NON-PERMANENCE RISK REPORT

Document Prepared by the Wildlife Conservation Society

Project Title	Reduced Emissions from Deforestation and Degradation in Keo Seima Wildlife Sanctuary
Version	1.0
Date of Issue	22 July 2020
Project ID	1650
Monitoring Period	1 January 2018 – 31 December 2019
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1 INTERNAL RISK

Risks from weaknesses in project management are assessed as very low due to the high capacity of the implementing partners and the existence of a formal adaptive management system.

The implementing organization and several of the implementing partners had been active in conservation at the site for up to eight years prior to the project start date (Evans et al. 2013) and already had a well-established core team which has been expanded to achieve the additional activities required for the REDD+ project as resources became available. The team draws on the combined strengths of a government agency (MoE), an international conservation NGO (WCS) and a number of local and international development NGOs.

The MoE has the legal mandate to manage protected areas (PA) in Cambodia. It has over 1500 staff, including senior managers and core technical offices in Phnom Penh and a network of local offices extending out to every district (RGC 2010). Senior MoE management staff assigned to the KSWS REDD+ project vary over time. They are mainly drawn from the General Department of Administration for Nature Conservation and Protection (GDANCP) and the National Council for Sustainable Development (NCSD), with involvement of other technical offices as required. These managers have extensive experience in protected area management, implementation of forestry law enforcement, design of community engagement programs, wildlife monitoring, coordination with other stakeholders and management of large budgets. They also provide training to and coordinate the involvement of officers from the provincial and district branches of the MoE, who have skills in matters such as forest estate demarcation, law enforcement, oversight of community forestry and forest tree nurseries, and members of the Royal Cambodian Armed Forces who participate in law enforcement patrols.

WCS has strong institutional capacity to support the work of the project proponent. WCS, founded in 1895 as the New York Zoological Society, is an internationally recognized organization dedicated to preserving the Earth's wildlife and wild landscapes and seascapes. WCS currently oversees a portfolio of more than 500 conservation projects in 60 countries in Asia, Africa, Latin America, and North America. WCS works with national governments, universities, non-governmental organizations (NGOs) and dedicated individuals to increase understanding and awareness of the importance of wildlife through the establishment and strengthening of protected areas, conducting scientific research, strengthening national governmental organizations and NGO capacity, and training the next generation of conservation professionals.

More recently, WCS has engaged in the development of its Carbon for Conservation initiative. Currently, WCS is working with communities and governments in 18 landscapes and 14 countries to develop sub-national REDD+ demonstration projects and support the development of national REDD+ strategies. WCS believes that work at sub-national and national levels should be linked in such a way that national REDD+ strategies are informed by on-the-ground

experience obtained through demonstration projects. WCS only works on sub-national REDD+ demonstration projects in landscapes where they have or plan to have a long-term presence. This long-term presence is a prerequisite to success in order to understand the drivers of deforestation and implement activities that reduce deforestation effectively and ensure permanence with community consent and participation.

Specific REDD+ project management experience within the WCS Global Conservation Program includes two VCS and CCBA dually validated and verified Avoided Unplanned Deforestation projects. These projects are the Makira REDD+ in Madagascar and the Keo Seima Wildlife Sanctuary REDD project in Cambodia. Specific project staff supporting the WCS Global Conservation Program have experience developing REDD projects beyond this. WCS has successfully managed the Makira REDD+ project, of similar scale and type as Seima REDD+, from inception through periodic verifications. This includes strong institutional capacity in technical aspects of carbon measurement and monitoring ranging from locating and applying IPCC Tier 1 defaults and Tier 2 data sources to conducting the Tier 3 GHG estimation procedures required by the Seima REDD+ methodological approach. Technical skills include carbon density estimations of forest strata from biomass plots, remote sensing monitoring and ex-ante modeling of activity data, calculation of change matrices and application of emission factors, application of leakage corrections, and uncertainty estimation and the calculation and application of deductions. The WCS Global Conservation program has foresters, modelers, remote sensing specialists, and REDD+ technical experts who are available to support Seima REDD+ activities. Additionally WCS maintains strong relationships with numerous technical partners and academic institutions who are available on a contractual basis if further technical support is required.

WCS Cambodia employs various non-government national project staff on the KSWS project including expatriate or national technical advisors, field team members, volunteers, and Phnom Penh based technical and administrative personnel. The technical advisors are often resident long term on-site and over the past few years as needed have included at various times Senior Natural Resources Management advisor, a Community and Civil Society Development advisor, a Wildlife and Threats Monitoring advisor and a Law Enforcement advisor. WCS Global Conservation Program also has a conservation support team based regionally and at the New York headquarters that provides technical assistance, analysis, training and capacity building to WCS field programs. The Conservation Support Unit, established over 10 years ago, provides direct technical support in the areas of conservation strategic development, status and impact monitoring, landscape and ecological modelling, education outreach and capacity building.

Project Management		
Risk Factor	**Risk Factor and/or Mitigation Description**	**Risk Rating**
a)	Species planted (where applicable) associated with more than 25% of stocks on which GHG credits have previously been issued are not native or proven to be adapted to the same or similar agro-ecological zones (s) in which the project is located.	0
b)	Ongoing enforcement to prevent encroachment by outside actors is required to protect more than 50% of stocks on which GHG credits have previously been issued.	2
c)	Management team does not include individuals with significant experience in all skills necessary to successful undertake all project activities (ie, any area of required experience is not covered by at least one individual with at least 5 years experience in the area).	0
d)	Management team does not maintain a presence in the country or is located more than a day of travel from the project site, considering all parcels or polygons in the project area.	0
e)	Mitigation: Management team includes individuals with significant experience in AFOLU project design and implementation, carbon accounting and reporting (eg, individuals who have successfully managed projects through validation, verification, and issuance of GHG credits) under the VCS program or other approved GHG programs.	-2
f)	Mitigation: Adaptive management plan in place. Applicable. Fully implemented. Since 2009 KPWS has operated under an adaptive management cycle involving systematic monitoring, annual participatory review of progress, drafting of workplans and updating strategic plans.	-2
Total Project Management (PM) [as applicable, (a + b + c + d + e + f)] Total may be less than zero.		-2

Via grant money raised and increasing sales the project already achieved breakeven in the most recent fiscal year and financial projections indicate this will continue going forward. Between existing grants raised and a reserve fund from credit sales, the project has secured the funding required to achieve breakeven in 2021. The high Net Present Value of alternative land uses relative to the income expected from the project also poses a risk, but this is largely offset by the strong legal basis for long-term protection at the site.

Financial report made available to verifier.

Financial Viability		
Risk Factor	**Risk Factor and/or Mitigation Description**	**Risk Rating**
a)	Project cashflow breakeven point is greater than 10 years from current risk assessment	0
b)	Project cashflow breakeven point is between 7 up to 10 years from current risk assessment	0
c)	Project cashflow breakeven point is between 4 up to 7 years from current risk assessment	0
d)	Project cashflow breakeven point is less than 4 years from current risk assessment. The Financial model presented separately shoes breakeven will occurred in 2021.	0
e)	Project has secured less than 15% of funding needed to cover the total cash out before the project reaches breakeven.	0
f)	Project has secured 15% to less than 40% of funding needed to cover the total cash out before the project reaches breakeven.	0
g)	Project has secured 40% to less than 80% of funding needed to cover the total cash out before the project reaches breakeven	0
h)	Project has secured 80% or more of funding needed to cover the total cash out before the project reaches breakeven. Calculated at over 100%.	0
i)	**Mitigation**: Project has available as callable financial resources at least 50% of total cash out before project reaches breakeven. Applicable.	-2
Total Financial Viability (FV) [as applicable, ((a, b, c or d) + (e, f, g or h) + i)] Total may not be less than zero.		0

See Annex 2.3 Appendix 1 of PD

Opportunity Cost		
Risk Factor	**Risk Factor and/or Mitigation Description**	**Risk Rating**
a)	NPV from the most profitable alternative land use activity is expected to be at least 100% more than that associated with project activities; or where baseline activities are subsistence driven, net positive community impacts are not demonstrated. Applicable.	8
b)	NPV from the most profitable alternative land use activity is expected to be between 50% and up to 100% more than from project activities	0
c)	NPV from the most profitable alternative land use activity is expected to be between 20% and up to 50% mre than from project activities	0
d)	NPV from the most profitable alternative land use activity is expected to be between 20% more than and up to 20% less than from project activities; or where baseline activities are subsistence-driven, net positive community impacts are demonstrated.	0
e)	NPV from project activities is expected to be between 20% and up to 50% more profitable than the most profitable alternative land use activity	0
f)	NPV from project activities is expected to be at least 50% more profitable than the most profitable alternative land use activity.	0
g)	**Mitigation**: Project proponent is a non-profit organization	0
h)	**Mitigation**: Project is protected by legally binding commitment to continue management practices that protect the credited carbon stocks over the length of the project crediting period. Applicable; the Sub-decree creating the KPWS is indefinite in duration.	-2
i)	**Mitigation**: Project is protected by legally binding commitment to continue management practices that protect the credited carbon stocks over at least 100 years. Applicable; the Sub-decree creating the KPWS is indefinite in duration.	-8
Total Opportunity Cost (OC) [as applicable, (a, b, c, d, e or f) + (g + h or i)] Total may be less than 0.		-2

Project Longevity

a)	Without legal agreement or requirement to continue the management practice.	0
b)	With legal agreement or requirement to continue the management practice.	-20
Total Project Longevity (PL) May not be less than zero		0

Internal Risk	
Total Internal Risk (PM + FV + OC + PL) Total may not be less than zero.	0

2 EXTERNAL RISKS

Though land tenure and use in the Reference Region in general is complex, the choice of Project Area avoids most forms of risk to be assessed in this section. The estimated risk scores are reduced somewhat by the clearly established legal basis for protection of the KPWS and the evidence of strong community agreements clarifying the status of these overlapping claims with respect to the REDD+ project. Cambodia's relatively low scores on the database of Worldwide Governance Indicators increase the assessed risk, although this is partly offset by the existence of a national REDD+ Readiness process.

Land Tenure and Resource Access/Impacts		
Risk Factor	**Risk Factor and/or Mitigation Description**	**Risk Rating**
a)	Ownership and resource access/use rights are held by the same entity(s)	0
b)	Ownership and resource access/use rights are held by different entity(s) (e.g., land is government owned and the project proponent holds a lease or concession) Applicable. Whilst the Project Area is owned by the Royal Government of Cambodia as State Public Land, traditional users have some resource use rights in accordance with the Forestry Law.	2

c)	In more than 5% of the project area, there exist disputes over land tenure or ownership.	0
d)	There exist disputes over access/use rights (or overlapping rights)	0
e)	WRC criterion N/A	0
f)	**Mitigation**: Project Area is protected by legally binding commitment (e.g., a conservation easement or protected area) to continue management practices that protect carbon stocks over the length of the project crediting period Applicable The Sub-decree creating the KPWS is indefinite in duration.	-2
g)	**Mitigation**: Where disputes over land tenure, ownership or access/use rights exist, documented evidence is provided that projects have implemented activities to resolve the disputes or clarify overlapping claims.	0
Total Land Tenure (LT) [as applicable, ((a or b) + c + d + e + f + g)] Total may not be less than zero.		0

Community Engagement		
Risk Factor	**Risk Factor and/or Mitigation Description**	**Risk Rating**
a)	Less than 50 percent of households living within the project area who are reliant on the project area, have been consulted	0
b)	Less than 20% percent of households living within 20km of the project boundary outside the project area, and who are reliant on the project area, have been consulted.	0
c)	**Mitigation**: The project generates net positive impacts on the social economic well-being of the local communities who derive livelihoods from the project area. These benefits are summarized in Table 6.1 of the PD.	-5
Total Community Engagement (CE) [where applicable, (a + b + c)] Total may be less than zero.		-5

Cambodia's Political Risk Score is -0.77.

Political Risk		
Risk Factor	**Risk Factor and/or Mitigation Description**	**Risk Rating**
a)	Governance Score of less than -0.79	0
b)	Governance Score of -0.79 to less than -0.32	4
c)	Governance Score of -0.32 to less than -0.19	0
d)	Governance Score of 0.19 to less than 0.82	0
e)	Governance Score of 0.82 or higher	0
f)	**Mitigation:** Country is implementing REDD+ Readiness or other activities and is a recipient of FCPF funds. Information on Cambodia's REDD+ Readiness is compiled on the REDD+ Cambodia website (http://www.cambodia-redd.org/) the Forest Carbon Partnership Facility country database also keeps records of Cambodia's REDD+ Readiness progress (http://www.forestcarbonpartnership.org/cambodia)	-2
Total Political (PC) [as applicable ((a, b, c, d or e) + f)] Total may not be less than zero.		2

External Risk	
Total External Risk (LT + CE + PC) Total may not be less than zero.	0

3 NATURAL RISKS

Fire (F)	
Significance	Insignificant/transient losses as confirmed through remote sensing analysis of historic imagery. This study detailed in the document "Large Area Deforestation from Uncontrolled Fires and Disease/Pest Outbreak" that was submitted to the auditor during validation. No large areas of forest fire or disease related deforestation observed. As there are annual anthropogenic fires in the project area (less than every 10 years)

	however no loss of forest from fire greater than 5% (~ 8,000 ha) has been observed, the risk of fire has been set to a value of 2 per tool instructions.
Likelihood	Insignificant. Less than every 10 years
Score (LS)	2
Mitigation	1

Pest and Disease Outbreak (PD)	
Significance	Insignificant/transient losses as confirmed through remote sensing analysis of historic imagery. This study detailed in the document "Large Area Deforestation from Uncontrolled Fires and Disease/Pest Outbreak" that was submitted to the auditor during validation. Further confirmation was provided in a letter from a long-term local expert. No large areas of forest fire or disease related deforestation observed. A value of 1 was selected conservatively.
Likelihood	Every 25 to less than 50 years
Score (LS)	1
Mitigation	1

Extreme Weather (W)	
Significance	Cambodia has no record of extreme weather events. This risk is insignificant. Sites such as the UNEP Global Risk Data Platform (http://preview.grid.unep.ch/) or Insurance Australia Group (http://globalriskmap.nicta.com.au/) identify no history of cyclones, flooding, storm surge etc for the project area.
Likelihood	Every 25 to less than 50 years
Score (LS)	1
Mitigation	1

Geological Risk (G)	
Significance	Cambodia has no record of extreme geological events. This risk is

	insignificant. Sites such as the NOAA National Centers for Environmental Information Hazard Maps (https://maps.ngdc.noaa.gov/viewers/hazards/) identify no tsunami events, significant earthquakes, or significant volcanic eruptions.
Likelihood	1
Score (LS)	1
Mitigation	1

Score for each natural risk applicable to the project (Determined by (LS × M)	
Fire (F)	2
Pest and Disease Outbreaks (PD)	1
Extreme Weather (W)	1
Geological Risk (G)	1
Other natural risk (ON)	N/A
Total Natural Risk (as applicable, F + PD + W + G + ON)	**5**

4 OVERALL NON-PERMANENCE RISK RATING AND BUFFER DETERMINATION

4.1 Overall Risk Rating

Risk Category	Rating
Internal Risk	0
External Risk	0
Natural Risk	5
Overall Risk Rating (a + b + c)	**5 (10)**

4.2 Calculation of Total VCUs

Item	2018	2019	TOTAL
Gross Emissions Reductions (NERs)	557,171	1,083,969	1,641,141
Overall Risk Rating	10%	10%	-
Buffer Contribution	118,042	128,492	246,534
Net Emissions Reductions (VCUs)	439,129	955,477	1,394,606