP. Beneficiary KIs explained that CRDT has taught them about biodiversity conservation and ecosystem health and how to limit their use of toxic pesticides and herbicides, combat illegal logging and wildlife snaring, and avoid expanding their agricultural crops at the expense of the natural forest. The KIs also said that the CCAP agricultural practices give them less time to collect NTFPs and that if they fail to adhere to the CCAP guidelines, they risk losing their access to

²⁷ Clements, T., M. Neang, E.J. Milner-Gulland, and H. Travers. 2020. Measuring Impacts of Conservation Interventions on Human Well-Being and the Environment, in Northern Cambodia, 3ie Impact Evaluation Report 106. New Delhi: International Initiative for Impact Evaluation (3ie). Available at <https://doi.org/10.23846/DPW11E106>.

a farmers' savings group and the markets for their agricultural produce. Two members of the Koh Nhaek Internal Control Committee opined that CCAP influence also extends to non-CCAP farmers who realize that by adopting CCAP, they could increase financial gains. USAID and partner KIs commented that the farmers who have adopted CCAP have increasingly collaborated with the Provincial Department of Environment (PDoE) in monitoring the expansion of smallholdings into the wildlife sanctuaries, and the beneficiary KIs, who had received CCAP training, agreed.

- **Wild Honey:** KIs expressed their opinion that honey collection has already, and bamboo production could in the future stimulate enthusiasm for forest conservation. However, wild honey has so far produced marginal income, so their link to forest conservation may be tenuous.

KSCP and WSSP

- **Bamboo:** Bamboo also has produced marginal improvements in income, so its production and/or processing may only tenuously increase forest protection.
- **Environmental Awareness:** WSSP and KSCP's technical support includes "environmental awareness" programs, some of which are intended to increase their beneficiaries' understanding of environmental issues related to NRM and thereby change their management practices for these resources. Other programs are intended to elicit support for the protection of natural resources among the Cambodian public. WSSP has aimed its environmental awareness program at beneficiaries in LTFHs and CPAs in PPWS and SWS. It consists of an in-person training, mobile loudspeakers, telephone messages, and films. KSCP is implementing a program to promote awareness among the general Cambodian public. It includes radio programs, websites, Facebook pages, videos, and meetings to explain REDD+. The September 30, 2020, WSSP Annual Report and KSCP progress reports do not contain data on the effectiveness of these programs, but according to its September 30, 2020, Progress Report, in 2021, WSSP intends to make a survey to evaluate its reach. No KIs mentioned that they had been reached by the environmental awareness program, although, many KIs did say that programs to raise environmental awareness are necessary to persuade people to protect forests and biodiversity.

The Activities' support for land titling may have increased protection for forests. KIs in the Koh Nhaek and Boursa communes commented that CRDT's assistance for establishing a legally recognized ICT has given commune members more confidence that they will not lose their land to illegal encroachment or government confiscation. They, therefore, have more incentive to protect and manage their communal forests. These KIs, however, also expressed dismay at how casually provincial authorities tend to ignore the rights that the establishment of an ICT legally convey to the Bunong. One, for example, said, "The authority from the district level up to the provincial level do not really intervene in cases where the Khmer [encroach on our land]." Another said, "Sometimes local police are reluctant to help the community when they have found illegal activities."

The Activities' livelihood training and technical support have occurred at small geographic and time scales. Both WSSP and KSCP are scheduled for approximately 3 years of implementation, representing a short time scale, especially compared to their ambitious outputs, outcome, and results targets. Moreover, the KSWs covers 292,690 hectares, the PPWS 222,500 hectares, and the SWS 372,971 hectares, so the total area of the three wildlife sanctuaries the Activities are intended to protect is 888,161 hectares.²⁸ About 6,000 people live within their

²⁸ WWF Cambodia, N.D.

boundaries, and another 25,000 or outside but near its boundaries.²⁹ Table 7 indicates that WSSP provides support to only 131 LTFHs, that KSCP has assisted 13 villages, has established 33 demonstration fields and 316 hectares of IBIS rice in three communities, and assists five CPAs. Accordingly, the scale of achievement thus far is modest relative to the full targeted geography and population scale.

Table 7: Scale of WSSP and KSCP Activities

WSSP	WSSP
# of LTFHs assisted	131
KSCP	
# Villages assisted	13
# Demonstration fields established	33
# Hectares IBIS rice	316.25
# Communities growing IBIS rice	3
# of CPAs	5

Source³⁰

The Activities’ livelihood training and technical support does not affect the people who drive large-scale forest and biodiversity degradation. As described above, the Activities are mainly attempting to provide alternative livelihoods to the Bunong people living within the wildlife sanctuaries and to help them fend off encroachment by migrants from other parts of Cambodia. Yet documentary and KII data indicate that forest and biodiversity degradation is being driven, in large part, by people involved in supplying markets in Cambodia, Vietnam, and China for Monduliri’s timber and wildlife.³¹ Activity documentary and KII data make clear that the Activities are providing training, equipment, and financial support to assist the Cambodian government to enforce these laws. Yet numerous KIs and documents confirm that some Cambodian government officials are abetting the illegal supply of Monduliri’s timber and wildlife to these markets.³² Some beneficiary KIs think that the Activities’ livelihood training and technical support have caused some wildlife poachers to turn to legal agricultural activities. However, nearly all the KIs concurred that the Activities’ livelihood training and technical support for its beneficiaries and forest patrols are unlikely to slow, much less stop, the supply of timber and wildlife to their markets.

The Activities are not supplying adequate support for forest rangers to control illegal logging and poaching. Partner KII and site observation data indicate that community forest rangers are enthusiastic, active, and committed. However, documentary, KIIs, and observational data clearly indicate that the forest rangers lack the means to control illegal logging and poaching in the wildlife sanctuaries. KIs said that the number of forest rangers is far less than the number required to patrol effectively over 800,000 Ha of the wildlife sanctuaries. KII data indicate that the forest rangers are paid less than US\$200 per month (“not enough to buy gasoline for my motorcycle” according to one KI), although the number and salaries of forest rangers are not under the direct control of the Activities. Slow administrative procedures hinder their ability to control illegal activities. They lack basic equipment and materials, such as up-to-date communication devices or rain gear and boots. Poachers and illegal loggers, by contrast, have up-to-date communication equipment and can operate quickly and flexibly. Moreover, they may be dangerous, as indicated by a KI comment that forest rangers may avoid patrols at night, when much illegal poaching and timber extraction occurs, for fear “of having guns pointed in their faces” and, according to the same KI, that

²⁹ Yeang, N.D. Keo Seima Wildlife Sanctuary REDD+ Project. Available at <https://www.researchgate.net/project/Keo-Seima-Wildlife-Sanctuary-REDD-Project>. Accessed December 7, 2020.

³⁰ KSCP and WSSP September 30, 2020, Progress Reports.

³¹ Paley, R. 2015. Managing Protected Areas in Cambodia: The Challenge for Conservation Bureaucracies in a Hostile Governance Environment. Conservation and Development in Cambodia. Routledge: 159–177.

³² Mahanty, S. 2018. Shadow Economies and the State: A Comparison of Cassava and Timber Networks on the Cambodia–Vietnam Frontier. *Journal of Contemporary Asia*.

eight forest rangers have been killed or injured in the EPL in the last decade.³³ KIs also concurred that government corruption is preventing control of illegal logging and poaching. For example, one KI said that a high provincial authority had prevented a thorough investigation of the 2018 murder of three forest rangers.³⁴ KIs also commented that illegal loggers and poachers might be successfully prosecuted only by well-connected lawyers who can successfully challenge provincial vested interests. Indeed, a KI went so far as to comment that the Activities' law enforcement efforts are a "masquerade," serving mostly to obfuscate how ineffective conservation law enforcement is in Monduliri Province. In sum, KI and documentary data indicate that the scale of the Activities' support for the enforcement of conservation laws far from matches the scale of the poaching and illegal logging occurring in Monduliri Province.

EQ 3: HOW DOES THE ISSUANCE OF MINING LICENSES AND OTHER ECONOMIC DEVELOPMENT ACTIVITIES IN THE EPL IMPACT THE ACTIVITIES' OBJECTIVES?

c) What are the perspectives of the Activities' stakeholders on the issuance of the mining licenses and other economic development in the EPL?

Four of the six categories of KIs perceive the issuance of mining licenses³⁵ as likely to negatively impact the Activities' objectives. Licenses for mining exploration or production are issued only to formal, legally established companies, not to informal, nonlegalized artisanal miners. KI data indicates that the only two formal mining operations within the three wildlife sanctuaries are a Chinese-owned mine within SWS and the Renaissance gold mine located in the PPWS. No detailed information could be obtained about the Chinese-owned mine.

According to the operating company, the Renaissance mine is within the multiple-use zone of the PPWS. It has been in the exploratory stage for 15 years and will start its 8 years of operation in early 2021, producing 100,000 ounces of gold per year from a pit 500 meters on each side and 200 meters deep. It will employ 300 people and make a gross income of about \$12 million a year at current gold prices. It has received an environmental license from the Ministry of Environment and has established three environmental funds.

Of the 34 KIs who expressed an opinion about mining, only four KIs expressed a positive perception of mining, while 18 expressed a negative perception and 12 were neutral. The KIs' negative perceptions derived from the following categories of concerns:

- Negative biodiversity/forest impact:** Six of the KIs expressed concern that formal mining would cause impacts on biodiversity and forests, especially if mines are located in the biodiversity-rich core zones of the wildlife sanctuaries. For example, one KI commented, "Mining takes away everything above the ground, and the place remains a big hole, with bad water, no forests, no trees, no wildlife." Another KI said, "There would be forest loss; a key concern is that we would lose the entire population of silver langur within the boundaries of

³³ The data provided by the KI may be inaccurate as documentary sources report that two rather than eight rangers and one WCS staff have been killed in the last decade; see the following web sites:

<https://www.khmertimeskh.com/649710/officer-imprisoned-for-life-over-cold-blooded-murder-of-forest-ranger/>;

<https://ens-newswire.com/2018/02/01/cambodian-conservationists-killed-fighting-illegal-loggers/>;

<https://www.khmertimeskh.com/108637/killings-fail-to-deter-wcs/>; <https://www.phnompenhpost.com/national/breaking-three-killed-while-forestry-patrol-monduliri>;

<https://www.khmertimeskh.com/50642141/court-tries-four-over-murders-of-forest-conservationists/>.

³⁴ WCS Newsroom. 2018. Statement From WCS on the Killing of Three Conservation Heroes in Cambodia [online]. Available at <https://newsroom.wcs.org/News-Releases/articleType/ArticleView/articleId/10973/Statement-from-WCS-on-the-Killing-of-Three-Conservation-Heroes-in-Cambodia.aspx>. Accessed November 25, 2020.

³⁵ One KI noted that the only active mining activities in the EPL lie outside of the KSCP intervention areas.

the Renaissance gold mine.” The ET, however, could not confirm that this would actually happen.

- **License Approval Process:** Five of the KIs expressed concern about how formal mining companies obtain licenses and the quality of the environmental impact statements they prepared. One KI, for example, opined that Renaissance did “not pay attention to civil society input or comments on environmental plans” and “they could not answer my questions about water quality or flooding.” Another said he thought Renaissance’s Australian parent company might have created a Cambodian company because “it could help them get around Australian law,” and there might have been “foul play” involving the Cambodian military in its construction of the access road to the mine site. Another concern is that the wildlife sanctuaries may have been rezoned so that mining could occur in what had been zoned as core zones where no mining is legal.
- **Enforcement:** Five KIs expressed concern that the measures required by an environmental impact study to avoid, mitigate, or compensate for a mine’s negative environmental impacts would not be implemented or enforced. For example, one KI asked, “Do you trust the government system to ensure enforcement?” and another said, “There is the process of Environmental Impact Assessment (EIA), but it is a bureaucratic exercise. There would be forest loss.”
- **Employment & Benefits:** Only two KIs commented on potential negative social aspects of issuing mining licenses. One said that he thought a mine would not offer many jobs. I don’t think there’s been much employment from this.” Another KI questioned the use of funds a mining company might provide to finance environmental remediation or compensation: “Would the funds be used well to protect the site?”

The KIs who were neutral about mining operations had no knowledge about mining in general or specifically within the wildlife sanctuaries.

The four KIs who expressed positive perceptions about formal mining in the wildlife sanctuaries appeared to base their perception on:

- **Income:** Three KIs referred to the income from gold mining as a possible benefit. One noted that the Renaissance mine would produce 100,000 ounces of gold per year, which, at the December 2020 value of US\$1,776 per ounce, would be a gross income of US\$167,600,000. Two KIs noted that part of the revenue from mining might be used to finance part of the costs of the wildlife sanctuaries within which they are located. One said, “In Phnom Prich, the mining company is paying for protecting the species of Green Peafowl. We want to engage them. They could support general conservation.” The KI who represented the Renaissance mine said that Renaissance is financing three different funds for the Ministry of Environment and expressed interest in collaborating on conservation with WWF and WCS.
- **Technical Expertise and Capital:** Three KIs mentioned that a large, well-capitalized, experienced mining company, such as Renaissance, could introduce Cambodia to mining techniques that would cause much less negative environmental impact than those currently being practiced. The KI from the Renaissance mine, for example, pointed out that Renaissance has adhered to the environmental guidelines for mining operations of the International Finance Corporation and the World Bank. A government KI concurred, saying that the Renaissance mine “Can reduce environmental impact because they have a lot of global experience, thus they can minimize the environmental impact by, for example, digging an open pit and refilling it once its ore is exhausted.”

A majority of the KIs perceive large-scale agriculture as likely to negatively impact the Activities' objectives. Large-scale agriculture in the EPL, such as rubber tree plantations, occurs almost entirely within Economic Land Concessions (ELC),³⁶ many of them located in or near to the Keo Seima, Phnom Prich, and SWS. Of the 24 KIs who expressed an opinion about large-scale agriculture, 14 expressed a negative perception, 6 expressed a neutral perception, and 4 expressed a positive perception. The four KIs with positive perspectives came from the government, partner, knowledgeable stakeholder, and private enterprise KI categories. None of the beneficiary KIs had positive perspectives, but three had neutral, and six had negative perspectives about large-scale agriculture.

The KI's with negative perspectives on large-scale agriculture were concerned about the following:

- **Forest Degradation:** Documentary data indicates that timber cut illegally within the wildlife sanctuaries has sometimes been extracted through ELCs, thus "legalizing" illegal timber. None of the KIs, however, mentioned this as a way that ELCs are involved in degrading natural forest within the wildlife sanctuaries. One KI noted that a French agricultural company had permitted poaching in the forest that still remained on its ELC. Beneficiary KIs who live near small (200–300 ha) ELCs located between the Srepok and PPWS indicated that a pepper plantation used poles cut from trees in the adjoining wildlife sanctuary.
- **Forest Clearing:** Three KIs mentioned that if there are forests in ELCs, they are cleared off to permit agricultural crops. Two KIs noted that ELCs might sometimes expand into adjoining forest areas within the boundaries of the wildlife sanctuaries. One of them said, "Although ELCs are not inside protected areas, they are very close and 'bleed' into protected areas. Another noted that forest clearing might continue because "Now there is a trend towards large-scale commercial crops such as avocado, and black pepper," and one more opined that "Cashew is also a major contributor to deforestation." Two KIs noted another aspect of ELC "leakage" causing deforestation: ELCs bring in workers from outside Mondulkiri Province, who then settle and encroach on and clear forest to create their own farms.
- **Contamination and Ecosystem Change:** Two of the KIs who commented on large-scale agriculture noted that the ELCs might cause negative environmental impacts both within and outside their own boundaries. One KI said, "large-scale agriculture, for example, banana plantations, use chemicals that threaten biodiversity." Another Beneficiary KI commented, "Before we could catch fish with our net, the Chinese pepper plantation has built a dam, and now the stream is drying up in March and April."
- **Corruption and Influence:** Two KIs expressed concern that ELCs have been granted through corrupt means and/or with the involvement of high-ranking authorities.

Two KIs who expressed positive perceptions about large-scale agriculture in the EPL emphasized its potential to foster economic growth.

- **Economic Growth:** Presumably, potential profits drive the "trend towards large-scale commercial crops such as avocado, black pepper" that one KI mentioned. One KI expressed a positive perspective on large-scale agriculture, saying, "We can consider how to link medium or small-scale farmers to the big company. For example, black pepper or avocado

³⁶ ELCs are areas of formerly publicly owned land in the EPL that were given to private people for large-scale agricultural investments, such as rubber plantations.

crops could be important for the area.” Another KI opined that large-scale agriculture could introduce more efficient and effective production techniques, thereby, presumably, contributing to competitive economic activity: “ELCs owned and operated by Vietnamese have introduced more technologically advanced production methods.”

The KIs generally perceived forestry as an illegal activity that does not contribute to the EPL’s economic development. Of the 14 KIs who expressed an opinion about forestry, 9 expressed negative perceptions, one was neutral, and four had positive perceptions of forestry. All four beneficiary and three partner KIs have a negative perspective on forestry.

The KIs with negative perspectives tended to associate forestry not with the profession of forestry but with illegal logging. Thus, typical of KI comments about forestry were: “Illegal activity including illegal logging still happens in Keo Seima”; “WWF is trying to address the transboundary issue of illegal timber crossing the Vietnam border”; “Outsiders come to commit forest crime, but maybe now they are not coming since there is no luxury timber left.”

The KIs with a positive perspective of forestry noted that it (1) provides timber that people need, especially for house construction; (2) provides a way to regulate timber cutting in contrast to trying, often futilely, to control it; and (3) helps to define communal and individual property rights over forest areas by defining property lines, demonstrating the use of the forest, and obtaining official government agreements for forest management.

Few of the KIs mentioned tourism as an economic development activity that would impact the Activities’ objectives. Only four of the KIs expressed an opinion about tourism, and three of them expressed positive perceptions, and one was neutral.

The KI who conveyed a negative perception of tourism referred only to a project that was financed by the WWF on the Srepok River, saying “it’s all empty and full of spiders and God knows what they’ll do with it. It looks to be South Africa themed. It’s very strange and a waste of time.”

The KIs who expressed a positive perspective on tourism emphasized its potential to create jobs and stimulate economic growth. For example, one KI said,

“Community-based ecotourism could be important and is in line with the government policy that considers that Cambodia is a destination for ecotourism. Looking back to the successful experience of ecotourism in Cambodia in some provinces, it has generated much income. This area has rich natural resources of wildlife to attract tourists.”

Another KI commented that “there is a growing demand for tourism” and noted that “tourism effects can be mitigated.”

Relatively few of the KIs mentioned the construction of infrastructure as an economic development activity that would impact the Activities’ objectives. Among the ten KIs that did mention infrastructure, there is a sharp contrast between the perspectives of USAID officials and partner KIs versus government and beneficiary KIs. The four KIs in the first two categories all expressed negative perspectives on infrastructure, biodiversity, and forests, whereas the six KIs in the last two categories all expressed positive perceptions of infrastructure. The KIs with negative perspectives noted the direct and indirect negative impacts that infrastructure can cause. For example, one KI commented, “Development infrastructure, such as dams, transmission lines, and energy projects are trumping conservation in the EPL.” Another KI said, “Roads are a big influence on reaching our objectives by widening roads, making access easier for people ... the military has built a road along the border [with Vietnam] and through the wildlife sanctuary.”

The KIs with positive perspectives on infrastructure emphasized the social and economic benefits of infrastructure. One KI, for example, said, “Personally, I want the road infrastructure—cycling for ecotourism so people can visit the forest; it’s great to have people sightseeing.” Another commented, “Before we had water supplies, women spent a lot of time to get water from a stream about two kilometers from their homes.”

Overall, of the 86 KIs who expressed an opinion about mining and other economic development in the EPL, 47 expressed a negative perspective, 18 were neutral, and 21 expressed positive perspectives. The KIs were not, however, a representative sample of the Activities’ stakeholders. The category of the KIs that probably best represents the Activities’ stakeholders is the beneficiary category since the Activities beneficiaries are mostly Bunong who live within or near to the wildlife sanctuaries. Of the 15 beneficiary KIs who expressed an opinion about mining and other economic development in the EPL, 10 expressed negative perspectives, and 5 expressed positive perspectives. One of the positive perspectives was expressed about mining, and the other four about infrastructure. However, these beneficiary KIs may have been expressing their positive perspective on small-scale infrastructures such as water systems and access roads to their villages, not about large-scale infrastructure such as dams.

d) What is the government’s commitment to address the issues?

Cambodia’s government is legally committed to addressing conservation issues in the EPL. Cambodia’s national constitution defines forests, land, and natural resources as state property. Article 59 requires the state “shall protect the environment and balance of abundant natural resources and establish a precise plan of management,” explicitly requiring these plans to be established for land, water, ecological systems, forests, and forest products, including wildlife. Articles 1 and 2 of the Land Law (2001) defines both trees and forest land—and therefore “forests”—as immovable property “for the purpose of guaranteeing the rights of ownership and other rights related to immovable property.” Laws and regulations across various sectors have relevance for timber resulting from land clearing and conversion, but no direct or detailed provisions. The Land Law regulates the establishment of ELCs for plantation development but does not address allocation of forest lands.³⁷ Cambodia has a Forestry Law (2002) that regulates timber concession operations, community forestry, user rights, and administrative arrangements, and a Protected Areas Law (2008) that regulates land use with wildlife sanctuaries.

Enforcement of Cambodia’s legal commitments to address conservation issues in the EPL tends to be weak. According to the USAID/Cambodia Foreign Assistance Act 118/119 Tropical Forest and Biodiversity Analysis, “despite formal protections, Cambodia continues to experience significant losses in forest cover and species.”³⁸ Forest concessions were suspended indefinitely because of governance and compliance issues.” The result has been that conversion timber harvesting, commonly known as “illegal logging” has been circumventing and even contradicting existing natural resource legislation.³⁹ Although the law on Protected Areas (2008) permits changes in land use within protected areas and includes a system for land use zoning systems, it does not regulate large-scale commercial agriculture within wildlife sanctuaries. Documentary evidence indicates that in practice, the RGC’s Council of Ministers sometimes has declared the transfer of public land to private land without following legal procedures.⁴⁰ A KI corroborated this documentary data, saying, “Currently, these powerful people can avoid the

³⁷ Forest Trends. 2015. Conversion Timber, Forest Monitoring, and Land Use Governance in Cambodia, July. <http://forest-trends.org/releases/uploads/Cambodia%20Concessions%20Report%20small%20size.pdf>.

³⁸ Bernazzani, Paol, James Jolley, Phat Chandara, and Seak Sophat. 2019. USAID/Cambodia. Foreign Assistance Act 118/119 Tropical Forest and Biodiversity Analysis, 135 pp.

³⁹ Forest Trends. 2015. Conversion Timber, Forest Monitoring, and Land Use Governance in Cambodia, July. <http://forest-trends.org/releases/uploads/Cambodia%20Concessions%20Report%20small%20size.pdf>.

⁴⁰ Ibid.

law whilst maximizing personal benefits.” Many beneficiary KIs agreed with this assessment making comments such as, “The majority of officials don’t want us to establish our community because they want to take advantage—if we are not protecting the forest it would be lost” and “It’s difficult to get intervention from government on time about encroachment on the forest; sometimes government ignores complaints; even the commune chief ignores them.” Documentary data indicates that the Ministry of Environment does not enforce the sub-decree on the Environmental Impact Assessment (EIA) Process, which requires the Ministry of Environment to monitor an ELC’s performance and its compliance with the Environmental Management Plan (EMP).⁴¹ A KI agreed, commenting, “The EIA process is just a formality for approving a project and fulfilling the legal requirement, but not effective mitigation/avoidance.”

KII data corroborated the Cambodian government’s weak commitment to the conservation issues raised by economic developments in the EPL. Of the 31 KI who expressed an opinion, 24, or 77 percent, thought that the government was not committed to resolving conflicts between conservation and economic development in the EPL. Particularly striking is the contrast between the opinion of beneficiary KI with government KIs about this commitment: only one of ten beneficiary KIs thought the government is committed to conservation, while five of five government KIs said the government is committed. Although a positive response is expected from government officials, the responses from beneficiary KIs, who were mostly indigenous Bunong people, seem to indicate distrust of the government. Likewise, all five of the knowledgeable stakeholder KIs and the five USAID KIs expressed doubt that the government is committed to reconciling conservation and economic development in the EPL. For example, one said, “The government sees economic opportunities before conservation opportunities.” Another KI noted, “There are internal government conflicts over land uses and many overlapping roles and responsibilities.” Numerous beneficiary KIs made observations that provincial and local government officials cannot fight decisions by powerful outsiders and national-level officials.

The one private enterprise KI, by contrast, expressed some confidence, although not much, in the government commitment, perhaps because she represented the Renaissance gold mine, which has worked with the Ministry of Environment.

For example, one KI noted, “There are internal government conflicts over land uses and many overlapping roles and responsibilities.” Numerous beneficiary KIs made observations that provincial and local government officials cannot fight decisions by powerful outsiders and national-level officials.

EQ 4: DOES THE MISSION’S LANDSCAPE APPROACH WORK?

e) What are the key lessons learned from this landscape approach implementation?

USAID/Cambodia’s landscape approach differs from other landscape approaches by not emphasizing multi-stakeholder engagement. USAID calls its landscape approach the “extended landscape approach.” It defines its approach as follows:

“The extended landscapes include the core biodiversity areas as well as the broader agricultural areas connected through ecosystem functions, including the provision of goods and services. These extended landscapes are the common source of persistent pressures and threats to biodiversity and other natural resources, and otherwise influence the health of the core ecosystems to be conserved. An “extended landscape approach would take into account the biophysical, social, economic, and political factors that affect those core biodiversity areas. At the same time, the approach would demonstrate to all stakeholders

⁴¹ Forest Trends. 2015. Conversion Timber, Forest Monitoring, and Land Use Governance in Cambodia, July. <http://forest-trends.org/releases/uploads/Cambodia%20Concessions%20Report%20small%20size.pdf>.

the value of those areas, quantitatively and qualitatively, for the long-term economic growth and resilience of the country.”⁴²

By contrast, the WWF “integrated landscape management” approach emphasizes multi-stakeholder negotiation. Five of the six steps for this approach in the WWF publication *Landscape Elements: Steps to Achieving Integrated Landscape Management* concern stakeholder engagement:

1. Interested stakeholders come together for cooperative dialogue and action in a **multi-stakeholder platform**.
2. They undertake a systematic process to exchange information and discuss perspectives to achieve a **shared understanding of the landscape** conditions, challenges, and opportunities.
3. This enables **collaborative planning** to develop an agreed action plan.
4. Stakeholders then **implement the plan**, with attention to maintaining collaborative commitments.
5. Stakeholders also undertake **monitoring for adaptive management** and accountability, which feeds into subsequent rounds of dialogue, knowledge exchange, and the design of new collaborative action.
6. Success is catalyzed by good **governance** and access to adequate and sustainable **finance** and **markets**.⁴³

A partner KI said, “WCS has a global philosophy of the ‘Landscape approach’ and is the normal way of operating in all its projects around the world.”

The recent compendium of experiences about the landscape approach, entitled *Operationalizing Integrated Landscape Approaches in the Tropics*, emphasizes that numerous international experiences have demonstrated that for the landscape approach to work, it must be based on stakeholder engagement. In that publication, the article by Reed et al. say that integrated landscape approaches (ILA) aim to achieve sustainable and resilient landscapes based on multi-stakeholder negotiation of trade-offs between potentially competing land uses.”⁴⁴ They emphasize “the critical importance of meaningful and long-term local stakeholder engagement” in an ILA, noting “community engagement in decision-making, and inclusion of people-based strategies, to be the most significant contributing factor to successful outcomes [of the landscape approach]” and “the value of community engagement and empowerment to the long-term sustainability of joint conservation and development interventions.”

To achieve such stakeholder engagement, inclusion, and empowerment, Reed et al. recommend “developing a robust in a participatory manner: that can be useful for developing a “shared understanding amongst stakeholders of their respective requirements or objectives and the implications of actions can help to highlight potential areas of synergy and also enhance empathy and trust amongst participants.”⁴⁵ No documentary evidence made available to the ET or KII data it collected indicated that KSCP and WSSP developed their TOCs through using a multi-stakeholder consultation approach.

Several KIs commented similarly to the KI, who said, “The main result of the project is spatial planning [for Mondulkiri Province] to balance social, economic, and environmental sustainability.

⁴² Email Communication from USAID to the ET, November 2020.

⁴³ WWF (World Wildlife Fund). 2016. *Landscape Elements: Steps to Achieving Integrated Landscape Management*, 12 pp.

⁴⁴ Reed, James, Jos Barlow, Rachel Carmenta, Josh van Vianen, and Terry Sunderland. Engaging Multiple Stakeholders to Reconcile Climate, Conservation, and Development Objectives in Tropical Landscapes, in J. Reed, M. Ros-Tonen, and T. Sunderland, *Operationalizing Integrated Landscape Approaches in the Tropics*. Bogor, Indonesia: CIFOR.

⁴⁵ Ibid.

When the spatial plan is the law, the government may be convinced to implement it and bring order to the use of the land.” The ET lacked sufficient detailed data about the spatial planning process to be able to evaluate it fully, but it is possible that the viewpoint that “the government may be convinced to implement it” suggests that perhaps the WSSP spatial planning process is not based on a type of multi-stakeholder engagement process that will successfully stimulate “multi-stakeholder negotiation of trade-offs between potentially competing land uses” and “shared understanding amongst stakeholders.”⁴⁶

Key lessons about the Activities’ landscape approach emerged from the KI data. The KI data included 97 comments related to key lessons learned from the Activities’ implementation of the landscape approach. Partner, government, and USAID KIs spoke much more on the landscape approach. These KI comments were categorized into seven categories of lessons learned:

- **The landscape approach requires effective institutional support.** Effective institutional support refers not just to national, provincial, and local government support but also civil society organizations, especially national and international development and environmental non-governmental organizations (NGOs) and educational institutions, such as national and international universities. The institutional support for the landscape approach includes financing, policies, laws and regulations, equipment and materials, public statements and educational programs, and personnel. With 22 responses, this area was the most frequently mentioned. Typical comments about this lesson learned include, “Conservation is impossible without the participation of government. Our successes lie in strengthening the relationship with and the role of government.” One KI particularly emphasized the need for civil society institutions, saying the landscape approach needs a “Strong network of civil society that help with programs and not as only ‘outside observers’ but well-received individuals,” and another commented on the dedication of some government officials to conservation, “At the national level, we see ministers, secretary of state, undersecretary of state dedicated to an unbelievable level.”
- **The landscape approach requires multi-stakeholder engagement.** Multisector engagement refers to the type of stakeholder discussions referenced in the previous section that aim to resolve actual and potential differences over the use of the EPL’s land and natural resources, despite difficult issues of equity, status, power, and wealth. This was the second most common category of KI comment. Typical comments in this category include, “You have to involve all stakeholders to manage the landscape approach”; “we need a strong and consistent approach and the participation of all relevant stakeholders.” One KI noted the multiscale nature of multi-stakeholder engagement: “We work at the grassroots level with communities and rangers to improve the management; at the next level with conservation enterprises to conserve forest and wildlife; at a higher level with the government to put policies and processes in place; and with companies to use best practices.” A KI commented obliquely, but still relevantly, to multi-stakeholder engagement by saying, “NGOs need to get out of the habit of thinking they are in the driving seat.”
- **The landscape approach requires technical competence.** Technical competence refers to knowledge and ability to apply that knowledge about sound production practices, such as those for timber or agricultural production, and technical competence in administration, economics, finances, marketing, packaging, and other areas. It includes technical competence to meet market standards, such as those for “green” markets, organic produce, or sustainable forestry. Twenty of the comments referred to this lesson learned.

⁴⁶ Reed, James, Jos Barlow, Rachel Carmenta, Josh vanVianen, and Terry Sunderland. Engaging Multiple Stakeholders to Reconcile Climate, Conservation, and Development Objectives in Tropical Landscapes, in J. Reed, M. Ros-Tonen, and T. Sunderland, *Operationalizing Integrated Landscape Approaches in the Tropics*. Bogor, Indonesia: CIFOR.

Typical comments about the need for technical competence include, “When people have knowledge and ability through capacity-building, they can play their role to reduce pressure on natural resources” and “you must encourage farmers to grow crops based on market demand.” Like several other KIs, one mentioned infrastructure as an element of technical competence, “We don’t want farmers to depend on rain but on an irrigation system. If we compare agriculture here to Vietnam or Thailand, we have very poor infrastructure.” A pithy comment was, “You need a lot of effort and capacity. It needs skills, not just money.”

- **The landscape approach requires a feasible scope.** A feasible scope means that funds and time are sufficient to accomplish the landscape Activity’s intended results within the geographic area that has been defined as its landscape. The Activity design includes enough time and money to accomplish the Activities’ planned results. Sixteen comments were in this category. One KI noted, “If you have proper management in one landscape, it would be better than jumping around. Concentrate on one thing and then expand with proper capacity. Otherwise, you do work and then run away, and people do not understand what to do.” Some KIs emphasized that the Activity needs to be designed to match the available time and money: “Donors should continue their support as I mentioned for 5 years or beyond to ensure the protection of natural resources—more sustainable long term.”
- **The landscape approach requires that physical, biological, and social factors affecting the landscape be integrated.** This lesson learned emerged from comments about the need to balance the social needs and desires of the EPL’s people with the capacity of its physical and biological resources of a defined landscape to help meet them. One KI summarized: “The landscape is very good because it involves everything around the forest.” Yet, this requires an understanding and integration of many different sectors and types of knowledge. As one USAID KI summarized, “For me, the landscape approach is a good approach, but it is more than just the landscape. It should be in every component that is going on.” Another KI suggested, “Work more with the communities and in schools. Reach out to the medical departments, monks, and pagodas to get them all collectively involved. Don’t just focus on biodiversity.”
- **The landscape approach requires a useful MELP.** This lesson learned encompasses all the activities required for the administrators of the landscape approach Activity to have the data and information required to administer it effectively and efficiently to attain its planned target results. The MELP is the basis for managing the Activity adaptively to respond to new opportunities and to resolve problems quickly. Five of the comments concerned this lesson learned. One KI summarized the importance of MELP to a landscape Activity to formulating policy, “With data, it is possible to demonstrate the problem. It takes out the unclarity. Very powerful to have the data. For example, the monitoring data we have about the population of dogs in the wildlife sanctuary allows us to demonstrate the problem [to policy makers]” and to learning “We need to be trying new stuff based on the data; We do change our responses in recognition of the data also. Compared with the absence of the information, it is significantly better.”
- **The landscape approach requires progress toward undisputed ownership of land and natural resources.** This lesson learned refers to the need for people to feel sure that they will benefit from orderly, technically sound investments in, and use of land and natural resources because they have secure rights to them. In simple terms, most people take care of what they are sure they own. Three of the analyzed comments supported the formulation of this lesson learned, two from government KIs, and one from a beneficiary KI. Surprisingly, more KIs did not mention land and natural resource ownership since tenure issues are well-

known to affect land and natural resources.⁴⁷ Perhaps one KI comment is sufficient to explain the importance of secure land titles and rights to resources, “If NGOs stop their support, the government will give all land to outsiders.”

b) Are there any other areas of opportunity in which the Mission should focus on over the next 5 years?

Design an Activity to focus on CF management with the Bunong, including timber production. Community forestry has been a successful way to conserve forests and biodiversity in many places around the world. The findings indicate that the Cambodia government has established regulations to promote and regulate community forestry and that it has successfully served to conserve forests and biodiversity in some parts of Cambodia, including some parts of the EPL. The ET lacked sufficient data to draw a firm conclusion about the feasibility of community forestry in the EPL since some data indicated that community forestry is not feasible and other data indicate that it is. Community forestry is certainly an opportunity for use of its resources that USAID/Cambodia should explore thoroughly.⁴⁸

Design an Activity to focus on bamboo enterprises. A knowledgeable stakeholder identified that there are large unutilized bamboo forests on the Srepok River that ought to be utilized to benefit forest dwellers. The KI explained that the river is already used as a “floating highway,” and if bamboo were to be sustainably harvested, it could provide significant benefit to indigenous households. The stakeholder also promoted the planting of bamboo on degraded forest land and inside CPAs. The stakeholder has gained permission to undertake pilot projects with the Forest Administration in Kratie province on revoked ELCs under a private sector entity called Leopa Bamboo,⁴⁹ which would also provide a raft of social benefits to communities in Kratie province if ever funded. For wildlife sanctuaries in the EPL, the stakeholder suggested that ownership of each bamboo plant could be given to beneficiaries to ensure the proper management of the resource and its sustainable harvest into the future. The stakeholder confirmed that bamboo forests in CPAs’ conservation zones could also serve as sites for the release of species such as slow loris, who are threatened specifically by Khmer traditional medicine practices and the illegal pet trade.⁵⁰ The principal product best suited to the species of bamboo and technical capacity apparent in Monduliri province would be for furniture and a biochar soil improver.

Design an Activity to increase Cambodian professional, research, and technical capabilities through establishing a new academic and vocational institution in the EPL. Project technical advisors and managers recognized a lack of qualified candidates to fill integral project positions (the late recruitment of a project lawyer for WSSP serves as one example). Challenges related to a lack of human resource capacity likely contributed to delays. Project technical advisors recommended that one solution to address a lack of technical capacity would be to develop Cambodian professional and research capabilities through establishing wildlife, forestry, and ranger college in the EPL. Law enforcement actors working under WSSP emphasized that such an institution could help develop managerial procedures (such as standard operating procedures for wildlife sanctuaries), train and develop local counterparts, and support graduates to implement forest protection. A dedicated educational and training institution could also provide ecotourism or sabbatical opportunities and develop the capacity of Cambodian conservationists and PDoE counterparts.

⁴⁷ See McDermottb, Constance, Anne Larsonc, Safia Aggarwald, and Lukas Giessene. 2020. Forest Tenure and the Sustainable Development Goals—A Critical View Pia Katilaa, <http://www.elsevier.com/locate/forpol>.

⁴⁸ Forest Trends. 2015. Conversion Timber, Forest Monitoring, and Land Use Governance in Cambodia, July. <http://forest-trends.org/releases/uploads/Cambodia%20Concessions%20Report%20small%20size.pdf>.

⁴⁹ Open Corporates, 2020. Bambusa Cambodia Ltd [online]. Available at <https://opencorporates.com/companies/kh/00046018>. Accessed November 25, 2020.

⁵⁰ TRAFFIC. 2020. Southeast Asia: At the Heart of Wildlife Trade. TRAFFIC.

Design an Activity to support the already existing indigenous community social-network and their capacity to gain national-level support to pressure provincial and district authorities to respond to forest crime. Two indigenous activists explained that many indigenous and concerned Khmer in Monduliri province utilize Facebook to advocate for the prosecution of forest crime cases. The two activists interviewed specified that Facebook had been used to raise five cases of forest crimes perpetrated by outsiders or locally connected individuals in their commune alone. They explained that it is challenging to encourage the provincial or district authorities to respond to illegal exploitation. But through Facebook, the case can be carried to national authorities who then pressure subnational actors to take definitive action. The ET ascertained that Bunong and other indigenous have their own dedicated Facebook groups. A distinguished Bunong forest warden in Pu Chey CPA adjacent to the Vietnamese border inferred that Vietnamese hunters and loggers maintain an informal network with indigenous contacts around Pu Chey. However, it was not clear if this network is maintained online or by telephone. Facebook could prove useful as a tool for disseminating counter wildlife trafficking messages and regulating wildlife trade as per the corporation's commitment under the Coalition to End Wildlife Trafficking Online.⁵¹

Design Activity to support the immediate, intensive management of charismatic and keystone species and habitat. While tiger reintroduction is a global initiative, knowledgeable stakeholders noted that the decline of key ungulates and the inability to secure habitat from poachers or snaring across an adequate range for tigers renders this initiative temporarily unfeasible, especially in the Greater Mekong countries of Vietnam, Laos, and Cambodia. One partner stakeholder explained that tiger reintroduction was likely planned for the EPL before the implementer was fully aware of the complexity of issues such as an unabating snaring crisis, and the subsequent decline of all terrestrial prey. Senior partners explained that tigers likely became functionally extinct in the EPL after 2007. Several knowledgeable and partner stakeholders recognized that since the Indochinese leopard population is of global significance, and the population of this sub-species in Srepok Wildlife Sanctuary is believed to be in serious decline,⁵² the intensive management of key charismatic and keystone populations and their habitat may be integral. One partner stakeholder believed that facilities to rescue leopard or critically endangered keystone species, such as Eld's Deer, from the wild for ex-situ breeding could be a potential future intervention. Another senior partner explained that an intensive management fence to protect migration corridors and key habitat inside the core zone of Srepok Wildlife Sanctuary might be a necessity in the future, likely as a means to address the snaring crisis.

Access U.S. Government Combating Wildlife Trafficking (CWT) funds and design a complimentary project to reduce transboundary wildlife and timber trafficking through the EPL, for both locally sourced species and higher value wildlife products. USAID officials recognized that the Mission is currently without specified CWT funds and that while the Activities do monitor snare removal, support filing of court cases and prosecutions, support the promulgation of a provincial ban on the sale of bushmeat, and fund a mobile enforcement unit, they do not have a dedicated CWT or criminological focus. Stakeholders across KI categories identified the prevalence of wildlife crime in Monduliri province, regardless of measures from the Provincial Governor's office to ban the sale of bushmeat in restaurants and markets. Although no hard evidence was provided, knowledgeable stakeholders and partners identified tenuous links between wildlife trafficking and both the Vietnamese and Cambodian border armies or connected individuals who are not fearful of any repercussions from trafficking timber, wildlife, or parts and derivatives. According to the London-based Environmental Investigation Agency, the trafficking of Cambodian

⁵¹ WWF (World Wildlife Fund). 2020. Coalition to End Wildlife Trafficking Online.

⁵² Grey. 2013. Activity Patterns and Home Ranges of Indochinese Leopard Panthera Pardus Delacouri in the Eastern Plains Landscape, Cambodia. Natural History Bulletin of the Siam Society, 59.

timber to Vietnam is believed to have been conducted under fraudulent CITES permits produced in Cambodia.⁵³ Knowledgeable stakeholders, partners, and beneficiaries confirmed that both timber and wildlife trafficking is common between border posts 8–9, or during the dry season, via any unofficial route through the forest to Vietnam. At the same time, the NGO TRAFFIC has recognized that the international border crossing from Mondulkiri into Dak Lak province in Vietnam is likely a busy trafficking route for high-value wildlife products, such as ivory, sourced from Africa, likely flown into Phnom Penh and moved by organized crime syndicates to serve the Vietnamese, or potentially the Chinese tourist market pre-Covid-19.⁵⁴ The trafficking of timber and locally sourced species in Mondulkiri serve domestic markets and the Vietnamese market (including ranches that launder illegal goods),⁵⁵ and could intercept with transcontinental high-value wildlife trafficking and other associated criminal enterprises.⁵⁶

Gain high-level support for the protection of natural resources and indigenous livelihoods in the EPL through engaging the Supreme National Economic Council in the promulgation of a biosphere reserve concept for the EPL. A knowledgeable stakeholder who worked on several analyses for USAID projects inferred that for conservation to work well in Cambodia, NGOs might not be the ideal leaders. The KI inferred that a UNESCO biosphere reserve could be an example of engaging a third party for the protection of indigenous culture and their natural resources in the EPL, rather than having implementers at the center of any conservation effort. The stakeholder drew upon their experience of promulgating a nominal UNESCO biosphere reserve for Tonle Sap. This was won by engaging the Supreme Economic Council and the Council of Ministers to understand the tourism potential of Tonle Sap, its connection to Angkor, and direct economic benefits that could be reaped from increased tourism because of the area's UNESCO status. The knowledgeable stakeholder expressed that the lesson learned from creating this concept for Tonle Sap was that while the Supreme National Economic Council is highly knowledgeable on economic issues, they lack a nuanced understanding of the importance of sustainable NRM. Government stakeholders confirmed that Mondulkiri province would likely develop an airport in the future. Hence, a UNESCO status for the landscape could be a significant draw for adventure tourists with a higher expendable income than the backpackers who ordinarily visited Mondulkiri previous to COVID-19.

⁵³ EIA (Environmental Investigation Agency). 2018. Serial Offender. Vietnam's Continued Imports of Illegal Cambodian Timber.

⁵⁴ TRAFFIC. 2020. Southeast Asia: At the Heart of Wildlife Trade. TRAFFIC.

⁵⁵ EIA. 2018. Serial Offender. Vietnam's Continued Imports of Illegal Cambodian Timber; ENV (Education for Nature Vietnam). 2017. An Analysis of Wildlife Farming in Vietnam. Education for Nature Vietnam Hanoi.

⁵⁶ TRAFFIC. 2020. Southeast Asia: At the Heart of Wildlife Trade. TRAFFIC.

CONCLUSIONS

EQ 1

The findings indicate that although the Activities have made some important advances, they are unlikely to achieve all of what they planned to achieve. Both Activities expect to achieve, at least partially, most, if not all, of their PI targets. The Activities' important achievements include forest patrolling with the use of up-to-date technologies, engaging government officials in providing a technical basis for landscape governance through spatial planning, support for ICT, use of REDD+ funds for small-scale infrastructure, initial trials of potential alternative livelihood Activities, engagement of the RGC on landscape governance, and stabilization of populations of two out of four key species in KSCP target areas. However, these achievements are unlikely to lead to attaining completely the Activities' higher level results. Three findings suggest that the PIs may not provide a completely accurate measure of the Activities' results. First, the qualitative data does not entirely coincide with the quantitative data of the PIs. For example, neither WSSP nor KSCP KIs confirmed unambiguously that their net income has increased or that illegal exploitation of forest resources has decreased. Second, the Activities' M&E systems do not always accurately and comprehensively measure progress toward the target results. For example, their PI for measuring beneficiaries' income reports gross rather than net income, and their only measure of improved forest management is the number, extent, and frequency of forest patrols. Third, the Activities are too short-term and small-scale to permit accurate conclusions about their sustainability after the Activities end, especially when they are no longer subsidized. For example, the IBIS rice cultivation has so far occurred only on small areas over just one or two growing seasons and with subsidized inputs.

The findings indicate that the chief factors limiting achievement of results are ineffective governance, insufficient resources, production problems, and Activity design, administration, and M&E. Ineffective governance largely results from pervasive corruption, which complicates enforcement of existing laws and regulations, but also from incomplete or nonexistent regulations and plans, such as the lack of standard operating procedures and management plans for wildlife sanctuaries, and insecure property rights, especially over land and natural resources. Insufficient resources mostly concern funding levels below the levels required to carry out management activities in hundreds of thousands of hectares of wildlife sanctuaries, that require sufficient personnel, equipment, and operating funds. Production problems mostly concern weather conditions for agricultural production and lack of knowledge about control of pests and diseases. The principal design problem was that the time period for the Activities is much shorter than that required to achieve its planned outcomes and objectives. The principal administrative problem was caused by difficulties the WSSP had in contracting qualified staff and a company that could implement the provincial zoning exercise. Finally, the Activities' M&E have not provided data and analyses as intended, making timely adaptive management and, as discussed, conclusive evaluation difficult.

EQ 2

The findings do not provide an adequate basis for firm conclusions about the degree to which the Activities' livelihood training and technical support has met or, if continued after the project end date, could eventually meet, their beneficiaries' needs and priorities by improving household economies. The findings do indicate that the KSCP's access to REDD+ funds enabled it to finance community infrastructure improvements (i.e., water systems, roads) and strengthen community governance processes through a more democratic decision-making process than is traditional among the beneficiaries. By contrast, without access to REDD+ funds, WSSP has been unable to use infrastructure financing to improve local governance. The KSCP's and the WSSP's livelihood training and technical support for productive enterprises have been small-scale and short-term. As previously discussed, appropriate and sufficient data about their financial and technical aspects, moreover, has not been collected and analyzed by the Activities' M&E, at least to the knowledge of the ET. There is no clear evidence of their long-term viability of the

KSCP IBIS rice Activities. Some findings cast doubt on how much the livelihood activities will replace or improve upon existing sources of income. For example, honey collectors expressed that they were losing motivation because they lacked market access. Consequently, the ET was unable to draw firm conclusions about the Activities' current or longer-term financial and technical viability and current or potential future benefits to their target beneficiaries.

The Activities' livelihood training and technical support may have reduced some immediate threats to the wildlife sanctuaries but probably have not permanently or significantly reduced these threats to the KSWs, PPWS, and SWS. The Activities' M&E have not provided sufficient quantitative data or analyses to provide the basis for a firm conclusion about the impact of their livelihood and technical support activities on forests and biodiversity. Findings based on qualitative data, however, suggest that so far, their alternative livelihood activities have not been on a large enough scale or lasted long enough to have induced significant levels of conservation of forests and biodiversity and that the link between improved livelihoods and conservation of forests and biodiversity has not been clearly defined or measured. Also, the livelihood activities' impact on forests and biodiversity depend mostly on financial incentives, provided by REDD+ funds and the VMN IBIS rice markets, that may not be sustainable after the Activities end. The forest patrols both KSCP and WSSP and may have reduced illegal logging, deforestation, and capture of wildlife. Quantitative data, however, are lacking to prove that it is so definitively. The finding that forest patrols do not have sufficient coverage, equipment, supplies, and infrastructure, whether from the Activities or the government, casts doubt on the effectiveness and sustainability of the patrols. The finding, based on qualitative data, that land titling responds to a beneficiary priority and often gives people a greater opportunity to fight land encroachments more successfully and an incentive to adopt conservation practices suggests that land titling may be one of the most effective means by which the Activities have met their beneficiaries' priorities and needs while also increasing conservation of forests and biodiversity.

The Activities have provided women and men equal opportunities and have aided the Bunong indigenous group. However, in general, the Activities do not incorporate specific analysis, data collection, or planning specific to the Bunong and the EPL. Accordingly, some approaches that have shown promise elsewhere (e.g., IBIS rice) may not generate the same impacts in the EPL. The Activities' livelihood training and technical support does not affect the people who drive large-scale forest and biodiversity degradation, although clear data are lacking on the scale of drivers. The Activities are not supplying adequate support for forest rangers to control illegal logging and poaching.

EQ 3

The Activities' principal stakeholders in terms of population numbers, the Bunong, and most other categories of stakeholders who were consulted, generally have a negative perspective on the issuance of the mining licenses and other economic development in the EPL. The category of economic activity which these stakeholders, including the Bunong, viewed favorably is small-scale infrastructure that benefits poor, local people directly, such as water systems for households and irrigation and access roads. The findings also lead to the conclusion, however, that financial benefits of mining and most other economic activities, except for ecotourism, are unlikely to flow to the poorer, often indigenous segments of the EPL's population. The findings also lead to the conclusion that the KSCP and WSSP were not designed or implemented with the intent of incorporating the private, entrepreneurial sector into efforts to conserve the EPL's forests and biodiversity. They also indicate that private sector actors in the EPL may have little interest in promoting conservation of forests and biodiversity, possibly because they see no financial or nonfinancial benefits to their enterprises.

The government is weakly, or unevenly, committed to resolving the conservation issues raised by mining licenses and other economic development in the EPL. The findings

indicate that the Forestry Law and the Protected Areas Laws have gaps that significantly undermine the legal basis for conservation in the EPL. Moreover, local, provincial, and national government institutions have not satisfactorily resolved conflicts between conservation of forests and biodiversity and economic growth. They do not have the financial resources required to enforce conservation laws and regulations or to implement large-scale, effective conservation measures, such as management of wildlife sanctuaries. These weaknesses in forests and biodiversity governance permit some financially and politically powerful stakeholders, migrants from other parts of Cambodia, and sometimes the Bunong themselves to circumvent conservation regulations and laws for their own financial benefit.

EQ 4

The key lesson of the WSSP's and KSCP's landscape approach implementation is that an effective landscape approach in the EPL requires effective multi-stakeholder engagement. The multi-stakeholder ILA, as defined by USAID, cannot be implemented by engaging only those stakeholders whose interests and objectives coincide with conservation of forest and biodiversity objectives. Rather it must include all the stakeholders who significantly influence the attainment of conservation objectives, including those who are driving resource exploitation. The findings lead to the conclusion, however, that KSCP and WSSP were not designed and implemented based on the multi-stakeholder ILA. Therefore, they do not have the objective of reconciling the interests of different categories of EPL stakeholders to combine significant, sustainable, large-scale economic growth with conservation of forests and biodiversity. The findings do not permit a firm conclusion about how feasible it is to implement the multi-stakeholder ILA in the EPL. The ET was unable to consult sufficiently with private-sector stakeholders in the EPL to draw a firm conclusion about the feasibility of engaging them in the multisector ILA, and it seems clear that some powerful, and important, stakeholders are unlikely to be interested in participating. More research and consultation would be required to draw a conclusion about the feasibility of the multisector ILA in the EPL.

If USAID/Cambodia determines that the multi-stakeholder ILA is not feasible in the EPL then it could support other conservation approaches that would assist Cambodia to conserve the EPL's forests and biodiversity. The findings indicate that these approaches include community forest management with the Bunong; enterprises based on growing and selling bamboo and bamboo products; professional and technical training in conservation fields at a new academic and vocational institution in the EPL; support for social networks as a means to control illegal forest and biodiversity exploitation; management of charismatic wildlife species; control of transboundary wildlife trafficking; and support for a EPL biosphere reserve. Each of these potential opportunities, however, would have to be evaluated in much more detail than this evaluation is able to do given its limited scope, short time period, and available data.

RECOMMENDATIONS

USAID should conduct additional data collection and analyses that are required to establish a reliable base of knowledge for the design of a future EPL conservation Activity. Among the areas of knowledge that more complete data and analyses could help to provide are: the type, scale, and time period required to achieve effective conservation, governance, and equitable economic growth in the EPL through an integrated landscape activity; the profitability, competitiveness, and sustainability without subsidies of the Activities' current alternative livelihood activities; the financial, social, and ecological impacts of the Bunong changing from shifting to permanent agriculture; the relative roles and influence of the Bunong; recent migrants into and near the wildlife sanctuaries and politically and financially powerful stakeholders on the processes and rate of forest and wildlife loss and degradation in the EPL; and the feasibility of engaging all stakeholders in a landscape approach, including powerful individuals who are currently seen to be circumventing restrictions.

USAID should clarify its landscape approach. WCS and WWF's landscape approaches and TOC do not engage all key stakeholders including some powerful stakeholders who are seen a directly or indirectly driving resource exploitation, whereas multi-stakeholder engagement is a core element of the ILA, and best practices as described in the most recent literature about the ILA to achieving conservation. Before designing a follow-on landscape approach project, USAID/Cambodia should define and clarify how its "extended landscape approach" differs from the ILA based on multi-stakeholder engagement. Given their influence, the use of forests and biodiversity in the EPL, and its potential for financing conservation activities and economic growth, USAID/Cambodia should clearly define the role of the private sector in whatever approach it chooses for its next EPL conservation project. It should assess whether or how to engage powerful stakeholders who drive exploitation of biodiversity and forests, whether legally or illegally. Its TOC for a follow-on conservation project should reflect its definition of its landscape approach and the extent to which it includes the multi-stakeholder engagement that is the core element of the best practice of an "ILA."

If it deems that a multi-stakeholder landscape approach is not feasible, then USAID should center future conservation Activity on assisting communities in and around forests to solve their problems, preventing encroachment from outside actors, and addressing the communities' priorities through the use, management, and community governance of natural resources. Since the principal conservation threats are perceived to come from outside of these communities, USAID could focus on strengthening these communities' abilities to counter those threats. WSSP and KSCP have supported some Activities that might merit further USAID support, including strengthening of community governance, monitoring of illegal exploitation, land titling, infrastructure supported by REDD+, and development of ecotourism at selected sites. It might also support additional Activities, such as community forestry; professional and technical training in conservation fields at a new academic and vocational institution in the EPL; support for social networks as a means to control illegal forest and biodiversity exploitation; management of charismatic wildlife species; control of transboundary wildlife trafficking; and support for an EPL biosphere reserve.

USAID could support the above approach with two components that extend beyond these communities. First, **USAID should explore SBCC⁵⁷ and other approaches to increasing support for conservation among middle- and upper-class Cambodians.** This

⁵⁷ Social Behavioral Communications Change (SBCC) is a comprehensive methodology consisting of five parts, including: (i) behavior identification to determine which behavior to alter; (ii) audience segmentation to determine who is the target for change; (iii) behavior modelling to determine appropriate approach; (iv) marketing framework to develop appropriate messaging and channels; and (v) initiative implementation including monitoring adaptive management and assessment.

may help to generate additional support for conservation among more powerful decision makers and reduce demand among consumers. The EPL is increasingly a draw for domestic ecotourism, which can be used as an opportunity to increase awareness and support. Second, **USAID should support governance initiatives that seek to combat corruption and close loopholes that allow powerful actors to access resources that are off-limits to local communities.** This requires an integrated approach to development planning and implementation that recognizes the complex interplay of governance, economic growth, conservation, and the possible co-benefits of integrated programming across these sectors.

USAID should incorporate a more robust learning component and systematic scaling plan for an alternative livelihoods' component of a future conservation project. While some of the KSCP and WSSP's livelihood Activities show promise from both the perspective of livelihoods and conservation, for example, ecotourism, NTFPs, and some forms of agriculture, the data and analyses required to confirm their sustainability, profitability, and competitiveness are lacking. Without those analyses, it remains unclear if and how these Activities could be upscaled so that they would significantly contribute to the conservation of forests and biodiversity in the EPL. As previously recommended above, USAID should support more complete and rigorous research that would permit firm conclusions to be drawn on the degree to which the KSCP and WSSP alternative livelihoods Activities can be scaled up successfully and sustainably. Moreover, a scaling strategy should be determined at the outset, at least in broad strokes, that lays out how decisions regarding scaling will be made as well as, importantly, data that must be tracked and analyzed to support decisions on where and with whom to scale. This might include research or data on particular conditions in targeted communities that support or inhibit the success of the approach. Finally, USAID should commit resources to scale approaches that are shown to be successful, such as CCAP.

USAID should design a useful, clear MELP for its next conservation Activity. The evaluation's conclusion is that the KSCP and WSSP MELPs have not provided the data and analyses that they were expected to provide. Without adequate data and analyses, WSSP and KSCP have not been able to judge their progress toward their results accurately and adjust their design and implementation accordingly. The lack of these data and analyses also limited this performance evaluation's ability to evaluate some aspects of their Activities fully. USAID/Cambodia should ensure its next conservation project has a strong MELP that continually provides up-to-date information on the project's progress. To achieve a useful MELP, USAID/Cambodia should lay out its TOC, its expected results at all levels, linkages between result levels, and key assumptions through a process that involves all the key stakeholders, whether their principal interest is conservation or not. It will be imperative for USAID/Cambodia to define its key assumptions when it may not be possible to engage some influential stakeholder groups in a multi-stakeholder process. USAID's implementers should use the TOC it develops with the stakeholders as a basis for identifying indicators at each result level that effectively measures that result and commits resources to measure these indicators regularly.

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ANNEX B: SUPPLEMENTARY ANALYSIS TABLES FOR EVALUATION QUESTIONS 1A AND 1B

Table 1: KSCP Target vs Achieved Results of Performance Indicators by Results Levels

Output Performance Indicators	Target	Achieved	Difference
1.d. Number of village events designed and conducted to increase socially responsible behavior by communities	44	28	(16)
1.b. Number of people trained in sustainable natural resources management and/or biodiversity conservation	1000	1,217	217
2.b. Number of laws, policies, or regulations that address biodiversity conservation and/or other environmental themes officially proposed, adopted or implemented	9	4	(5)
2.c. Amount of investment mobilized (in USD) for sustainable landscapes (EG.1 I–4)	800,000	870,648	70,648
3.b. Number of sustainable forestry and biodiversity management plans developed using participatory national and sub-national planning processes	1	0	(1)
3.d. Number of media articles produced about KSWs	60	28	(32)
Outcome Performance Indicators			
1.a. Number of hectares of biologically significant areas under improved natural resource management	272,000	272,000	0
1.c. Number of people that apply improved conservation law enforcement practices	180	99	(81)
3.a. Number of institutions with improved capacity to address sustainable landscapes issues	55	67	12
3.c. Number of ICTs and Community Protected Areas (CPAs) established and strengthened	16	15	(1)
Objective Performance Indicators			
1.e. Reduced deforestation in priority landscapes in hectares per year	1,900	1,747	(153)
1.h. Number of hectares of biologically significant areas showing improved biophysical conditions	166,000	166,000	0
1.f. Greenhouse gas emissions, estimated in metric tons of CO2 equivalent, reduced, sequestered or avoided through sustainable landscapes activities	1,643,500	1,511,155	(132,345)
1.g. Population estimates of key species in KSWs	44	22	(2)
Gibbons	1,209	1,432	223
Doucs	23,628	24,929	1,301
Wild pig	1,367	1,162	(205)
Muntjac	1,194	732	(462)
2.a. Number of people with improved economic benefits derived from sustainable natural resource management and/or biodiversity	3,700	2,676	(1,024)

2.d. Income level (\$) of target community from ecotourism projects	32,000	27,760	(4,240)
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Source⁵⁸

Table 2: WSSP Target vs Achieved Results of Performance Indicators by Results Levels

Output Performance Indicators	Target LOP Performance Indicator	Achieved Performance Indicator	Difference
6. The patrolling effort in PPWS as a result of USG assistance.			
• Patrol number	912	799	(113)
• Distance in km	36,423	78,216	41,793
• Days	2,496	3,308	812
• Nights	1,584	2,509	925
7. The percentage of wildlife and forest crime cases properly filed and sent to the provincial court	96	120	24
8. The prosecution rate of filed wildlife and forest crime cases	Eliminated	Eliminated	Eliminated
9. Number of people trained in sustainable natural resources management and/or biodiversity conservation	4,184	5,315	1,131
11. Amount of investment mobilized (in USD) for sustainable landscapes	100,000	53,623.9	(46,376.1)
16. Number of laws, policies, or regulations that address biodiversity	3	2	(1)
Outcome Performance Indicators			
1. Number of hectares of biologically significant areas under improved natural resource management	124,330	130,000	5,670
4. Number of institutions with improved capacity to address sustainable landscapes issues as supported	10	10	0
12. The percentage of land titled farming households in PPWS and SWS engaging in Conservation Compatible Agricultural Practices (CCAP)	14	24	10
13. Number of farmers and others who have applied improved technologies or management practices with USG assistance.	72	33	(39)
14. The percentage of people living in PPWS and SWS demonstrated at least a high level of understanding of environmental protection, biodiversity, and conservation	No Data	No Data	No Data
15. Number of people that apply improve conservation law enforcement practices	150	278	128
Objective Performance Indicators			
2. Number of hectares of biologically significant areas showing improved biophysical			

⁵⁸ KSCP September 30, 2020 Progress Report.

conditions	124,330	106,000	(18,330)
3. Greenhouse gas (GHG) emissions, estimated in metric tons of CO2 equivalent, reduced, sequestered, or avoided through sustainable landscapes activities.	290,170	247,660	(42,510)
5. The estimated population of key ungulate species (banteng, wild pig, and muntjac), yellow-cheeked crested gibbon, and white-shouldered ibis in PPWS and SWS	55	00	(5))
Banteng	1,024	856	(168)
Wild pig	7,375	4,017	(3,358)
Muntjac	4,155	3,350	(2,935)
Yellow cheeked crested gibbon	600	No data	No data
White shouldered ibis	49	19	(30)
10. Number of people with improved economic benefits derived from sustainable natural resource management and/or biodiversity conservation through a demonstration pilot project	137	172	35

Table 3: WSSP: Reasons for Differences Between Target & Actual Results Levels

Output Performance Indicators	Difference	
6. The patrolling effort in PPWS as a result of USG assistance.		
Patrol number	(113)	The Project still has 6 months (Oct. 2020-Mar.2021) to achieve this remaining target (19 patrols/month
(1)8. The prosecution rate of filed wildlife and forest crime cases		This indicator has been cancelled in the last annual work plan approved by USAID AOR since it is beyond the Project's capacity to achieve it. Part-time lawyer who was hired by the Project does not have legal role to prosecute the cases, it is the role of prosecutor. Compliantly, the Project cannot hire prosecutor who is a government official.
11. Amount of investment mobilized (in USD) for sustainable landscapes,	(46,376.1)	The Project is expected to reach the target in the next 6 months (Oct. 2020-Mar. 2021) when more revenues generated from rice products and wild honey sales.
16. Number of laws, policies, or regulations that address biodiversity	(1)	Those 3 policy document are provincial guidance (Deikar), CCAP guidelines and Mondulkiri spatial plan. The Project will achieve all when Mondulkiri Spatial plan is enacted at the end of the project March 2021.
Outcome Performance Indicators		
13. Number of farmers and others who have applied improved technologies or management practices with USG assistance.	(39)	This figure is counted only for farmers who set up rice and vegetable demonstration plots. The Project will record more farmers who also applied improved technology, but not setting up demonstration in the next reporting period (Oct. 2020-Mar.2021)

14. The percentage of people living in PPVS and SWS demonstrated at least a high level of understanding of environmental protection, biodiversity, and conservation	No data	The indicator will be reported at the end of the Project. End line survey is being conducted to measure the change of level of understanding of people.
Objective Performance Indicators		
2. Number of hectares of biologically significant areas showing improved biophysical conditions	(18,330)	
3. Greenhouse gas (GHG) emissions, estimated in metric tons of CO2 equivalent, reduced, sequestered, or avoided through sustainable landscapes activities.	(42,510)	
5. The estimated population of key ungulate species (banteng, wild pig, and muntjac), yellow-cheeked crested gibbon, and white-shouldered ibis in PPVS and SWS	(4,981)	

Table 4: Summary: Unfavorable Factors for WSSP & KSCP Noted in WSSP and KSCP September 30, 2020, Progress Reports

WSSP			KSCP	
Results	Summary of Data	Categories	Summary of Data	
1	• Ineffective governance • Technical production problems • Monitoring & Evaluation problems	KSCP	• Ineffective Governance • Lack of Human Resource	
2	• Ineffective governance	Law enforcement	• Technical In expertise • Ineffective governance • Insecure tenure	
3	• Monitoring & evaluation problems		• Ineffective governance • Ineffective/contradictory policies	
4	• Administrative problems	ICT and CPA establishment and implementation	• Lack of data • Ineffective/contradictory policies	
5	• Ineffective governance		• Technical production problems • Lack of production infrastructure • Ineffective administration • Lack of market access	

Source: WSSP & KSCP 30 September 2020 Progress Reports

Table 5: WSSP: Analysis of Unfavorable Factors for Implementation Noted in WSSP September 30, 2020 Progress Report

WSSP	Summary	Unfavorable Factors
Result 1: PPWS and SWS populations of flagship species remain stable or are increasing in comparison to the 2018 estimates.	• COVID 19 • Ineffective governance • Technical production problems • Monitoring & Evaluation problems	• Southern Yellow-cheeked crested gibbon (<i>Nomascus gabriellae</i>) survey progress has been slow due to the demanding work load and conflicting priorities of the academic partner & additional workloads resulting from COVID-19. • White-shouldered Ibis habitat loss, potential hunting, and potential impacts of pesticides which could all be contributing factors to the observed apparent decrease • Drone survey: The travel ban due to the COVID-19 pandemic has hampered the potential partnership between WWF and the Queensland University of Technology • The Biodiversity research teams are frequently confronted with illegal activities during the field work which can potentially be a health and safety risk. • The statistical software 'R' package for acoustic spatially explicit capture recapture (aSECR) analysis has only recently been developed and, therefore, is not yet ideally fitted to the particularities of acoustic gibbon datasets and • several errors, bugs and inaccuracies still occur when running the codes. • The outbreak of the Novel Coronavirus (COVID-19) has complicated international travel and the governmental permission letters required to fly and import unmanned aerial vehicles is proving a longer and more complex process than anticipated
Result 2: Improved management & enforcement systems in SWS/PPWS and the extended landscape.	• Ineffective governance	• For Y3, the amount of CO2 avoided is less than Y2 because forestland clearance illegal logging cases occurred in the conservation and core zones of PPWS
Result 3: Increased economic opportunities for target farming households in PPWS & SWS, and enhancement of the role of women in responsible agricultural practices.	• COVID-19 • Monitoring & Evaluation Problems	• CIRD expected to reach the agreement in April but with the COVID-19 pandemics, economic activities slowed down. Therefore, these two companies have decided to cancel these agreements. • The inspection form is confusing as some parts use English acronyms, which the ICC members do not understand and mixed questions for both vegetable and rice production in the form. • The outbreak of COVID-19 hindered the project activities (training/meeting with farmers in larger group) as large group gatherings were restricted.
Result 4: Increased environmental awareness for forest stewardship among target "land titled" and CPA communities in PPWS and SWS.	• Administrative Problems • COVID-19	• April to June was the critical period in Cambodia on the COVID-19 pandemic. As a result, the WWF Environmental Educational (EE) team was not able to deliver 36 environmental education sessions the Project has decided to terminate the contract with the consultant who has been hired to develop improved EE training manual/materials and provide a training of trainer to local environmental educators, since he has been unable to follow the timeframe and has produced a low quality draft manual
Result 5: Economic development decisions in Mondulkiri Province	• Ineffective Governance	• No participation by private sector

WSSP	Summary	Unfavorable Factors
(covering most of the PPWS/SWS extended landscape) based on an inclusive PSP balancing economic, social, and environmental sustainability.		

Source: WWF 30 September 2020 Progress Report

Table 6: KSCP: Summary Unfavorable Factors for Implementation Noted in September 30, 2020 Progress Report

Result	Summary
Law enforcement	• Ineffective Governance • Lack of Human Resource
ICT and CPA establishment and implementation	• Technical In expertise • Ineffective governance • Insecure tenure
Biodiversity	• Ineffective governance • Ineffective/contradictory policies
KSWS zonation	• Lack of data • Ineffective/contradictory policies
Livelihoods	• Technical production problems • Lack of production infrastructure • Ineffective administration • Lack of market access

Source: KSCP 20 September 2020 Progress Report

Table 7: KSCP: Favorable & Unfavorable Factors for Implementation

KSCP	Summary	Unfavorable Factors	Favorable Factors
Law enforcement	• Ineffective Governance • Lack of Human Resource	• Lack of coordination and knowledge among stakeholders • Low levels of law enforcement including delayed responses to reports of illegal activity • Low levels of human resources for law enforcement • Culture of intervention from high-level officials against crimes.	• None mentioned
ICT and CPA establishment and	• Technical In expertise • Ineffective governance	• Lack of a consistent approach by the land demarcation team from MLMUPC	•

KSCP	Summary	Unfavorable Factors	Favorable Factors
implementation	Insecure tenure	- The process of systematic land titling not well understood by some community members who are clearing land for speculation - External factors (market economy, technology, social discrimination, materialization, climate change, and weak governance including law enforcement. Illegal private land registration in ICT villages) is affecting indigenous social values, land use behaviors, and is a great threat to zonation - Pressure on the ICT in Andoung Kraloeng is mounting as some ICT members attempt to sell community-owned land to cover personal debt - Sre Preah CPA continues to be threatened by illegal activities in and around the CPA	
Biodiversity	- Ineffective governance - Ineffective/contradictory policies	- Giant Ibis nest trees that were used in 2019 were cut down after the birds had finished nesting - Clearance of forest land to cultivate crops exacerbates problems of human–wildlife conflict - National radio station Bayon (95 MHz FM), which usually works closely with MEDIA One, refused to air broadcasts related to forest and wildlife conservation, deeming the issue too controversial.	
KSWS zonation	- Lack of data - Ineffective/contradictory policies	KSWS zonation was delayed by a lack of data availability and the proclamation on land allocation. Endorsement of illegal clearance and settlement by local authorities has been a particular problem in Sre Preah CPA	
Livelihoods	- Technical production problems - Lack of production infrastructure - Ineffective administration - Lack of market access	- Drought during the previous growing season reduced the volume of the harvest - Misunderstandings of the IBIS Rice process led to a few farmers declining to take part in the program - Some farmers have used herbicides, which will make it difficult to obtain organic certification - Farmers have continued to clear land for agricultural purposes so cannot be part of the scheme - Bamboo enterprise group in Sre Preah were struggling to find affordable transportation for raw and semi-processed bamboo poles and slats - Due to the low value of the items, the transportation costs to customers were prohibitively high compared to overall income generated	

Source: KSCP September 30, 2020 Progress Report

Table 8: Summary of KIIs Negative Factors for Implementations Noted by Key Informants

Negative Factors	Key Informant Categories					Grand Total
	Beneficiaries	Government	Knowledgeable Stakeholders	Partners	Private Enterprise	
Administration	4		2	9		15
Design	6		2	6		18
Governance	21	9	3	10	1	59
Production	10	4		6	1	23
Resources	11	7		15		38
Grand Total	52	20	7	46	2	153

Negative Factors	Key Informant Categories					Grand Total
	Beneficiaries	Government	Knowledgeable Stakeholders	Partners	Private Enterprise	
Administration	8%	0%	29%	20%	0%	10%
Design	12%	0%	29%	13%	0%	12%
Governance	40%	45%	43%	22%	50%	39%
Production	19%	20%	0%	13%	50%	15%
Resources	21%	35%	0%	33%	0%	25%
Grand Total	100%	100%	100%	100%	100%	100%

Table 9: Summary of KII Negative Factors for Implementation Noted by Key Informants

Key Informants	•Negative Factors
A. USAID Officials	•Resources Financial •Resources - Human •Governance – Policy •Governance Administration •Governance Corruption •Governance - Policy •Design - Technical •Production -Markets •Design Monitoring & Evaluation
B. Government	•Governance – Policy •Production – Markets •Production – Technical •Governance – Tenure •Resources – Equipment •Governance – Administration •Resources – Water •Resources – Human •Resources – Financial •Governance – Control
C. Partners	•Administration – Procurement •Design – Time period •Production – Markets •Production – Infrastructure •Production – Technical •Resources – Financial •Resources Equipment •Design – Financial •Governance – Policy •Administration – Procedures •Governance - Corruption
D. Beneficiaries	•Administration – Procedures •Production – Weather •Production – Water •Production – Pests •Governance – Corruption •Governance – Land Tenure •Design – Training •Production -Training •Resources – Financing •Governance – Procedures •Resources – Human •Resources – Infrastructure •Design – Time Period
E. Knowledgeable Stakeholders	•Design – Implementors •Governance – Policy •Administration – Training •Design – Time Period

Key Informants	•Negative Factors
	•Governance - Corruption
F. Private Enterprise	•Production - Water
	•Production - Infrastructure

The two tables below show the number of comments regarding the results at the output, outcome, and objective levels by key informant categories. Tables show that KI's mostly commented on outputs. Fewer commented on outcomes and almost none on objectives. This is not an indication of the achievement of results, just of the nature of the dialogue. USAID and Partners categories were the only KI's that discussed objectives. Knowledgeable stakeholders were the category most engaged in discussing outcomes. Results from this table could be strongly influenced by the nature of the questions.

Key Informant Categories	Number of Comments by Results Level			Total
	Output	Outcome	Objective	
Beneficiaries	20	9		29
Government	12	5		17
Knowledgeable Stakeholders	5	3		8
Partners	59	7	7	73
Private Enterprise				0
USAID	16	4	5	25
Total	112	28	12	152

Key Informant Category	Percentage of Comments by Results Level		
	Output	Outcome	Objective
Beneficiaries	69%	31%	0%
Government	71%	29%	0%
Knowledgeable Stakeholders	63%	38%	0%
Partners	81%	10%	10%
Private Enterprise	0%	0%	0%
USAID	64%	16%	20%
Total	74%	18%	8%

Table 12: Summary Table of Links between KSCP and WSSP Performance Indicators at Output and Outcome Results Levels

Performance Indicator Level	WSSP				KSCP			
	Total Possible Links	Directly Linked	Indirectly Linked	Not Linked	Total Possible Links	Directly Linked	Indirectly Linked	Not Linked
Output	36	9	6	21	24	0	10	14
Outcome	24	8	1	15	36	9	6	21
TOTAL	60	17	7	36	60	9	16	35

Table 13: Analysis of Links Between KSCP and WSSP Output, Outcome and Objective Performance Indicators

Analysis of Links Between KSCP and WSSP Output, Outcome and Objective Performance Indicators			
KSCP	Link to Outcome PI		
Output Performance Indicators	Direct	Indirect	No Link
1.d. Number of village events designed and conducted to increase socially responsible behavior by communities	0	1 (1a)	4
1.b. Number of people trained in sustainable natural resources management and/or biodiversity conservation	0	3 (1c.3a, 3c)	3
2.b. Number of laws, policies, or regulations that address biodiversity conservation and/or other environmental themes officially proposed, adopted or implemented (EG. 10.2-5)	0	1 (3a)	3
2.c. Amount of investment mobilized (in USD) for sustainable landscapes (EG. 11-4)	0	1 (3c)	3
3.b. Number of sustainable forestry and biodiversity management plans developed using participatory national and sub-national planning processes	0	1 (3c)	3
3.d. Number of media articles produced about KSWS	0	0	4
Outcome Level Performance Indicators			
1.a. Number of hectares of biologically significant areas under improved natural resource management	0	4 (1h, 1c, 3a, 3c)	0
1.c. Number of people that apply improved conservation law enforcement practices	0	4 (1e, 1h, 1g, 1f)	0
3.a. Number of institutions with improved capacity to address sustainable landscapes issues	0	4 (1e, 1h, 1f, 1g)	0

Analysis of Links Between KSCP and WSSP Output, Outcome and Objective Performance Indicators			
3.c. Number of ICTs and Community Protected Areas (CPAs) established and strengthened	1e, 1h, 1f,	1 (1g)	0
WSSP			
6. The patrolling effort in PPWS as a result of USG assistance.	1 (1)	0	
7. The percentage of wildlife and forest crime cases properly filed and sent to the Provincial Court.	1 (#4)	0	
8. The prosecution rate of filed wildlife and forest crime cases	1 (#4)	0	
9. Number of people trained in sustainable natural resources management and/or biodiversity conservation.	6 (# 14, 12, 13, 14, 15)	0	
11. Amount of investment mobilized (in USD) for sustainable landscapes, as supported by USG assistance.	0	5 (#1, 4, 13, 14, 15)	
16. Number of laws, policies, or regulations that address biodiversity Conservation and/or other environmental themes officially proposed, adopted, or implemented	0	1 (#4)	
Outcome Level Performance Indicators			
1. Number of hectares of biologically significant areas under improved natural resource management	4 (#2,3,5,10)	0	
4. Number of institutions with improved capacity to address sustainable landscapes issues as supported	0	0	
12. The percentage of land titled farming households in PPWS and SWS engaging in Conservation Compatible Agricultural Practices (CCAP)	1 (#10)	0	
13. Number of farmers and others who have applied improved technologies or management practices with USG assistance.	1 (#10)	0	
14. The percentage of people living in PPWS and SWS demonstrated at least a high level of understanding of environmental protection, biodiversity, and conservation	0	0	
15. Number of people that apply improved conservation law enforcement practices	2 (#2,5)	1 (#2)	

Source: WWF 2018. MELP; WWF 2020 Progress Report September 30, 2020

Analysis of Links Between KSCP and WSSP Performance Indicators and KSCP and WSSP Results as Stated in September 30, 2020 Semi-Annual Reports

WSSP

Results as Stated in 30 September 2020 Semi Annual Report	Corresponding Performance Indicators
Result 1: PPWS and SWS populations of flagship species remain stable or are increasing in comparison to the 2018 estimates	5. The estimated population of key ungulate species (banteng, wild pig, and muntjac), yellow-cheeked crested gibbon, and white-shouldered ibis in PPWS and SWS
Result 2: Improved management & enforcement systems in SWS/PPWS and the extended landscape.	4 Number of institutions with improved capacity to address sustainable landscapes issues as supported
Result 3: Increased economic opportunities for target farming households in PPWS & SWS, and enhancement of the role of women in responsible agricultural practices	None
Result 4: Increased environmental awareness for forest stewardship among target “land titled” and CPA communities in PPWS and SWS.	14. The percentage of people living in PPWS and SWS demonstrated at least a high level of understanding of environmental protection, biodiversity, and conservation
Result 5: Economic development decisions in Mondulkiri Province (covering most of the PPWS/SWS extended landscape) based on an inclusive PSP balancing economic, social, and environmental sustainability.	None

KSCP

Activity Objectives & Activities as Stated in 30 September 2020 Semi Annual Report	
Activity Objective 1: Improved biodiversity conservation and ecosystem health in the Eastern Plains Keo Seima Wildlife Sanctuary and its corridors	None
Enhanced law enforcement efforts in KSWS:	I.c. Number of people that apply improved conservation law enforcement practices
Improving law enforcement strategy:	None
Facilitating adaptive management using SMART:	None
:	
Monitoring conservation efforts	I.g. Population estimates of key species in KSWS (Objective 1)
Activity Objective 2: Increased sustainable and equitable economic opportunities, community livelihoods, and natural capital reinvestment in the Eastern Plains Keo Seima Wildlife Sanctuary	None

Sustainable financing of protected areas in Cambodia	None
Improving sustainable income from natural resources	2.d. Income level (\$) of target community from ecotourism projects (Objective 2) 3.b. Number of sustainable forestry and biodiversity management plans developed using participatory national and sub-national planning processes
Developing capacity to fulfil conservation regulations	2.b. Number of laws, policies, or regulations that address biodiversity conservation and/or other environmental themes officially proposed, adopted or implemented(EG. 10.2-5)
Activity Objective 3: Strengthened inclusive and effective landscape management of the Eastern Plains Keo Seima Wildlife Sanctuary and its corridors	None
Zonation to improve landscape management of KSWs:	None
Strengthening community-based land management	1.d. Number of village events designed and conducted to increase socially responsible behavior by communities 1.b. Number of people trained in sustainable natural resources management and/or biodiversity conservation 2.a. Number of people with improved economic benefits derived from sustainable natural resource management and/or biodiversity (Objective 2) 3.b. Number of sustainable forestry and biodiversity management plans developed using participatory national and sub-national planning processes 3.a. Number of institutions with improved capacity to address sustainable landscapes issues 3.c. Number of ICTs and Community Protected Areas (CPAs) established and strengthened
Promoting engagement in conservation through various media channels	3.d. Number of media articles produced about KSWs

Source: WWF Semi Annual Report 30 September 2020; WCS Semi Annual Report 30 September 2020

ANNEX C: SUPPLEMENTARY ANALYSIS TABLES FOR EVALUATION QUESTIONS 3A AND 3B

Table 14: Information About the Renaissance Gold Mine in Phnom Prick Wildlife Sanctuary

Location:	Multiple-Use Zone of Phnom Prick Wildlife Sanctuary
Exploration Period:	15 years
Current Status:	Mid-way through construction phase
Period of Operation:	8 years starting 2021
Period of Closure:	5 years starting 2029
Legal Status:	2019 Obtained Industrial Mining License, Ministry of Mines. 2019 Environmental Impact Statement, Ministry of Environment
Size:	Concession for 1,100 hectares; will directly disturb 500 hectares
Mine size:	1 open pit mine 500 m X 500 side and 200 deep
Processing:	Crushing, milling facility; 200 ha storage; 120 waste rock
Rock Volume	2 million tons rock/year
Product:	100,000 ounces gold/year
Estimated Market Value of Gold	\$2 million/year (@ \$20/once
Infrastructure:	Access road; internal roads
Employment:	Construction – 500 people Operation – 300 people
On-site Environmental Infrastructure	Sediment dams. Clean water & dirty water drains. Zero clean or waste-water discharge; Border fence
Off-site Environmental Measures	Implementing Biodiversity Off-Set Plan; financing forest ranger; ranger station
Off Site Social Measures	
Environmental Financing	(1) social fund; (2) environment; (3) endowment fund environmental performance bond
Reference Environmental Standards	International Finance Corporation; World Bank environmental

Source: KII with representative of the Renaissance Mining Company

Table 15: Perceptions of Stakeholder Key Informants Regarding the Issuance of Mining Licenses

Category of Informant	Perception of Mining	TOTAL
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	Negative	Neutral	Positive	
USAID	5	0	0	5
Government	2	2	2	6
Partners	3	2	0	5
Beneficiaries	5	7	1	13
Knowledgeable Stakeholders	2	1	0	3
Private Enterprise	1	0	1	2
TOTAL	18	12	4	34

Key: Knowledge of Mining Situation in EPL: 0 – none; 1 – some; 2 – detailed

Analysis 1 Stakeholders' Perceptions of Large-Scale Agriculture

Table 16: Perceptions of Stakeholder Key Informants Regarding Large-Scale Agriculture

Category of Informant	Perception of Mining			TOTAL
	Negative	Neutral	Positive	
USAID	2	2	0	4
Government	2	1	1	3
Partners	2	0	1	3
Beneficiaries	6	3	0	9
Knowledgeable Stakeholders	2	0	1	3
Private Enterprise	0	0	1	1
TOTAL	14	6	4	24

Analysis 2 Stakeholder Perceptions of Forestry

Table 17: Perceptions of Stakeholder Key Informants Regarding Forestry

Key Informant Categories	Perspective			Total
	Negative	Neutral	Positive	

Key Informant Categories	Perspective			Total
A. USAID Officials	2	0	1	3
B. Government	0	0	1	1
C. Partners	3	0	0	3
D. Beneficiaries	4	0	0	4
E. Knowledgeable Stakeholders	1	0	2	3
Total	10	0	4	14

Source: KII data

Perceptions of Stakeholder Key Informants Regarding Tourism

Key Informants	Perspective			Total
	Negative	Neutral	Positive	
USAID Officials	0	0	1	1
Government	0	0	1	1
Partners	0	0	1	1
Beneficiaries	0	0	0	0
knowledgeable Stakeholders	1	0	0	0
Private Enterprise	0	0	0	0
Total	1	0	3	4

Source: KII data

Analysis 3 Stakeholder Perceptions of Infrastructure

Table 18: Perceptions of Stakeholder Key Informants Regarding Infrastructure

Key Informants	Perception			Total
	Negative	Neutral	Positive	
A. USAID Officials	1	0	0	1
B. Government	0	0	2	2
C. Partners	3	0	0	3
D. Beneficiaries	0	0	4	4
E. Knowledgeable Stakeholders	0	0	0	0

Key Informants	Perception			Total
F. Private Enterprise	0	0	0	0
Total	4	0	6	10

Source: KII data

Key Informant Categories		Key Informant Perceptions of Government Commitment to Conservation in Eastern Plains Landscape		
		Yes	No	Neutral
Government Actions to Indicate Commitment	A. USAID Officials	0	5	0
	• Support & enforce spatial planning, Conserve the key biodiversity areas; Promote more productive agricultural technology; Enforce conservation laws; Include conservation as a national policies priority; Incorporate private sector in conservation			
	B. Government	4	1	0
	• Analyze cost-benefits of economic development vs conservation; Support rangers more; Invest in communities			
	C. Partners	1	4	0
	• Enforce spatial planning; Coordinate government institutions; Prioritize biodiversity rich areas; Prevent large-scale development & infrastructure; Stop illegal activities; Regulate private investment			
	D. Beneficiaries	1	10	0
	• Control land grabbing; Control corruption			
	E. Knowledgeable Stakeholders	0	5	
	• Champions in government for conservation; Stop corruption & control crime; Permit & encourage forestry			
	F. Private Enterprise	0	0	0

Analysis 4 Key Informant Interview Data on Government Commitment to Resolving Issues of Economic Growth & Conservation

Key Informant Category	Summary of Perspective	
	Commitment	No Commitment
USAID	0	5
Government	4	1

Partners	1	4
Beneficiaries	1	9
Knowledgeable Stakeholders	0	5
Private Enterprise	1	0
Percentage Total	23%	77%

ANNEX D: SUPPLEMENTARY ANALYSIS TABLES FOR EVALUATION QUESTIONS 4A, 4B, AND 4C

Analysis 5 Comparison of Concepts of the Landscape Approach

Chervier et al note that a theory of change should identify the interventions that will bring about change and that for landscape approaches these interventions are

“a range of multi-stakeholder interventions, initiatives, programs applied at sub-national/landscape levels in order to achieve lasting, landscape-wide improvements to natural resource management by catalyzing collaborative action of a group of stakeholders working with local government to institutionalize improved land use governance and practice⁵⁹

Similarly, the Food and Agriculture Organization (FAO) of the United Nations defines integrated landscape management as

“long-term collaboration among different groups of land managers and stakeholders to achieve their multiple objectives and expectations within the landscape for local livelihoods, health and well-being. The protection, conservation, sustainable use and restoration of biodiversity and ecosystem services has been analyzed with a specific focus”⁶⁰ (FAO 2020).

The WWF document The WWF Little Sustainable Landscapes Book identifies the following steps as those required to achieve integrated landscape management:

7. “Interested stakeholders come together for cooperative dialogue and action in a **multi-stakeholder platform**.
8. They undertake a systematic process to exchange information and discuss perspectives to achieve a **shared understanding of the landscape** conditions, challenges, and opportunities.
9. This enables **collaborative planning** to develop an agreed action plan.
10. Stakeholders then **implement the plan**, with attention to maintaining collaborative commitments.
11. Stakeholders also undertake **monitoring for adaptive management** and accountability, which feeds into subsequent rounds of dialogue, knowledge exchange and the design of new collaborative action

⁵⁹ Chervier Colas, Marie-Gabrielle Piketty and James Reed. 2020. Theories of change and monitoring and evaluation types for landscape approaches, in J. Reed, M. Ros-Tonen, and T. Sunderland. 2020. Operationalizing Integrated Landscape Approaches in the Tropics. Bogor, Indonesia: CIFOR.

⁶⁰ FAO (Food and Agriculture Organization of the United Nations). Accessed September 28, 2020. www.fao.org/land-water/overview/integrated-landscape-management/en

12. Success is catalyzed by good **governance** and access to adequate and sustainable **finance** and **markets**.⁶¹

These three definitions, or descriptions of the “landscape approach” clearly emphasize that it is a process of “multi-stakeholder” collaboration to resolve, or at least manage, actual and/or potential conflicts over land uses.

Documentary and KII data indicate USAID/Cambodia, WWF and WCS have a different concept of the “landscape approach” The documentary and KII data indicate that they conceive of the “landscape approach” as a process for considering all the threats to and values of protected areas and then using that information to convince “stakeholders” to protect, or at least not degrade, those protected areas. Thus USAID/Cambodia describes its “extended landscape approach”, as follows:

“The extended landscapes include the core biodiversity areas as well as the broader agricultural areas connected through ecosystem functions, including provision of goods and services. These extended landscapes are the common source of persistent pressures and threats to biodiversity and other natural resources, and otherwise influence the health of the core ecosystems to be conserved. An “extended landscape approach [that] would take into account the biophysical, social, economic and political factors that affect those core biodiversity areas. At the same time, the approach would demonstrate to all stakeholders the value of those areas, quantitatively and qualitatively, for the long-term economic growth and resilience of the country.” ⁶²

WSSP’s Theory of Change only slightly touches on the “landscape approach” when it refers to “spatial planning”:

(1) “If PA management and staff are empowered to effectively monitor, protect, and manage natural resources in and around PAs, **then** poaching, illegal timber harvesting and other illegal activities will be curtailed; and (2) If sustainable economic opportunities are developed with and for local communities and if they learn about the value of ecosystem services, **then** local people will adopt sound natural resource stewardship practices, and livelihoods that degrade natural resources will be curtailed; and (3) If provincial governments develop sound spatial planning with active involvement and buy-in of relevant stakeholders, **then** development in Monduliri Province will take place in ways and in places that do not degrade biodiversity and reduce ecosystem services; (4) If the three prongs of the Theory of Change are effective, not only will wildlife and biodiversity be conserved, but ecosystem services will be maintained for the people of Monduliri.”⁶³

The WSSP administration provided the following definition of the landscape approach:

⁶¹ WWF (World Wildlife Fund). 2016. Landscape Elements: Steps to Achieving Integrated Landscape Management, 12 pp.

⁶² Email USAID/Cambodia to Kernan.

⁶³ USAID/Cambodia. 2018. Cooperative Agreement No. 72044218CA00001 with World Wildlife Fund, Inc. for the USAID Wildlife Sanctuary Support Program, p. 21–22.

“Landscape approach is a means to conceptualize and implement integrated multiple objective programs/projects. It describes an approach to reconciling conservation and development thru interventions in different components of the landscape matrix; e.g. livelihood development goals, and recognizes the need to address the complex interactions between different spatial scales and the need to embrace the full complexity of human institutions and behaviors.

Knowledgeable WWF KIs explained that WSSF’s development of the spatial plan for Mondulkiri Province is WSSP’s principal mechanism to implement a “landscape approach”. Another knowledgeable WFF KII commented that “WWF uses the landscape approach for its projects around the world”, but could not explain how WSSP’s spatial planning process within WSSP corresponded to WWF’s own “multi-stakeholder platform”, as described in the WWF document above.

The KSCP’s Theory of Change does not refer at all to a “landscape approach”:

“That if the primary threats (illegal poaching of wildlife, illegal clearance of forest and loss of availability of NTFPs) can be mitigated through a comprehensive program of improved law enforcement and protected area management, development of sustainable livelihoods for communities and promotion of KSWs as a model site for protected area management, then natural resources, including biodiversity, will be secure and deliver benefits to local communities.”⁶⁴

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Analysis 6 Summary of Analysis of Key Informant Data Regarding Lessons Learned

Future landscape approach activities must have:

1. **Multi Stakeholder Engagement.** The categories of stakeholders who influence land use in the chosen landscape become involved in negotiations over future use of land and natural resources
2. **Integration of Physical, Biological & Social Factors:** The activity considers all the factors that influence land and natural resource use within the defined landscape
3. **Feasible Scope.** the Activity's geographic scale and range of interventions are feasible considering the funds and time period available
4. **Effective Institutional Support.** National, provincial and local government & civil society institutions and authorities provide effective support for the proposed landscape interventions with their policies, funds, personnel and actions
5. **Useful Monitoring and Evaluation System:** The M&E system provides timely, reliable information that permits Activity administrators to adapt its activities to new opportunities and problems
6. **Undisputed Ownership of Land/Resources:** People who invest labor and time in conservation of land and natural resources have knowledge of their assets can be confident that they will receive benefits from their investments
7. **Technical Competence:** The Activity is able to provide technically sound knowledge about the land owners natural resource assets and how to best management them for the long-term benefit to the land owners.

The two tables below show the number of comments regarding lessons learned that were received from different key informant groups. Tables show that partners were most engaged in commenting on lessons learned while beneficiaries were least engaged in commenting on lessons learned. The majority of those interviewed commented on the need for effective institutional support, technical competence, and multi-stakeholder engagement. Few of those interviewed commented on the need for undisputed ownership of land/resources and useful monitoring and evaluation system. Results from this table could be strongly influenced by the nature of the questions.

Lessons Learned	Key Informant						Total
	Beneficiaries	Government	Knowledgeable Stakeholders	Partners	Private Sector	USAID	
Effective Institutional Support	1	4	5	7		5	22
Feasible Scope		2	1	12		1	16
Integration of Physical, Biological & Social Factors		1	1	3		5	10
Multi-Stakeholder Engagement	1	3	1	11	1	3	20
Technical Competence	1	8	3	6	1	2	21
Undisputed Ownership of Land/Resources	1	2					3

Useful Monitoring & Evaluation System				5			5
Total	4	20	11	44	2	16	97

Lessons Learned	Key Informant						Total
	Beneficiaries	Government	Knowledgeable Stakeholders	Partners	Private Sector	USAID	
Effective Institutional Support	25%	20%	45%	16%	0%	31%	23%
Feasible Scope	0%	10%	9%	27%	0%	6%	16%
Integration of Physical, Biological & Social Factors	0%	5%	9%	7%	0%	31%	10%
Multi-Stakeholder Engagement	25%	15%	9%	25%	50%	19%	21%
Technical Competence	25%	40%	27%	14%	50%	13%	22%
Undisputed Ownership of Land/Resources	25%	10%	0%	0%	0%	0%	3%
Useful Monitoring & Evaluation System	0%	0%	0%	11%	0%	0%	5%
Total	100%	100%	100%	100%	100%	100%	100%

Analysis 7: Analysis of Key Informant Data Regarding Key Challenges and Opportunities

Challenge	Opportunity
•Scale of landscape should match budget & time period Government support with budget	•Experience and data are now available to match scale to budget and time period available
•Ensure government budget, personnel, legal and administrative support for extended period of time	•Experience and data now available to justify government support for landscape approach
•Involve private sector that sees more risks than opportunities for profit in necessary landscape approach activities	•Mondulkiri Province has abundant natural resources and large markets for some of its actual and potential products (wood, minerals, tourism, agricultural products)
•Selling carbon credits from forests that are threatened with clearing and degraded and with weak governance is difficult	•Mondulkiri Province still has large areas that have been legally reserved for permanent of forest and a relatively low human population
•National government ministries have contradictory policies and priorities and mostly gave little importance to conservation of biodiversity and forests	•Conservation of biodiversity and forests provides important economic, political and social benefits and the natural resource professions (e.g. forestry, watershed management, conservation biology, etc.) have standard, proven concepts and tools to manage natural resources
•Long-term inhabitants of Mondulkiri's forests, mostly the Bunong, have relatively little political or financial power and are poor and mostly uneducated	•Bunong people still have deep ties to their traditional land and forests and have begun to organize themselves in their communities and between communities
•Technical capacity for conservation in Cambodia in general and in Modulkiri Province in particular is relatively low and natural resource management is generally considered a low-status occupation	•the Royal University of Cambodia is building up its capacity to train natural resource management researchers and professionals
•Tenure over land and natural resources is insecure and many boundaries have not been delimited legally on maps or on the ground	•Experience has accumulated regarding how to achieve land titling and establish rights to natural resources
•Social and productive infrastructure is expensive and not a priority for USAID financing although it is important for livelihoods and production	•There are other sources of financing for infrastructure such as REDD+, other donors and the government
•Logging, poaching and encroachment are degrading Mondulkiri's forest and biodiversity resources	•Experience has accumulated about how to organize enforcement of conservation laws and regulations including what technology can be used effectively
•the public in general and decision-makers in particular do not all fully understand the concept and practice of the landscape approach.	•Experience has been accumulated about the concept and practice of the landscape approach which can be distilled and conveyed to the general public and to decision-makers
•Wildlife sanctuaries still lack Standard Operating Procedures (SOP) to regulate enforcement of conservation laws and regulations and to guide management practices	•Much experience has been accumulated about how to enforce conservation laws and regulations and to manage the wildlife sanctuaries
•International conservation NGOs currently dominate conservation activities in Mondulkiri Province	•The international conservation NGOs can transfer their responsibilities and knowledge to Cambodian professionals and institutions
•Markets in Vietnam, China and elsewhere are creating a large demand for products extracted illegally from the Mondulkiri forests	•International treaties regarding climate change, protection of biodiversity, desertification and international public opinion can influence the Cambodian government to give more priority to conserving Mondulkiri's forests and biodiversity
•A higher percent of Mondulkiri Province has been designated as protected areas than the government has the capacity to protect or to manage reserved	•By focusing on the core, key areas and corridors for conserving biodiversity and forests the government can achieve more effective conservation
•The population of Mondulkiri Province is growing rapidly due to migration from other parts of Cambodia and high birth rates among the current population which puts more pressure to clear forest land	•More efficient production technology and higher levels of education can increase production on existing farm and grazing land and provide more job opportunities to the population
•Mining within the wildlife sanctuaries can potentially cause severe, irreversible negative impacts on forests and biodiversity	•Mining can produce huge amounts of income part of which could be used to mitigate, avoid or offset its negative effects on forests and biodiversity by financing the effective management of the wildlife sanctuaries

Analysis 8: Summary of Analysis of Key Informant Data Regarding Other Opportunities

Key Informants Suggestions for Other Opportunities	Continuity	Landscape Approach	5 Year Time Frame	Proven Technology/ Practices	Economic Growth
Landscape Approach	Yes	Yes	Yes	Yes	Yes
Focused on KSWS, PHWS & SWS					
Focused on Prey Lang					
National Policies & Laws	No	Yes	Yes	Yes	Yes
National level policy support tied to national tourism or Cambodians					
Develop national conservation policies					
Organize donor policy technical working groups					
Establish a Monduliri Province Biosphere					
Geographic Areas Other than the Eastern Plains Landscape	No	No	No	No	No
Landscape approach in other geographic areas					
Ratanakiri Province, Virachey National Park					
Virachey National Park in Ratanakiri					
Conservation corridors between habitats					
Transboundary collaboration between EPL and Vietnam					
Monitoring biodiversity in the Cardamoms					
Conserving remaining forested area across all of Cambodia					
Tourism	No	No	Yes	No	Yes
Specific program to plan, promote, finance, etc. ecotourism					
Focus on promoting ecotourism in especially attractive sites					
Community based eco and ethnic tourism at specific sites					
Infrastructure	No	Yes	Yes	Yes	Yes
Infrastructure for social (household and economic benefits					
Infrastructure to resolve water supply problems					
Research & Education	No	Yes	Yes	Yes	Yes
National environmental education program					
Incorporate the Royal University of Phnom Penh in EPL activities					
Study impacts of livelihood and community engagement conservation					
Monitoring biodiversity in the Cardamoms					
Make a detailed study and evaluation of the Bunong culture and traditions					
Financing for Conservation	Yes	Yes	Yes	Yes	Yes
Finance more forest rangers					
Scale up REDD+ activity to include other forested areas					
Savings groups to finance communities' and individuals' projects					
Biodiversity Conservation	No	No	Yes	Yes	

Focus on biodiversity & forest conservation in all provinces					
Specific effort to recover banteng, boar, ungulate and/or tiger populations					
Increase enforcement collaboration between the three wildlife sanctuaries					
Protect a few core biodiversity zones					
Natural Resource Management					
Watershed management approach rather than landscape approach					
Reforestation to forest cover & wildlife habitat					
Community forestry					
Livelihood Activities	No	Yes	Yes	Yes	Yes
Support livestock production					

Analysis 9: Discussion of Other Opportunities

Design Activity to focus on community forest management with Bunong including timber production. The RGC has considerable focus on supporting community forestry, yet there appears to be a reluctance to allocate high value forest areas to local community groups, which would provide some degree of protection and security for local forest users. However, even community forest designation is increasingly proving to be too weak to either prevent illegal logging or the reallocation of community forest lands to ELC agreements by the central government. In any event, the RGC’s ambitious goal of two million hectares under community forestry pertains to only a small share of the nation’s 10.5 million hectares of forest land, so it cannot constitute a solution for the nation’s forests in general.⁶⁵

Design an Activity to focus on bamboo community forest management and enterprises with forest dwellers. A knowledgeable stakeholder identified that there are large unutilized bamboo forests on the Srepok River that ought to be utilized to benefit forest dwellers. The key informant explained that the river is already used as a ‘floating highway’ and if bamboo were to be sustainably harvested, could provide great benefit to indigenous households. The stakeholder also promoted the planting of bamboo on degraded forest land and inside CPAs. The stakeholder has gained permission to undertake pilot projects with the Forest Administration in Kratie province on revoked ELCs under a Private Sector entity called Leopa Bamboo⁶⁶ which would also provide a raft of social benefits to communities in Kratie province if ever funded. For wildlife sanctuaries in the EPL, the stakeholder suggested

⁶⁵ Forest Trends. 2015. Conversion Timber, Forest Monitoring, and Land Use Governance in Cambodia, July 2015. <http://forest-trends.org/releases/uploads/Cambodia%20Concessions%20Report%20small%20size.pdf>.

⁶⁶ Open Corporates 2020.

that ownership of each bamboo plant could be given to beneficiaries, to ensure the proper management of the resource and its sustainable harvest into the future. The stakeholder confirmed that bamboo forests in conservation zones of CPAs could also serve as sites for the release of species such as slow loris, who are threatened specifically by Khmer traditional medicine practices and the illegal pet trade.⁶⁷ The principal product best suited to the species of bamboo and technical capacity apparent in Mondulkiri province would be for furniture and a biochar soil improver.

Design an Activity to increase Cambodian professional, research, and technical capabilities through establishing a new academic and vocational institution in the EPL.

Project technical advisors and managers recognized that there is a lack of qualified candidates to fill integral Project positions (the late recruitment of a Project lawyer for WSSP serves as one example). Challenges related to a lack of human resource capacity likely contributed to Project delays. Project technical advisors recommended that one solution to address a lack of technical capacity would be to develop Cambodian professional and research capabilities through establishing a wildlife, forestry, and ranger college in the EPL. Law enforcement actors working under WSSP emphasized that such an institution could help to develop managerial procedures (such as SOPs for wildlife sanctuaries), train and develop local counterparts, and support graduates to implement forest protection. A dedicated educational and training institution could also provide ecotourism or sabbatical opportunities and in turn develop the capacity of Cambodian conservationists and PDoE counterparts.

Design Activity to support the already existing indigenous community social-network and their capacity to gain national-level support to pressure provincial and district authorities to respond to forest crime. Two indigenous activists explained that many indigenous and concerned Khmer in Mondulkiri province utilize Facebook as a tool to advocate for prosecution of forest crime cases. The two activists interviewed specified that in their commune alone, Facebook had been used to raise five cases of forest crime perpetrated by outsiders or locally connected individuals. They explained that ordinarily, it is difficult to encourage the provincial or district authorities to respond to illegal exploitation. But through Facebook, the case can be carried to national authorities who then pressurize sub-national actors to take definitive action. The ET ascertained that Bunong and other indigenous have their own dedicated Facebook groups in MDK. A distinguished Bunong forest warden in Pu Chey CPA adjacent to the Vietnamese border inferred that Vietnamese hunters and loggers maintain an informal network with indigenous contacts around Pu Chey. However, it was not clear if this network is maintained online or by telephone. Facebook could prove useful as a tool for disseminating counter wildlife trafficking messages and regulating wildlife trade as per the corporation's commitment under the Coalition to End Wildlife Trafficking Online.⁶⁸

Design Activity to support the immediate intensive management of charismatic and keystone species and habitat. Whilst tiger reintroduction is a global initiative, knowledgeable stakeholders identified the decline of key ungulates and the inability to secure habitat from poachers or snaring across an adequate range for tigers renders this initiative temporarily unfeasible, especially in the Greater Mekong countries of Vietnam, Laos, and Cambodia. One partner stakeholder explained that tiger reintroduction was likely planned for the EPL before the implementer was fully aware of the complexity of issues

⁶⁷ Traffic 2020.

⁶⁸ WWF. 2020. Coalition to End Wildlife Trafficking Online.

such as an unabating snaring crisis, and the subsequent decline of all terrestrial prey. Senior partners explained that tigers likely became functionally extinct in the EPL after 2007. Several knowledgeable and partner stakeholders recognized that since the Indochinese leopard population is of global significance, and the population of this sub-species in Srepok Wildlife Sanctuary is believed to be in serious decline,⁶⁹ the intensive management of key charismatic and keystone populations and their habitat may be integral. One partner stakeholder believed that facilities to rescue leopard or critically endangered keystone species, such as Eld's Deer, from the wild for ex-situ breeding could be a potential future intervention. Another senior partner explained that an intensive management fence to protect migration corridors and key habitat inside the core zone of Srepok Wildlife Sanctuary may be a necessity in the future, likely as a means to address the snaring crisis.

Access USG Combatting Wildlife Trafficking (CWT) funds and design a complimentary Project to reduce transboundary wildlife and timber trafficking through the EPL, for both locally sourced species and higher value wildlife products. USAID officials recognized that the Mission is currently without specified CWT funds and that whilst the Projects do monitor snare removal, the filing of court cases and prosecutions, support the promulgation of a provincial ban on the sale of bushmeat, and fund a mobile enforcement unit, they do not have a dedicated CWT or criminological focus. Stakeholders across KI categories identified the prevalence of wildlife crime in Mondulkiri province, regardless of measures from the Provincial Governor's office to ban the sale of bushmeat in restaurants and markets.

Whilst no hard evidence was provided, knowledgeable stakeholders and partners identified tenuous links between wildlife trafficking and both the Vietnamese and Cambodian border armies, or simply connected individuals who are not fearful of any repercussions from trafficking timber, wildlife, or parts and derivatives. According to the London-based Environmental Investigation Agency, the trafficking of Cambodian timber to Vietnam is believed to have been conducted under fraudulent CITES permits produced in Cambodia.⁷⁰ Knowledgeable stakeholders, partners, and beneficiaries confirmed that both timber and wildlife trafficking is common between border posts 8 – 9, or during the dry season, via any unofficial route through the forest to Vietnam. At the same time, the NGO TRAFFIC has recognized that the international border crossing from Mondulkiri into Dak Lak province in Vietnam is likely a busy trafficking route for high-value wildlife products, such as ivory, sourced from Africa, likely flown into Phnom Penh and moved by organized crime syndicates to serve the Vietnamese, or potentially the Chinese tourist market pre-Covid-19.⁷¹ The trafficking of timber and locally sourced species in Mondulkiri serve domestic markets, the Vietnamese market (including ranches which launder illegal goods),⁷² and could intercept with transcontinental high-value wildlife trafficking and other associated criminal enterprises.⁷³

Gain high-level support for the protection of NR and indigenous livelihoods in the EPL through engaging the Supreme National Economic Council in the promulgation of a biosphere reserve concept for the EPL, albeit cautiously. A knowledgeable stakeholder who worked on several analyses for USAID

⁶⁹ Grey 2013; Rostro Garcia et al. 2018.

⁷⁰ EIA 2018.

⁷¹ Traffic 2020.

⁷² EIA 2018; ENV 2017.

⁷³ Traffic 2020.

Projects inferred that for conservation to work well in Cambodia, NGOs best not be in the driving seat. The key informant inferred that a UNESCO biosphere reserve could be an example of engaging a third party for the protection of indigenous culture and their natural resources in the EPL, rather than having implementers at the center of any conservation effort. The stakeholder drew upon their experience of promulgating a nominal UNESCO biosphere reserve for Tonle Sap. This was won through engaging the Supreme Economic Council and the Council of Ministers to understand the tourism potential of Tonle Sap, its connection to Angkor, and direct economic benefits that could be reaped from increased tourism as a result of the area's UNESCO status. The knowledgeable stakeholder expressed that the lesson learned from creating this concept for Tonle Sap was that whilst the Supreme National Economic Council are highly knowledgeable on economic issues, yet lack a nuanced understanding of the importance of sustainable NRM. Government stakeholders confirmed that Monduliri province will likely develop an airport in the future, and hence a UNESCO status for the landscape could be a significant draw for adventure tourists with a greater expendable income than the backpackers who ordinarily visited Monduliri previous to COVID-19.