

# NON-PERMANENCE RISK REPORT SOUTHERN CARDAMOM REDD+ PROJECT



Document Prepared by Wildlife Works and Wildlife Alliance

|                          |                                                                                                                                       |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>Project Title</b>     | Southern Cardamom REDD+ Project                                                                                                       |
| <b>Version</b>           | 4.3                                                                                                                                   |
| <b>Date of Issue</b>     | 09 November 2018                                                                                                                      |
| <b>Project ID</b>        |                                                                                                                                       |
| <b>Monitoring Period</b> | 01-January-2015 to 31-December-2017                                                                                                   |
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## 1. INTERNAL RISK

| Project Management                                                                                            |                                                                                                                                                                                                                                                                                                                                                                           |             |
|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Risk Factor                                                                                                   | Risk Factor and/or Mitigation Description                                                                                                                                                                                                                                                                                                                                 | Risk Rating |
| a)                                                                                                            | Not Applicable - No species will be planted for this Project.                                                                                                                                                                                                                                                                                                             | 0           |
| b)                                                                                                            | Not Applicable – No previous credits have been issued for this Project.                                                                                                                                                                                                                                                                                                   | 0           |
| c)                                                                                                            | Not Applicable – The Project management team has extensive experience in all skills necessary for the project activities.                                                                                                                                                                                                                                                 | 0           |
| d)                                                                                                            | Not Applicable – The project management team is located in Phnom Penh, Cambodia, and manages the field team that is located in the Project Area.                                                                                                                                                                                                                          | 0           |
| e)                                                                                                            | <b>Mitigation:</b> The project management team consists entirely of senior members of Wildlife Alliance and the Ministry of Environment that have extensive experience in natural resource project design, management and implementation. Additionally, Wildlife Works, an experienced AFOLU project developer, is providing technical assistance to the management team. | -2          |
| f)                                                                                                            | <b>Mitigation:</b> The Project Proponent has implemented an adaptive management plan including a community feedback mechanism, detailed social and biodiversity impact monitoring, and many mitigation activities as detailed in the Project Design document.                                                                                                             | -2          |
| <b>Total Project Management (PM) [as applicable, (a + b + c + d + e + f)]</b><br>Total may be less than zero. |                                                                                                                                                                                                                                                                                                                                                                           | <b>-4</b>   |

| Financial Viability |                                                                                                                                               |             |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Risk Factor         | Risk Factor and/or Mitigation Description                                                                                                     | Risk Rating |
| a)                  | Not Applicable                                                                                                                                | 0           |
| b)                  | Not Applicable                                                                                                                                | 0           |
| c)                  | Not Applicable                                                                                                                                | 0           |
| d)                  | Project cash flow breakeven point is 4 years or less from the current risk assessment                                                         | 0           |
| e)                  | Not Applicable                                                                                                                                | 0           |
| f)                  | Project has secured 15% to less than 40% of funding needed to cover the total cash out required before the project reaches breakeven          | 2           |
| g)                  | Not Applicable                                                                                                                                | 0           |
| h)                  | Not Applicable                                                                                                                                | 0           |
| i)                  | <b>Mitigation:</b> The Project has available as callable financial resources at least 50% of total cash out before project reaches breakeven. | 0           |

|                                                                                                                                  |          |
|----------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>Total Financial Viability (FV) [as applicable, ((a, b, c or d) + (e, f, g or h) + i)]</b><br>Total may not be less than zero. | <b>2</b> |
|----------------------------------------------------------------------------------------------------------------------------------|----------|

| 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 | 8           |
| b)                                                                                                                   | Not Applicable                                                                                                                                                                                                                                         | 0           |
| c)                                                                                                                   | Not Applicable                                                                                                                                                                                                                                         | 0           |
| d)                                                                                                                   | Not Applicable                                                                                                                                                                                                                                         | 0           |
| e)                                                                                                                   | Not Applicable                                                                                                                                                                                                                                         | 0           |
| f)                                                                                                                   | Not Applicable                                                                                                                                                                                                                                         | 0           |
| g)                                                                                                                   | Not Applicable – <b>Mitigation:</b> Project proponent is the government of Cambodia.                                                                                                                                                                   | 0           |
| h)                                                                                                                   | <b>Mitigation:</b> 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 (see project longevity)                                 | -2          |
| i)                                                                                                                   | <b>Mitigation:</b> Project is protected by legally binding commitment to continue management practices that protect the credited carbon stocks over at least 100 years (see project longevity)                                                         | -8          |
| <b>Total Opportunity Cost (OC) [as applicable, (a, b, c, d, e or f) + (g + h or i)]</b><br>Total may be less than 0. |                                                                                                                                                                                                                                                        | <b>-2</b>   |

| Project Longevity                                                |                                                                                                                                                                                                           |          |
|------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| a)                                                               | Not Applicable                                                                                                                                                                                            | 0        |
| b)                                                               | There is legal protection for the Project Area and a requirement to continue the conservation management Practice in perpetuity as enshrined in Cambodian national law, the project longevity is 30 years | 0        |
| <b>Total Project Longevity (PL)</b><br>May not be less than zero |                                                                                                                                                                                                           | <b>0</b> |

| Internal Risk                                                                      |          |
|------------------------------------------------------------------------------------|----------|
| <b>Total Internal Risk (PM + FV + OC + PL)</b><br>Total may not be less than zero. | <b>0</b> |

## 2. EXTERNAL RISKS

| Land Tenure and Resource Access/Impacts                                                                           |                                                                                                                                                                                                                                        |             |
|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Risk Factor                                                                                                       | Risk Factor and/or Mitigation Description                                                                                                                                                                                              | Risk Rating |
| a)                                                                                                                | The Project Area land is under the jurisdiction of the Royal Cambodian Government Ministry of Environment, and all resource and carbon rights are also held by the Ministry of Environment                                             | 0           |
| b)                                                                                                                | Not Applicable                                                                                                                                                                                                                         | 0           |
| c)                                                                                                                | Not Applicable                                                                                                                                                                                                                         | 0           |
| d)                                                                                                                | Not Applicable                                                                                                                                                                                                                         | 0           |
| e)                                                                                                                | Not Applicable                                                                                                                                                                                                                         | 0           |
| f)                                                                                                                | <b>Mitigation:</b> Project area is protected by legally binding commitment (eg, a conservation easement or protected area) to continue management practices that protect carbon stocks over the length of the project crediting period | -2          |
| g)                                                                                                                | Not Applicable –<br><b>Mitigation:</b> There are no current land tenure disputes in the Project Area.                                                                                                                                  | 0           |
| <b>Total Land Tenure (LT) [as applicable, ((a or b) + c + d + e + f + g)]</b><br>Total may not be less than zero. |                                                                                                                                                                                                                                        | <b>0</b>    |

| Community Engagement                                                                                   |                                                                                                                                                                                                                                                                                                                      |             |
|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Risk Factor                                                                                            | Risk Factor and/or Mitigation Description                                                                                                                                                                                                                                                                            | Risk Rating |
| a)                                                                                                     | Not Applicable                                                                                                                                                                                                                                                                                                       | 0           |
| b)                                                                                                     | The project has held extensive community meetings throughout the region and performed many outreach activities, however we are unsure of the total number of people consulted and the total local population living within 20 km of the Project boundary who are dependent on the Project Area for their livelihood. | 5           |
| c)                                                                                                     | Not Applicable –<br><b>Mitigation:</b> The Project has not yet received its validation under the CCB standard, which will demonstrate its positive impacts on the social and economic well being of the local communities who derive livelihoods from the Project area.                                              | 0           |
| <b>Total Community Engagement (CE) [where applicable, (a + b + c)]</b><br>Total may be less than zero. |                                                                                                                                                                                                                                                                                                                      | <b>5</b>    |

| Political Risk                                                                                          |                                                                                                                                                       |             |
|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Risk Factor                                                                                             | Risk Factor and/or Mitigation Description                                                                                                             | Risk Rating |
| a)                                                                                                      | Not Applicable                                                                                                                                        | 0           |
| b)                                                                                                      | <b>Governance score of -0.79 to less than -0.32</b><br>The average governance scores for the years 2010-2014 for Cambodia is -0.7667                  | 4           |
| c)                                                                                                      | Not Applicable                                                                                                                                        | 0           |
| d)                                                                                                      | Not Applicable                                                                                                                                        | 0           |
| e)                                                                                                      | Not Applicable                                                                                                                                        | 0           |
| f)                                                                                                      | <b>Mitigation:</b> The Cambodian government is implementing REDD+ Readiness, through support of the World Bank Forest Carbon Partnership and UN-REDD. | -2          |
| <b>Total Political (PC) [as applicable ((a, b, c, d or e) + f)]</b><br>Total may not be less than zero. |                                                                                                                                                       | <b>2</b>    |

| External Risk                                                                 |          |
|-------------------------------------------------------------------------------|----------|
| <b>Total External Risk (LT + CE + PC)</b><br>Total may not be less than zero. | <b>7</b> |

### 3. NATURAL RISKS

| Natural Risk – Fire |                                                    |
|---------------------|----------------------------------------------------|
| <b>Significance</b> | Insignificant (less than 5% loss of carbon stocks) |
| <b>Likelihood</b>   | Less than every 10 years                           |
| <b>Score (LS)</b>   | 2                                                  |
| <b>Mitigation</b>   | Not applicable                                     |

| Natural Risk – Pest and Disease Outbreaks |                                                                                                |
|-------------------------------------------|------------------------------------------------------------------------------------------------|
| <b>Significance</b>                       | No Loss – The Southern Cardamom Project ecosystem does not suffer from pest damage or disease. |
| <b>Likelihood</b>                         | Never                                                                                          |
| <b>Score (LS)</b>                         | 0                                                                                              |
| <b>Mitigation</b>                         | No mitigation is needed.                                                                       |

| Natural Risk – Geological Risk |                                                                              |
|--------------------------------|------------------------------------------------------------------------------|
| <b>Significance</b>            | No Loss – There is no significant volcanic or earthquake risk in the region. |
| <b>Likelihood</b>              | Never                                                                        |
| <b>Score (LS)</b>              | 0                                                                            |
| <b>Mitigation</b>              | No mitigation is needed.                                                     |

| Natural Risk – Extreme Weather |                                                                                                                                      |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <b>Significance</b>            | No Loss – There are extreme rain events that occur but the species in the Southern Cardamom ecosystem are adapted to wet conditions. |
| <b>Likelihood</b>              | Once every 50 years                                                                                                                  |
| <b>Score (LS)</b>              | 0                                                                                                                                    |
| <b>Mitigation</b>              | No mitigation is needed.                                                                                                             |

| Natural Risk – Flooding |                                                                                                                                             |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Significance</b>     | Insignificant (less than 5% loss of carbon stocks) or transient (full recovery of lost carbon stocks expected within 10 years of any event) |
| <b>Likelihood</b>       | Every 10 to less than 25 years.                                                                                                             |
| <b>Score (LS)</b>       | 1                                                                                                                                           |
| <b>Mitigation</b>       | No mitigation is needed.                                                                                                                    |

| Score for each natural risk applicable to the project<br>(Determined by $LS \times M$ ) |          |
|-----------------------------------------------------------------------------------------|----------|
| Fire (F)                                                                                | 2        |
| Pest and Disease Outbreaks (PD)                                                         | 0        |
| Extreme Weather (W)                                                                     | 0        |
| Geological Risk (G)                                                                     | 0        |
| Other natural risk (ON) – Flooding                                                      | 1        |
| <b>Total Natural Risk (as applicable, <math>F + PD + W + G + ON</math>)</b>             | <b>3</b> |

## 4. OVERALL NON-PERMANENCE RISK RATING AND BUFFER DETERMINATION

### 4.1 Overall Risk Rating

| Risk Category                          | Rating    |
|----------------------------------------|-----------|
| a) Internal Risk                       | 0         |
| b) External Risk                       | 7         |
| c) Natural Risk                        | 3         |
| <b>Overall Risk Rating (a + b + c)</b> | <b>10</b> |

### 4.2 Calculation of Total VCU

| Component                                     | 2015 Value (t CO <sub>2</sub> e) | 2016 Value (t CO <sub>2</sub> e) | 2017 Value (t CO <sub>2</sub> e) | Total Value (t CO <sub>2</sub> e) |
|-----------------------------------------------|----------------------------------|----------------------------------|----------------------------------|-----------------------------------|
| Gross emissions reductions, m <sub>1</sub>    | 4,461,598                        | 4,461,598                        | 4,461,598                        | <b>13,384,794</b>                 |
| Emissions from Leakage, m <sub>1</sub>        | 33,060                           | 33,060                           | 33,060                           | <b>99,181</b>                     |
| NERs to VCS pooled buffer account, (10%)      | 446,160                          | 446,160                          | 446,160                          | <b>1,338,479</b>                  |
| VCS pooled buffer account return.             | 0                                | 0                                | 0                                | <b>0</b>                          |
| Net emissions reductions NERs, m <sub>1</sub> | 3,982,378                        | 3,982,378                        | 3,982,378                        | <b>11,947,133</b>                 |