

PROJECT REVIEW REPORT

Project ID	2401
Project Name	<i>Restoration of Degraded Lands in Sierra Leone</i>
Program(s)	VCS
Verification Period	<i>16 May 2016 to 10 January 2020</i>
Project Proponent	<i>Miro Forestry Developments Limited</i>
Methodology	<i>AR-ACM0003 A/R Afforestation and reforestation of land except wetlands, v2.0</i>
Sectoral Scope(s)	<i>14. AFOLU (Agriculture, Forestry and Other Land-Use)</i>
Validation/Verification Body (VVB)	AENOR

Assessment Criteria	<i>VCS Standard, v4.1</i>
Date of First Issue	13 August 2021
Date of Second Issue	29 October 2021
Date of Third Issue	6 November 2021
Date of Final Issue	21 December 2021

Summary:

An accuracy review of the Restoration of Degraded Lands in Sierra Leone registration and verification approval request has been conducted by Verra in accordance with Section 4.3 of the *Registration and Issuance Process*.

The accuracy review has raised eight assessment findings and no minor findings, detailed below. The VVB, in coordination with the project proponent, is hereby required to provide a response to the assessment findings presented in Section 1. The seven assessment findings must be addressed to the satisfaction of Verra. The VVB need not address the minor findings during this review. Please note, however, that where Verra finds consistent minor findings by the VVB in future reviews, minor findings shall be escalated to assessment findings.

This project review report will be made publicly available. Confidential information may be provided as separate attachments.

1. ASSESSMENT FINDINGS

Finding 1

Section 1.10 of the joint project description and monitoring report state that the average annual ERRs for the project are 1,910,174 tCO₂e, but that the project scale is “project”. Section 3.1.7 of the joint validation and verification report state that the annual estimate annual ERRs for the project are 63,672 tCO₂e.

The project proponent is requested to clarify the estimated annual net ERRs and the scale of the project.

VVB Response:

The project scale remains as “project” since the annual VER are less than 300.000. The initial statement of average annual 1,910,174 was meant for the Long-Term Average. It did not correspond to annual average but total amount for the life of the project after the harvest discounts.

For increasing clarity, the table was updated with the results after the calculation of the Long-term Average.

For further details in the ex-ante calculations please refer to the ex-ante excel sheet in the supporting documents.

Verra Response:

Section 1.10 of the joint project description and monitoring report has been updated so that it is clear the annual estimated ERRs for the project are 63,672 based on the long term average. This finding is closed.

Finding 2

Section 3.1.2 of the *VCS Standard, v4.1* states that “methodologies shall be applied in full, including the full application of any tools or modules referred to by a methodology.”

AR-ACM0003 states that project proponents shall use the “Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities.”

Section 3.1 and 3.5 of the joint project description and monitoring report state that the project proponent used the VCS tool VT0001 (Version 3.0), Tool for the demonstration and assessment of additionality in Agriculture, Forestry and Other Land Use (AFOLU) project activities.

The project proponent and VVB are requested to clarify why the VCS Tool was used, and how the usage of this tool is in accordance with Section 3.1.2 of the *VCS Standard, v4.1*.

VVB Response:

The project proponent acknowledges the recommended usage of the “Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities”. Thus, a reassessment of the section was performed, and the document was updated:

- Section 3.1: Title and Reference of Methodology was updated indicating the actual tool used
- Section 3.4 was updated with steps and sub-steps to demonstrate additionality and baseline identification were applied and described according to the referenced CDM tool.
- Section 3.5 was update in relation to the new tool employed.

Verra Response:

The project proponent has updated the project description using the CDM tool “Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities.” This finding is closed.

Finding 3

Section 3.2.21 of the *VCS Standard, v4.1* states that “the long-term average GHG benefit shall be calculated using the...procedure” outlined in Section 3.2.21.

The equation for the long-term average is provided in Section 4.2 of the joint project description and monitoring report but the actual calculated result is not included. It is also unclear in the relevant Sections what is the time period to reach the long-term average.

The project proponent is requested to update Section 4.2 of the joint project description and monitoring report to provide the calculated long-term average, and the relevant Sections of the project description to include the length of time it takes to get to the long-term average.

VVB Response:

As requested, section 4.2 was updated in the joint project description and monitoring report. Specifically, Table 12 and Table 43 incorporates now the values calculated to estimate the long-term average and it was specified in the text the period where the project reaches it (Year 11 of the project, that means 2026).

Verra Response:

Sections 4.2 and 4.4 of the joint project description and monitoring report have been updated to clarify the long term average calculations. The project proponent is requested to provide the excel spreadsheet to demonstrate the process for calculating the long term average together with the GHG quantification for the monitoring period.

VVB Response:

The project proponent includes the updated excel sheets for ex-ante and ex-post calculations attached with this document.

Verra Response:

Through evaluation of the excel sheets, it is clear how the long term average was calculated. This finding is close.

Finding 4

Section 3.1.2 of the *VCS Standard, v4.1* states that “methodologies shall be applied in full, including the full application of any tools or modules referred to by a methodology.”

Section 5.3.12(a) of AR-ACM0003 “for baseline net GHG removals by sinks, it is usually sufficient to stratify the area according to major vegetation types and their crown cover and/or land use types.”

Section 3.4 of the joint project description and monitoring report indicates that there are multiple land cover types within the project area, such as forested, grasslands, and wetlands.

Section 4.1 of the joint project description and monitoring report does not stratify the baseline emissions based on biomass type in the project area.

The project proponent is requested to update Section 4.1 of the joint project description and monitoring report to stratify the baseline emissions based on land cover and biomass types within the project area.

VVB Response:

Section 4.1 was updated with a stratification of the baseline, including the main land cover present at the beginning of the project: Grassland and cropland. The forest cover and wetlands described in section 3.4 were discounted as per methodology requirements and the process is explained in the section 4.1.

However, no baseline discounts were made according to the characteristics of the baseline landcover:

- Grasslands: Grassland is a type of herbaceous vegetation, and according to the methodology (Section 5.5 paragraph 14) “GHG emissions resulting from removal of herbaceous vegetation, combustion of fossil fuel, fertilizer application, use of wood, decomposition of litter and fine roots of N-fixing trees, construction of access roads within project boundary, and transportation attributable to the project activity shall be considered insignificant and therefore accounted as zero
- Project Developer as conservatively excluded croplands from the project area

Verra Response:

Section 4.1 of the joint project description and monitoring report has been updated to stratify the baseline based on land use types. The closure of this finding is dependent on Finding 6.

VVB Response:

Cropland has been conservatively excluded from the project area, the only baseline landcover is now Grassland. All the relevant shapefiles, calculations, tables and sections have been updated accordingly.

As a consequence of this exclusion, , Finding 1 responses changes to the following:

- ERR for the entire crediting period: 1,907,488
- Estimated annual ERR: 63,583 based on the long term average

Verra Response:

The exclusion of cropland is considered conservative. The updates to the relevant Sections are sufficient and the finding is closed.

Finding 5

3.4.1 of the *VCS Standard, v4.1* states that project proponents shall use the relevant *Project Description Template* and adhere to all instructional text within the template.

Section 4.1 of the *Joint Project Description and Monitoring Report Template* states that the project

proponent shall provide the relevant baseline emissions equation.

Section 4.1 of the joint project description and monitoring report does not include the baseline emissions equation.

The project proponent is requested to update Section 4.1 of the joint project description and monitoring report to include the baseline emission equation.

VVB Response:

Section 4.1 was updated with a stratification for the landcover present before the start of the project. As a result of this stratification, the main land cover identified were Grassland and Cropland. As per the statements indicated in the Finding 4, there is no significant accumulation of biomass in the baseline landcovers and can be deemed to zero. As a conclusion, baseline emissions can be considered as zero.

Verra Response:

While the explanation that baseline emissions are considered zero is sufficient, the project proponent is required to provide an equation in this section. The project proponent is requested to updated Section 4.1 to include the relevant baseline equation.

VVB Response:

The relevant equation has been included in Section 4.1

Verra Response:

Section 4.1 has been updated to include the relevant baseline equation. This finding is closed.

Finding 6

Section 3.1.2 of the *VCS Standard, v4.1* states that “methodologies shall be applied in full, including the full application of any tools or modules referred to by a methodology.”

Section 6.10 of the CDM Tool, AR-AM Tool 15 states that leakage due to grazing can be accounted as zero under the following scenarios:

- Animals are displaced to existing grazing land and the total number of animals in the receiving grazing land (displaced and existing) does not exceed the carrying capacity of the grazing land;
- Animals are displaced to existing non-grazing grassland and the total number of animals displaced does not exceed the carrying capacity of the receiving grassland;
- Animals are displaced to cropland that has been abandoned within the last five years;
- Animals are displaced to forested lands, and no clearance of trees, or decrease in crown cover of trees and shrubs, occurs due to the displaced animals;
- Animals are displaced to zero-grazing system.

Sections 4.3 and 6.4 of the joint project description and monitoring report state that there is no leakage as described in a different Section.

However, Sections 4.3, 6.4, and 1.17 of the joint project description and monitoring report does not make it clear whether there were any displaced grazing activities on the grassland in the project area.

The project proponent is requested to update the relevant Sections of the joint project description and monitoring report to demonstrate that there was no displacement of grazing activities, or that the leakage due to grazing was accounted for as zero under one of the conditions listed in the methodology.

VVB Response:

The section 1.17 of the document was updated: There was no cattle nor grazing activities in the project area prior to the start of the project activities. This can be confirmed in the Project Background & Description section within the Environmental and Social Impact Assessment, ESIA, included in the PDD supporting documents.

In the same line, there will be no displacement of agricultural activities. As described in the PDD the project is being established primarily in non-used grassland areas, and in the same way, agricultural areas and other importance areas are excluded from the land lease agreements. In addition, agriculture is mainly developed in swampy areas, that are not suitable for planting trees and also are excluded from the eligible areas.

Thus, the usage of the CDM Tool, AR-AM Tool 15 for displacement of agricultural activities is not applicable, since there is not such displacement for the reasons mentioned above.

A clarification statement was included in the section 4.3 and 6.4 as requested.

Verra Response:

Section 4.1 and 4.3 of the joint project description and monitoring report indicate that there is croplands in the project area. Currently it is unclear why there would be no leakage if the project activities are implemented on cropland.

Please clarify if the project is on cropland, that the land was degraded or there were no agricultural activities taking place in the baseline scenario. If cropland is not included in the project area, please clarify in Section 4.1 why it would be considered eligible land if it is not part of the project area.

Further, Section 3.2.4 of the *VCS Standard, v4.1* states that for ARR projects “the project area shall not be cleared of native ecosystems within 10 years of the project start date”. As the majority of the project area is native grassland, the project proponent is requested to clarify in Section 4.1 whether any clearing of native grassland took place in order to facilitate planting.

VVB Response:

Project Developer re-assessed the baseline and indeed there was 14,69 ha of croplands in the baseline in the initial version of the PDD. However, considering that the PP has no full certainty concerning the potential displacement of such activities, those areas have been excluded from the project. As a result, a total of 4,005,86 ha is the updated eligible area for plantations established up to 2019. All the relevant sections were updated in the document, the eligibility shapefile and the excel sheets for ex-ante and ex-post calculations.

Verra Response:

While the updates to conservatively remove cropland from the baseline calculations and project area are conservative and consistent it is still unclear whether native ecosystems have been cleared for the planting activities in this project.

Section 3.2.4 of the VCS Standard, v4.1 states that for ARR projects “the project area shall not be cleared of native ecosystems within 10 years of the project start date”. As the majority of the project area is native grassland, the project proponent is requested to clarify in Section 4.1 whether any clearing of native grassland took place in order to facilitate planting.

Response:

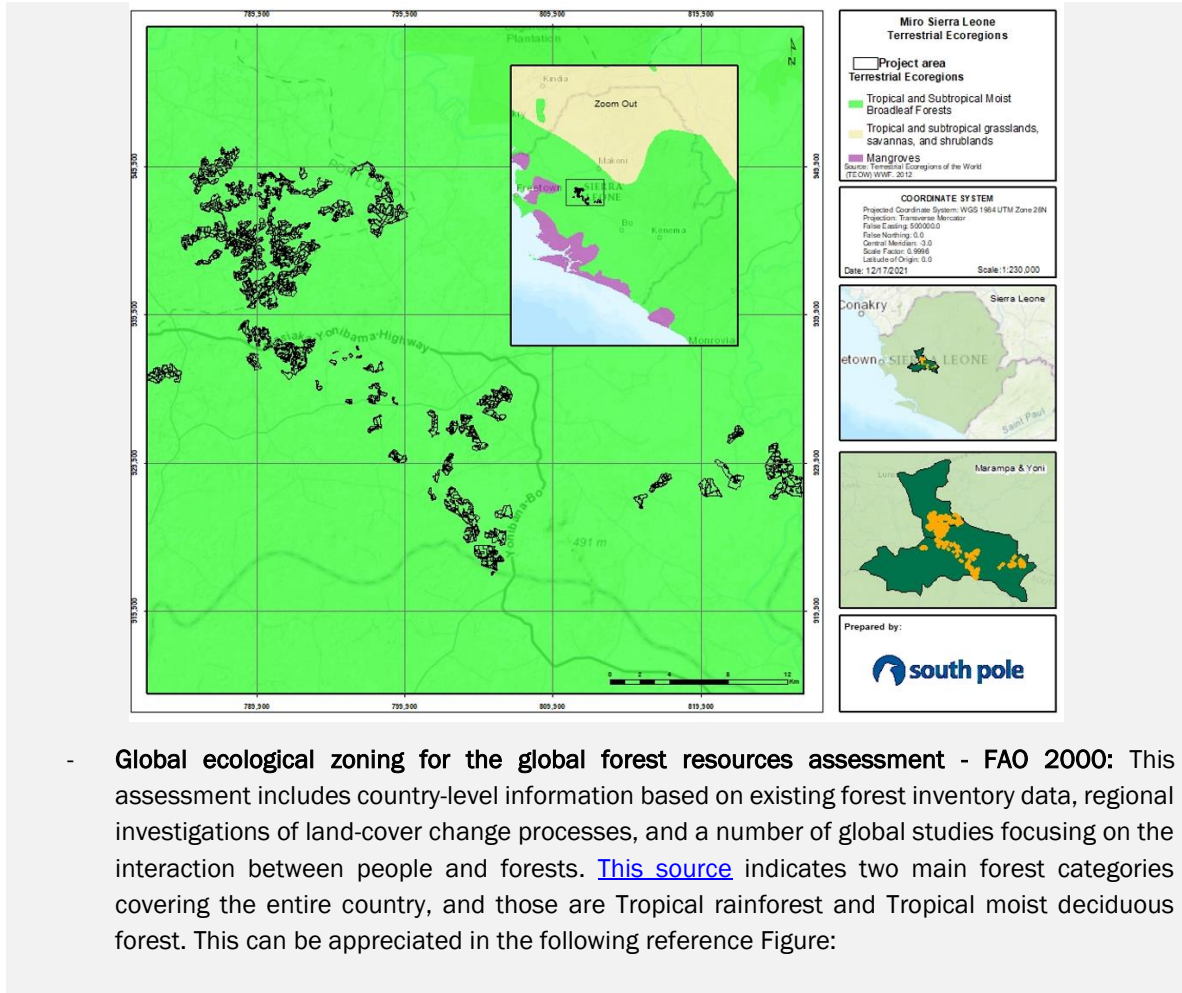
The majority of the project area baseline is indeed grassland, as indicated in the eligibility analysis of the PDD. However, this type of land cover is the result of historical deforestation and degradation of the area caused by agricultural and charcoal production. This statement can be supported by the Environmental and Social Impact Assessment ESIA study, submitted along with the supporting documentation.

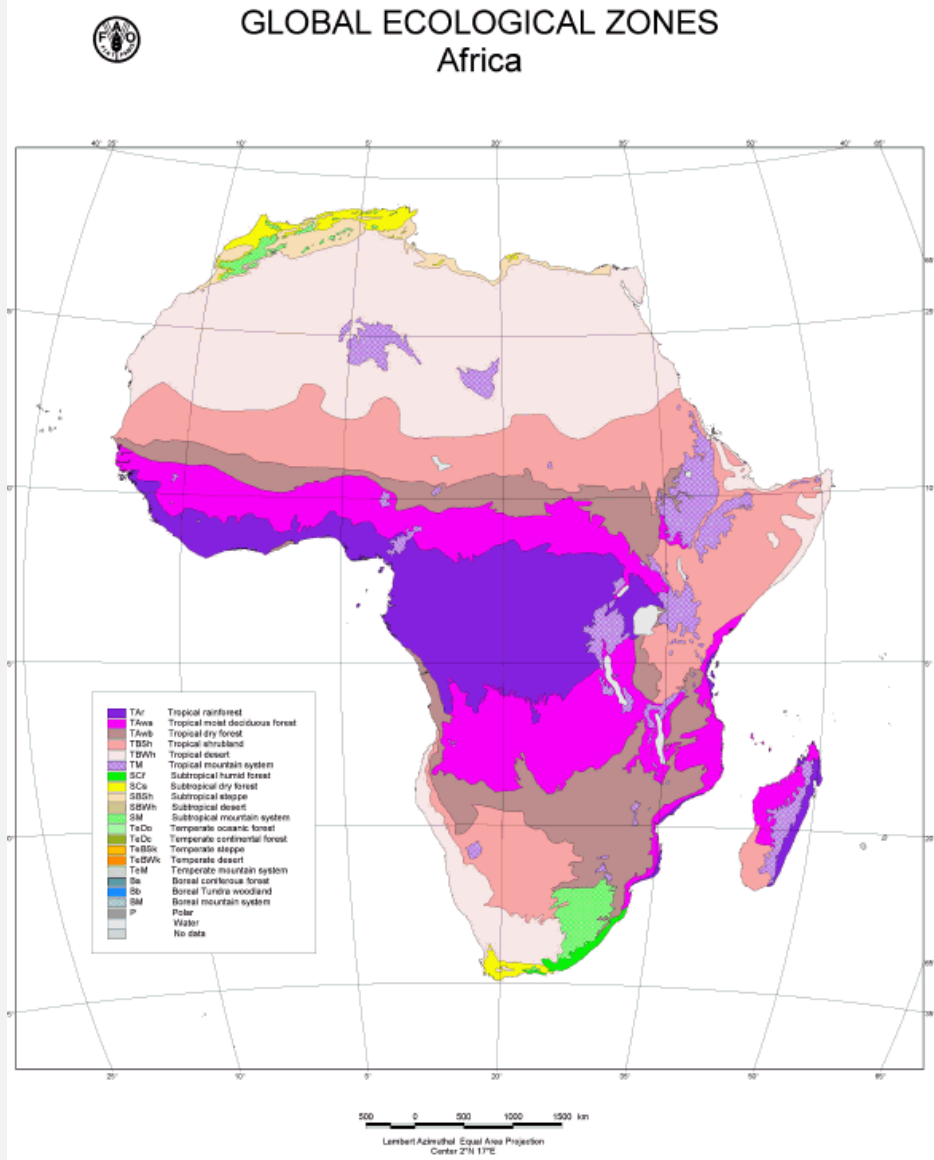
In this study, it is indicated that there is a very limited tree cover over the project area, save for sporadic sacred groves near villages, the entire area has suffered heavily from slash and burn agriculture and charcoal production for local consumption as well as for sale in the local cities.

“For these reasons, and originally to profit from high-value indigenous hardwood sales, Sierra Leone has suffered some of the worst deforestation in West Africa, many estimating it to be over 90% within the last 100 years.” In the same study, it is stated in section 4.6.3 Vegetation, “About 75% of the project area is covered by farm bushes, with vast areas characterized by thick secondary undergrowths, believed to have been part of the Tropical Rainforest, but having been subjected to clearing, burning and tree cutting for several years”

In the same line, different sources confirm the statement of original forest vegetation in the country:

- Terrestrial Ecoregions of the World (WWF 2012): According to this source, the project area falls completely in the ecoregion Western Guinean Lowland Forest also known as Tropical and Subtropical Moist broadleaf forest, as presented in the next figure:





Considering the elements referenced above, it can be concluded that the grasslands in the baseline scenario are the result of natural forest degradation and do not correspond to a grassland natural ecosystem. Thus, the project complies with Section 3.2.4 of the VCS Standard, v4.1 states that for ARR projects “the project area shall not be cleared of native ecosystems within 10 years of the project start date”.

Verra Response:

The explanation provided by the VVB and the supporting evidence provided by the project proponent and included in the updated documents demonstrates that the project has not cleared native grasslands for planting activities. This finding is closed.

Finding 7

Section 3.1.2 of the *VCS Standard, v4.1* states that “methodologies shall be applied in full, including the full application of any tools or modules referred to by a methodology.”

Section 5.18(1) of the methodology *AR-ACM0003* states that the project proponent shall use the net anthropogenic GHG removals by sinks equation.

Section 6.5 of the joint project description and monitoring report does not include the relevant net GHG ERR equation required by the methodology.

The project proponent is requested to update Section 6.5 of the joint project description and monitoring report to include the net anthropogenic GHG removals by sinks equation.

VVB Response:

The Net Anthropogenic GHG removals by sinks equation is addressed in section 4.4 of the joint project description and monitoring report.

As suggested in Section 6.5 the equation was included. However, results remain the same since Leakage and Baseline emissions are deemed to be zero and the justification for such statement is described in the PDD in sections 1.17, 4.1 and 4.3

Verra Response:

Section 6.5 of the joint project description and monitoring report was updated to include the relevant net GHG emissions removal equation. This finding is closed.

Finding 8

Section 6.5 of the joint project description and monitoring report does not indicate the monitoring period but includes a table with ERRs from the years 2016-2018.

Section 5 of the joint validation and verification report states that the dates of the monitoring period are 16 May 2016 – 10 January 2020 and includes the same table as the joint project description and monitoring report.

The project proponent is requested to update Section 6.5 of the joint project description and monitoring report to include the monitoring period dates. The VVB is requested to clarify why the monitoring period is from 2016 – 2020 but the table only includes information on years 2016 – 2018.

VVB Response:

Section 6.5 was updated specifying the monitoring period (2016-2020) and adjusting Table 54 of VCU's eligible for Issuance. The initial table contained the information presented by Planting Year and not by vintage. The updated table is split by vintage and includes the years 2019 and 2020.

The monitored conducted included plantations from the years 2016 to 2018 and was conducted up to the year 2020, as indicated in the ex-post excel sheet. The updated table includes the actual growth for

each year of the monitoring period.

Verra Response:

Section 6.5 of the joint project description and monitoring report has been updated to include the correct monitoring period dates. This finding is closed.

2. MINOR FINDINGS

Finding 1

Most of the references in the project description and monitoring report are broken.
Please ensure all references and links work within the project description and monitoring report.

VVB Response:

The reference links of the Project Description have been repaired.

3. ASSESSMENT CONCLUSION

On 13 August 2021 Verra completed an accuracy review of the registration and verification approval request of Reforestation of Degraded Lands in Sierra Leone and raised the eight assessment findings and one minor finding detailed above.

On 28 September 2021 the VVB AENOR submitted responses to the findings with updated joint PD and monitoring report and joint validation and verification report. The updates were sufficient to close several findings. However, Finding 3, 4, 5 and 6 remain open.

On 29 October 2021 Verra determined that the response to the findings The updates were sufficient to close several findings. However, Finding 3, 4, 5 and 6 remain open and were insufficient to close out the report. As a result, Verra raised a second round of review and submitted the review report back to the VVB AENOR.

On 19 November 2021 the VVB AENOR submitted responses to the findings with updated joint PD and monitoring report and joint validation and verification report. The updates were sufficient to close several findings. However, Finding 6 remains open.

On 6 December 2021 Verra determined that the response to the findings were sufficient to close several findings. However, Finding 6 remained open and was insufficient to close out the report. As a result, Verra raised a third round of review and submitted the review report back to the VVB AENOR.

On 18 December 2021 the VVB and project proponent submitted responses and supporting evidence to Verra. The response from the VVB, updated documents, and supporting evidence from the project proponent was sufficient to close the remaining open finding.

On 21 December 2021 Verra closed the review of the registration and verification approval request of Reforestation of Degraded Lands in Sierra Leone.