NORTH PIKOUNDA REDD+ PROJECT

Report ID	VCS.22.VER.048
Project title	North Pikounda REDD+ project
Project ID	1052
Verification period	01/01/2013 to 31/12/2019
Original date of issue	10/02/2024
Most recent date of issue	05/12/2024
Version	02.2
VCS Standard Version	4.5
Client	Olam Agri
Prepared by	KBS Certification Services Ltd.
Approved by	Mr.Kaushal Goyal, Managing Director
Work carried out by	Team Leader and sector expert 14.1: Dr. D. Siddaramu Local expert - Rinah Zo Rakotonarivo Technical Reviewer – Mr. Praveen N Urs Expert for TR (14.1) – Mr. Shankar Shan Patro

Summary:

Olam Agri has commissioned "KBS Certification Services Ltd." (KBS) to carry out the 2nd verification of the project titled "North Pikounda REDD+ project" (VCS PROJECT ID 1052) with regard to the relevant requirements of VCS Standard (Version 4.4) and 'VM0011 Methodology for Calculating GHG Benefits from Preventing Planned Degradation', v1.0.

The verification team evaluated the project by means of document analysis, interviews with stakeholders and by observations & measurements made directly in the field during the site visit to the project location. Fieldwork lasted 10 days, between 21/01/2023 to 10/02/2023 (including flight and on road travel to project location from India). During this period the audit team carried out forest inventories, travelled through rivers and roads analyzing different aspects of the landscape, and interviewed residents from communities within the project zone.

The North Pikounda REDD+ project is an emission reduction project designed to protect 92,530 hectares (ha) of unlogged native Congolese forest from deforestation and degradation by conservation and Planned logging. The forest is legally designated as a selective logging concession and is comprised of 60% dry land mixed forest and 40% designated wetland area. The selective logging anticipated would normally have been undertaken on the dry lands, consisting of an area of 55,950 ha. These dry lands constitute the project crediting area. The project has been developed under VCS sectoral scope 14 (Agriculture, Forestry, Land Use) and is categorized as the VCS AFOLU category ARR: Afforestation, Reforestation, and Revegetation and is applied to quantify the GHG removals achieved in this project. The calculation of the project emission removals is carried out in a transparent and conservative manner.

KBS Certification Services Ltd. has employed a risk-based approach in the verification, focusing on the identification of significant risks and reliability of project design and generation of emission reductions according to the relevant applicable version of the VCS standard and applying auditing techniques. In the course of the assessment 06 Corrective Action Requests (CAR) and 17 Clarification Requests (CL) were raised and successfully closed out, 02 FAR was raised during the assessment. Refer to Appendix 2 for further details. There are no restrictions of uncertainty. Based on the information seen and evaluated we confirm that the project in the second monitoring period from 01/01/2013–31/12/2019 (including both days) the net amount of VCUs achieved for the project is 556,706tCO_2e after deduction of the buffer pool. All issues raised by the audit team during the auditing process are resolved by the project proponent and the verification conclusion is positive.

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1 INTRODUCTION

1.1 Objective

Olam Agri has commissioned "KBS Certification Services Ltd." (KBS) to carry out the 2nd verification and certification of emission reductions reported for the project titled "North Pikounda REDD+ project" (VCS PROJECT ID 1052) for the monitoring period from 01/01/2013–31/12/2019 (including both days) with regard to the relevant requirements of VCS Standard (Version 4.5) and 'VM0011 Methodology for Calculating GHG Benefits from Preventing Planned Degradation', v1.0. The main objective of the verification is an independent assessment of the ex-post parameters monitored in the project and its GHG statement of emission reductions and removals that have occurred as a result of the project during the monitoring period.

1.2 Scope and Criteria

The scope of the verification is the independent and objective review and ex-post determination of the monitored reductions in GHG emission by the project activity. The verification is based on the validated Project Description, version 5.3, dated 24/04/2013, corresponding validation report, monitoring report, version04 (of this verification), monitoring report of 1st verification and 1st verification report. These documents were reviewed against the requirements and criteria of the verification are:

- VCS Standard (Version 4.5) and other relevant requirements
- 'VM0011 Methodology for Calculating GHG Benefits from Preventing Planned Degradation', v1.0
- AFOLU requirements: VCS Version 4.2
- AFOLU Non-Permanence Risk tool: VCS Version 4.0

The verification shall ensure that reported emission reductions are complete and accurate to be verified.

1.3 Level of Assurance

The verification report expresses a conclusion with a reasonable level of assurance about whether the reported net anthropogenic GHG removals data is free from material misstatement. The threshold for materiality with respect to the aggregate of errors, omissions, and misrepresentations relative to the total reported GHG emission reductions and/or removals shall be five percent for projects and one percent for large projects as per VCS standard 4.1.10. KBS has applied a materiality threshold of 5% with respect to omission or misstatements concerning reported quantities.

1.4 Summary Description of the Project

Project Proponent	Olam Agri; 9 Temasek Boulevard, #25-01, Suntec Tower 2, Singapore 038989
Title of project activity	North Pikounda REDD+ Project
Project activity	The main activity of the North Pikounda REDD+ project is to nullify the planned degradation and deforestation activities in favor of promoting the decision to maintain and protect the forest area and its biodiversity. This is significant as the project area has considerable biodiversity, including one of the largest known lowland gorilla populations in the Congo basin. From the implementation of the project (January 1st 2012), it is estimated that around 4,900,000 metric tons (t) of greenhouse gas (GHG) emissions which would have been emitted into the atmosphere over a period of 30 years (December 31st 2041) in the absence of the project (ex-ante) will be avoided, not including the project's non-permanence risk buffer amount and leakage (if any), which will be accounted for over the life of the project.
Baseline and monitoring methodology	'VM0011 Methodology for Calculating GHG Benefits from Preventing Planned Degradation', v1.0
Location of the project activity	Concession of the UFE of Pikounda – Nord, Department of Sangha, Republic of Congo
Project's crediting period	01/01/2012 to 31/12/2041
Monitoring period	01/01/2013–31/12/2019 (including both days)

2 VERIFICATION PROCESS

The verification process is based on applicable verification guidelines described in the latest version of the VCS Standard (Version 4.5), validation and Verification manual and all the relevant principles and requirements of VCS. As part of the verification assessment, the verification team initially performed a desk review on all verification related documents, followed by interviews with PP/stakeholders in order to review the project implementation and its operation.

For all identified inconsistencies and lack of clarity, related findings (list of outstanding issues) are raised. The next steps are to close out the findings through direct communication with PP, received updated version of the monitoring report and the supporting documents for preparing the verification report. The draft version of the verification report undergoes a technical review by KBS prior to its submission to the VERRA through PP.

2.1 Method and Criteria

The verification was performed in accordance with the requirement of the registered VCS PD, the applied methodology, and the VCS Standard Version 4.5 and other relevant VCS requirements.

- A desk review of the monitoring report and all support documents.
- Interview with project representatives and issuance of findings.
- Resolution of findings followed by preparation of the final validation report and opinion.

The verification team revisited randomly selected 08 sampling plots which were re-measured by the PP's staff under our observation. While the PP was carrying out the remeasurement, we verified the operational and data collection procedures that were implemented at site in line with the monitoring plan of the VCS PD. Further, the verification team checked the monitoring equipment's to confirm the monitoring practices followed are as described in the registered VCS PD and in line with the applied methodology. A consistency check was performed to verify the consistency of the previous measurement and the remeasurement, and to verify the correctness of the reported stand growth in each plot visited.

KBS follows a risk-based validation approach, wherein a desk review of the project documentation is undertaken, which is followed by a on site assessment by the member of assessment team and assessment team confirms that the stated figures in the VCS PD are verifiable and reliable evidence.

Project Verification team

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of VCS Project Verifier or outsourced entity)	Involvement in			
						Desk/document review	On-site inspection	Interviews	Project Verification findings
1.	Team Leader (TA 14.1)	IR	Siddaramu	Dr. D	Central Office	✓	✓	✓	✓
2.	Local Expert	ER	Rakotonarivo	Rinah Zo	Central Office	✓	✓	✓	x

Technical reviewer and approver of the Project Verification report

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of VCS Project Verifier or outsourced entity)
1	Expert to Technical reviewer (TA 14.1)	IR	Patro	Shankar	Central office
2	Technical reviewer[1]	IR	Urs	Praveen N	Central office
3	Manager (Technical & Certification)	IR	Francis	Margaret	Central office
4	Authorizer	IR	Goyal	Kaushal	Central office

Timeline of Verification:

Site Visit	21/01/2023 to 10/02/2023
(Draft) Reporting	15/03/2023 (findings issued to PP)
(Final) Reporting	*05/12/2024*

2.2 Document Review

The verification was performed primarily based on the review of the monitoring report and the supporting documentation. This process included review of data and information presented to verify their completeness and review of the monitoring plan and monitoring methodology, paying particular attention to the frequency of measurements, including calibration requirements, and the QA/QC procedures, and an evaluation of data management and the QA/QC system in the context of their influence on the generation and reporting of emission reduction.

The initial MR version 1.0 submitted by the project participant and additional background documents related to the emission reductions are reviewed as an initial step of the verification process. The subsequent step involved the identification of corrective action requests, clarification requests and Forward action request (CAR's, CL's and FAR) which are presented in Appendix 4 of this report. As a result of these findings, the MR is revised to MR version 5.0. A complete list of all documents and records reviewed is attached in Appendix 3 of this report.

[1] Additional Technical review as a part quality check

2.3 Interviews

KBS has conducted on-site inspection on 21/01/2023 to 10/02/2023[2]. Interviews were undertaken with relevant stakeholders in the host country (i.e., Republic of Congo), as well as personnel with knowledge of the project design and implementation. A list of interviewees, and the main topics discussed with each person can be found in appendix A. The following were discussed in the interview with following personnel.

Sl No	Name and village	Date	Subject	Team member
01.	Mr.Ashish Malik[3] Senior Vice President & Business Head – Wood, OLAM	January – December 2023	➢ Project Design ➢ Project Implementation status, Management ➢ Roles and responsibility ➢ Grievance mechannisms	Dr.D.Siddaramu Rinah Zo Rakotonarivo
02	Mr.Leboyne Baptise CIB	21/01/2023 to 10/02/2023	➢ Project Design ➢ Project Implementation status, Management ➢ Roles and responsibility ➢ Management, Monitoring, documentation, and reporting system ➢ Risk and mitigations	
03	Mr.Mombanoto Raf CIB	21/01/2023 to 10/02/2023		
04	Mr. Mabongue Smilch Account, CIB	07/02/2023	➢ Project Implementation status, Management ➢ Forest inventory ➢ Sales records, Financial statements	
05	Ms.Maria Fernanda Buitrago Acevedo[2] Ms.Diana Lucia Giraldo Charria[2] Consultant[4], Southpole	January – October 2023	➢ Project Design ➢ Project Implementation status ➢ Management, Monitoring, documentation, and reporting system ➢ Roles and responsibility ➢ Daily Operations ➢ Stakeholder meetings, Grievances mechanism	
06				

[2] The North Pikounda REDD+ project is in a very, remote place of RoC, to reach the sample plots, 800kms travel on road from Brazzaville to Pokola in a car, by boat in river for 05 days and trekking i.e., walking for 05 days (we covered 95kms) to reach the site. There were continuous rains during the site visit for 2 days, we walked in rain. We were 18-member team (including me), the route was cleared of bushes/shrubs, very tough conditions to walk as it had rained and we had above knee-high mud and the route was very slippery (slipped many times, in fact in the return I had a solen thumb in the right foot, walked 28kms in pain as there was no alternative). I had insect/bee and red ants bites, we spotted elephant and gorilla. This was a very dangerous/risky threat to life with lot of physical strain. There was a lot of physical/mental stress, Touch wood I am very lucky to return alive to India and the memories are still a fresh in my mind even after a year.

[3] Interaction/discussion over phone

[4] Due to risk and remoteness of the site, the project consultants did not visit the site during the site visit of VVB.

07	Forest Department	24-01-2023	➢ Logging activities ➢ Encroachment ➢ Natural Risk to forest ➢ Habitat loss ➢ Safeguarding activities for illegal activities ➢ Country legal regulations	
08	Other local community leaders, ground project management team members were interviewed			

Sampling approach

The verification team used acceptance sampling approach for checking/re-measuring the sampled plots of PP. A sample size of 08 was required, based on an AQL of 0.5% and UQL of 20%. In accordance with the para.39, table 2 on page no.14 of "Sampling and surveys for CDM project activities and programmes of activities", version 09. However, the verification team visited and re-measured 08 plots from 57 Permanent sample plot (PSP). No discrepant records were observed with the published MR and PP records. Thus, PP's set of records has been accepted.

- ✓ An assessment of the implementation and operation of the VCS project activity as per the registered PD
- ✓ A review of information flows for generating, aggregating, and reporting of the monitoring parameters
- ✓ Interviews with relevant personnel to confirm that the operational and data collection procedures are implemented in accordance with the Monitoring Plan
- ✓ A cross-check between information provided in the MR and data from other sources.
- ✓ A on observations of monitoring practices against the requirements of the PD and the applied methodology
- ✓ A review of calculations and assumptions made in determining the VCU data and ERs,
- ✓ An identification of QA/QC procedures in place to prevent, or identify and correct, any errors or omissions in the reported monitoring parameters and
- ✓ To confirm the information and to resolve issues identified in the document review.

2.4 Site Visits

Site visit was undertaken to gather evidence to determine conformance with the VCS Program rules[3], guidance provided in the VCS Validation and Verification Manual[3] and methodology assessments under the VCS Program. An on-site assessment was conducted on 21/01/2023 to 10/02/2023.

Sl No.	Activity performed on-site	Site location	Date	Team member
1.	➢ General information about the project. ➢ Chronology of Events/ Implementation cycle of the project activity. ➢ Legal/ Statutory Clearances and Agreements Signed[8] ➢ Application of appropriate Methodology ➢ Validation of the values of ex-ante determined parameters. ➢ Review of the Monitoring plan. ➢ Validation of Stakeholder Consultation by interviewing the stakeholders. ➢ Validation of Non-Performance Risk Report[9]	Brazzaville, Pikola, Pikounda, Republic of Congo	21/01/2023 to 10/02/2023	Dr.D. Siddaramu and Rinah Zo Rakotonarivo

2.5 Resolution of Findings

KBS applies the risk-based approach aimed at focusing on high-risk issues to the verification results whilst not omitting any part of the mandatory processes. All the project related documents submitted by PP were assessed against the most recent version of the VCS Standard and Program document 06 CARs, 17 CLs and 2 FAR were raised during verification and submitted to PP, which were addressed either by providing to the audit team the requested information or by making the appropriate corrections. Updated versions of the documentation were submitted by the PP and the audit team reassessed them against the guidance documentation. This process was repeated iteratively until all CL and CAR were fully resolved.

All findings (CARs, CLs and FAR) issued by the KBS audit team in the course of verification process have been closed. All findings issued and the inputs for their closure, are described in Appendix 1 of this report. After reviewing the revised and resubmitted latest MR resolving the CARs & CLs raised and outstanding concerns, KBS issues this final verification report and opinion.

2.5.1 Forward Action Requests

02 FAR has been raised during this verification. There was no pending FAR from previous verification.

2.6 Eligibility for Validation Activities

NA.

3 VALIDATION FINDINGS

3.1 Methodology Deviations

The deviations from the methodology were identified during the this verification period, however, temporary deviation was found in the frequency of monitoring, which will not affect the additionality, applicability, baseline and final outcome of the project activities,

The audit team verified these deviations. These deviations will not negatively impact the conservativeness of the quantification of reductions or removals.

The PP has proposed to do the monitoring on every year but due to unforeseen circumstances the monitoring has not happened the reason has been provided in the table below. These deviation in frequency of monitoring will not affect the tree growth as well as the baseline, additionality, applicability and final outcome of the project activity. Furthermore, the PP has provided comprehensive information (refer CL11 and CAR03 Appendix 2) to assess the conservativeness of the monitored parameters and the quantification of GHG emission reductions or carbon dioxide removals. The evidence provided demonstrates that forest composition has remained stable, indicating that the project has been effective in protecting the forest during the proposed monitoring period (2013-2019).

Additionally, conservative values were employed for emission reduction estimation, utilizing a diameter in the range of 5 to 20 cm (DBH) compared to the reference paper's (https://bg.copernicus.org/articles/9/3381/2012/) ≤40 cm (DBH), ensuring a cautious approach.

In this 2nd monitoring period, VVB had conducted a thorough assessment to determine whether the stratification of the project area needed updates based on any changes in carbon within the existing strata. The project area's two strata, Wetland and Dryland mixed forests typical of Northern Congo, were carefully reviewed.

Wetland Stratum:

These areas are part of the North Pikounda UFE but are excluded from the crediting area.

No significant changes were observed in the Wetland stratum during the 2nd monitoring period, consistent with the findings from the 1st monitoring period.

Dryland Mixed Forest Stratum:

These forests, typical of Northern Congo, would have been harvested under the baseline scenario and have been inventoried for this project.

The project team conducted field surveys and remote sensing analysis to monitor any changes in the forest cover and carbon stocks within this stratum.

The findings confirmed that there were no significant changes in the carbon stocks within the Dryland mixed forest stratum during the 2nd monitoring period, similar to the 1st monitoring period.

The VVB also reviewed the updated project area .kml file provided by PP. This file identifies only the forest area and includes the North Pikounda UFE and wetland areas inside the concession. The stratification boundaries remained consistent, and no updates were necessary.

Based on the assessment, the stratification did not require updates during this monitoring period, as there were no changes in carbon within the existing strata.

FAR 01 has been raised to ensure the monitoring frequency inline with the methodology in subsequent verification.

Methodology section	Deviation
2.2.2 Temporal Boundaries	Subsection 2.2.2.2 Monitoring and Reporting Periods states that the maximum interval between a monitoring event and the immediately following one should not exceed five years; however, for this second monitoring period it has not been possible to comply with this interval. The project asked for a temporary change in this sense according to what was stated in the monitoring plan (periodicity of one year). As a background, the project faced during this monitoring period a delay due to serval political, environmental and health issues that affected this region in Africa. The first verification covered the monitoring period from January 2012 to December 2012, and the second verification was planned to cover, maximum the period from January 2013 to December 2017. Unfortunately, several political, environmental, and social issues occurred between 2017 and 2019 that did not allow the project to perform the field monitoring and the verification process in 2017 as expected. These issues which have been very complex for the country and the African region, created unsafe conditions to perform a site visit for the local monitoring team, the project's team and also for the VVB personnel (which come from

<table>
<tr><th>Methodology section</th><th>Deviation</th></tr>
<tr><td></td><td>other countries due to the lack of local VVBs internally in Congo). Some of these complexities are presented and explained in the table below:
<table>
<tr><th>Date</th><th>Summary</th><th>Source</th><th>Link</th></tr>
<tr><td>6/06/2017</td><td rowspan="4">Security emergency: The security situation in Congo has remained volatile since October 2015, following a constitutional referendum which reinstated the position of Prime Minister and eliminated presidential term limits. Violent conflict in the department of Pool (started in April 2016) and the neighboring country (RDC). Although it was a ceasefire agreement in December 2017, humanitarian emergency and security tension remains. Potential affectations to the mobility to the project area due to Pool is located along the highway to Pikounda, due to several months of insecurity in some districts of the Pool region. This situation not only affects the Pool region but the entire country as well. Supplies are disrupted as the railway between</td><td>ACAPS - Independent information provider: Republic of Congo, Conflict in Pool department. Briefing note June 2017.</td><td>Conflict Pool</td></tr>
<tr><td>27/07/2017</td><td>OCHA - UN Office for the Coordination of Humanitarian Affairs: Relief web. Republic of Congo Humanitarian Response Plan, July - December 2017</td><td>Humanitarian response</td></tr>
<tr><td>15/08/2018</td><td>UNICEF - Situation Report. WFP Republic of Congo country Brief, June 2018</td><td>Congo situation</td></tr>
<tr><td>3/09/2019</td><td>ACTED (Agency for Technical Cooperation and Development). Unicef Congo, Humanitarian Situation Report, June 2019</td><td>Congo situation</td></tr>
</table></td></tr>
</table>

Methodology section	Deviation			
	19/06/2019	Pointe-Noire and Brazzaville has been severed, and security force officers from various regions of the country have been killed. The solution to this situation cannot just be humanitarian, but there are lives at stake and action must be taken urgently. Also, high risk of violence along the country because of the 2017 legislative elections. Due to the emergency high risk of spreading of the Ebola Virus Disease outbreak from DRC's trough the people's displacements on Congo River and to Likouala (neighboring department of Sangha).	WFP - World Food Programme: En République du Congo, ACTED fournit une aide d'urgence aux déplacés de République Démocratique du Congo (RDC). June 2019	ACTED urgency
	8/05/2018	**Ebola Virus Disease Outbreak:** In 2018, the Democratic Republic of Congo declared the second-largest Ebola virus disease (EVD) in the north-western border of the country, since the Republic of Congo is among the countries prioritized because a risk of a potential spread of an Ebola Virus Disease outbreak. During this period there was a high risk in the provinces of Likouala (neighboring of Sangha) and Brazzaville according to the WHO. An aggravating factor in this situation is that flights operated to Brazzaville normally stopover in Kinshasa, the capital of DRC, thus increasing the risk of contagion. These reasons increased the risk of mobilization between the capital and the project area, forcing to reduce activities related to monitoring and verification.	WHO - News and press release: New Ebola outbreak declared in Democratic Republic of Congo. May 2018	ebola-outbreak
	14/06/2018		IFRC -Situation Report (International Federation of Red Cross And Red Crescent Societies). Republic of Congo: Ebola Virus Disease Preparedness – Emergency plan of action (EPoA) DREF no. MDRCG015/PCG017. June 2018	ebola virus disease
			National Library of Medicine	ebola

Methodology section	Deviation			
	7/09/2018	**Yellow fever:** During this period there has been an alert for potential risk of spread of yellow fever within the Congo, especially to the capital city of Brazzaville. The risk at the regional level is considered to be moderate due to the lack of information to describe the scope and the dynamics of the outbreak. During this period mobilization and some activities were reduced by the company to reduce health risks.	WHO - News and press release: Yellow fever – Republic of the Congo: Disease outbreak news – 7 September 2018	yellow-fever-congo-outbreak
	1/05/2019	**Chikungunya Disease outbreak:** On 9 February 2019, the government of Congo officially declared an outbreak of chikungunya virus disease, affecting Brazzaville (capital of Republic of Congo and the main airport in the country). Based on available information, the risk of continued transmission and spread of chikungunya to unaffected areas cannot be ruled out. The overall risk is considered moderate at both the national and regional levels, and mobilization was restricted between the capital and other regions.	WHO - News and press release: Chikungunya – Congo (The) Disease outbreak news, May 2019.	chikungunya-Congo-outbreak

Methodology section	Deviation

23/01/2020	**Floods along the Congo basin:** The torrential rains that fell over a large part of the territory of the Republic of Congo between October and December 2019 resulted in a complex and persistent flooding situation over a large part of the country, particularly in the northern departments (Likouala, Cuvette, Plateaux and Sangha). Access to the affected areas is very difficult, as these regions are particularly isolated in normal times. Humanitarian access is mainly by river, with food being delivered by barges and speedboats.	OCHA - UN Office for the Coordination of Humanitarian Affairs. Republic of Congo: Floods Flash Update no. 3, January 23rd, 2020	congo-floods

During the 2017-2019 period, it was not possible to carry out the field monitoring due to the health and safety complexities described above. The unsafe conditions (social, health and safety) for both, the technical monitoring team from the company, the company's external personnel (who would have supported the field work), and the potential VVBs coming from India or Europe (main active VVBs at that moment) and not only in the pool sector but throughout the country, made it difficult to guarantee adequate conditions for all these stakeholders. Additionally, between 2019 and 2021, the COVID-19 outbreak also posed additional mobility restrictions that made it impossible to conduct the monitoring field work. It was until 2021 and 2022 that the company could envisioned a field campaign and in 2022 that the verification could have a green light in terms of the possibility of flights worldwide, and the possibility of performing fieldwork and verification activities.

The current monitoring period cover almost seven years, from January 2013 until December 2019. However, this deviation does not adversely affect the permanence of the forest and the project, since during the site visit and with all GIS technology is has been possible to prove the presence of the forest in the entire project area. Additionally, this deviation does not affect the conservatism of the quantification of GHG emission reductions, as demonstrated in Appendix 15, where a test for significant differences between ex-ante and ex-post estimates was performed. This test showed that ex-post VCU estimates, differ significantly from ex-ante estimates (being lower):

<table>
<tr><th>Methodology section</th><th>Deviation</th></tr>
<tr><td></td><td>
<table>
<tr><th>Year</th><th>VCU ex ante</th><th>VCU ex post</th></tr>
<tr><td>2013</td><td>74,529</td><td>52,934</td></tr>
<tr><td>2014</td><td>90,271</td><td>63,638</td></tr>
<tr><td>2015</td><td>103,870</td><td>72,797</td></tr>
<tr><td>2016</td><td>115,689</td><td>80,672</td></tr>
<tr><td>2017</td><td>124,727</td><td>89,317</td></tr>
<tr><td>2018</td><td>131,501</td><td>95,829</td></tr>
<tr><td>2019</td><td>137,692</td><td>101,519</td></tr>
<tr><td>Total</td><td>778,279</td><td>556,706</td></tr>
</table>
</td></tr>
<tr><td>Verification audit team opinion</td><td>During the site visit it was noted that the 2nd verification was not conducted within the methodology parameter monitoring timeframe. i.e., 5 years. The situation in the country were discussed with the govt. authorities, PP and local communities to understand the difficulties of having site visit since 2017 – 2019 and during covid 19. With the interaction and web research it was observed that there was political unrest, medical & health emergency (Ebola, Yellow fever, Chikungunya outbreak) and floods in the Congo valley during those periods and covid 19 later to 2019. Thus, there were travel restrictions.

Further when auditors verified with the PP it was understood that the period of second verification within the specified timeline could not be completed due to travel restrictions. Audit also cross checked the same information with online available news sources and documents[5,6,7,8,9,10,11,12,13] Thus conclude that the situation was true that led to the delay in conducting the 2nd verification site visit.</td></tr>
<tr><td>3.1 Estimation of Emissions from</td><td>Data used to model the volumes that would have been harvested by CIB in the baseline scenario imply the merchantable volumes</td></tr>
</table>

[5]https://www.acaps.org/fileadmin/Data_Product/Main_media/20170606_acaps_briefing_note_congo_conflict_pool_department.pdf
[6] https://reliefweb.int/report/congo/republic-congo-humanitarian-response-plan-july-december-2017
[7] https://reliefweb.int/report/congo/wfp-republic-congo-country-brief-june-2018
[8] https://reliefweb.int/report/congo/unicef-congo-humanitarian-situation-report-30-june-2019
[9] https://reliefweb.int/report/congo/en-r-publique-du-congo-acted-fournit-une-aide-d-urgence-aux-d-plac-s-de-r-publique-d
[10] https://www.afro.who.int/news/new-ebola-outbreak-declared-democratic-republic-congo-0
[11] https://reliefweb.int/report/congo/republic-congo-ebola-virus-disease-preparedness-emergency-plan-action-epoa-dref-n
[12] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8672027/
[13] https://reliefweb.int/report/congo/yellow-fever-republic-congo-disease-outbreak-news-7-september-2018

Methodology section	Deviation
Degradation	estimated in the North Pikounda FMP and the normal harvesting practices based on real volumes historically harvested by CIB in its concession. As the merchantable volumes estimated in the FMP are based on sampling, it is possible that, for some species, the real harvested volumes either exceed or fall short of those defined in the FMP. To take this aspect into account, a new 'harvesting intensity ratio' parameter has been defined. This species-specific parameter, expressed in percent, is equal to the mean historical harvested volumes divided by the volume estimated for this species in the FMP: $$HI_x = \frac{V_{merch,x}}{V_{merchFMP,x}} + corr$$ Where: HI_x: the harvesting intensity ratio for the species *x*; $V_{merch,x}$: the mean merchantable volumes of species *x* harvested over the reference period in CIB concessions; $V_{merchFMP,x}$: the merchantable volumes for species *x* as estimated in the North Pikounda FMP; and corr: a correcting factor that can be added or subtracted to represent the advantages/disadvantages that the North Pikounda REDD+ project presents compared to other UFAs (e.g., distance, old-growth forest, and better timber quality).
Verification audit team opinion	The audit team verified this deviation. The deviations will not negatively impact the conservativeness of the quantification of reductions or removals. The result is more accurate in quantification and conservativeness. This is also in line with VCS standard 4.5 sect 3.20.2
3.2.1.1 Validation of existing forest inventory data	The methodology states that data used from the FMP should be no older than five years. The actual FMP, approved in 2012 by the government of the RoC, has been designed based on data collected in the project area in 2003. This data has been acquired following the normal inventory procedures in effect in the RoC, with the stratification used for the inventory being similar to that used for the IFM-LtPF project. This situation is the cause of a deviation for the North Pikounda project, as government approval of the FMP means that data must be used from it. Therefore, this FMP constitutes the legal base for South Pole's degradation estimations under the baseline scenario. Developing a new FMP is out of the question (see 'VM0011' methodology, Section 3.2.3.2, p. 40) as doing so would

Methodology section	Deviation
	interfere with a ministerial decree. Furthermore, validating data from the management plan has been possible using both the results from PSPs and recommendations from the 'VM0011' methodology (see Section 3.2.1.1). A demonstration of this is presented in Appendix 2a, Chapter 5 of the PDD. With the AGB of both growing stock and merchantable trees having naturally increased during the time left between the forest resources inventory for the FMP and the carbon inventory for the IFM-LtPF project, South Pole considers use of the volumes stated in the FMP report to be the conservative approach.
Verification audit team opinion	The audit team verified this deviation. The deviations will not negatively impact the conservativeness of the quantification of reductions or removals. The result is more accurate in quantification and conservativeness. This is also in line with VCS standard 4.5 sect 3.20.2
3.3.1 Net Carbon from the Deadwood Pool	As recommended by the methodology, South Pole have used the study by Brown et al. (2005) to estimate the carbon from residual stand damage. It appeared that, while this study provided CIB with site-specific data for both the residual stand damage (f_{RSD}) and branches and trimming factors (f_{Branch_Trim}), the results were aggregated without the possibility of differentiation between f_{RSD} and f_{Branch_Trim}. Therefore, a new factor called $f_{damages}$ will be used, and the following equation will replace equations 3.18, 3.19, and 3.20: $$C_{DWin,t} = f_{damages} \times V_{merch,t}$$ With: $$f_{damages} = f_{RSD} + f_{branch\_trim}$$ $f_{damages}$ is expressed in t of carbon (C)/cubic meter (m^3) harvested.
Verification audit team opinion	The audit team verified this deviation. The deviations will not negatively impact the conservativeness of the quantification of reductions or removals. The result is more accurate in quantification and conservativeness. This is also in line with VCS standard 4.5 sect 3.20.2
3.3.5 Carbon in the Regrowth after Selective Logging	To calculate the factor called $G_{regrowth,t}$, South Pole followed the method proposed in the PDD which for the second monitoring was based on the results of PSP monitoring for both 1st and 2nd. Using the differences in growth for all timber species in the PSPs between two

Methodology section	Deviation
	monitoring events, the differences in AGB for trees between 5–20 cm in diameter ($B_{AGB\_regrowth,t}$) can be estimated. South Pole considers this as corresponding to the carbon that would have been stored during regrowth occurring in the gaps after logging under the baseline scenario. As this model allows for the growth between two monitoring events to be estimated for every tree once the wood specific gravity (WSG) has been taken into account, $G_{regrowth,t}$ is therefore expressed as tC/ha^{-1} /yr^{-1} instead of t of dry matter (DM)/ha^{-1}/yr^{-1}. Equation 3.38 is therefore replaced by the following equation: $$C_{regrowth,t} = \underline{G}_{regrowth,t} \times \sum_{t=1}^{t^*} A_{NHA_{annual},t}$$ Appendix 2, Chapter 4.2.5 of the PDD gives more details about regrowth estimation
Verification auditors team opinion	The audit team verified this deviation. The deviations will not negatively impact the conservativeness of the quantification of reductions or removals. The result is more accurate in quantification and conservativeness. This is also in line with VCS standard 4.5 sect 3.20.2 The value which has used for G-Growth Forgone rate (AGB of merchantable trees are estimated per plot and per hectare for the two monitoring events, 2012 and 2021) and G Regrowth rate after harvesting f (AGB of trees whose diameter are between 5-20 cm are estimated per plot and per hectare for the two monitoring events 2012 and 2021) or year 2012 and 2021 is also very much conservative. The G-growth is estimated from the PSP inventory after selective logging. Parameter | 2021 | 2012 G Growth forgone rate[14] | 0.2798 | 0.4468 G Regrowth rate after harvesting[5] | 0.0498 | 0.3377
3.3.5 Carbon in the Regrowth after	While the 'VM0011' methodology states that it applies a conservative approach “by considering that the entire annual harvest area would

[14] This value is estimated by taking measurements from the PSP’s (as mentioned in the MR & registered PD) during the harvesting period.

Methodology section	Deviation
Selective Logging	permit regrowth each year", South Pole concluded that, in the context of this project, this approach did not represent the reality. Indeed, while there is a fixed annual area that can be legally harvested annually, the baseline scenario for reduced-impact logging indicates that, regardless of the extent of the logging activity, this area will not be totally harvested. More precisely, Meoli (2005) has defined that, for CIB harvesting operations, only 12.4% of the annual area that can be harvested is effectively damaged by harvesting operations (e.g., via the combined impact of felling gaps, hauling damages, and road networks). As such, only 12.4% of the annual harvesting area will allow regrowth. This percentage will be applied to the parameter $A_{NHA\_annual,t}$, described above in the regrowth calculation (Appendix 7).
Verification auditing team opinion	The audit team verified this deviation. The deviations will not negatively impact the conservativeness of the quantification of reductions or removals. The result is more accurate in quantification and conservativeness. This is also in line with VCS standard 4.5 sect 3.20.2
3.4.1 Emissions Due to Harvesting Operations and 3.4.2 Emissions Due to On-site Preparation	Fuel used for harvesting operations (e.g., logging, on-site preparation, and hauling) is assimilated into two categories: 'mixed petrol' (i.e., petrol and oil), used for chainsaws, and 'gas oil', used for heavy machinery (e.g., skidders, bulldozers, and loading machines). As differentiation between the mixed petrol used in chainsaws for cutting trees and for preparing trees is impossible, South Pole have decided to combine the emissions from harvesting and on-site preparation into one category. Equation 3.40 (p. 61) will therefore be replaced by the following equation: $$E_{harvest+onsite\_prep,t} = FC_{harvest+onsite\_prep,t} \times EF_{fuel} \times V_{merch,t}$$ Where $FC_{harvest+onsite\_prep}$ is the fuel consumption of chainsaws employed for felling, snigging, and trimming per m^3 of harvested material.
Verification auditing team opinion	The audit team verified this deviation. The deviations will not negatively impact the conservativeness of the quantification of reductions or removals. The result is more accurate in quantification and conservativeness. This is also in line with VCS standard 4.5 sect 3.20.2

Methodology section	Deviation
3.4.4 Emissions Due to Log Transport	In equation 3.46, the fuel consumption of trucks ($FC_{transport,t}$ in liters [L]/km^{-1}) has been used instead of their fuel efficiency ($Eff_{vehicle}$ in km/kiloliters [kL]$^{-1}$). This will not impact the final results.
Verification auditing team opinion	The audit team verified this deviation. The deviations will not negatively impact the conservativeness of the quantification of reductions or removals. The result is more accurate in quantification and conservativeness. This is also in line with VCS standard 4.5 sect 3.20.2
3.4.5 Emissions Due to Timber Processing	Electricity is produced by six generators with different power ratings (i.e., four with 1,250 kilovolt-amperes [kVA], one with 1,275 kVA, and one with 1,375 kVA) and load capacities. These generators work together to provide electricity at the required frequency. The project's transformation units, administrative units, workshops, etc., are all equipped with energy meters which allow for electricity consumption to be tracked on a daily basis, while the fuel consumption of each generator is also monitored. Consequently, linking the production of sawn timber with the electricity consumption for each transformation unit and this consumption in turn with the generator's fuel consumption is a straightforward procedure. The following equations are replacing equations used to estimate $E_{processing}$ in Section 3.4.5 of the 'VM0011' methodology: $$E_{processing,t} = FC_{generators} \times EF_{fuel} \times V_{sawn\_timber,t}$$
Verification auditing team opinion	The audit team verified this deviation. The deviations will not negatively impact the conservativeness of the quantification of reductions or removals. The result is more accurate in quantification and conservativeness. This is also in line with VCS standard 4.5 sect 3.20.2
3.4.6 Emissions Due to Log Distribution	The 'VM0011' methodology only considers the distribution of logs and/or sawn timber by road, whereas, in the baseline scenario, some timber products are transported by river and/or train. Additional fuel consumption and fuel emission factors have therefore been considered in the calculation of $E_{distribution,t}$. For example, the emission factors $EF_{distriboat}$ and $EF_{distrirail}$ have been created for boat and train transport, respectively. In terms of distribution by road, South Pole have used fuel consumption for the calculations instead of fuel efficiency. Two specific truck capacities have been calculated, with one for trucks travelling to Cameroon

Methodology section	Deviation
	($CAP_{cameroon}$) where there is a legal limit for truck capacity, and the other for trucks travelling to the RoC (CAP_{congo}).
The verification auditing team opinion	The audit team verified this deviation. The deviations will not negatively impact the conservativeness of the quantification of reductions or removals. The result is more accurate in quantification and conservativeness. This is also in line with VCS standard 4.5 sect 3.20.2

3.2 Project Description Deviations

For the first monitoring period, the project description deviation was related to the estimation of the growth foregone due to selective logging. This approach was not followed for the second monitoring period due to the difference in growth between PSPs being calculated. In this (i.e., 2nd monitoring period), there is a project description deviation related to Market Leakage calculations.

Market leakage - Leakage due to market effect is attributed to an IFM-LtPF project when the project significantly reduces the production of timber that affects the demand and supply equilibrium as well as results shifting of production elsewhere by the third party i.e., other than the Project Proponent, but within the host country. The applied methodology (VM0011) suggests following the latest version of the VCS rules for assessing leakage due to market effect for an IFM-LtPF project[15].

During the validation and first verification, PP had used Sharma et al (2012) article to calculate the market leakage. However, the methodology states that "*The Project Proponent must demonstrate how market leakage has been accounted for in accordance with the most recent version of applicable VCS rules*". Hence, PP in line with VCS Standard v4.5 has used the Table 3 (clause 3.15.10) for calculating the market leakage for this 2nd verification.

The result is more accurate in quantification and conservativeness. This is also in line with VCS Standard, v4.5 - Table.3. Further verification team reviewed the calculations to ensure the accuracy and reliability of the data and parameters used, calculation and formula applied from the methodology by the PP to justify the leakage emissions[16] ($C_{leakage}$). The value applied for this monitoring period (i.e., second) is equal to 20% of the baseline is considered appropriate.

[15] Refer to Section 5.3, Pages 99-100 in VM0011, version 1.0
[16] For more details refer Section 4.3 (page no.25) of this report.

3.3 New Project Activity Instances in Grouped Projects

Not Applicable, as the project is not a grouped project.

3.4 Baseline Reassessment

Did the project undergo baseline reassessment during the monitoring period?

☐ Yes ☒ No

4 VERIFICATION FINDINGS

4.1 Project Details

Verification team during the onsite visit, through observations of project activities and interviews with project personnel confirms that the project has been implemented throughout this monitoring period as it was described in the monitoring report.

The monitoring report was cross-checked against the monitoring plan submitted in the VCS PD to ensure compliance in terms of GHG emission reduction calculations as well as monitoring occurrences. Verification team also conducted interviews to confirm that monitoring plan were implemented as described in the VCS PD.

The verification team has determined whether the monitoring plan has been properly implemented and followed by PP that the monitoring has been carried out in accordance with the registered monitoring plan; and determined whether all parameters including project emission parameters, baseline emission parameters and leakage emission parameters used for emission reduction calculation stated in the registered monitoring plan are monitored or used appropriately as per the registered VCS PD.

During the verification all monitoring parameters listed in Section 4 of MR were compared with monitoring parameters and the monitoring plan of the registered VCS PD and have been verified with regard to appropriateness of the applied measurement / determination method, the correctness of the values applied for ER calculation, the accuracy and applied QA/QC measures.

The verification team confirmed that PP has implemented surveillance activities. The audit team has verified the project implementation activity during the site visit, interview with specific stakeholders and also through document analysis. As described in the MR and verified during the site visit, training to field staff were carried out during the second monitoring period.

In line with Guidelines for Application of materiality in verifications a reasonable level of assurance is defined for the verification of the project by complete verification of all the values indicated in the emission reduction spreadsheet at the document review stage and remote site.

There are no material errors, omissions or misstatements. There are no material discrepancies between the actual monitoring system, and the monitoring plan set out in the project description and the applied methodology.

The GHG emission reductions or removals generated by the project have not become included in an emissions trading program or any other mechanism that includes GHG allowance trading. The project has not received or sought any other form of environmental credit or has not become eligible to do so since validation or previous verification. The project has not participated or been rejected under any other GHG programs since validation or previous verification.

Item	Evidence gathering activities, evidence checked, and assessment conclusion:
Audit history	2nd Verification
Double counting and participation under other GHG programs	The project is registered under the VCS program (https://registry.verra.org/app/projectDetail/VCS/1052) as well as the "Emission Reduction Program in Sangha and Likouala" under the Forest Carbon Partnership Council (FCPF) Standard of the World Bank (https://www.forestcarbonpartnership.org/country/congo-republic). The FCPF project, located in the Sangha and Likouala departments of the Republic of Congo, is active and generating credits from 2020 to 2024, following the completion of the monitoring period for the VCS project (2013-2019). As a result, there is no risk of double counting between the two projects. KBS confirms that the project has not been registered nor is seeking registration under any other GHG programs, nor has it been rejected by any other GHG programs, as confirmed through a risk-based internet review in other program registries, interviews with the Project Proponent (PP), and as described in the registered Project Design Document (PD) and Monitoring Report (MR).
No double claiming with emissions trading programs or binding emission limits	KBS confirms that the Project is not currently participating in any emission trading or other binding limit program or mechanism, as confirmed through discussion with project personnel and review of registered PD and MR.
No double claiming with other forms of environmental credit	The Project is currently participating in the Forest Carbon Partnership Facility (FCPF) program in the Republic of Congo, financed by the World Bank, which starts on the 1st of January 2020 and continues until the 31st of December 2024, as confirmed through discussion with project personnel and review of registered PD and MR. Additionally, there is no risk of double

	claiming for this verification period because it spans from the 1st of January 2013 to the 31st of December 2019. Therefore, this verification will not overlap with the Forest Carbon Partnership Facility (FCPF) program in the Republic of Congo.
Supply chain (scope 3) emissions double claiming	Project is enrolled under sectoral scope 14; Agriculture, Forestry and Other Land Use (AFOLU). Inventory emissions are not considered under sectoral scope 14. Thus, no issuance of public statements or email notification proceeds.
Sustainable development contributions	KBS has the following conclusions regarding the project's sustainable development contributions by discussion, review of documents that PP has aimed to contribute to the following three SDGs: SDG 8 (Decent work and economic growth) - In the last 10 years, the project has employed people with average earnings of 9,308 XAF/day (CURRENCY/DAY), whereas average earnings before the start of the project were 6,520 XAF/day (CURRENCY/DAY). In the last 10 years, the project has employed at least 24 people, of which two have been women. SDG 13 (Climate action) - The emission of 1041363 tCo2e (before buffer pool) of carbon into the atmosphere has been avoided by preserving the project area (activity), cancelling any logging intentions. The avoided emissions correspond to the emissions due to the reference scenario in which Pikounda could have been converted in the absence of the IFM carbon project, in short, the emissions due to the conversion of the forest into processed timber. SDG 15 (Life on land) - In the second monitoring period (2013-2019) the conservation of the forest continued, and 92530 ha of rainforest were protected, including the peat swamp surrounding the project area (dryland forest). During the second monitoring period, the project 1052 has avoided the emission of 748555 tCo2e (before buffer pool) of carbon into the atmosphere, as verified through the estimation of the emissions reductions. The PP has demonstrated its contribution to the SDGs, their monitoring and reporting, and their alignment with the achievement of the Host Country.
Additional information relevant to the project	The protection of the project area has maintained the population of gorillas, apes, elephants, ungulates, and other animal species

	with International Union for Conservation of Nature and/or Convention on International Trade in Endangered Species of Wild Fauna and Flora status according to sampling conducted in the project area in 2014. According to a recent report (December 2022) [17] the area has efficiently kept free of poaching and other threats related to the illegal hunting. In addition, the area in the south borders the Ntokou-Pikounda National Park, an exceptional priority area for the conservation of species within the Odzala/Lossi/Pikounda/Ngombé/Ntokou complex in the northern RoC.[18] Once revenues from both verifications are received, CIB - OLAM Agri will disburse the benefits agreed with the government and the communities of Molenda and Pikounda, i.e., the project requires that 20% of the net profit be shared with the Government, which also includes the community share (included in the Memorandum of understanding, Article 3, Activity 10).

4.2 Safeguards and Stakeholder Engagement

4.2.1 Stakeholder Identification

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Stakeholder identification	The stakeholders consulted in the first verification period have not changed in the last nine years and there was no stakeholder conflict with the project implementation.
Legal or customary tenure/access rights	The right to use nor the ownership of the land in the project area has changed in the last nine years, meaning CIB and, by extension, its parent Olam Agri continue to hold the rights to the area. As there are no affected communities, no informed consent has been signed, nor has there been any compensation and there are no conflicts over title with the surrounding communities.
Stakeholder diversity and changes over time	The stakeholders consulted in the first verification period have not changed in the last nine years and there was no stakeholder conflict with the project implementation. To assess whether the stakeholders

[17] Appendix 0 Threats of poaching.
[18] https://interholco.com/images/pdfs/Maisels-et-al-2015-Wildlife-and-human-impact-survey-of-Ngombe-Ntokou-Pikounda-EN-v2_FINAL.pdf

consulted for the validation and in the first verification period have not changed in the last nine years, the following steps were undertaken:

Step 1: Review of Project Design Document (PDD) and Historical Records

Review Initial Stakeholder List: The Project Design Document (PDD) and other historical documents from the validation and first verification period were reviewed to confirm the original stakeholders involved, specifically:

The RoC National REDD+ coordination

Communities from Molanda and Pikounda

The MEFDD - Ministry of Forest Economy, Republic of Congo

Document Stakeholder Interactions: All recorded interactions and communications with these stakeholders over the years were compiled and reviewed to ensure continuity.

Step 2: Stakeholder Re-engagement

National and Local Government Bodies: Meetings and communications were conducted with the RoC National REDD+ coordination and the MEFDD to verify their ongoing involvement and confirm no changes in their representation or engagement.

Local Communities (Molanda and Pikounda):

Community Meetings: Meetings were held in Molanda and Pikounda to re-engage the communities, explaining the project's current status and confirming their continued involvement.

Consultation with Community Representatives: Consultations were held with community representatives to gather feedback and confirm their continued engagement and support.

Step 3: Verification of Legal and Customary Rights

Legal Rights Review: The legal rights of the project area were verified, ensuring that the CIB still holds the logging concession permit granted in 2012.

Community Land Tenure Confirmation: It was confirmed that the communities of Molanda and Pikounda still do not have any land tenure rights over the project area and are located more than 20 km away from it.

	Step 4: Ongoing Communication and Informal Consultations Informal Communications: Although no formal stakeholder consultations were conducted prior to this verification, informal communications with the nearest communities continued. These interactions, though not formally documented, helped to maintain ongoing dialogue and address any emerging issues. FSC Certification Meetings: As part of the FSC certification process, meetings were held in December 2022 (outside the current monitoring period) in the communities of Molanda and Pikounda to survey their knowledge of possible encroachments in the project area. By systematically following these steps, the project ensured that the stakeholders consulted during the validation and first verification period remained consistent over the past nine years, thus maintaining the integrity and continuity of stakeholder engagement. It was also observed during on site visit that there were no new plantation/area is included, no new communities were added, and no project area change has reported in last 10 years.
Expected changes in well-being	In the last 10 years, the project has employed people with average earnings of 9,308 XAF/day (CURRENCY/DAY), whereas average earnings before the start of the project were 6,520 XAF/day (CURRENCY/DAY). In the last 10 years, the project has employed at least 24 people, of which two have been women. Average earnings during this monitoring period (i.e., 2013–2019) were 8,966 XAF/day (CURRENCY/DAY), representing an increase of 38% compared with average earnings in the last nine years
Location of stakeholders	There are no human settlements near the project area other than a few communities (i.e., Molenda, Ngangassa, Bouéndé, and Iténdé) located more than 20 kilometers (km) away
Location of resources	This project does not have any kind of risk that could affect communities, then activities to mitigate risks have not been implemented during the project lifetime as was validated in the PDD. This project does not contemplate logging or any other productive activity; the only land use proposed is conservation without extraction of natural resources, so no mitigation actions for the stakeholders were carried out.

4.2.2 Stakeholder Consultation and Ongoing Communication

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Ongoing consultation	Regular Interaction with RoC National REDD+ coordination, MEFDD - Ministry of Forest Economy[19], inhabitants of Molenda and Pikounda.
Date(s) of stakeholder consultation	December 2022
Communication of monitored results	Direct one to one survey through a questionaries/11/, stakeholders feedback on the project were collected.
Consultation records	18 surveys records/11/ with inhabitants of Molenda (9) and Pikounda (9).
Stakeholder input	During December 2022, 18 surveys were conducted with inhabitants of Molenda (9) and Pikounda (9) to inquire about the project and its benefits or drawbacks.

4.2.3 Free, Prior, and Informed Consent

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Consent	NA, As there are no human settlements near the project area other than a few communities (i.e., Molenda, Ngangassa, Bouéndé, and Iténdé) located more than 20 kilometers (km) away.
Outcome of FPIC[20] discussion	Hence this project does not have any kind of risk that could affect communities, then activities to mitigate risks have not been implemented during the project lifetime as was validated in the PDD.

4.2.4 Grievance Redress Procedure

Item	Evidence gathering activities, evidence checked, and assessment conclusion

[19] Letter to the MEFDD in the folder under the name: Letter to MEFDD - AR Non adhésion Pikounda Nord au ER-P Sangha Likouala_20221115_0001 (1)

[20] Free, Prior, and Informed Consent (FPIC) is a specific right granted to Indigenous Peoples recognised in the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), which aligns with their universal right to self-determination.

Grievance received and steps taken to resolve the grievance including the outcomes of the resolution	In the present monitoring period, there were no conflict arose between the PP (CIB-OLAM Agri) and the local stakeholders, hence no grievance redress procedures were applied.
Grievance redress procedure	Yes, a well-defined grievance redress procedure is established by PP

4.2.5 Public Comments

The project MR has not received any stakeholder comments (https://registry.verra.org/app/projectDetail/VCS/1052).

Comments received	Actions taken by the project proponent	Evidence gathering activities, evidence checked, and assessment conclusion
NA	*NA*	

4.2.6 Risks to Local Stakeholders and the Environment

4.2.6.1 Management Experience

The audit team evaluated additional associated risk and mitigation measures in the project.

- **Forest Fire/ Wildfire:** During the site visit observation, the audit team could confirm that nearest community settlement is 20 km away from the project site. There have been no forest fires noted since 25 years. Fires are not common in the humid tropical forest ecosystem in Africa (support information from GIS)
  - **Mitigation:** project proponent has prepared the fire line and buffer zone to mitigate the fire risk in the project area. The same was demonstrated to the audit team during the site visit.
- **Illegal timber felling/ Charcoal/ Biochar production**
  - **Mitigation:** It is evident from the onsite field-visit, the audit team confirms that no local community/ nomadic population resides near-by the project location, thus such risks are also negligible[18].
- **Human dependency on forest-**
  - **Mitigation:** During the site visit observation, the audit team could confirm that the nearest community settlement is 20 km away from the project site. The audit team also confirmed that the surroundings of the project area has very difficult terrain, so the intensity of this risk is found negligible[18].

- **Open animal grazing**
  - **Mitigation:** During the site visit observation, the audit team could confirm that there are no local community / nomadic herdsmen near to the project location. Thus, the intensity of this risk is found negligible. It is also verified through the latest satellite imagery of the project location.

During the onsite assessment the audit team reviewed the analysis report (Land Cover Maps and Satellite Images Analysis) conducted by the PP. The audit team further interviewed the forest management team regarding the local risk scenario the probability of occurrence. The audit team with its independent review, review of documents and interview confirms that the project area is an isolated area from the community and there is no impact from the anthropogenic activities. Audit team further cross verified the satellite imagery for the monitoring period (January 1, 2013, to December 31, 2019), and confirms that there are no losses/devastation in the green cover were observed in the project boundary, thus NO leakage accounted by the project activity is accepted by the audit team.

4.2.6.2 Risk Assessment

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Natural and human induced risks to stakeholders' wellbeing	NA
Risks to stakeholder participation	This project does not have any kind of risk that could affect communities, then activities to mitigate risks have not been implemented during the project lifetime as was validated in the PDD. This project does not contemplate logging or any other productive activity; the only land use proposed is conservation without extraction of natural resources, so no mitigation actions for the stakeholders were carried out. As there are no human settlements near the project area other than a few communities (i.e., Molenda, Ngangassa, Bouéndé, and Iténdé) located more than 20 kilometers (km) away.
Working conditions	NA
Safety of women and girls	NA

Safety of minority and marginalized groups, including children	NA
Pollutants (air, noise, discharges to water, generation and release of hazardous materials and chemical pesticides and fertilizers	NA The project is located in the Sangha region, part of the northern RoC Forest sector. The main activity of the North Pikounda REDD+ project is to cancel planned degradation and deforestation activities in favor of promoting the decision to conserve and protect the forest area and its biodiversity. This is significant as the project area has considerable biodiversity, including one of the largest known lowland gorilla populations in the Congo Basin. Hence no Pollutants (air, noise, discharges to water, generation of waste, release of hazardous materials) from the project.

4.2.7 Respect for Human Rights and Equity

4.2.7.1 Labor and Work

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Discrimination and sexual harassment	This project does not have any kind of risk that could affect communities, then activities to mitigate risks have not been implemented during the project lifetime as was validated in the PDD. This project does not contemplate logging or any other productive activity; the only land use proposed is conservation without extraction of natural resources, so no mitigation actions for the stakeholders were carried out.
Management experience	NA
Gender equity in labor and work	NA
Human trafficking, forced labor, and child labor	NA

4.2.7.2 Human Rights

Risks identified	Evidence gathering activities, evidence checked, and assessment conclusion
Human rights	NA This project does not have any kind of risk that could affect communities, then activities to mitigate risks have not been implemented during the project lifetime as was validated in the PDD. This project does not contemplate logging or any other productive activity; the only land use proposed is conservation without extraction of natural resources, so no mitigation actions for the stakeholders were carried out. The project is located in the Sangha region, part of the northern RoC Forest sector. The main activity of the North Pikounda REDD+ project is to cancel planned degradation and deforestation activities in favor of promoting the decision to conserve and protect the forest area and its biodiversity. This is significant as the project area has considerable biodiversity, including one of the largest known lowland gorilla populations in the Congo Basin.

4.2.7.3 Indigenous Peoples and Cultural Heritage

Risks identified	Evidence gathering activities, evidence checked, and assessment conclusion
Preservation and protection of cultural heritage	NA This project does not have any kind of risk that could affect communities, then activities to mitigate risks have not been implemented during the project lifetime as was validated in the PDD. This project does not contemplate logging or any other productive activity; the only land use proposed is conservation without extraction of natural resources, so no mitigation actions for the stakeholders were carried out. The project is located in the Sangha region, part of the northern RoC Forest sector. The main activity of the North Pikounda REDD+ project is to cancel planned degradation and deforestation activities in favor of promoting the decision to conserve and protect the forest area and its biodiversity. This is significant as the project area has considerable biodiversity, including one of the largest known lowland gorilla populations in the Congo Basin.

4.2.7.4 Property Rights

Risks identified	Evidence gathering activities, evidence checked, and assessment conclusion
Disputes over rights to territories and resources	The North Pikounda Reducing Emissions from Deforestation and forest Degradation (REDD+) project is an emissions reduction project that aims to protect 92530 hectares (ha) of unlogged native Congolese forest from deforestation and degradation through conservation. The forest is legally designated as a selective logging concession (the North Pikounda Unité Forestière d'Exploitation - UFE) by ministerial decree in 2002/8/ and consists of 60% dry mixed forest and 40% designated wetland. The PP has demonstrated the logging rights in section 1.1 of MR and submitted legal documents "EF-AR-92 - POKOLA & PIKOUNDA.pdf in both English and French" Issued on dated 2012 by the Ministry of Sustainable Development, Forest Economy, and Environment (MDDEFE) with a duration of 25 years (Article 2), these documents confirm the logging rights are valid until 2037. The audit team has reviewed the legal documents (Both English and Frech language) to confirm the logging rights and its validity. During the onsite visit multiple stakeholders (CIB, OLAM) were interviewed to check and confirm if there were any logging in the project area. Randomly the OLAM financial statements for year 2021- 2022 and forest inventory were also cross checked for if there were any sales due to logging. Further, from 2012 to 2023 GIS mapping (satellite imagery) were cross checked for logging activities. With the above verification, the audit team confirms that there was no logging in the project area and as stated by the PP in MR. The concession is owned by Congolaise Industrielle des Bois (CIB), an established timber operator in the northern Republic of Congo (RoC) since 1968. Its also an subsidiary of Olam Agri. The company currently has five active sawmills, dryers and moulding units in Pokola and Loundoungou, and employs over 900 permanent staff and more than 100 subcontractors. CIB was the first timber company in the RoC to submit a Forest Management Plan (FMP) in 2005 and the first to be certified by the Forest Stewardship Council (FSC) in 2006/8/. The project is located in the Sangha region, part of the northern RoC forest sector. The UFE is a component of the Pikounda *Unité*

	Forestière d'Aménagement [Forest Management Unit] (UFA), divided into two UFEs: 1) the North Pikounda UFE, designated for timber extraction allocated to CIB; and 2) the South Pikounda UFE, decreed to become the 'Tokou-Pikounda Protected Area'. The main activity of the North Pikounda REDD+ project is to cancel planned degradation and deforestation activities in favor of promoting the decision to conserve and protect the forest area and its biodiversity. This is significant as the project area has considerable biodiversity, including one of the largest known lowland gorilla populations in the Congo Basin.
Respect for property rights	As above

4.2.7.5 Benefit Sharing

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Summary of the benefit sharing plan	As of on now, the PP (CIB - OLAM Agri) has not received any revenues for the issuance of credits. Because the amount for the first verification is small (56,196 credits) compared to the expected credits for the second verification, once revenues from both verifications are received, CIB - OLAM Agri will disburse the benefits agreed with the government and the communities of Molenda and Pikounda, following the next plan: • Project development costs have been shared with the government for audit. The project requires that 20% of the net profit be shared with the government, which also includes the community share (included in the Memorandum of understanding, Article 3, Activity 10).
Benefit sharing during the monitoring period	As above

4.2.8 Ecosystem Health

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Impacts on biodiversity and ecosystems	The project is located in the Sangha region, part of the northern RoC Forest sector. The main activity of the North Pikounda REDD+ project is to cancel planned degradation and deforestation activities in favor of promoting the decision to conserve and protect the forest area and its biodiversity. This is significant as the project area has considerable biodiversity, including one of the largest known lowland gorilla populations in the Congo Basin. Hence there is. ➢ No impacts on biodiversity and ecosystems ➢ No Soil degradation and soil erosion ➢ No Water consumption and stress ➢ No Usage of fertilizers in the project.
Soil degradation and soil erosion	*As above*
Water consumption and stress	*As above*

4.2.8.1 Rare, Threatened, and Endangered species

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Species or habitat	The project is located in the Sangha region, part of the northern RoC Forest sector. The main activity of the North Pikounda REDD+ project is to cancel planned degradation and deforestation activities in favor of promoting the decision to conserve and protect the forest area and its biodiversity. This is significant as the project area has considerable biodiversity, including one of the largest known lowland gorilla populations in the Congo Basin.

	The protection of the project area has maintained the population of gorillas, apes, elephants, ungulates, and other animal species with International Union for Conservation of Nature and/or Convention on International Trade in Endangered Species of Wild Fauna and Flora status according to sampling conducted in the project area in 2014. According to a recent report (December 2022) 21 the area has efficiently kept free of poaching and other threats related to the illegal hunting. In addition, the area in the south borders the Ntokou-Pikounda National Park, an exceptional priority area for the conservation of species within the Odzala/Lossi/Pikounda/Ngombé/Ntokou complex in the northern RoC.[22]
Areas needed for habitat connectivity	*NA*

	Evidence gathering activities, evidence checked, and assessment conclusion
Habitats for rare, threatened, and endangered species	The protection of the project area has maintained the population of gorillas, apes, elephants, ungulates, and other animal species with International Union for Conservation of Nature and/or Convention on International Trade in Endangered Species of Wild Fauna and Flora status according to sampling conducted in the project area in 2014. According to a recent report (December 2022) 23 the area has efficiently kept free of poaching and other threats related to the illegal hunting. In addition, the area in the south borders the Ntokou-Pikounda National Park, an exceptional priority area for the conservation of species within the Odzala/Lossi/Pikounda/Ngombé/Ntokou complex in the northern RoC.[24]
Areas for habitat connectivity	NA

[21] Appendix 0 Threats of poaching.

[22] https://interholco.com/images/pdfs/Maisels-et-al-2015-Wildlife-and-human-impact-survey-of-Ngombe-Ntokou-Pikounda-EN-v2_FINAL.pdf

[23] Appendix 0 Threats of poaching.

[24] https://interholco.com/images/pdfs/Maisels-et-al-2015-Wildlife-and-human-impact-survey-of-Ngombe-Ntokou-Pikounda-EN-v2_FINAL.pdf

4.2.8.2 Introduction of Species

Species introduced	Evidence gathering activities, evidence checked, and assessment conclusion
NA	The project is located in the Sangha region, part of the northern RoC Forest sector. The main activity of the North Pikounda REDD+ project is to cancel planned degradation and deforestation activities in favor of promoting the decision to conserve and protect the forest area and its biodiversity. This is significant as the project area has considerable biodiversity, including one of the largest known lowland gorilla populations in the Congo Basin.

Existing invasive species	Evidence gathering activities, evidence checked, and assessment conclusion
NA	The project is located in the Sangha region, part of the northern RoC Forest sector. The main activity of the North Pikounda REDD+ project is to cancel planned degradation and deforestation activities in favor of promoting the decision to conserve and protect the forest area and its biodiversity. This is significant as the project area has considerable biodiversity, including one of the largest known lowland gorilla populations in the Congo Basin.

	Evidence gathering activities, evidence checked, and assessment conclusion
Invasive species	The project is located in the Sangha region, part of the northern RoC Forest sector. The main activity of the North Pikounda REDD+ project is to cancel planned degradation and deforestation activities in favour of promoting the decision to conserve and protect the forest area and its biodiversity. This is significant as the project area has considerable biodiversity, including one of the largest known lowland gorilla populations in the Congo Basin.

4.2.8.3 Ecosystem conversion

Item	Evidence gathering activities and evidence checked
Ecosystem conversion	The project is located in the Sangha region, part of the northern RoC Forest sector. The main activity of the North Pikounda REDD+ project is to cancel planned degradation and deforestation activities in favour of promoting the decision to conserve and protect the forest area and its biodiversity. This is significant as the project area has considerable biodiversity, including one of the largest known lowland gorilla populations in the Congo Basin. The protection of the project area has maintained the population of gorillas, apes, elephants, ungulates, and other animal species with International Union for Conservation of Nature and/or Convention on International Trade in Endangered Species of Wild Fauna and Flora status according to sampling conducted in the project area in 2014. According to a recent report (December 2022) 25 the area has efficiently kept free of poaching and other threats related to the illegal hunting. In addition, the area in the south borders the Ntokou-Pikounda National Park, an exceptional priority area for the conservation of species within the Odzala/Lossi/Pikounda/Ngombé/Ntokou complex in the northern RoC.[26]

4.3 Accuracy of Reduction and Removal Calculations

The verification of all the data ex-ante and data ex-post (monitoring parameters) including data measurement, data transfer, data archiving, aggregation and calculation of baseline emissions, project emissions and leakage emissions are tabulated below.

Parameter	Source considered and value applied	Conclusion by the verification team
Ex-ante		
Project area $A_{project,t=0}$ = 55950 ha	FMP	There is no deviation from the validated PDD and hence the source and value applied is

[25] Appendix 0 Threats of poaching.

[26] https://interholco.com/images/pdfs/Maisels-et-al-2015-Wildlife-and-human-impact-survey-of-Ngombe-Ntokou-Pikounda-EN-v2_FINAL.pdf

		considered acceptable.
Allometric equations for calculation of AGB $f(\mathbf{DBH}_{n,l,s,j,t=0}, \mathbf{H}_{n,l,s,j,t=0})$ = NA	Chave et al., 2005; Feldspauch et al., 2012	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.
Diameter at breast height (1.30 meters [m]) $DBH_{n,i,s,t=0}$ = NA	PSP inventory	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.
Merchantable volume harvested in year t $V_{merch,t}$ = NA	FMP total volumes given per Unités Forestières de Production [Forest Production Unit] (UFP) (five years of harvesting)	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.
Harvesting intensity ratio for species x: annual percentage of Vmerch estimated in the FMP that will actually be harvested HI_x = NA	CIB harvesting data (2006–2012) and CIB FMPs	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.
Carbon in the AGB of the growing stock C_{AGB} = 0.49 tC/ha[1]	Carbon in the AGB of the growing stock	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.
Carbon in the AGB of the growing stock k_{decay} = 0.186 yr^{-1}	Chambers et al., 1999	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.
Factor combining branch-trim factor and residual stand damage factor (see Deviation Description Paragraph 2.6 of the VCS project design document [PDD]) $f_{damages}$ = 0.6989 tC/m^3	Brown et al., 2005	The factors considered from the registered PDD is considered accepted.
Proportion of merchantable log converted to long-term harvested wood products (ltHWPs) $f_{lumber\_recovery}$ = See Appendix 4 of MR	CIB production data (2007–2012)	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.

Rate of oxidation for LtHWP k_{ltHWP_ox} = 0.023 yr^{1}	'VM0011' v1.0, Table B5, p. 141; adapted from Table 12-2, Chapter 12 of the Intergovernmental Panel on Climate Change, 2006b	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.
Fuel consumption of equipment used for harvesting and trimming per m^3 of merchantable logs produced $FC_{harvest+onsiteprep}$ = 0.0912 L/m^3	CIB production data from 2012	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.
Fuel emission factor EF_{fuel} = 2.7782 kilograms (kg) of carbon dioxide equivalent (CO_2e)/L^{1}	Department for Environment, Food & Rural Affairs (Defra), 2012; Annex 1	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.
Fuel consumption of equipment used for hauling per m^3 of merchantable logs produced $FC_{hauling}$ = 4.7767 L/m^3	CIB production data from 2012	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.
Fuel emission factor EF_{fuel} = 3.6028 $kgCO_2e/L$	Defra, 2012; Annex 1	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.
Truck load capacity Cap_{truck} = 56.32 m^3	CIB production data from 2011	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.
Annual log transport distance from collection depot to processing plant $KM_{transport,t}$ = ---- km See Appendix 4 Tab 2.2	Management plan North Pikounda (Appendix 8)	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.
Truck fuel consumption $FC_{transport}$ = 0.6014 L/km	CIB production data from 2011	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.
Fuel emission factor EF_{fuel} = 3.6028 $kgCO_2e/L$	Defra, 2012; Annex 1	There is no deviation from the validated PDD and hence the source and value applied is

		considered acceptable.
Generators fuel consumption per m^3 of timber entering the sawmill $FC_{processing}$ = 14.7 L/m^3	CIB production data from 2012	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.
Fuel emission factor EF_{fuel} = 3.6028 $kgCO_2e/L$[1]	Defra, 2012; Annex 1	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.
Volume of merchantable logs reserved for the sawmill in year t $V_{sawn\_timber,t}$ = m^3 See Appendix 4 Tab 1.2	FMP; calculation based on Vmerch,t	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.
Ratio of total merchantable volume reserved for the sawmill $f_{export/sawn}$ = See Appendix 4 Tab 1.2	CIB production data from 2007–2012	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.
Volume of merchantable logs/sawn timber transported to destination d, by vehicle v, in year t $V_{merch,vehicle,destination,t}$ = m^3 See VCS MR Tab 1, Appendix 7	FMP; CIB production data from 2007–2012	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.
Truck load capacity $Cap_{vehicle}$ = 48.2 m^3 Based on monthly transport reports = 49.4 m^3 Based on Cameroonian legislation	CIB production data from 2011; legal threshold for Cameroon	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.
Distance between Pokola and export point $KM_{distrib,destination,t}$ in km **Destination** / **Distance (km)** PKL-BZV / 880 - Road PKL-BZV / 850 - River BZV-PTN / 510 - Rail PKL-DOU / 1350 - Road PKL-BELABO / 750 - Road	See Appendix 4 Tab 2.1	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.

BELABO-DOU | 650 - Rail		
Truck fuel consumption FC_{truck} = 0.6014 L/km	CIB production data from 2011	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.
Fuel emission factor EF_{fuel} = 3.6028 $kgCO_2e/L$[1]	Defra, 2012; Annex 1	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.
Rail freight emission factor EF_{rail} = 0.03634 $kgCO_2e/t/km$	Defra, 2012	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.
Annual volume of harvest for land l (where l = 1,2,3,.....L) that is owned and/or operated by the project proponent over the historical reference period K $V_{historical\_harvest,l,t=0}$ in m^3 See Appendix 3b of MR	CIB production data	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.
Annual volume of timber production in each concession (c) with the same forest types or tree species composition in the country in each year (n) of the historical reference period (N) $V_{c,N}$ in m^3 See Appendix 3c of MR	MEFDD compilation of production data	There is no deviation from the validated PDD and hence the source and value applied is considered acceptable.
Ex Post		
DBH (1.30 m) for individual tree n, of species i, in sample plot s, in year t $DBH_{n,i,s,t}$	PSP inventory	The verification team during the site visit, with discussion and by observation confirms that the monitoring team (i.e., field personnel), measure as per the standard SOP's of the project. The field staff are given appropriate trainings prior to data
Average AGB of merchantable trees in the project area in year t $B_{AGBmerch,t}$	PSPs inventory	
Annual carbon lost due to growth foregone in the AGB in the project area in year t	PSPs inventory	

$C_{growth\_foregone,t}$		collection. Hence accepted
Average AGB of trees in the regrowth estimated from the growth of trees in the regeneration sub-plot of the PSPs (i.e., trees with a diameter between 5–20 cm) $B_{AGB\_regrowth,t}$	PSPs inventory	
Average regrowth of AGB per ha per year after logging in year t $G_{regrowth,t}$	PSPs inventory	
Average regrowth of AGB in the gaps after selective logging $C_{regrowth,t}$	PSPs inventory	
Annual area of natural disturbance (nd), in stratum j, in year t $A_{nd,j,t}$	Annual monitoring	
Fraction of the growing stock naturally damaged in stratum j in year t $f_{natdisturb,j,t}$	Annual monitoring	
DBH for individual tree n, of species i, in sample plot of naturally disturbed areas and in stratum j in year t $DBH_{tree\_nd,i,snd,j,t}$	Annual monitoring	
Annual area of illegal harvest in stratum j in year t $A_{illegal\_harvest,t}$	Annual monitoring	
Volume estimated in areas where illegal harvesting was detected. If, during the year evaluated, there were no areas of illegal harvesting, then any volume was estimated $V_{illegal\_harvest,t}$	Annual monitoring	
Annual actual volume of harvest for land l operated by the project proponent in year t (2013 – 2019) $V_{actualharvest,l,t}$	Annual monitoring	

Average annual volume of timber production after the implementation of an IFM-LtPF project from the same forest types or tree species composition and in the same climatic region within the host country for the monitoring period M (2013 – 2019) $V_{marketleakage, M}$	Annual monitoring	

The PP submitted emission reduction calculations and other supporting calculations in excel sheets in a excel sheet. The excel sheets are clear, un-protected and easily viewable. The calculation in the excel sheet is verified and found be correct. The methods and formulae set out in the project description for calculating baseline emissions, project emissions and leakage are correctly followed in the monitoring report and ER calculation sheet.

All the values are provided in the MR and ER calculation sheet are cross verified with its sources and confirmed no manual transposition errors between data sets have occurred. Also, the consistency of values within MR is checked and found to be OK.

PP has described the reasons with justification for omission and inclusion of certain parameters with respect to the project monitoring:

1. The project does not monitor “height of tree” data even though field measurements were taken

Hence verification team conclude that the GHG emission reductions and removals have been quantified correctly in accordance with the project description and applied methodology.

Leakage:

Project activity as considered following two sources of leakage:

1) Activity Shifting Leakage: carbon emissions from degradation due to the shifting of logging operations to a new forest area or if the baseline activity has shifted from the Project Area to other areas controlled by CIB (limited to within RoC) i.e. removal of harvested wood products including sawlogs and the associated emissions.

2) Market Leakage: carbon from emissions due to shifts in supply and demand of sawlogs, timber and other harvested wood products.

The project leakage is the combined total of the above leakage parameters described as:

$$C'_{leakage,t} = \left(CL_{activityshifting,t} + CL_{market,t}\right) * \frac{44}{12} + CL'_{emissions,t}$$

This will be deducted from $C'_{baseline,t}$, as required in equation 1.1 of VM0011:

$$C'_{IFM-LtPF} = C'_{baseline} - C'_{leakage}$$

Activity shifting leakage

The VM0011 methodology accounts for activity shifting leakage from the following two different sources for an IFM-LtPF project:

1) Intensification of logging operations: the Project Proponent is required to demonstrate that the harvesting operation in other forest lands owned and/or operated have not materially changed, i.e., increased harvest volume to compensate the harvest volume lost due to commencement of an IFMLtPF project, and

2) Shifting of harvesting operation: the Project Proponent acquires new forest land within the host country and undertake or shifts the harvesting operation to recover the loss of harvest volume due to IFM-LtPF project. Leakage due to activity shifting is given by Equation 5-2 below:

$$C_{activityshifting,t} = C_{IH_{activityshifting},t} + C_{SH_{activityshifting},t}$$

Where $C_{IH\_activityshifting,t}$ is the annual carbon losses due to the intensification of harvesting operations and $C_{SH\_activtyshifting,t}$ is the annual carbon losses due to the shifting of harvesting operations.

Intensification of logging operations

The VM0011 describes the procedure for quantifying activity shifting leakage due to intensification of harvesting in the forestlands owned and/or operated by the Project Proponent. A comparison of harvest volumes from these forestlands (l) from before and after the commencement of an IFM-LtPF is performed to detect and quantify the leakage due to intensification of harvesting. An historical reference period has been chosen and compared against the harvested volume in the monitoring period: the period between 2002 and 2011 (10 years) and the first monitoring period (2012) has been considered as the historical Leakage Reference Period, while the monitoring period goes from 2013 to 2019 (7year). The total leakage in terms of merchantable logs volume is calculated as given by Equation 5-7 in VM0011

$$V_{IH_{activityshifting},t} = \sum_{l=1}^{L} (V_{actualharvest,l,t} - V_{historicalharvest,l,t})$$

The summation of the difference between the actual harvest in the monitoring period and the average annual harvest volume for each concession in the historical reference period resulted in a value of -109,489 m^3. This negative value indicates that the Project Proponent harvested less by that amount than the threshold for the leakage due to intensification of harvest. **It means there is no leakage due to intensification of harvesting.**

Leakage due to shifting of harvesting operation

The activity shifting leakage is caused by the Project Proponent due to shifting of harvesting into new area after the commencement of IFM-LtPF project activity. In this case, the CIB-Olam have neither acquired new concessions nor shifted harvesting into the new forest land besides the concession areas already operated within the Republic of Congo. Therefore, **there is no activity shifting leakage due to shifting of harvesting operation for this monitoring period.**

Market leakage

Leakage due to market effect is attributed to an IFM-LtPF project when the project significantly reduces the production of timber that affects the demand and supply equilibrium as well as results shifting of production elsewhere by the third party i.e. other than the Project Proponent, but within the host country. The applied methodology (VM0011) suggests following the latest version of the VCS rules for assessing leakage due to market effect for an IFM-LtPF project (refer to Section 5.3, Pages 99-100 in VM0011, version 1.0).

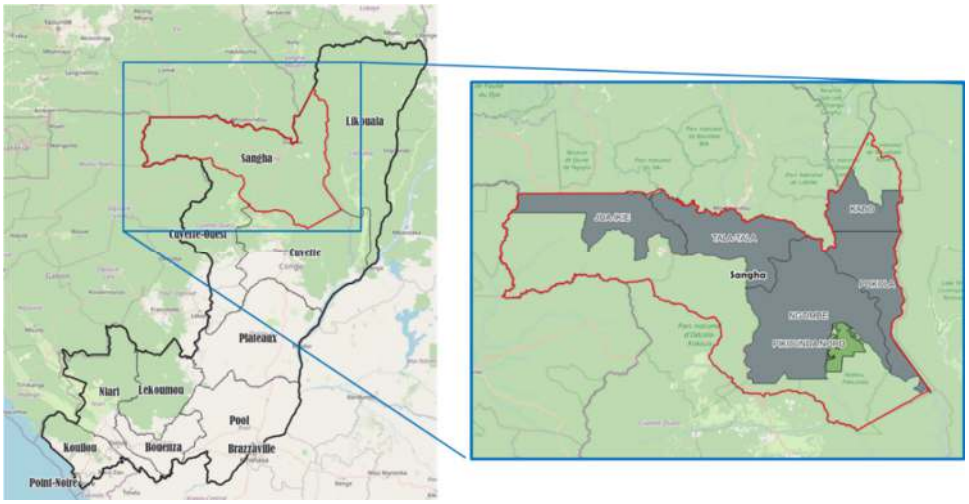
As per the Table 3 (clause 3.15.10) from the VCS Standard v4.5, the market leakage is applied. The verification team took note of the methodology requirements and the accepted.

Table 3: Market Leakage Discount Factors

Project Action	Leakage Risk	Market Leakage Discount Factor
IFM activity with no effect or minimal effect on total timber harvest volumes (e.g., RIL with less than 25% reduction)	None	0%
IFM activity that leads to a shift in harvests across time periods but minimal change in total timber harvest over time (e.g., ERA with rotation extension of 5-10 years)	Low	10%
IFM activity that substantially reduces harvest levels permanently (e.g., RIL activity that reduces timber harvest across the project area, or project that halts logging by at least 25%)	Moderate to High	Conditional upon where timber harvest is likely to be shifted, as follows: • Where the ratio of merchantable biomass to total biomass is higher within the area to which harvesting is displaced compared to the project area, 20% • Where the ratio of merchantable biomass to total biomass is similar within the area to which harvesting is displaced compared to the project area, 40% • Where the ratio of merchantable biomass to total biomass is lower within the area to which harvesting is displaced compared to the project area, 70% • Where the leakage is out of country, 0%

For this project, the IFM activity falls into the 3rd project action (IFM activity that substantially reduces harvest levels permanently (e.g., RIL activity that reduces timber harvest across the project area, or project that halts logging by at least 25%)) causing a leakage risk of moderate to high. This selection is considered conservative.

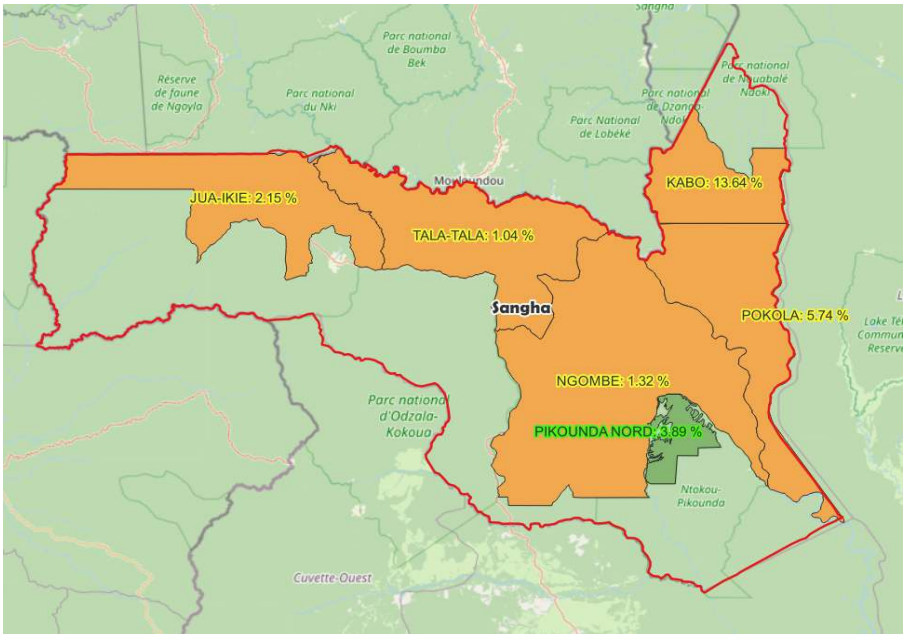
The Shanga region were selected because of proximity and the same type of forest. The concessions selected for the analysis were the following: Kabo, Pokola, Ngombe, Tala-Tala, and Jua-Ikie; apart from Pikounda North.



The calculation of the ratio of merchantable biomass to total biomass was calculated in the Appendix 3e and the Leakage report[27]. The summary and (a map showing the ratio per concession) of the calculations is depicted below:

Concession	Ratio of merchantable biomass to total biomass ($R_{merch-total\ biomass}$)	Aggregated ratio	
	% (AGB m3/ha)	% (AGB m3/ha)	
PIKOUNDA	3.89%	3.89%	Pikounda
POKOLA	5.74%	4.78%	Concessions in Shanga Region
KABO	13.65%		
NGOMBE	1.32%		
TALA-TALA	1.04%		
JUA-IKIE	2.15%		

[27] Supporting information/Appendix 3a Leakage Assessment Report



According to Table 3, the ratio of merchantable biomass to total biomass is higher within the area to which harvesting is displaced (4.78%) compared to the project area (3.89%), concluding that **the market leakage discount factor is 20%.**

Leakage emissions ($C_{leakage}$) are equal to 20% of the baseline for this monitoring period

Verification team has assessed the leakage during the site visit and calculation of Leakage is deemed to be conservative approach. Audit team reviewed to ensure the accuracy and reliability of the data and parameters used by the PP to justify that leakage emissions ($C_{leakage}$) are equal to 20% of the baseline for this monitoring period. The team reviewed all relevant documentation, including Appendices 12 (Land cover maps) and 13 (Land cover classification Pikaunda IFM), and verified the information in CL11 and CAR03 of the VR. The verification team confirms that Sharma et al (2012) article was used for the validation and first verification. For this monitoring report, considering the methodology requirement of applying the latest VCS rules, the PP has applied Table 3 (clause 3.15.10) from the VCS Standard v4.5 This application is justifiable and accepted by the verification team.

Uncertainty

The uncertainty has been calculated considering a mean percentage error of 6% for the "objective" species and an 11% error for the "promotion" species (see Appendix 4, tab 1.2 on the volumes in the baseline scenario): these percentages have been defined in the North Pikounda forest management plan (2012) and were used in deriving the uncertainties for the project calculations. The latter can be found in Appendix 4, in the 2.3 and 3.2 tabs. The average uncertainties for the 2013-2019 period for the emissions related to the baseline scenario have been calculated as 5.46% ($U_{IFM-LtPF}$, calculated in Appendix 4, tab 3.2). This is under the 10% threshold as set forth in the methodology and therefore no uncertainty deduction is considered.

VCUs and the Non-Permanence Risk Withholding Buffer Percentage

The Non-Permanence risk withholding buffer is calculated using the formula

$$CC_{NPbuffer,t} = NP_{buffer,t}\% \times C'_{degradation,t}$$

Final VCU is calculated with the following formula

$$VCU_t = CC_{IFM-LtPF,t} - CC_{NPbuffer,t}$$

4.4 Quality of Evidence to Determine Reductions and Removals

The GHG removals for the project reporting period are based on forest inventory measurements and calculation procedures and factors that have been assessed by the verification team, as described in Section 4.2 of this report. The verification team has attained a reasonable level of assurance that these measurements and procedures, including the internal quality control measures such as check plots, were designed and have been implemented to the highest level of quality. The verification team interviewed personnel from CIB relevant to the project and confirmed their qualifications and expertise. Further the QA/ QC procedures adopted by CIB for the monitoring of the GHG emission reductions were found to conform to the project design and monitoring plan which ensured a high degree of data reliability.

4.5 Non-Permanence Risk Analysis

Risk factor was assessed using the VCS Tool for AFOLU Non-Permanence Risk Analysis and Buffer Determination as per non-permanence risk tool version 4.0. The risk rating was assessed at validation stage and also reviewed during the previous verification. For this verification, the buffer risk was set at 23%, according to the potential risk and mitigation measurements of the project which has been assessed by verification team are provided in the below table.

Risk Factor	Risk Factor and/or Mitigation Description	Risk rating as per PP	PP Justification	VVB opinion
INTERNAL RISK[28]				
Project Management:				
A)	Species planted (where applicable) associated with more than 25% of the stocks on which GHG credits have previously been issued are not native or proven to be adapted to the same or similar agro-ecological zone(s) in which the project is located.	0	No Planting of trees is planned at this point so this section is not applicable.	It is not applicable as project is emission reduction project under category Improved Forest Management (IFM), to protect Congolese forest from planned logging through conservation.
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.	0	Not applicable because the concession is 25 km from the nearest settlement.	Onsite inspection and interviews VVB confirms that the Project Area is extremely remote and there is no credible threat of deforestation from outside actors that would threaten more than 50% of stocks.
C)	*Management team does not include individuals with significant experience in all skills necessary to successfully undertake all project activities (i.e., any*	0	The management team does include individuals with significant experience in all skills necessary to successfully	It was verified during the on-site visit that both CIB---Olam team has extensive experience that

[28] ALM options for Internal Risk (f, g and i) included in the NPRT V4.2 are not included in the next table, because the project is an IFM one.

	area of required experience is not covered by at least one individual with at least 5 years' experience in the area).		undertake all project activities.[29] (Details of the personal involved in the project are provided in NPRR)	is alteast 5 years. Hence the experience and skills of the personnel are considered as sufficient to meet the criteria.
D)	Management team does not maintain a presence in the country or is located more than a day's travel away from the project site, considering all parcels or polygons in the project area.	0	The management team maintains its presence in the country, based in Pokola, where Congolaise Industrielle des Bois (CIB) is headquartered (CIB is Olam's Agri subsidiary), moving continuously around the project area, and the other concessions in the Sangha region.	It was verified that the project management team maintains a presence in the project area. Project site Management are in both Brazzaville and in Pokola. All locations of the Project Area can be reached.
E)	Mitigation: Management team includes individuals with significant (i.e., more than five years) experience in AFOLU project design aimplementation, carbon accounting and reporting (e.g., individuals who have successfully managed projects through validation, verification and issuance of GHG credits) under the VCS Program or other approved GHG programs.	-2	The project proponent has engaged with a carbon project developer team, South Pole, which has extensive technical expertise in developing AFOLU projects, as well as in-depth knowledge of national and international carbon markets. The management team responsible for managing this project within South Pole includes:	The management team includes individuals with significant experience in AFOLU project design and the expertise of Southpole group in several AFOLU project. This has been verified during onsite interviews with management

[29] Supporting information: [1. Internal Risks\CVs]

			●Maria Fernanda Buitrago: Specializes in forest 3 management, conservation, and remote sensing. She's the Senior Manager for Afforestation, Reforestation, and Revegetation (ARR) projects at South Pole. Her expertise includes implementing AFOLU projects using VCS, CCB, and Gold Standard processes, tools, and guidelines. She has competence in biomass estimation, GHG quantification, eligibility, additionality, and risk analysis, impact assessment, and the creation of implementation and monitoring plans in AFOLU. She has more than 15 years of experience developing projects for private organizations and research institutes in the domain of forests and climate change, especially environmental assessment of forest ecosystems, forest conservation, and biodiversity assessment, from fieldwork to regional and national scales using GIS and remote sensing.	team selection of risk rating is satisfactory.

			●Diana Lucia Giraldo Charria: forest engineer, with a master degree in Natural Sciences. Diana has a strong background in researching in forest commercial plantations, urban forests and natural forest, and over 11 years of experience developing projects in those areas. At South Pole, she supports AFOLU projects development under VCS, GS and CCB standards and projects proposal design.	
F)	**Mitigation: Adaptive management plan in place**	0	Not applicable because the project has not had any loss.	Yes, there are no loses, the score assigned is acceptable.
Total Project Management (PM) [as applicable, (a + b + c + d + e + f)] = -2 Total may be less than zero.				
Financial Viability:				
A)	Project cash flow breakeven point is greater than 10 years from the current risk assessment	0	Not applicable.	NA
B)	Project cash flow breakeven point is greater than 7 and up to 10 years from the current risk assessment	0	Not applicable.	NA
C)	Project cash flow breakeven point greater than 4 and up to 7 years from the current risk assessment	0	Not applicable.	NA

D)	Project cash flow breakeven point is 4 years or less from the current risk assessment	0	Not applicable.	NA
E)	Project has secured less than 15% of funding needed to cover the total cash out before the project reaches breakeven	0	Not applicable.	NA
F)	Project has secured from 15% to less than 40% of funding needed to cover the total cash out required before the project reaches breakeven	2	According to the results of the cash flow analysis, the project has secured 25.79% of funding needed to cover the total cash out required before the project reaches breakeven.[30]	The score assigned is acceptable
G)	Project has secured from 40% to less than 80% of funding needed to cover the total cash out required before the project reaches breakeven	0	Not applicable.	NA
H)	Project has secured 80% or more of funding needed to cover the total cash out before the project reaches breakeven.	0	Not applicable.	NA
I)	Mitigation: Project has available as callable financial resources at least 50% of total cash out before project reaches breakeven.	-2	The project proponent (CIB) has the full funding necessary to cover the implementation of project activities while the project reaches the break-even point (financial statements are attached to the folder of	The score assigned is acceptable

[30] Supporting information: [1. Internal Risks\Cash Flow]

			NPRT v4.2/1.Internal risks/ Financial statements CIB 2016-2020, showing CIB is in good financial standing and can meet its financial obligations.).	
Total Financial Viability (FV) [as applicable, ((a, b, c or d) + (e, f, g or h) + i)] =0 Total may not be less than zero.				
Opportunity Cost				
A)	NPV of 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	The NPV for most profitable land use is almost nine times the NPV of the project activity	Selection is deemed valid
B)	NPV of the most profitable alternative land use activity is expected to be between 50% and up to 100% more than from project activities.	0	Not applicable.	N/A
C)	NPV of the most profitable alternative land use activity is expected to be between 20% and up to 50% more than from project activities.	0	Not applicable.	N/A
D)	NPV of the most profitable alternative land use activity is expected to be between 20 percent or more than and up to 20% less than from project activities; or where baseline activities are subsistence- driven, net positive community impact are demonstrated.	0	Not applicable.	N/A

E)	NPV of project activities is expected to be between 20 percent and up to 50 percent more profitable than the most profitable alternative land use activity.	0	Not applicable.	N/A
F)	NPV from project activities is expected to be atleast 50 percent more profitable than that of the most profitable alternative land use activity.	0	Not applicable.	N/A
G)	Mitigation: Project proponent is a non-profit organisation.	0	Not applicable.	Because CIB is a private organisation and fully owned by Olam Agri.
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.	-2	NA	The score assigned is acceptable
I)	Mitigation: Project is protected by legally binding commitment to continue management practices that protect the credited carbon stocks over at least 100 years.	0	Not applicable.	The score assigned is acceptable
Total Opportunity Cost (OC) [as applicable, (a, b, c, d, e, or f) + (g + h or I)] = 6 Total may be less than 0.				
Project Longevity				
a)	Without legal agreement or requirement to continue the management practice	0	-	The score assigned is acceptable
b)	With legal agreement to continue management practice	15	-	Review of documents[8]

				submitted. The score assigned is acceptable

Total Project Longevity (PL) = [as applicable, (a or b)] = 15

Note: Total may not be less than zero.

Any project with a legally binding agreement that covers at least 100 years from the project start date will be assigned a score of zero.

Any project that requests registration on or after 1 January 2024 with a project longevity of less than 40 years fails the risk assessment. Any project that requests registration before 1 January 2024 with a project longevity of less than 30 years fails the risk assessment. The selected project longevity shall be supported by a management, financial and monitoring plan.

Verra has granted exemption from using version 4.2 to all the projects that can demonstrate that they meet one of the following conditions to PP in the e-mail.

- audit started (i.e., opening meeting occurred) before 29 Aug 2023 (i.e., date of NPRT program update)
- request is registration only AND audit a started before they gained access to the project hub (circa Oct 2023)
- on a case-by-case basis – request is registration + verification AND audit a started before they gained access to the project hub (circa Oct 2023)

Since the project demonstrate that the audit started before 29 August 2023, so the PP can use v4.0 risk tool[31]

Internal Risk	
Total Internal Risk (PM + FV + OC + PL) Total may not be less than zero.	**19**

EXTERNAL RISKS				
Land & Resource Access/Impacts				
a)	**Ownership and resource access/use rights are held by same entity(s)**	0	NA	The score assigned is acceptable
b)	**Ownership and resource access/use rights are held**	2	Government gave a concession permit for	Selection is deemed viable

[31] Verra Email.png

	by different entity(s) (e.g.land is government owned and the project proponent holds a lease or concession)		exploitation to CIB-OLAM Agri on June 8th 2012 for 25 years, it was signed a development and transformation agreement.	
c)	In more than 5% of the project area, there exist disputes over land tenure or ownership	0	NA	The score assigned is acceptable
d)	There exist disputes over access/use rights (or overlapping rights)	0	NA	The score assigned is acceptable
e)	WRC projects unable to demonstrate that potential upstream and sea impacts that could undermine issued credits in the next 10 years are irrelevant or expected to be insignificant, or that there is a plan in place for effectively mitigating such impacts.	0	NA	The score assigned is acceptable
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.	-2	The project area is protected by legally binding commitment to continue management practices that protect the credited carbon stocks over the length of the project crediting period. The crediting period covers the full length of the current agreement.	The score assigned is acceptable
g)	Mitigation: Where disputes over land tenure, ownership or access/use rights exist, documented evidence is provided that projects have implemented activities to	0	Not applicable	N/A

	resolve the disputes or clarify overlapping claims			
Total Land Tenure ((a or b) + c + d + e + f + g)]= 0 Total may not be less than zero.				
Community Engagement				
a)	Less than 50 percent of households living within the project area who are reliant on the project area, have been consulted.	0	Not applicable, the project area is uninhabited, there are no households living within the project area.	N/A
b)	Less than 20 percent of households living within 20 km of the project boundary outside the project area, and who are reliant on the project area, have been consulted.	0	Not applicable, the nearest communities are more than 21 km away and do not depend on the project area.	N/A
c)	Mitigation: The project generates net positive impacts on the social and economic well-being of the local communities who derive livelihoods from the project area.	0	Not applicable, local communities do not depend on the project area because it is far for more than 21 km	N/A
Total Community Engagement (CE) [where applicable, (a + b + c)] = 0 Total may be less than zero.				
Political Risk				
a)	Governance score of less than -0.79	6	The average governance score in Republic of Congo across the six indicators of the World Bank for the 2013 – 2019 period is -1.07.[32]	The score assigned is acceptable

[32] Supporting Information: [2. External Risks\Political Risk]

b)	Governance score of -0.79 to less than -0.32	0	Not applicable.	The score assigned is acceptable
c)	Governance score of -0.32 to less than 0.19	0	Not applicable.	The score assigned is acceptable
d)	Governance score of 0.19 to less than 0.82	0	Not applicable.	The score assigned is acceptable
e)	Governance score of 0.82 or higher	0	Not applicable.	The score assigned is acceptable
f)	Mitigation: Country is implementing REDD+ Readiness or other activities.	-2	Republic of Congo and the World Bank have a program that is called: Emission Reduction Program in the Sangha and Likouala Regions, Republic of Congo, in which Pikounda is included. Also, the government of Congo submitted its FREL in 2016 for the reference period 2000-2012 and in 2024 a new submission (a draft in French) is available for the reference period 2016-2021.	The score assigned is acceptable
Total Political (PC) [as applicable ((a, b, c, d or e) + f)] = 4				
Total External Risk (LT + CE + PC)		4		

NATURAL RISKS				
F	**Fire**	0	Every 25 to less than 50 years - Fires are not common in the humid tropical forest ecosystem	Site visit inspection and discussion with PP, it is

			in Africa (support information from GIS) No mitigation measures have been considered due to the rarity of fire events in the project area	confirmed that occurrence of fire is rare as the concession is located in the tropics and sufficient rainfall is present throughout the year, the incidences of large scale. non-anthropogenic forest fires are very low to non-existent. Furthermore the project proponent has a rudimentary fire plan in-situ. The score assigned is acceptable.
PD	**Pest & Disease Outbreak**	0	No loss The project did not contemplate either harvesting or timber harvesting activities, which is in line with the principles of forest conservation, as these ensure the protection of vegetation against destruction. In addition, several studies have shown a negative correlation between the biodiversity of ecosystems and the occurrence of outbreaks of pests and diseases	Site visit inspection and discussion with PP, it is confirmed that occurrence of pest is rare, as a result of the diversity of tree species that are within the project's forested areas, it is highly unlikely that a pest occurrence could devastate large

			affecting these ecosystems.[33] Therefore, considering that the project has not disturbed the forest and has instead protected its species, it is assumed that no loss of carbon stocks has occurred during the second monitoring period. Hence Not applicable	areas of forested areas. It would require multiple pest or disease vectors to impact the concession; there has been no history of such a disturbance. The score assigned is acceptable.
W	**Extreme Weather**	0	The forest of North Pikounda has not experienced any affectation during the last nine years due to extreme weather.	Site visit inspection and discussion with PP, it is confirmed that occurrence of extreme weather is rare, a although the risk of flooding and drought is always present, the concession is located in the tropical area which has very little history of extreme weather events which would create a natural disturbance risk to the forests in question. There have been no known

[33] Supporting Information: [3. Natural Risks\Pest and Disease]

				incidences of hurricanes, tornados or other such extreme events in the past 100 years. The score assigned is acceptable.
G	**Geological Risk**	0	No volcanoes close to the project area. Earthquakes: In the Republic of Congo, earthquake hazard is classified as low according to the information that is currently available. This means that there is a 2% chance of potentially-damaging earthquake shaking in the project area in the next 50 years.34 Landslide: Landslide susceptibility is classified as low according to the information that is currently available. This means that this area has rainfall patterns, terrain slope, geology, soil, land cover and (potentially) earthquakes that make localized landslides an uncommon hazard phenomenon.35	There are no volcanoes in the region. There is no known risk of earthquakes. The potential for landslides does not exist as the land is flat. The score assigned is acceptable.

34 https://thinkhazard.org/en/report/59-congo/EQ
35 https://thinkhazard.org/en/report/59-congo/LS

ON	**Other Natural risk**	0	There are no other known natural risks associated with the Project.	The score assigned is acceptable.
Total Natural Risk (as applicable, F + PD + W + G + ON) = 0				

Overall Non-Permanence Risk Rating and Buffer Determination

Overall Risk Rating

Risk Category	Rating
Internal Risk	19
External Risk	4
Natural Risk	0
Overall Risk Rating (a + b + c)	**23**

As per the paragraph 2.5.4 of AFOLU Non-Permanence Risk Tool v 4.0, the overall risk rating shall be rounded up to the nearest whole percentage. Hence 23 % of the total VCUs generated will be kept in buffer account as per the clause 2.5.5 of VCS version 4.5.

This risk assessment has been performed at the time of validation and has been checked again for this second Verification period as recommended by the VCS standard. The assessment shows that the project is at the current point in time at a relative risk of 23%. The Verification team has collected and reviewed all information used to prepare this risk analysis and also, by means of the on-site assessment in 2023.

Calculation of Total VCUs

Year	Ex post buffer credits to be deposited in the AFOLU pooled buffer (tCO_2e)	Ex post tradable credits (tCO_{2e})
2013	19,413	52,934
2014	23,732	63,638
2015	27,428	72,797
2016	30,605	80,672
2017	33,983	89,317
2018	36,611	95,829
2019	38,907	101,519
Total	**95,927**	556,706

5 VERIFICATION OPINION

5.1 Verification Summary

Olam Agri has commissioned "KBS Certification Services Ltd." (KBS) to carry out the 2nd verification of the project titled "North Pikounda REDD+ project" (VCS PROJECT ID 1052) with regard to the relevant requirements of VCS Standard (Version 4.5) and 'VM0011 Methodology for Calculating GHG Benefits from Preventing Planned Degradation', v1.0.

The verification team evaluated the project by means of document analysis, interviews with stakeholders and by observations & measurements made directly in the field during the site visit to the project location. Fieldwork lasted 10 days, between 21/01/2023 to 10/02/2023 (including flight and on road travel to project location from India). During this period the audit team carried out forest inventories, travelled through river and road analyzing different aspects of the landscape, and interviewed stakeholders of the project.

The North Pikounda Reducing Emissions from Deforestation and forest Degradation (REDD+) project is an emission reduction project designed to protect 92530 hectares (ha) of unlogged native Congolese forest from deforestation and degradation by conservation and sustainable forestry activities. The forest is legally designated as a selective logging concession and is comprised of 60% dry land mixed forest and 40% designated wetland area. The selective logging anticipated would normally have been undertaken on the dry lands, consisting of an area of 55,950 ha. These dry lands constitute the project crediting area. The project has been developed under VCS sectoral scope 14 (Agriculture, Forestry, Land Use) and is categorized as the VCS AFOLU category IFM: Improved Forest Management and is applied to quantify the GHG removals achieved in this project. The calculation of the project emission removals is carried out in a transparent and conservative manner.

KBS Certification Services Ltd. has employed a risk-based approach in the verification, focusing on the identification of significant risks and reliability of project design and generation of emission reductions according to the relevant applicable version of the VCS standard and applying auditing techniques. In the course of the assessment 06 Corrective Action Requests (CAR) and 17 Clarification Requests (CL) were raised and successfully closed out, 2 FAR was raised during the assessment. Refer to Appendix 2 for further details. There are no restrictions of uncertainty. Based on the information seen and evaluated we confirm that the project in the second monitoring period from 01/01/2013–31/12/2019 (including both days) the net amount of VCUs achieved for the project is *556,706* tCO_2e. All issues raised by the audit team during the auditing process are resolved by the project proponent and the verification conclusion is positive.

As a result of the verification, the verification team confirms that:

- The monitoring system is in place and functional.
- The GHG emission reductions are calculated without material misstatements in a conservative and appropriate manner.

Therefore, KBS declares that the verification of the GHG statement was conducted in accordance with ISO 14064-3 (i.e., ISO 14064-3: 2019).

5.2 Verification Conclusion

The verification assessment covered the second monitoring period from (01/01/ 2013- 31/12/ 2019) and verified that calculated emission reductions were achieved during the monitoring period with a reasonable level of assurance.

KBS is able to issue a positive verification opinion for the 863310 tones CO_2e (Baseline Emission - Leakage Value), before buffer reduction and the same is reported in the monitoring report for the reporting period (01/01/ 2013- 31/12/ 2019). The overall non-permanence risk rating was 23%. Therefore, the total number of credits to be deposited in the buffer account is 210679 tCO_2e VCUs and the total VCUs to be issued are *556,706* tCO_2e VCUs. The level of assurance for this verification is to be reasonable with respect to material errors, omissions, and misrepresentations.

Verification period: (01/01/ 2013- 31/12/ 2019).

Verified GHG emission reductions and carbon dioxide removals in the above verification period:

The non-permanence risk rating (%)	23
If applicable, the Long-term Average (LTA), whether it has been properly updated, and if it has been reached.	N/A because the project does not have harvesting.
Whether a loss has been appropriately accounted for, in accordance with the VCS Program rules, if applicable.	N/A

Vintage period	Baseline emissions (tCO_2e)	Project emissions (tCO_2e)	Leakage emissions (tCO_2e)	Buffer pool allocation (tCO_2e)	Reductions VCUs (tCO_2e)	Removals VCUs (tCO_2e)	Total VCU issuance (tCO_2e)
01-Jan-2013 to 31-Oct-2021	90,434	0	18,087	19,413	52,934		52,934
01-Jan-2014 to 31-Dec-2014	109,214	0	21,843	23,732	63,638		63,638
01-Jan-2015 to	125,282	0	25,057	27,428	72,797		72,797

Vintage period	Baseline emissions (tCO_2e)	Project emissions (tCO_2e)	Leakage emissions (tCO_2e)	Buffer pool allocation (tCO_2e)	Reductions VCUs (tCO_2e)	Removals VCUs (tCO_2e)	Total VCU issuance (tCO_2e)
31-Dec-2015							
01-Jan-2016 to 31-Dec-2016	139,098	0	27,820	30,605	80,672		80,672
01-Jan-2017 to 31-Dec-2017	154,125	0	30,825	33,983	89,317		89,317
01-Jan-2018 to 31-Dec-2018	165,550	0	33,110	36,611	95,829		95,829
01-Jan-2019 to 31-Dec-2019	175,534	0	35,107	38,907	101,519		101,519
Total	959,237	0	191,849	210,679	556,706		556,706

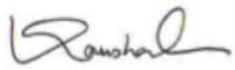
5.3 Ex-ante vs Ex-post ERR Comparison

Vintage period	Ex-ante estimated reductions/ removals	Achieved reductions/ removals	Percent difference	Explanation for the difference
01/01/2013 to 31/12/2019	778,279	556,706	28.46%	The main difference between the ex-ante and ex-post estimates are the growth rate after logging and the growth foregone rate. While in the first monitoring period theoretical growth rates were used, in the second monitoring period the regrowth after logging was estimated as the difference of the measurements of saplings or young trees (5-20 cm diameter) that in the baseline scenario would grow (difference between first and second

				monitoring period), after a selective harvest; also the growth foregone rate was estimated as the difference of the measurements of mature or harvestable trees (5-20 cm diameter) that in the baseline scenario would grow (difference between first and second monitoring period).

Location: Faridabad

Date: 27/12/2024



Authorized Signatory: Kaushal Goyal

Designation: Managing Director

KBS Certification Services Ltd.

APPENDIX 1: COMMERCIALLY SENSITIVE INFORMATION

Section	*Information*	*Justification*	*Assessment method and conclusion*
N/A	N/A	N/A	N/A

APPENDIX 2: RESOLUTION OF FINDINGS

Table 1. Remaining FAR from validation and/or previous verifications (Applicable for verification)

FAR ID	NA	Section no.		Date:13/03/2023
Description of FAR				
No FAR from Validation and first Verification.				
Project participant response		**Date:** DD/MM/YYYY		
Documentation provided by project participant				
DOE assessment		**Date:** DD/MM/YYYY		

Table 2. CL from this validation/verification

CL ID	CL 01.	Section no.	1.1	Date: 13/03/2023
Description of CL				
From section 1.1 - Summary Description of the Implementation Status of the Project of the MR there is no clarity on what is implemented and status of the REDD+ project.				
Project participant response		**Date:** DD/MM/YYYY		

In the Monitoring Report Section 1.1, it was included a new paragraph and new table including the status of the project:

From the outset, in both monitoring periods, CIB (and no other actor) holds the concession rights and has not used the logging right in the project area and has kept the forest intact. For both monitoring periods the entire project area (55,950 ha) has been monitored through the measure of the permanent plots. During the first monitoring period (1 January to 31 December 2012), the net amount of VCUs achieved for the project was 56,209. For the second monitoring period (1 January 2013 to 31 October 2021), the net amount of VCUs achieved for the project is estimated at 933,424.

Audit Type	Period	Program	VVB Name	Number of years
Validation and First Verification	01-01-2012 to 31-12-2012	VCS	DNV Climate Change Services AS	1 year
Second Verification	01-01-2013 to 31-10-2021	VCS	KBS Certification Services	8 years, 10 months.

Documentation provided by project participant
Monitoring report was updated.

DOE assessment	Date:13/06/2023
Now, MR section 1.1 - Summary Description of the Implementation Status of the Project is update for clarity on what is implemented and status of the REDD+ project. Hence CL01 is closed	

CL ID	CL02	Section no.	1.4	Date: 13/03/2023
Description of CL				
In Section 1.4 Other Entities Involved in the Project of MR 1. Salutation of the contact person is missing. 2. Telephone number of the contact person in SouthPole is missing.				
Project participant response		**Date:** DD/MM/YYYY		
In the Monitoring Report Section 1.4, it was included the right salutation for the contact person, address was changed, and telephone number was included.				

Organization name	South Pole Carbon Asset Management Ltd.
Role in the project	Project Consultant
Contact person	Mrs. Maria Fernanda Buitrago Acevedo
Title	Afforestation, Reforestation and Revegetation/IFM Senior Lead
Address	Technopark Str. 1, 8005 Zurich, Switzerland
Telephone	+ 41 43 501 35 50
Email	m.buitrago@southpole.com

Documentation provided by project participant	
Monitoring report was updated.	
DOE assessment	**Date:**13/06/2023
In the revised MR section 1.4, the other entities involved in the Project “Salutation of the contact person and Telephone number of the contact person” is update. Hence CL02 closed	

CL ID	CL03	Section no.	1.5	Date: 13/03/2023
Description of CL				
The start date of the project defined in section 1.5 of the MR is not in line with the start date as defined in VCS Program Definitions. Please check				
Project participant response		**Date:** DD/MM/YYYY		

The paragraph was corrected to: The project start date is January 01, 2012, which is the date when harvesting of the North Pikounda forest would have commenced based on the approval of the North Pikounda UFE FMP from the RoC'sMinistère du Développement Durable de l'EconomieForestière et de l'Environnement [Ministry of Sustainable Development, Forestry Economy and Environment] (MEFDD), and the moment where the conservation of this forest concession started. Note that project start date refers to the crediting period start date: "The start date of a non-AFOLU project is the date on which the project began generating GHG emission reductions or removals. The start date of an AFOLU project or jurisdictional REDD+ program is the date on which activities that led to the generation of GHG emission reductions or removals are implemented (e.g., planting, changing agricultural or forestry practices, rewetting, restoring hydrological functions, orimplementing management or protection plans).; Equivalent to "Project Start Date" and "Program Crediting Period Start Date".
Documentation provided by project participant
Monitoring report was updated.

DOE assessment	**Date:**13/06/2023
The clarification by PP on start date of the project is accepted and is in line with the start date as defined in VCS Program Definitions. Hence CL03 closed.	

CL ID	CL04	**Section no.**	1.11	**Date:** 13/03/2023
Description of CL				
In section 1.11 Sustainable Development Contributions of the MR, it is indicated that "Due to the isolation of the project area, this forest has not been used dependently by local communities. However, CIB has maintained permanent employees who have helped prevent encroachment or illegal harvesting within the project area". Contradictory statement, check and clarify. Also provide more clarity on 1. How the development of this project has directly contributed to the RoC's vision of maintaining a low rate of deforestation while diversifying its economy, all within the framework of the Congo Basin Forest Partnership and the Central African Forest Initiative and 2. Demonstrate on how the carbon project proceeds are diversified among the stakeholders.				
Project participant response		**Date:** DD/MM/YYYY		

The first part of the section (second paragraph) was updated (underlined text was included):

> Due to the isolation of the project area, this forest has not been dependently used by the local communities, as verified during an interview process conducted during December 2022 (Appendix 9), and from which the most common response was the impossibility of harvesting the Pikounda area due to the great distance of the project from the communities of Molenda and Pikounda, and the low necessity to do that displacement to cover their needs, especially since the communities are surrounded by natural forests. Although the risk of encroachment in Pikounda is low, CIB has maintained permanent employees who have helped prevent illegal harvesting within and around all their concessions, including the entrance and surroundings of the Pikounda area.

Answer to the question: 1. How the development of this project has directly contributed to the RoC's vision of maintaining a low rate of deforestation while diversifying its economy, all within the framework of the Congo Basin Forest Partnership and the Central African Forest Initiative and

The section was updated and underlined text was included:

> The development of this project has directly contributed to the RoC government's vision of maintaining a low rate of deforestation while diversifying its economy, all within the framework of the REDD+ strategy, the Congo Basin Forest Partnership and the Central African Forest Initiative (CAFI). Specifically, the RoC's vision for REDD+ is to reduce emissions from deforestation and forest degradation without compromising socioeconomic development capacities, for which the North Pikounda project largely contributes to this purpose by generating carbon sequestration instead of forest degradation, as was envisaged in its initial timber concession use. The carbon project has contributed to diversify the economy in the region by generating a different income from ecosystem benefits that has reduced the forest degradation on the entire region and has become an example for other forest concessions on the clear opportunities in parallel markets based on ecosystem services finance and not just based on forest degradation.
>
> Also, under CAFI , since 2019 the RoC has committed "to protect peatlands by prohibiting any drainage and desiccation and preventing the conversion of more than 20,000 hectares of forest per year, and this only outside forests with high carbon stocks and high conservation value". Because the area around the project site is classified as peatland, not clearing in the dryland (forest belonging to the project area) directly benefits the conservation of these wetlands, contributing to the above-mentioned commitment, at least during two years in the monitoring period (2019 - 2021), and before since the concession permit was granted in 2012.

Answers to the question: 2. Demonstrate on how the carbon project proceeds are diversified among the stakeholders.

The next information was included:

> Regarding stakeholders, this project previously recognized the following in the validated PDD, which during the current monitoring period (2013 - 2021) have not changed (see Section 2.2):
>
> ●National and local government bodies in the Republic of Congo (Ministère du Développement Durable de l'EconomieForestière et de l'Environnement [Ministry of Sustainable Development, Forestry Economy and Environment] (MEFDD))
>
> ●International IGOs and NGOs
>
> ●Local communities near the project area (Molenda and Pikounda)

●Local civil representatives (meetings in Ouesso)

At the current time, the project proponent (CIB - OLAM Agri) has not received revenues for the issuance of credits (it was a transaction done in 2021). Because the amount for the first verification is small (56,196 credits) compared to the expected credits for the second verification, once revenues from both verifications are received, CIB – OLAM Agri will disburse the benefits agreed with the government and the communities of Molenda and Pikounda, following the next plan:

●Project development costs have been shared with the government for audit.

●The project requires that 20% of the net profit be shared with the government, which also includes the community share (included in the Memorandum of understanding, Article 3, Activity 10)

Documentation provided by project participant

- Monitoring report was updated.
- Appendix 9 is included
- CAFI 2021 Consolidated Annual Report: Annual report for 2021 written by CAFI
- CAFI 2018 - Plan de'Investissement REDD RoC version Finale7b: investment Plan of the National REDD+ Strategy of the Republic of Congo 2018-2025 (version 7b) in French, written by CAFI
- Memorandum of understanding (English and French)

DOE assessment	**Date:**13/06/2023

Open

1. PP to Provide respondent name, address, contact details in the "Appendix 9 Surveys Pikounda - Molanda December 2022". Also indicate the date of interview with evidence and share the questionnaires for review.

Project participant response	**Date:** dd/mm/yyyy

Respondents have as their address, the names of their communities, since there are not other type of addresses in these type of communities (i.e. Molenda and Pikounda). Most stakeholders do not have a telephone number. The date of the surveys was December 16, 2022. Some of the participants interviewed were:

1. Pikounda :

- MADJOUDZE Pierre : Indigenous People local representative in Pikounda
- SIKANGUI André Joël : Sub-Prefect of Pikounda District
- Victor Mbolo : Tokou- Pikounda National Park curator

2. Molenda :

- Ange MAKANGANDZA: Molenda head of village
- DJOUDE (Indigenous)
- ESSOMO Jean (Indigenous)
- MAMBIYE (Indigenous)

Documentation provided by project participant

- Appendix 9 Surveys Pikounda - Molanda December 2022

- Four pictures of the day when surveys were applied

DOE assessment	**Date:** 13/09/2023

Open

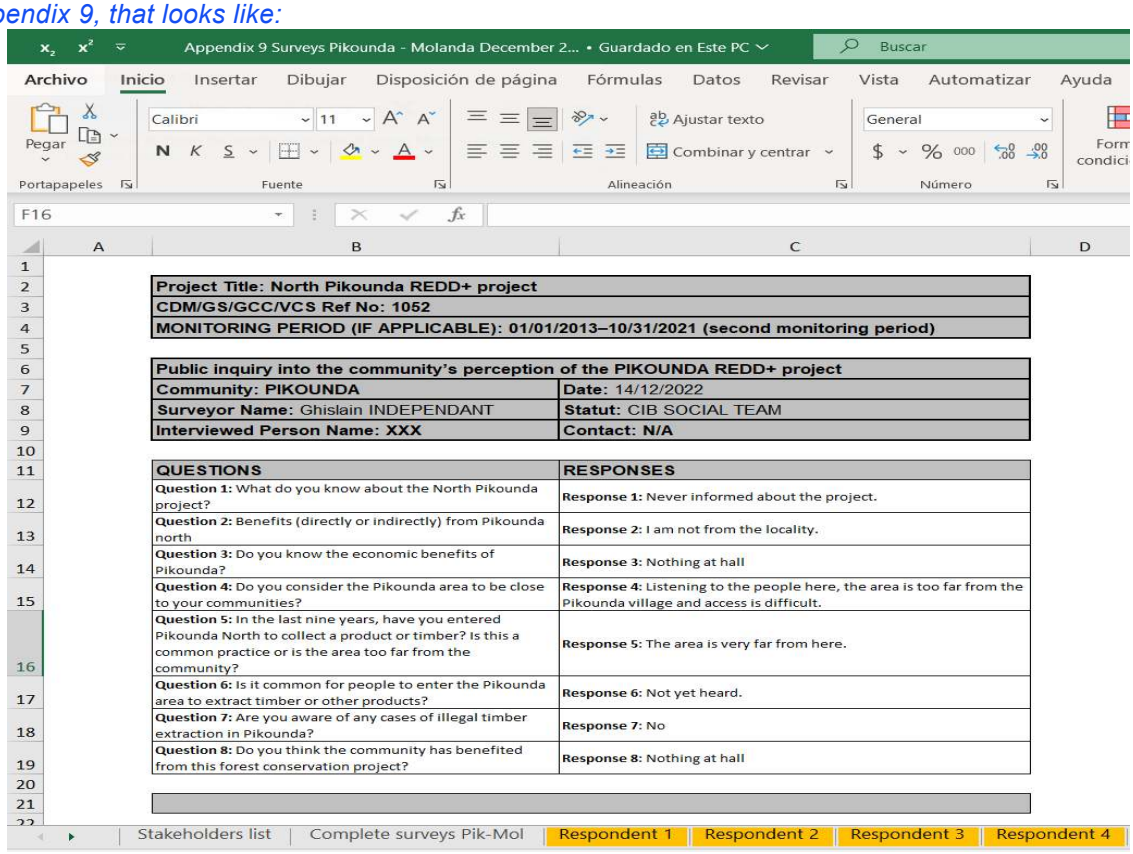
1. There is no Appendix 9 in the MR
2. Questionnaires not shared

Project participant response	**Date:** 09/10/2023

Appendix 9 was updated and all surveys were transcribed (see all tabs of the Excel file); contact details for some respondents were also included in a separate tab (list of stakeholders). Mention of Appendix 9 was made in Section 2.1 No Net Harm in the Monitoring Report V 3.0.

Documentation provided by project participant

- *Appendix 9, that looks like:*



Appendix 9 Surveys Pikounda - Molanda December 2... • Guardado en Este PC

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F16

Project Title: North Pikounda REDD+ project	
CDM/GS/GCC/VCS Ref No: 1052	
MONITORING PERIOD (IF APPLICABLE): 01/01/2013–10/31/2021 (second monitoring period)	
Public inquiry into the community's perception of the PIKOUNDA REDD+ project	
Community: PIKOUNDA	**Date:** 14/12/2022
Surveyor Name: Ghislain INDEPENDANT	**Statut:** CIB SOCIAL TEAM
Interviewed Person Name: XXX	**Contact: N/A**
QUESTIONS	**RESPONSES**
Question 1: What do you know about the North Pikounda project?	**Response 1:** Never informed about the project.
Question 2: Benefits (directly or indirectly) from Pikounda north	**Response 2:** I am not from the locality.
Question 3: Do you know the economic benefits of Pikounda?	**Response 3:** Nothing at hall
Question 4: Do you consider the Pikounda area to be close to your communities?	**Response 4:** Listening to the people here, the area is too far from the Pikounda village and access is difficult.
Question 5: In the last nine years, have you entered Pikounda North to collect a product or timber? Is this a common practice or is the area too far from the community?	**Response 5:** The area is very far from here.
Question 6: Is it common for people to enter the Pikounda area to extract timber or other products?	**Response 6:** Not yet heard.
Question 7: Are you aware of any cases of illegal timber extraction in Pikounda?	**Response 7:** No
Question 8: Do you think the community has benefited from this forest conservation project?	**Response 8:** Nothing at hall

Stakeholders list | Complete surveys Pik-Mol | Respondent 1 | Respondent 2 | Respondent 3 | Respondent 4

DOE assessment	**Date:** DD/MM/YYYY

The Questionnaires are submitted and clarification by PP is accepted. Hence CL04 is closed.

CL ID	CL05	Section no.	1.11	Date: 13/03/2023
Description of CL				
In section 1.11 Sustainable Development Contributions of the MR, it is indicated that "The implementation of the project has helped promote climate mitigation, strengthening the conservation of ecosystems and their services, such as peatland regulation, wildlife refuge, and carbon storage" How the above has be attained and what are the activities/steps/measure undertaken by PP to achieve the same. Clarify with evidence.				
Project participant response		**Date:** DD/MM/YYYY		
The first paragraph of the section was updated (underlined text was included): The implementation of the project has helped to promote climate mitigation, strengthening the conservation of ecosystems and their services, such as peatland regulation, wildlife refuge and carbon storage. Through the emissions avoidance and removals that the project has been carrying out, it is possible to demonstrate the project's contribution to climate mitigation and carbon storage, the Emission Reduction (ER) measurements attached to this monitoring report confirm how the forest conservation has contributed to this. Although for the present monitoring period no specific activities have been implemented for the demonstration of peatland regulation and wildlife refuge, the absence of impacting activities such as selective logging or encroachment, allows inferring that the project area is a safe place for wildlife and to ensure the health of the peatlands. The year-by-year land cover classification, attached to this monitoring report, shows how the peatlands have maintained their area throughout the monitoring period, indicating that at least in terms of area, their protection has been ensured for the current carbon project.				
Documentation provided by project participant				
● Monitoring report was updated. ● Appendix 12 Land cover classification year-by-year (maps) ● Appendix 13 Report Supervised_Classification_GFW deforestation				
DOE assessment			**Date:**13/06/2023	
Open 1. In response to this CL it is indicated that ".....Although for the present monitoring period no specific activities have been implemented for the demonstration of peatland regulation and wildlife refuge, the absence of impacting activities such as selective logging or encroachment, allows inferring that the project area is a safe place for wildlife and to ensure the health of the peatlands.....". Clarify why no activities were implemented for the present monitoring period and 2. PP to clarify the report production date "Appendix 13 Report Supervised_Classification_GFW deforestation" Also refer new CL17 related to all the images/GIS Maps raised now.				
Project participant response		**Date:** 12/07/2023		

Peatland regulation and wildlife refuge are indirect positive consequences of the project, and they have been mentioned as indirect co benefits in this monitoring report, but not specific monitoring activities have been performed during this second verification

These co benefits do not have any specific monitoring program during this verification, since no specific monitoring activities were proposed to be monitored during the validation of the monitoring report, especially since the VCS forms and requirements did not require specific monitoring of these positive benefits. Instead, the specific activities included in the validated monitoring plan were carried out during this verification, and are now part of the current activities for the coming verification and reassessment of the baseline to take place during 2023 and 2024. For more details, see the monitoring plan described on pages 94-102 of the PDD. For a quick assessment, the following image shows the activities that were proposed to be monitored at each verification:

The Monitoring Plan described in detail in VCS-MR, ***Appendix 08***, is based on 12 main activities that are briefly described below. This appendix "Monitoring Plan for the North Pikounda REDD+ project" can be considered as the procedure that will be implemented in order to collect all the necessary information for the Verification audits.

1. **PSPs inventory**
   The PSPs network will be monitored before each verification event. Tree parameters and dynamic will be measured, analysed and compiled in order to estimate the Carbon stock variations (AGB), the growth foregone and the regrowth factors.
2. **Remote Sensed Monitoring - Illegal/Natural Disturbances**
   Spot 5 images will be acquired annually through the partnership between CIB and *Portail de l'Observation Spatiale des Forêts du Congo* and Astrium. Those images will be analysed to determine any evidences of illegal activities or natural disturbances.
3. **Field Monitoring - Illegal Activities**
   Illegal logging is not a viable threat in the early stage of the Project, as there are no communities within the Project Area and any nearby communities are at least 20km away. However, much can change in a developing country in 30 years such as RoC, including increased population pressures.
   Annual field control will be organised with CIB teams, during PSPs inventory or if needed after satellite images analyse. Community consultation will also allow monitoring any kind of illegal activities in the area. CIB-Olam's significant community experience from its FSC certification activities will be leveraged in this area to ensure a robust monitoring.
4. **Natural Disturbances Emissions Monitoring**
   If natural disturbances are identified, the associated emissions will be monitored following VM0011 and Monitoring Plan.
5. **Illegal Harvesting Emissions Monitoring**
   If illegal harvesting activities are identified, the associated emissions will be monitored following VM0011 and Monitoring Plan.
6. **Leakage Monitoring**
   Appropriate production data from the Leakage Area will be collected, analysed and compiled upon each verification event to estimate activity shifting and market leakage.
7. **Uncertainty Monitoring**
   Uncertainty linked to the parameters monitored will be automatically calculated using excel models.
8. **Non-Permanence Risk Assessment**
   The non-permanence risk tool will be reviewed upon each verification event and actualised if necessary, in view of the any relevant data collected.
9. **Quality Assurance / Quality Control**
   The Project implement a rigorous quality assurance and quality control (QA/QC) system to ensure the long-term accuracy of the data that is collected, to ensure a robust data storage system and to create a systematic data management structure. This QA/QC systems is entirely integrated in the already existing QA/QC system that has been implemented for FSC certification. This system is reviewed annually during FSC Verification audits, that is a guarantee of the quality and dynamic nature of the QA/QC System.
10. **Training**
    All new personal participating in PSPs inventory/control are trained following PSPs Inventory/Control/Monitoring Procedures specifications and standard CIB practices, as much as is reasonably possible.
11. **Documentation Management**
    All documents are properly controlled managed and stored in a manor that complies with standard CIB practices. Hard-copy of project documentation will be stored in the "Aménagement" office and soft-copy are stored in the "Public" folder used for the project. This folder is automatically saved on a daily basis. All documents will be archived for at least two years after the crediting period.
12. **VCU Calculation**
    For each verification event, VCU vintage is estimated and updated based on the parameters monitoring results.

Documentation provided by project participant	
- PDD validated were the validated activities are mentioned (Page 94-102)	
DOE assessment	**Date:** 13/09/2023
Ok, however, the following is not addressed, hence open 1. PP to clarify the report production date “Appendix 13 Report Supervised_Classification_GFW deforestation”	
Project participant response	**Date:** 11/10/2023
Appendix 13 was updated and date of the report has been added.	
Documentation provided by project participant	
- *Appendix 13 is in folder CL17*	
DOE assessment	**Date:** 11/10/2023
The clarification by PP is ok, hence CL05 is closed.	

CL ID	CL06	**Section no.**	Table 1 of MR	**Date:** 13/03/2023
Description of CL				
In Table 1: Sustainable Development Contributions of MR, clarify the following with evidence. Row #1: What are the activities introduced to enhance the income of the community. Row #2: In the last 10 years, the project has employed 92 people, of which 2 have been women PP to clarify their roles and responsibilities? Row #3: What are the activities implemented and it’s benefits to decrease the occupational and non-occupational fatal by the project and provide relevant evidences? Row #4: t of GHG emissions avoided or removed: What are the activities introduced to avoid and remove (both) the GHG emissions in the project area? Row #5: What are the activities introduced by the project to increase the biodiversity of the project area (both terrestrial and freshwater)? Row #6: Demonstrate the activities introduced by the project to increase the Red listed species of the project area (both terrestrial and freshwater)? Provide more clarity and demonstrate on how the project measured (before and after) the population status etc.				
Project participant response		**Date:** DD/MM/YYYY		

Row #2:the row was updated, underlined text was included
In the last 10 years, the project has employed at least 92 people, of which two have been women. These two women have been involved in community relations (Hortense Benabo) and data management (Diane Ockhembat), a table with the information about their duties is included in the supporting documents: (CV CIB Pikounda).

Row #3:specifically, the project has not contributed to the achievement of this SDG, for that reason there is no any evidence and it will not be included in the Monitoring Report, additionally there was not any commitment of the project in this regard during the validation and the accuracy review with Verra. The PDD and the monitoring plan validated by the auditor and Verra can confirm the current commitments..

Row #4:the row was updated to expand the information on how the project has contributed to achieve results in this SDG.Underlined text was included.

Net Impact Indicator: Implemented activities to increase (activities in this case refer to forest conservation and to stop the intention of logging).

Current project contributions: During the second monitoring period (2013-2021) the purpose of the project continued to be conservation of the concession land, and 92,530 ha of rainforest were protected, including the peat swamp surrounding the project area (dryland forest). During the second monitoring period, the project 1052 has avoided the emission of 1 020 285 t of carbon into the atmosphere.

Contributions over project lifetime: The emission of 1,076,494 t of carbon into the atmosphere has been avoided by preserving the project area (activity), cancelling any logging intentions. The avoided emissions correspond to the emissions due to the reference scenario in which Pikounda could have been converted in the absence of the IFM carbon project, in short, the emissions due to the conversion of the forest into processed timber.

Row #5:the row was updated to include new information to broad how the project has contributed to achieve results in this SDG. Underlined text was included.

Current project contributions: During the 2nd monitoring period, CIB-OLAM Agri made an agreement with WWF. The agreement sought authorization to conduct reconnaissance missions in the North Pikounda FMU by WWF, which is the entity in charge of the management and control of the adjacent park, the NtokouPikounda National Park.

Under this agreement, WWF intended to conduct field activities, in the park and in the project area, focused on collecting data on spatial occupancy indicators (camps, agricultural plantations, tracks), poaching (shells, carcasses) if any.

Contributions over project lifetime: Over the entire period since registration, the project has protected 92,530 ha, of which 55,950 ha are dry land mixed forests and 36,570 ha are wetlands (e.g., flooded forests, riparian and riverine forests, and marshes). By avoiding logging, these forests have kept their natural values intact.

In addition, the agreement signed with WWF, the organization in charge of the NtokouPikounda National Park, adjacent to Pikounda, enhances the monitoring of the project area by contributing to the indicator, 15.1, in the protection of important sites, in this case mixed dryland and wetland forests. Within the framework of this project, the North Pikounda FMU can be considered a protected area due to CIB-OLAM Agri's legal permission to use it and their interest in maintaining it as a conservation area, plus its isolation and boundaries with other private concessions and a national park.

Row #6:the row was updated to include new information to broad how the project has contributed to achieve results in this SDG. Underlined text was included. During the monitoring period no activities were implemented directly by CIB on this regard. However, under the agreement that CIB has with WWF and the RoC National government, there were monitoring patrols in the east and north side of the project area to avoid the presence of poachers. As a result of these patrol operations along the northern border adjoining the Pikounda North UFE and in particular in the Pikounda sector, a tendency for the progressive return of elephants has been observed along the Kandeko river, specifically in the area associated with herbaceous aquatic plants. (See Appendix 0)
Documentation provided by project participant
- CV CIB Pikounda - Folder: Agreement CIB-OLAM Agri and WWF - Appendix 0: THREATS AND INDICATORS OF POACHING

DOE assessment	**Date:**13/06/2023
Open 1. No response to “Row #1: What are the activities introduced to enhance the income of the community” query raised. Check 2. The Names of Hortense Benabo and Diane Ockhembat are not included in the table with the information about their roles and responsibilities (CV CIB Pikounda), please check. And also, no information provided on 92 people employed in the project, why?	

Project participant response	**Date:** 12/07/2023
1. Although CIB normally carries out some measurement campaigns, these are specific to forest harvesting, the project has generated a high degree of specialization in some workers in the area for the measurement of carbon plots, which is a novelty in the area. In addition, the workers hired during the measurement for both the first and second verification are under a legal contract, which favors a framework of legality and fair remuneration. The contracts (payroll) of each worker for the second measurement campaign are attached as proof. 2. CVs of Hortense Benabo and Diane Ockhembhat are included, also the excel file explaining all roles from the CIB staff was updated. Additionally, a file with the roles of people participating in the monitoring of the survey plots, with their roles is included.	

Documentation provided by project participant
- Payroll of the workers of the Pikounda measurement mission - CIB direct employees participating in 2nd monitoring - CV CIB Pikounda - CV Hortense Benabo - CV Diane Ockembhat - People participating in the monitoring plots re measurement

DOE assessment	**Date:** 12/07/2023
The clarification by PP on Sustainable Development Contributions and inclusion in MR is accepted, hence CL06 is closed.	

CL ID	CL07	Section no.	2.1	Date: 13/03/2023
Description of CL				
As per Section 2.1 of MR, please provide more clarity on how the project protects and monitors the leakage in order to prevent the harm to the forest and biodiversity of the project area.				
Project participant response		**Date:** DD/MM/YYYY		
The following explanation was included in a new paragraph (the last one) in the section 2.1 of the MR: Given that Pikounda was never logged, it was that the project would not generate demand for timber and therefore due to the conservation purpose of the carbon project this demand would not be displaced to other areas. However, for concreteness, estimates of market leakage and displacement due to the carbon project are shown in Appendix 3 Leakage Assessment. On the other hand, the existence of leakage within the project area has been monitored through the analysis of satellite images year by year where it has been demonstrated the absence of illegal logging and therefore the absence of harm to the forest and biodiversity of the project area (Appendix 1).				
Documentation provided by project participant				
- Appendix 3a Leakage assessment - Appendix 1 Images Analysis Illegal Logging - Appendix 12 Land Cover Maps - Appendix 13 Report Suppervised Classification				
DOE assessment			**Date:**13/06/2023	
Ok However, a new CL17 related to all the images/GIS Maps is raised now.				
Project participant response		**Date:** 11/10/2023		
Appendix 13 was updated and land cover maps are presented in geotiff format				
Documentation provided by project participant				
- In folder CL17 Appendix 13 and geotiff landcover maps are included				
DOE assessment			**Date:** 11/10/2023	
Now section 2.1 of MR, is revised to provide more clarity on how the project protects and monitors the leakage in order to prevent the harm to the forest and biodiversity of the project area. Hence CL07 is closed				

CL ID	CL08	Section no.	2.3	Date: 13/03/2023
Description of CL				
As per section 2.3, please provide more clarity & demonstrate the implemented activities to mitigate.				
Project participant response		**Date:** DD/MM/YYYY		

Since the project does not contemplate the implementation of any activities that may affect stakeholders, no mitigation activities were carried out. The whole section was updated as follows:

Following the monitoring report template v4.1, this section should include (text in bold and in quotation marks):

"Activities implemented to mitigate risks local stakeholders due to project implementation."

This project does not have any kind of risk that could affect communities, then activities to mitigate risks have not been implemented during the project lifetime as was validated in the PDD. This project does not contemplate logging or any other productive activity; the only land use proposed is conservation without extraction of natural resources, then no mitigation actions for the stakeholders were carried out.

"Any updates, where relevant, to the property and land use rights of the local stakeholders and a demonstration that the project has not negatively impacted such rights without first obtaining the free, prior and informed consent of the affected parties, and provided just and fair compensation if done so."

In addition, neither the right to use nor the ownership of the land in the project area has changed in the last nine years, meaning CIB and, by extension, its parent Olam Agri continue to hold the rights to the area. As there are no affected communities, no informed consent has been signed, nor has there been any compensation.

"The processes used to communicate and consult with local stakeholders during the monitoring period, including any information about any conflicts that arose between the project proponent and local stakeholders and whether any such conflicts were resolved via the established grievance redress procedure."

During the monitoring period, no conflict arose between the project proponent (CIB-OLAM Agri) and local stakeholders (already defined in section 2.2), so no grievance redress procedures were applied.

Documentation provided by project participant	
Monitoring report was updated	
DOE assessment	**Date:**13/06/2023
The clarification by PP is accepted and section 2.3 of MR is updated, hence CL08 is closed. However, a new CL17 related to all the images/GIS Maps is raised now.	

CL ID	CL09	**Section no.**	3.1	**Date:** 13/03/2023
Description of CL				

As per section 3.1 Implementation Status of the Project Activity – (PSP) of MR

- The project has established 57 PSP's across the project area. Please provide clarity on how this was established, methodology used to estimate the PSP's and provide the spreadsheet, or any other tool used to estimate the PSP's.
- PP to provide the method used with relevant estimation spreadsheet to justify the 57 PSP's identified.
- Provide data used to estimate the carbon stock with species name, DBH, etc., and also for allometric equation used to estimate the carbon stock with reference.
- According to GFW analysis, there is forest loss between 2012-2021, therefore in order to arrive at the exact forest loss, the land cover maps for all the years has to be provided

Project participant response	**Date:** DD/MM/YYYY

- Appendix 10, was created with the methodology for the PSP installation
- Appendix 11, was created with the procedure to calculate the number of sampling plots
- The data used to estimate the carbon stock with species name, DBH,etc., and also the allometric equation used to estimate the carbon stock with reference are included in the Appendices called:

  - Appendix 7, 2nd monitoring Regrowth_GrowthForegone: data of the permanent plots to estimate the regrowth and the growth foregone parameters, including measurements for 2012 and 2021 (needed to make the estimation according to the methodology VM0011). Include a tab for the explanation of all the parameters.
  - Appendix 6, Monitoring1_2 measurements comparison: raw data of the 1st and the 2nd monitoring periods to make the quality check of the field data
  - Appendix 4, 2nd Monitoring Estimations of credits Pikounda IFM: estimations of the total credits including different tabs to show the source of the baseline information and the estimations of the credit

- To validate whether there was indeed forest loss we performed a new analysis using GFW for the monitoring period (2013 - 2021) detecting some forest loss that was rectified through the obtained raster and then filtered by the forest definition for the Republic of Congo (0.5 ha). The resulting pixels were then contrasted using images of better spatial resolution (google earth and planet) obtaining that GFW had a classification error and no forest loss occurred during the period 2013 - 2021. The analysis is included in Appendix 13.

Documentation provided by project participant

- Appendix 10: Procedure Installation PSP
- Appendix 11: Calculation of number of sampling plots
- Appendix 7: 2nd monitoring Regrowth_GrowthForegone
- Appendix 6: Monitoring1_2 measurements comparison
- Appendix 4: 2nd Monitoring Estimations of credits Pikounda IFM
- Appendix 12 Land cover classification year-by-year (maps)
- Appendix 13 Report Supervised_Classification_GFW deforestation

DOE assessment	Date:13/06/2023
The clarification by PP is accepted and section 3.1 of MR is updated, hence CL09 is closed. However, a new CL17 related to all the images/GIS Maps is raised now.	

CL ID	CL10	Section no.	1.1 – 11.1	Date: 13/03/2023
Description of CL				
Please provide a detailed report on how the activities are monitored & maintained for the sections (1.1 to 11.1).				
Project participant response		**Date:** DD/MM/YYYY		
A document explaining the development of activities if applicable for each section is presented.				
Documentation provided by project participant				
- Document: Clarification 010				
DOE assessment				**Date:**13/06/2023
Open, check the document submitted and re-submit				
Project participant response		**Date:** DD/MM/YYYY		
The document has been updated with the official formats and it is included in the supporting documents in PDF format and it is based on the template of VCS for monitoring report V 4.2 Complementary information on the monitoring activities is also presented in the CAR04				
Documentation provided by project participant				
- Clarification 10.PDF - CAR04 supporting information				
DOE assessment				**Date:** 07/10/2024
Clarification by PP on the activities monitored & maintained for the sections (1.1 to 11.1) is accepted. Hence CL10 closed				

CL ID	CL11	Section no.	3.2.1	Date: 13/03/2023
Description of CL				
As indicated in section 3.2.1 Methodology Deviations of MR, please provide a copy of the letter approved by the VERRA for the methodology deviations.				
Project participant response		**Date:** DD/MM/YYYY		

Methodology deviation for the section 2.2.2 Temporal Boundaries, is a new deviation for this monitoring period, it is included an explanation of the reasons for this. Methodology deviations for sections: 3.1 Estimation of Emissions from Degradation 3.2.1.1 Validation of existing forest inventory data 3.3.1 Net Carbon from the Deadwood Pool 3.3.5 Carbon in the Regrowth after Selective Logging 3.4.1 Emissions Due to Harvesting Operations and 3.4.2 Emissions Due to On-site Preparation 3.4.4 Emissions Due to Log Transport 3.4.5 Emissions Due to Timber Processing 3.4.6 Emissions Due to Log Distribution These sections were a CARs in the validation and first verification. Although there was no letter to Verra, asking specifically for these deviations, the VVB closed the CARs as shown in the verification report for the validation and verification of the project. These deviations were accepted by the VVB and Verra and the validation of the project was granted, and the deviation did not have a negative impact. Verra approved the deviations during the final accuracy review and final validation of the project document, therefore a specific communication with Verra was not required during the validation.
Documentation provided by project participant
- Methodology Deviation 2.2.2 and Communications to Verra - Verification Report 1st Verification VVB - Final VV 2013 Report v2 20130916

DOE assessment	**Date:**13/06/2023
PP has submitted “copy of letter approved by VERRA” for the methodology deviations in the project in the current monitoring period. Hence CL11 is closed.	

CL ID	CL12	**Section no.**	4.3	**Date:** 13/03/2023
Description of CL				
In section 4.3 Monitoring Plan of the MR, please provide clarity on the monitoring plan and the plan for the last three years.				
Project participant response		**Date:** DD/MM/YYYY		
The monitoring plan applicable to this monitoring period is clarified on the basis of the plan approved in the validation of the PDD.				
Documentation provided by project participant				
- Monitoring plan for the second monitoring period (excel file) - APPENDIX 10_PDD - Monitoring Plan_VersionCorrectedAudit_05062013				
DOE assessment				**Date:**13/06/2023
CL 12 is closed.				

CL ID	CL13	Section no.	5	Date: 13/03/2023
Description of CL				
As per section 5.0 of the MR, provide calculation spreadsheet used to estimate and quantify the GHG emissions and removals with evidence for value used.				
Project participant response			**Date:** DD/MM/YYYY	
The spreadsheet used to estimate and quantify the GHG emissions and removals is presented in the Appendix 4 mainly, but some parameters like buffer contribution, leakage and regrowth and growth foregone are included in other appendices to facilitate the use of the different files. The contents of the appendices are as follow: ● Appendix 4 2nd Monitoring Estimations of credits Pikounda IFM, includes the information used to estimate the **baseline** in tabs: 1.1 Volumes historical, 1.2 Volumes baseline scenario, 2.1 Parameters, 2.2 Baseline Activity Emissions, from which the **final estimations** are calculated in tab 3.1 Degradation. ● Appendix 5b 2nd monitoring VCS Risk Report Calculation Tool v4.0, includes the risk assessment for calculating the buffer (21%) applied in tab 3.1 Degradation emissions in Appendix 4. ● Appendix 3b 2nd monitoring Leakage Intensification and Appendix 3c 2nd monitoring Leakage Market Effect, include the estimate of the percentage of leakage due to the project, and which was applied in tab 3.1 Degradation emissions of Appendix 4. ● Appendix 7 2nd monitoring Regrowth_GrowthForegone, includes the estimate of the regrowth after harvesting and the growth foregone due to logging (Sections 3.3.5 and 3.3.4 of VM0011 respectively). Both factors were used in tab 3.1 Degradation emissions in Appendix 4. All files include the equation number of the VM0011 methodology to facilitate the reading and navigation of the files. Likewise, all annexes are referenced in the "Monitoring Report" document.				
Documentation provided by project participant				
- Appendix 3b: 2nd monitoring Leakage Intensification - Appendix 3c: 2nd monitoring Leakage Market Effect - Appendix 4: 2nd Monitoring Estimations of credits Pikounda IFM - Appendix 5b: 2nd monitoring VCS Risk Report Calculation Tool v4.0 - Appendix 7: 2nd monitoring Regrowth_GrowthForegone				
DOE assessment				**Date:**13/06/2023
PP has now provided the calculation spreadsheet used to estimate and quantify the GHG emissions and removals with evidence for value used. Buffer has been changed and corrected. Hence CL13 is closed				

CL ID	CL14	Section no.	MR	Date: 13/03/2023
Description of CL				

The appendix requires RS & GIS procedures used to estimate the GHG emissions and removal with all the steps such as RS data used, processing steps, accuracy achieved, QA/QC procedure, etc., 1. The PP to submit the Land Cover map (annually) for the entire monitoring period with following: i. Classified Land cover map every year. ii. Land use land cover change analysis for the entire monitoring period. iii. A report outlining complete remote sensing work carried out. a. RS & other Data used for carrying out the exercise. b. Methods of unsupervised classification with evidence. c. Supervised classification with accuracy. d. Copy of the ground truth points with geodetic coordinates and photos. e. Uncertainty analysis. f. Other relevant materials iv. The data and the report as necessary for the section 3.0 & Section 4.0 as outlined in the methodology (VM0011). 2. The PP to submit a detailed report to depict the section 5.0 of the VM0011 3. The PP to submit a detailed report to depict the section 7.0 of the VM0011 with ground truth data and relevant evidence, data sheets, and plan. 4. PP to clarify the carbon proceedings utilization with relevant evidence.
Project participant response | **Date:** DD/MM/YYYY
Clarification: GIS was not used to estimate GHG emissions and removals. 1. The PP to submit the Land Cover map (annually) for the entire monitoring period with following: i. Classified Land cover map every year. (Appendix 12) ii. Land use land cover change analysis for the entire monitoring period (Appendix 13) iii. A report outlining complete remote sensing work carried out. (Appendix 13 and Appendix 14) iv. The data and the report as necessary for the section 3.0 & Section 4.0 as outlined in the methodology (VM0011): All the development of the section 3.0 VM0011 Baseline Accounting is included in the Appendix 4. 2. The PP to submit a detailed report to depict the section 5.0 of the VM0011: this section was already developed in Appendices 3a, 3b and 3c. Already sent in the folder shared with KBS. 3. The PP to submit a detailed report to depict the section 7.0 of the VM0011 with ground truth data and relevant evidence, data sheets, and plan: This section was developed in Appendices 5a, 5b (non permanence risk assessment), appendices 10 and 11 (sampling plots)
Documentation provided by project participant

For point 1: - Appendix 12: Land cover classification year-by-year (maps) - Appendix 13 Report Supervised_Classification_GFWdeforestation - Appendix 14 Ground true points (including photos, coordinates and map) - Appendix 4: 2nd Monitoring Estimations of credits Pikounda IFM - DRAFT_JNR_Risk_Mapping_Tool_15APR2021 For point 2: - Appendix 3a Leakage Assessment - Appendix 3b 2ndmonitoring Leakage Intensification - Appendix 3c 2nd monitoring Leakage Market Effect For point 3: - Appendix 5a 2nd monitoring Pikounda Non-Permanence Risk Report - Appendix 5b 2nd monitoring VCS Risk Report Calculation Tool v4.0 - Appendix 11 Calculation of number of sampling plots - Appendix 10 Procedure installation PSP_V4
DOE assessment **Date:**13/06/2023
The clarification provided by PP for the raised issues were ok, however, a new CL17 related to all the images/GIS Maps is raised for more clarify. Hence CL14 is closed.

CL ID	CL15	**Section no.**	MR	**Date:** 13/03/2023
Description of CL				
Clarify on the QA/QC procedures adopted by CIB/OLAM on the periodic field monitoring data/sheets obtained. Further, provide evidence on training conducted to the field monitoring survey team.				
Project participant response		**Date:** DD/MM/YYYY		
Before every monitoring field campaign there is a series of training sessions (last occurred in May 2021) to explain to the team what the distribution of the plots was, how the trees were measured at the first monitoring (starting point, marking, end of the plot, numbering), the good measurement practices and to clarify the monitoring protocol. One of these trainings in a dummy plot in the same type of forest which was recorded on video (some videos are attached as support). Also, after the measurement campaign of the second monitoring was finished, the measurements were compared with those of the first monitoring for the detection of dead trees (due to natural causes) and those that came in new for their diameter. Based on this comparison, the file presented in appendix 6 was compiled.				
Documentation provided by project participant				

- Appendix 6: Monitoring1_2 measurements comparison - Support videos : - Distribution of plots explanation and photos - Identification of species - Marking and inclusion of trees - Measure of diameter - Use of compass to open trails inside the plot Support videos are in French, which is the official language in the Republic of Congo.
DOE assessment **Date:**13/06/2023
Open, The documents/records on training conducted to the field monitoring survey team to be submitted. Though the video's are submitted, it is not clear on the date, how many persons attended, who was training them, etc.,?
Project participant response **Date:** 11/10/2023
Attendance sheet is included in Appendix 19. See Table 6 of the MR where the appendix 19 is mentioned. Six people attended the training.
Documentation provided by project participant
Appendix 19 Training for the establishment and measurement of permanent plots in CL15 folder
DOE assessment **Date:** 11/10/2023
Clarification by PP on the QA/QC procedures adopted by CIB/OLAM on the periodic field monitoring data/sheets and on training conducted to the field monitoring survey team is submitted now. Hence CL15 is closed now.

CL ID	CL16	**Section no.**	Site visit/MR	**Date:** 13/03/2023
Description of CL				
During site visit it is observed that in Block 3, plot 3 a tree had fell down and in plot 10 a tree is inside and not indicated in the data sheet and calculation, why?				
Project participant response		**Date:** DD/MM/YYYY		
The tree not appearing in plot 10 is indeed in the database (appendix 6), which corresponds to tree n°40 (Guareacedrata). This tree does not appear on the map (drawing in the field) because its diameter could not be measured because it was strangled by a Ficus. Concerning the fallen tree in plot 3, it is just a tree that is dead and will be declared as such during the next monitoring campaign, as it was done for this monitoring period (see appendix 6). It is common that the average natural mortality rate of trees in the forest is about 1%, and it can go up to 1.5% for forests with Maranthaceae.				
Documentation provided by project participant				
- Appendix 6: Monitoring1_2 measurements comparison				

DOE assessment	Date:13/06/2023
Clarification by PP on tree mortality and site observation ok and accepted. Hence CL16 is closed.	

CL ID	CL17	Section no.	Site visit/MR	Date:19/06/2023
Description of CL				
PP to clarify following points on the land cover map preparation. 1) PP to add the Landsat identifier numbers, and other relevant data related to Landsat data in table 1 of the appendix 13. 2) PP to add more info such as cloud cover percentage of the Landsat image and also the project area? How was the cloud cover removed from the image? which algorithm was used? The complete processing steps with before and after cloud removal images to be added in the appendix in appropriate section. 3) PP to clarify the RMSE error's between the Image to image co registration with supporting evidence. PP demonstrate with appropriate pictures in the appendix. PP to add table in appendix for all the years of the analysis. 4) PP to clarify SLC-off processing methodology and results in appendix with appropriate before and after pictures. The processed data in Geotiff format has to be shared by the PP as soft copy for further verification. 5) PP to demonstrate that the image digitization techniques are better than supervised classification methods with supporting evidence. 6) PP to elaborate the Image processing steps and image digitization steps in the section 4.3.2 7) PP to provide ground truthing photographs for cross checking. 8) PP to clarify the Google earth tiles acquisition date & time over the project area. 9) PP to provide soft copy of the land cover maps in the Geotiff format for further verification of the land cover maps. 10) PP to clarify the steps on how the previous years land cover maps were verified in the section 4.6.2. 11) PP to clarify the steps followed when the Google earth maps had cloud over the project area? **12)** PP to demonstrate the quality measurements or procedure followed to assess the GFW data.				
Project participant response	**Date: 21/07/2023**			
A table with the 12 points and its responses was made and included in the supporting documents. Additionally in the Appendix 13 all the clarifications were included with track change and clean mode. Sentinel images were used instead of the Planet ones due to the rights of use that Planet has.				
Documentation provided by project participant				

Excel: Clarification 17 Answers PDF: Appendix 13 Report Supervised_Classification_GFW deforestation_CLEAN MODE Word: Appendix 13 Report Supervised_Classification_GFW deforestation_TRACK CHANGES GDB with the shapefiles of the land classification A folder of the GFW (Global Forest Watch Analysis) for the period 2013 - 2021, including shapefiles of forest - non forest, and an excel file of the analysis. Note that the deforestation trend was corroborated using google earth and sentinel imagery. This was included in the word document. Ground True points are included in a folder called "Appendix 14 Ground True Points_2nd verification". This folder includes the photographs taken in the field, the shapefile, an excel with the localization (coordinates) of each photograph, and a map in PDF showing the localization.

DOE assessment	**Date: 13/09/2023**

Open,

4) PP to clarify SLC-off processing methodology and results in appendix with appropriate before and after pictures. The processed data in Geotiff format has to be shared by the PP as soft copy for further verification. Open
5) PP to demonstrate that the image digitization techniques are better than supervised classification methods with supporting evidence. Open
6) PP to elaborate the Image processing steps and image digitization steps in the section 4.3.2 Open
7) PP to provide ground truthing photographs for cross checking. Open
8) Closed
9) PP to provide soft copy of the land cover maps in the Geotiff format for further verification of the land cover maps. Open
10) PP to clarify the steps on how the previous years land cover maps were verified in the section 4.6.2. Open
11) PP to clarify the steps followed when the Google earth maps had cloud over the project area? Open
12) PP to demonstrate the quality measurements or procedure followed to assess the GFW data. Open

- PP has to provide detailed steps adopted for the SLC-Off Correction with Peer reviewed references linked to finding #4
- PP has to describe in detailed steps undertaken to perform supervised classification. Linked to finding #6
- PP has to provide information on ground-truth data collection process, details and other relevant information year wise inline with LULC modeling standard process. Linked to finding #7
- Bibliografía is incomplete. PP to provide relevant references in the Bibliography section.
- Classification-accuracy values - PP to share system generated error matrix for checking. Linked to finding#6
- PP to clarify that GFW data accuracy is sufficient for LULC modelling in the cases of IFM. Linked to finding#12
- Why is verification site visit photo shared for Ground True points? Share Ground True photo's during the monitoring period.

Project participant response	**Date: DD/MM/YYYY**

In section 3.2.1 of Appendix 13, we address this issue in detail and provide a thorough explanation. In our approach, we do not apply mathematical processes to address missing SLC-off data. Instead, we opted to use multiple scenes from the same geographic area to fill in the missing data. This approach allowed us to maintain data integrity and generate consistent results. In addition, we have included appropriate "before" and "after" images in the section3.2.1 of Appendix 13 to illustrate how the SLC-off data were handled and how they were completed. These images provide a visual representation of our process and its results.	
In section 3.3.2 of Appendix 13, we performed a comprehensive analysis of these techniques and evaluated their effectiveness by means of supporting tests. After conducting tests that included the use of Support Vector Machine (SVM) and a critical evaluation of the results obtained, we concluded that supervised classification methods did not provide the precision and accuracy required for our analysis objectives. Our decision to use image digitization techniques was based on a review of the current scientific literature, which supports the superiority of these techniques in terms of precision and accuracy. In terms of our test results and the evidence available in the literature, we consider image digitization techniques to be the most appropriate choice for the land cover analysis of the project area in Pikounda.	
Although we recognize the importance of supervised classification in land cover analysis, in our case we chose not to use this approach after a thorough evaluation. To rule out the use of supervised classification, we employed the ROI Separability metric, which allowed us to assess the class separation capability in our data. In addition, we performed a quick visual analysis of the preliminary results of supervised classification. These two processes led us to the conclusion that the supervised classification did not provide the precision and accuracy needed for our objectives (determining the land covers of the project area in Pikounda). Instead of supervised classification, we opted for visual interpretation of the images, as described in detail in section 3.3.3 of Appendix 13. In this section, we provide a full description of the steps followed to conduct the visual interpretation, including image review, identification of land cover classes, and creation of land cover maps. To evaluate the outcome of the visual interpretation, we applied a Map Accuracy Assessment process, which allowed us to quantify the accuracy of our maps in terms of their ability to accurately represent reality. This process ensured that our results were reliable and supported by objective metrics (see section 3.4 Step 4 calculation of classification accuracy of Appendix 13).	
During the monitoring period (2013-2021) no true ground points were taken, however, during the site verification visit (for this verification) in February 2023, these points were taken in the blocks and plots visited. See Appendix 14 for the GPS coordinates of these points and some photographs of them.	
It is important to note that the results of our initial visual interpretation were obtained in vector format. However, to facilitate review and verification, we have transformed these maps into Geotiff format. This transformation was performed maintaining the same spatial resolution as the original images used in our study. See folder Classification_geotiff in folder CL17.	

In section 3.6.2 of Appendix 13, information for the rest of years 2014-2021 were included to show there was no change in the cover of the project area: Figure 11 shows the evolution of deforestation in each of the years analyzed, and it shows that between 2013 and 2014, a slight decrease in forest cover was recorded, with a reduction of approximately 0.02%. In the following years, from 2014 to 2021, no significant change in forest cover was observed, suggesting stability. In the following years, from 2014 to 2021, no significant change in forest cover was observed, suggesting stability.	
In section 3.6.3 of Appendix 13, we provide specific details on how we handled this situation. In that section, we detail the steps followed to address images affected by the presence of clouds. Our approach involved the use of several strategies, such as leveraging images available at different times to remove the obstruction caused by clouds. In addition, we describe how a thorough review of Google Earth imagery was conducted, using multiple scenes and captures from different dates to ensure the most accurate representation of the project area possible.	
To provide transparency and ensure the accuracy of our results, it is important to note that the producer of the GFW data provides detailed information on the accuracy of this data. In Appendix 13 section 3.6.1, we have referred to the quality information provided by the producer of the GFW data. In that section in Table 9, we provide specific details on accuracy at the biome and continent level. These details include information on the accuracy of the data in different geographic regions, which allows us to assess the reliability of the GFW data for our purposes. It is important to note that, beyond the information provided by the producer of the GFW data, we do not perform additional accuracy assessment on our data. We rely on the integrity of the GFW data and use this source as a valuable reference in our analysis.	
In section 5.Literature cited of Appendix 13, we have added the necessary references to adequately support our claims and provide a solid context for our study.	
Documentation provided by project participant	
Folder and RAR folder: Classification_geotiff Appendix 14 for ground true points (update) GFW_2013_2021: analysis using global forest watch GDB_Land classification: Geodatabase for land classification (in vector format) Appendix 13: 20231018_Appendix 13 Report Supervised_Classification_GFW deforestation_CLEAN	
DOE assessment	**Date:05/11/2023**

4) PP to clarify SLC-off processing methodology and results in the appendix with appropriate before and after pictures. The processed data in Geotiff format has to be shared by the PP as soft copy for further verification. Open – The images shared before and after still show the missing data hence this is open.

The exclusion of the year 2012 in the analysis is carried out because that year is not included in the established monitoring period. With this exclusion, uniformity in the data source is established by exclusively using information captured by Landsat 8 in all periods of analysis. It is important to note that the exclusion of the year 2012 also implies that Landsat data with SLC-off are not being used in the analysis, thus ensuring consistency in the quality and characteristics of the data used throughout the study.

5) PP to demonstrate that the image digitization techniques are better than supervised classification methods with supporting evidence. Open – Linked to above, the data still has issues of missing lines. PP justify the accuracy of the steps with appropriate references. Hence, this is still open

Supervised classifications were made for each of the years from 2013 to 2021 and the Map Accuracy Assessment was calculated for each one. As well as, the map accuracy assessment was calculated for each digitization of the same period in order to validate that the digitization offers a better performance in the classification of land covers in the project area (tables 9 and 10 of the report show the accuracy for each method).

6) PP to elaborate the Image processing steps and image digitization steps in the section 4.3.2 Open

After reviewing the document, it was validated that the steps followed in the analysis have already been included, specifically corresponding to the scheme presented in figure 2.

7) PP to provide ground truthing photographs for cross checking. Open. The photographs shared to support the ground truthing is not sufficient to justify the LULC process. Hence, this is open.

Because no ground truth points were taken during field monitoring (neither for the first verification nor for the second verification), we used some control points taken during the second verification visit, although they turned out to be too few for the audit and outside the timeframe of the monitoring period. Looking for a solution to have ground truth points with supporting information (not pictures but measurements), we opted to present the monitoring plots, 57 in total, as ground truth or control points because they were visited and have tree measurements that demonstrate the structure of a dense forest, which is a support to defend the cover in the project area, dense tropical forest. These control points (along with more than 200 other random points) were used in the processing of the satellite images to produce the accuracy assessment map for the supervised classification. A list of the plots with their coordinates and measurements from the field ins included.

8) Closed

9) PP to provide soft copy of the land cover maps in the Geotiff format for further verification of the land cover maps. Open. The data shared contains a class with no data. PP to justify how the project ensured that there was no deforestation under the “no data” category for each year.

In order to show the continuity of the forest throughout the period analyzed, especially in areas prone to the presence of clouds that were classified as "no data", the change matrix is presented. This matrix has been constructed using the results derived from the digitization process of land cover. This approach not only highlights the persistence of the forest despite areas affected by cloud cover, but also provides a visual and quantitative representation of the transformations in cover over time, thus offering a more complete perspective of forest dynamics during the analysis.

10) PP to clarify the steps on how the previous years land cover maps were verified in the section 4.6.2. Open This is still Open

The process for the verification for each year of the monitoring period follow the same steps included in the GIS report.

11) PP to clarify the steps followed when the Google earth maps had cloud over the project area? Open. In this case, PP has compared the Sentinel imageries. There are no details of the sentinel

coverage identifiers, cloud cover percentage, date acquired, whether cloud present in project areas etc is not provided. Hence, this is open.

The available Google Earth imagery was cloud-free for the periods in which GFW (erroneously) reported deforestation in the project area: between 2016 and 2021 for polygons 1 and 2, and between 2019 and 2021 for polygon 3. However, to double check the Google Earth information, some Sentinel images were used (see Table 16 of the report). Previous versions of the report included that in case of clouds Sentinel images were used, nevertheless, the GFW results were checked and it was shown that deforestation only appeared in specific periods when there were no clouds in Google Earth images when available.

12) PP to demonstrate the quality measurements or procedures followed to assess the GFW data. Open. PP to provide the procedure or summary of the process for quality measurement adopted in this case. PP has provided only showing the accuracy levels. Hence, this is open.

A map accuracy assessment of the global forest watch data for the year 2021 was carried out in order to evaluate and demonstrate the level of accuracy of this data.

) PP has made a comparison with GFW & LULC assessments. There exists a difference in the accuracy levels GFW vs LULC performed by the PP. How this differencing was taken care to produce accurate land cover?

The LULC maps produced by the PP did not take as input data the GFW data, but Landsat 8 imagery and its supervised classification processing and visual image interpretation. GFW was used as an assessment of forest cover evolution in the area with a recognized source, in addition, an accuracy assessment of the GFW data was carried out by the PP in order to validate the accuracy of these data in the project area, the accuracy assessment performed by us showed a producing accuracy of 99.6%, similar to that of the visual image interpretation (99.8%).

) The classified image shared by the PP has only two classes i.e., however, the report shared by PP on page 23 has seven different classes. PP to share the accurately classified files with seven classes.

It was clarified in the document that even though the IPCC land cover classification was used, which has 7 classes, in the project area there are only two classes present and for this reason the classifications only present two classes.

) Ground truth points map: PP has sampled the ground truthing from a small region. PP to justify the samples collected from the small region is enough to produce accurate supervised classification with references.

Due to the lack of ground truth points for the second monitoring we used the plots (57 in total and distributed along the project area) that were visited and measured as ground truth points or control points that have supporting information (not photos but tree measurements) that serves to demonstrate the structure of a dense tropical forest. This answer is related to the answer to point 7 of this clarification.

) PP to justify how fourteen ground truth points is enough for supervised classification with references published in peer-reviewed journals, the articles from predatory should be avoided.

Answer related to points 7 and 15 of this finding.

➢ PP has to provide detailed steps adopted for the SLC-Off Correction with Peer reviewed references linked to finding #4.

➢ PP has to describe in detailed steps undertaken to perform supervised classification. Linked to finding #6.

➢ PP has to provide information on ground-truth data collection process, details and other relevant information year wise inline with LULC modeling standard process. Linked to finding #7

➢ Bibliografía is incomplete. PP to provide relevant references in the Bibliography section.

➢ Classification-accuracy values - PP to share system generated error matrix for checking. Linked to finding#6.

➢ PP to clarify that GFW data accuracy is sufficient enough for LULC modelling in the cases of IFM. Linked to finding#12 ➢ Why is verification site visit photo shared for Ground True points? Share Ground True photo's during the monitoring period.
Documentation provided by project participant
Documents: included metadata of sentinel images used and ROI separability results GDB: land cover classification (included supervised classification and image visual interpretation) 20231215_Appendix 13 Report Supervised_Classification_GFW deforestation_CLEAN
DOE assessment **Date:15/12/2023**
The clarifications and submissions by PP to the issues raised on GIS/Remote sensing maps of the project is accepted. Hence CL17 is closed

Table 3. CAR from this validation/verification

CAR ID	CAR 01	**Section no.**	MR	**Date:** 13/03/2023
Description of CAR				
PP to provide. 1. A declaration to confirm that the project is not under any other GHG certification and/or claimed any carbon revenue for the current verification period starting from 2013 to 2021. 2. Copy of the logging concession awarded by the Government and the relevant website link managed by the Government stating that logging concession grants to the PP is valid. 3. In writing that during the entire crediting there was no planned logging in the project area. 4. Relevant NDC (at the start of the project) demonstrating that entities can carry out the REDD projects				
Project participant response	**Date:** DD/MM/YYYY			
- For the Point 1: A declaration is added where CIB-Olam Agri declared the project is not under any other GHG certification and/or claimed any carbon revenue for the current verification period starting from 2013 to 2021. - For the Point 2: A Logging Permit of Pikounda granted by the government of RoC is added as supporting information. - For the Point 3: A declaration is added as supporting information, including the notification of the state of conservation signed by the forest administration of Sangha and the report of the meeting between CIB and the local forest manager of Ouesso - For the point 4: A memorandum of understanding between RoC Government and CIB is included as supporting information				
Documentation provided by project participant				

- For the Point 1. Declaration 1_CAR01 (in English and French) - For the Point 2. Logging Permit Pikounda (English and French versions) - For the Point 3. Declaration 2_CAR01 (in English and French) - For the point 4. Memorandum of understanding (in English and French)
DOE assessment **Date:**13/06/2023
The requested documents and information's were shared by PP, hence CAR01 is closed.

CAR ID	**CAR02**	**Section no.**	1.2	**Date:** 13/03/2023
Description of CAR				
Please check the map provided in section 1.2 of the MR, there is no clarity. Need a high-resolution map, unable to read the legend clearly. The map should clearly define the project and other related attributes.				
Project participant response		**Date:** DD/MM/YYYY		
The maps showing the location of the project area were updated and now have better resolution. (pages 9 and 10)				
Documentation provided by project participant				
- Map in PDF Pikounda general info (infrastructure: roads, rivers, settlements) - Map in PDF: Layout location (country and department)				
DOE assessment				**Date:**13/06/2023
Now in revised MR, the maps showing location of the project area are updated with better resolution. Hence accepted and CAR02 is closed.				

CAR ID	**CAR03**	**Section no.**	MR	**Date:** 13/03/2023
Description of CAR				
As per para 2.2.2.2 Monitoring and reporting periods of the applied methodology VM0011, v1.0, "The monitoring period corresponds to the time taken between one monitoring event and the immediate next monitoring event for collecting measurements in the PSPs in the Project Area, and for reviewing non-monitored parameters. According to international industry practices for forest carbon assessment, the maximum interval between one monitoring event and the immediate next, should not exceed five years (Pearson et al., 2005). The results of project monitoring must be used to re-calculate the emissions associated with the project and this must be included in a report submitted for independent verification by an accredited third party". However, the current monitoring period cover almost nine years, from January 2013 until October 2021. Why is the monitoring done only in 2021? Justify with evidence.				
Project participant response		**Date:** DD/MM/YYYY		

The second verification was expected to cover the period January 2013 - December 2017. Unfortunately, from 2017 to 2019 there were some environmental and administrative issues that did not allow CIB-OLAM Agri to pursue the monitoring in the field and the verification process. Some of these situations are presented below: 1. The climatic conditions made it difficult to access the permanent plots during some of these years. 2. CIB-OLAM Agri was in contact with various consultants and auditors to continue with the second verification unfortunately, at that time there were just few VVBs earlier registered with Verra and some of them were not active in 2018 3. Some of these auditors were not ready to take Congo in their scope of work. 4. The COVID-19 pandemic also impacted the second verification. Particularly, the field measurements were delayed several times due to mobility restrictions around the country. These measurements successfully ended in October 2021. All these arguments are set out in a document entitled "Methodological deviation 2.2.2 and communications to Verra" in which it is stated that the acceptance of the monitoring period will depend in the first instance on the VVB and then on Verra.
Documentation provided by project participant
- Methodological deviation 2.2.2 and communications to Verra

DOE assessment	**Date:**13/06/2023
Open, PP to submit evidence for each of the points mentioned. If an audit was planned, for the monitoring period 2013 – 2017. PP to provide relevant evidence to confirm when and how the field data was collected, field data details with relevant evidence.	

Project participant response	**Date:** 14/07/2023

Evidence on the natural conditions that avoided the performance of the second monitoring field campaign are annexed to this response.

During 2015, there were floodings in the Republic of Congo and DRC, making difficult the mobility from Brazzaville to Sangha department where the project is located, and especially making difficult to access the peatlands, and the project area. In 2019, there were unprecedented floods in the department of Sangha making impossible the displacements to and into the project area as well. These are some of the reports on the regional access. https://www.reuters.com/article/us-congodemocratic-flood-idINKBN0TR29720151208
https://reliefweb.int/report/congo/republic-congo-floods-flash-update-n-2-27-december-2019
https://cerf.un.org/sites/default/files/resources/19-RR-COG-40036_Congo_CERF_Report_0.pdf

The Project Proponent also mentioned the difficulties in the following response: "Since 2017, CIB tried to get budgets and some tried to negotiate with some VVB in order to try to access the project area. Among the project developers and partners of this project we have DNV, which performed the first verification of our project, and Rainforest Alliance, which listed for verification in 2013 and 2014. In phone conversations we understood that there was also confusion regarding Verra's accreditations for VVBs. Some other VVBs initially expressed concern about traveling to the Republic of Congo due to conflict in the Pool department (2016 – 2018), where the capital Brazzaville (the country's only airport) is located. Later, it was due to an outbreak alert of Ebola in the DRC and its neighbors (2018). Unfortunately, we do not have access to the above electronic mails before 2020, but most of them were not answered. To justify these reasons, we attach the following links showing the conflict in the Pool department and the alert for an Ebola outbreak in the Central African region, including the Republic of Congo."

https://www.acaps.org/fileadmin/Data_Product/Main_media/20170606_acaps_briefing_note_congo_conflict_pool_department.pdf

https://www.dw.com/en/ebola-outbreak-who-puts-10-countries-on-high-alert/a-43746378

For the monitoring period from 2013 to 2021 no verification of the project was performed prior to the current KBS-led process. The first verification corresponded to the period 2012-2013 and took place in 2013.
The evidence on the measures that took place in 2021 includes some photos of the physical formats at the CIB offices in Pokola.

Documentation provided by project participant	
Pictures of the physical formats of the measurements in 2021 (taken by South Pole in December 2022)	
DOE assessment	**Date:**13/06/2023
Open, The clarification is not sufficient for "…. *the maximum interval between one monitoring event and the immediate next, should not exceed five years …"* (refer para 2.2.2.2 of methodology) and justify accordingly	
Project participant response	**Date:** 11/10/2023

The reasons were discussed at the meeting (28/09/2023), but no additional documentation including the reasons stated is provided for this third round. Instead, we propose an additional review of the reasons already explained and a similar assessment based on the decision made by KBS for another VCS project with a similar issue of a longer monitoring period (Restoration of degraded areas and reforestation in Caceres and Cravo Norte, Colombia, Verra ID 576). For the aforementioned project, the monitoring period was accepted by KBS and a letter of commitment was submitted to Verra by the PP.

At the same time, we would ask KBS to check the methodological deviation requirements set out in VCS Standard V 4. 5, as although OLAM Agri-CIB has acknowledged that there was a failure in the longer monitoring period (for what , this has not adversely affected the conservativeness of the quantification of reductions (as indicated in Appendix 17 Hypothesis testing of ex ante and ex post estimates) nor other monitoring conditions in the project area (as can be seen by the absence of encroachment and illegal logging) which did not generate a change in forest cover (Appendix 13) demonstrating that despite the long monitoring period there was no forest loss during this and therefore the main objective of the project, forest conservation, has remained intact.

3.20 Methodology Deviations

Concept

Projects are permitted to deviate from the procedures set out in methodologies in certain cases, such as where alternative methods may be more efficient for project-specific circumstances, or where the deviation will achieve the same level of accuracy or is more conservative than what is set out in the methodology.

Requirements

3.20.1 Deviations from the applied methodology are permitted where they represent a deviation from the criteria and procedures relating to monitoring or measurement set out in the methodology (i.e., deviations are permitted where they relate to data and parameters available at validation, data and parameters monitored, or the monitoring plan).

3.20.2 Methodology deviations shall not negatively impact the conservativeness of the quantification of reductions or removals, except where they result in increased accuracy of such quantification. Deviations relating to any other part of the methodology shall not be permitted.

3.20.3 Methodology deviations shall be permitted at validation or verification, and their consequences shall be reported in the validation or verification report, as applicable, and all subsequent verification reports. Methodology deviations are not considered to be precedent setting.

Documentation provided by project participant
- Appendix 17 Hypothesis testing of ex ante and ex post estimates - Engagement letter and mitigation plan

DOE assessment	**Date:** 29/01/2024
Refer methodology deviation section above. This CAR03 is closed.	

CAR ID	CAR04	Section no.	MR	Date: 13/03/2023
Description of CAR				
As per para 3.2.6, VCS Standard v.4.3 "The project proponent shall demonstrate that project activities that lead to the intended GHG benefit have been implemented during each verification period in accordance with the project design. Where no new project activities have been implemented during a verification period, project proponents shall demonstrate that previously implemented project activities continued to be implemented during the verification period (e.g., forest patrols or improved agricultural practices of community members)".				
Project participant response	**Date:** DD/MM/YYYY			
All the activities implemented during the last monitoring period (2013-2021) were documented in the monitoring report and were based on the monitoring plan validated. Those activities are already explained in the monitoring plan applicable to the period 2013-2021.				
Documentation provided by project participant				
- Monitoring plan for the second monitoring period (excel file) - APPENDIX 10_PDD - Monitoring Plan_VersionCorrectedAudit_05062013				
DOE assessment				**Date:**13/06/2023
Open, PP to submit all the relevant details and evidence for the activities implemented in the project area for the verification period 2013-2021				
Project participant response	**Date:** DD/MM/YYYY			

Evidence on the activities implemented in the project area during this monitoring period consists in all the appendices and the development of the monitoring report. The activities implemented follow the monitoring plan approved during the validation of this project by Verra. Each one of the activities is related to the appendices as follows:

Activity of the monitoring plan	Appendices with the evidence
1. PSPs Monitoring	• Appendix 6 Monitoring1_2 measurements comparison • Appendix 7 2nd monitoring Regrowth_GrowthForegone • Appendix 11 Calculation of number of sampling plots Appendix 10 Procedure installation PSP_V4 • Appendix 15 Procedure for monitoring carbon plots_v2
2. Remote Sensed Monitoring - Illegal/Natural Disturbances	• Appendix 1 Images Analysis Illegal Logging
3. Field Monitoring - Illegal Activities	• Appendix 1 Images Analysis Illegal Logging • Appendix 9 Surveys Pikounda - Molanda December 2022
4. Natural Disturbances Emissions Monitoring	• Appendix 12 Land Cover maps • Appendix 13 Report Supervised_Classification_GFW deforestation_CLEAN MODE
5. Illegal Harvesting Emissions Monitoring	• Appendix 1 Images Analysis Illegal Logging
6. Leakage Monitoring	• Appendix 3a Leakage Assessment • Appendix 3b 2022 2nd monitoring Leakage Intensification • Appendix 3c 2022 2nd monitoring Leakage Market Effect
7. Uncertainty Monitoring	• Appendix 4 2nd Monitoring Estimations of credits Pikounda IFM
8. Non-Permanence Risk Assessment	• Appendix 5a 2nd monitoring Pikounda Non Permanence Risk Report • Appendix 5b 2nd monitoring VCS Risk Report Calculation Tool v4.0
9. Quality Assurance / Quality Control	• Appendix 6 Monitoring1_2 measurements comparison Appendix 14 Ground True Points_2nd verification
10. Training	• Training for the establishment and measurement of permanent plots
11. Documentation Management	•
12. VCU Calculation	• Appendix 4 2nd Monitoring Estimations of credits Pikounda IFM

Documentation provided by project participant

- Appendix 16: PDF: “Monitoring plan for the second monitoring period” that includes all the monitoring activities implemented during this monitoring period and that are based on the monitoring activities approved since the beginning.
- Complementary information on the monitoring activities is also presented in the Clarification 10

DOE assessment	Date:
Open, No Appendix in MR submitted, check	
Project participant response	**Date:** 09/10/2023
The reference to Appendix 16 was done in sections 3 Implementation Status and 4.3 Monitoring Plan of the Monitoring Report V3.0, and in the Table 6: Table 6: Monitoring plan followed in this verification (Appendix 16)	
Documentation provided by project participant	
- Monitoring report updated	
DOE assessment	**Date:** 09/10/2023
The requested corrections are made in the revised MR. hence CAR04 is closed.	

CAR ID	CAR05	Section no.	MR	Date: 13/06/2023
Description of CAR				
Use the latest Monitoring report template available on VCS website, without altering/modifying the template.				
Project participant response		**Date:** DD/MM/YYYY		
Monitoring report submitted.				
Documentation provided by project participant				
DOE assessment				**Date:** 18/02/2024
PP has now used the latest Monitoring report template as available on VCS website (i.e., version is 4.3) Hence CAR05 is closed.				

CAR ID	CAR 06	Section no.	*1.10*	Date: 04/07/2024
Description of CAR				
PP shall provide supporting evidence and a formal declaration on that there is no double counting for the current monitoring period i.e., 01/01/2013 to 31/10/2021 and accordingly update section 1.10 of MR (Refer PRR finding no. 8, dated: 04/07/2024).				
Project participant response		**Date:** 31/07/2024		

The project has modified its monitoring period to 1st-January-2013 to 31st-December-2019. *There was the risk of double counting with another program in which CIB/Olam has been involved. This is the REDD+ project, including the Shanga region from the RoC government financed by the World Bank under the Forest Carbon Partnership Facility (FCPF) started in 2008. After the readiness phase, in 2021 RoC signed a contract (ERPA) with the World Bank to implement the project whose crediting period goes from 2020 to 2024. It is not sure if the government of RoC will continue with VCS or if they will change to the FCPF.* *For that reason, the years 2020 and 2021 were subtracted from the present verification to avoid the risk of double counting*
Documentation provided by project participant
All the documents have been updated reflecting the new monitoring period (2013-2019) or explaining why some of the calculations were performed using data up to 2021. These are: • *Monitoring report (VCS MR Project 1052 01January2013-31December2021-v5-track_changes_310724.docx)* • *Land cover classification (Appendix 13.docx)* • *Non-permanence risk report (Appendix 5a 2nd monitoring Pikounda Non Permanence Risk Report.docx)* • *Non permanence risk tool (Appendix 5b 2nd monitoring VCS Risk Report Calculation Tool v4.0.xls)* • *Ex-post estimations (Appendix 4 2nd Monitoring Estimations of credits Pikounda IFM)* • *Ex-ante estimations (Appendix 19_03_PikoundaREDD_ER_07.0_ToTR.xlsx)* *Worth mentioning that in all cases there were minor changes in the text changing the monitoring period and in some excel files selecting only the credits produced up to 2019.*
DOE assessment — **Date:** 02/08/2024
PP has updated double couting details and Monitoring period in MR. the updated monitoring is from 01/01/2013 to 31/12/2019, which do not risk in double counting of project as the world bank initiative will start monitoring from 01/01/2020 to 31/12/2024. Hence CAR 06 is closed.

Table 4. FAR from this verification

FAR ID	FAR 01	Section no.	3.1	Date: 22/02/2024
Description of FAR				
Temporary deviation was found in this monitoring method in the frequency of the monitoring, which will not affect the additionality, applicability, baseline and final outcome of the project activities, but during the next verification, audit team must check the frequency of the monitoring activity inline with the registered PDD and methodology.				
Project participant response				Date: DD/MM/YYYY
Documentation provided by project participant				
DOE assessment				Date: DD/MM/YYYY

FAR ID	FAR 02	Section no.	1.10	Date: 02/08/2024
Description of FAR				
The monitoring period was changed for the project activity from 8-year 10 month (01/01/2013 to 31/10/2021) to 7 years (01/01/2013 to 31/12/2019) due to the project registration with world bank initiative (01/01/2020 to 31/12/2024). During the next verification, audit team must check the details for double counting and risk associated with the project activity.				
Project participant response				Date: DD/MM/YYYY
Documentation provided by project participant				
DOE assessment				Date: DD/MM/YYYY

APPENDIX 3: REFERENCE

/1/	Project Description, version 5.3, dated 24/04/2013 and Corresponding validation report, Monitoring report of 1st verification and 1st verification report
/2/	Final Monitoring Report*, version 05 dt 31 July 2024*
/3/	VCS Standard, version 4.5 AFOLU requirements: VCS Version 4.2 AFOLU Non-Permanence Risk tool: VCS Version 4.0 VCS Program rules VCS Validation and Verification Manual
/4/	'VM0011 Methodology for Calculating GHG Benefits from Preventing Planned Degradation', v1.0
/5/	*Intial M*onitoring *R*eport, version04
/6/	Sampling and surveys for CDM project activities and programmes of activities", version 09
/7/	VCU calculations sheet
/8/	North Pikounda Unité Forestière d'Exploitation - UFE) by ministerial decree,2002 Forest Stewardship Council (FSC), 2006
/9/	Non-Performance Risk Report
/10/	Methodology Deviations references
/11/	Stakeholders' questionaries/18 surveys records

APPENDIX 4: COMPETENCE OF TEAM MEMBERS

Name:				Dr.D.Siddaramu	
Schemes	☒ CDM	☒ GCC	☒ GS	☒ VCS	☒Other GHG Schemes (VCS CCB, Social Carbon, SD Vista)
Qualified to work as:					
Team Leader	☒		Technical Expert	☒	
Validator/Verifier	☒		Financial Expert	☐	
Technical Reviewer	☒		Local Expert (India)	☒	
Area(s) of Technical Expertise					
Sectoral Scope	Technical Area				
Energy industries (renewable/non-renewable sources)	TA 1.2: Energy generation from renewable energy sources				
Energy demand	TA 3.1. Energy Demand				
Afforestation and reforestation	TA 14.1 Afforestation and reforestation				
Approved by	Manager Quality				
Approval date:	15/12/2022				

Personnel Name	Rinah Zo Nandrianina				
Schemes	☐ CDM	☐ GCC	☐ GS	☐ VCS	☐Other GHG Schemes (mention here)
Qualified to work as					
Team Leader	☐	Technical Expert	☒		
Validator/Verifier	☐	Financial Expert	☐		
Technical Reviewer	☐	Local Expert (Madagascar)	☒		
Area(s) of Technical Expertise					
Sectoral Scope	Technical Area				
SS 1: Energy industries (renewable/non-renewable sources)	TA 1.1: Thermal energy generation from fossil fuels and biomass including thermal electricity from solar				
SS 3: Energy Demand	TA 3.1. Energy demand				
SS 14: Afforestation and reforestation	TA 14.1 Afforestation and reforestation				
SS 15: Agriculture	TA 15.1. Agriculture				
Approved by (Manager Competence & Training)	Sanjay Kandari				
Approval date	11-01-2018				

Personnel Name		Mr. Praveen N Urs			
Schemes	☒ CDM	☒ GCC	☐ GS	☒ VCS	☒Other GHG Schemes (VCS CCB, ICR, CERCARBONO, Social Carbon)
Qualified to work as					
Team Leader	☒	Technical Expert	☒		
Validator/Verifier	☒	Financial Expert	☒		
Technical Reviewer	☒	Local Expert (India)	☒		
Area(s) of Technical Expertise					
Sectoral Scope		**Technical Area**			
SS 1: Energy industries (renewable/non-renewable sources)		TA 1.1: Thermal energy generation			
		TA 1.2: Renewable			
SS 13: Waste handling and disposal		TA 13.1: Solid waste and wastewater			
		TA 13.2: Manure			
SS- 14: Afforestation and Reforestation		TA- 14.1: Afforestation and Reforestation			
SS – 15 – Agriculture		TA 15.1: Agriculture			
Approved by (Manager Competence & Training)		Mr. Dushyant Parashar			
Approval date		12-05-2024			

Personnel Name		**Mr. Shankar Shan Patro**			
Schemes	☒ CDM	☒ GCC	☒ GS	☒ VCS	☐Other GHG Schemes (mention here)
Qualified to work as					
Team Leader	☐	Technical Expert	☒		
Validator/Verifier	☒	Financial Expert	☐		
Technical Reviewer	☐	Local Expert (India)	☒		
Area(s) of Technical Expertise					
Sectoral Scope		**Technical Area**			
SS 14: Afforestation and reforestation		TA 14.1. Afforestation and reforestation			
SS 15: Agriculture		TA 15.1. Agriculture			
Approved by (Manager Competence)		Dr.Rajesh Monga			
Approval date		28-02-2024			