Gold Standard Design Certification Report

For

"N'Situ Pelende by Colruyt Group" (GS12214)

Methodology: Gold Standard Afforestation/Reforestation (A/R) GHG Emissions Reduction & Sequestration Methodology (Version 2.0)

Report No: CCIPL1876/EU-GS/20230428

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I. PROJECT DATA

Project title:	N'situ Pelende by Colruyt Group		
Project Areas:	Kenge, Kwango Province		
Host Country	Democratic Republic of the Congo		
Registration No. / Date:	GS ID: GS12214	**Scale:**	Large
Methodology:	Gold Standard Afforestation/Reforestation (A/R) GHG Emissions Reduction & Sequestration Methodology (Version 2.0)	**Sectoral Scope/Technical Area:**	14/14.1
Initial PDD:	Version 1; dated 28/06/2023		
Final PDD:	Version 5 dated 24/07/2024		

Party	Project participants	Contract party
Belgium	Colruyt Group (Project developer)	☒
DRC (Host)	N'situ Pelende SASU (Project Participant)	☐

II. VALIDATION TEAM

Validation Team			Role									
Full name	**Affiliation**	**Appointed for Sectoral Scopes (Technical Areas)**	**Team leader**	**Acting/trainee Team Leader**	**Local Expert**	**Team Member (Auditor)**	**Technical Expert**	**Observer**	**Trainee Auditor**	**Technical Reviewer**	**Expert to TR**	**Trainee TR**
Vempally Prashanth	India	14.1	X				X					
Ghislain Manzalo	DRC	14.1			X							

Amit Anand	India	1.1, 1.2, 3.1, 4.1, 13.1, 13.2, 14.1, 15								X		

Audit Team Experience:

The team composition is linked to the methodology and local experience in the host country.

Vempally Prashanth is a forestry graduate and has knowledge & skills for the land use & forestry sector. He is a qualified validator/verifier and technical expert for TA 14.1 under CDM SS categorization. He has more than 1.9 years of work experience in GHG mechanism. Currently, He is working on a variety of land use & forestry projects under different GHG programs including VCS, GS4GG and ICR. He is the author of research work article (Prashanth et al., 2023) and co-authored three research articles (Murari et al.,2023, Shakith et al.,2023 & Ahalee et al., 2023).

Ghislain Manzalo is the local expert for Democratic Republic of Congo.

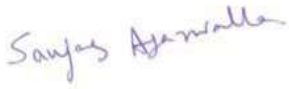
Amit Anand is the team leader, technical expert and technical reviewer at CCIPL. He has completed his Bachelor of Science and Master of Science degrees in Environmental Management andhas been involved in Clean Development Mechanism (CDM) for last 17 years. He is an expert for Agriculture, Forestry & Other Land Use (AFOLU) in CCIPL. He has also shared his experience on international platforms such as International Workshop on Capacity Building Project for MRV of GHGEmission Reductions in Africa, Latin America, Central Asia, and Eastern Europe organized by Ministry of Environment, Japan – 13 to 14 February 2012. He also serves as Executive Director and Chief Executive Officer at CCIPL.

III. VALIDATION REPORT

Status	Verification Phases
☒	Document Review
☒	On Site Assessment
☒	Follow up interviews
☒	Corrective Actions / Clarifications Requested
☒	Resolution of outstanding issues
☒	Full Approval and Submission for registration
☐	Rejected

Status	Distribution Conditions
☒	No distribution without permission from the Client or responsible organizational unit
☐	Limited Distribution
☐	Unrestricted distribution

Final Approval	
Date	14/08/2024
Approved by	Sanjay Kumar Agarwalla

Designation	Technical Director
Signature	

ABBREVIATIONS

AGB	Above Ground Biomass
ARR	Afforestation, Reforestation
BEF	Biomass Expansion Factor
BGB	Below Ground Biomass
CAR	Corrective Action Request
CCIPL	Carbon Check (India) Private Ltd.
CO_2e	Carbon Dioxide Equivalent
CL	Clarification Request
DW	Dead Wood
GIS	Geographical Information System
KML	Keyhole Markup Language
LUF	Land Use & Forestry
LULC	Land Use Land Cover
LULUCF	Land use, Land-use Change, and Forestry
DR	Document review
DVR	Draft Validation Report
EI	External Individual
FA	Final Approval

FAR	Forward Action Request
FVR	Final Validation Report
GHG	Greenhouse gas(es)
IPCC	Intergovernmental Panel on Climate Change
IR	Internal resource
KPI	Key Project Information
MUs	Modelling Units
PD	Project Developer
QC/QA	Quality control /Quality assurance
SOC	Soil Organic Carbon
TA	Technical Area
TR	Technical Review
UQL	Unacceptable Quality Limit
VVB	Validation & Verification Body
VER	Verified Emission Reduction

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1. Introduction

The project developer/Contact Party, Colruyt Group has appointed Carbon Check (India) Private Limited. (CCIPL), a GS4GG approved VVB to perform an independent design certification of the Project activity, titled *"N'situ Pelende by Colruyt Group*/01/*"*, hereafter referred to as "Project".

This report summarizes the findings of the design certification of the project, performed on the basis of GS4GG Principles & Requirements v1.2/B02/, GS4GG LUF Activity Requirements v1.2.1/B01/ and Gold Standard Afforestation/Reforestation (A/R) GHG Emissions Reduction & Sequestration Methodology (Version 2.0)/B03/ and subsequent decisions by the Gold Standard Secretariat, as well ascriteria given to provide for consistent project operations, monitoring and reporting and compliance with host country criteria and Gold Standard specific criteria.

This report contains the findings and resolutions of the design certification and a design certification opinion on the project.

1.1 Objective

The purpose of a design certification is to have a thorough and independent assessment of the proposed Project, GS4GG PDD/01/ against the requirements of GS4GG Principles & Requirements v1.2/B02/, GS4GG Land Use & Forests Activity Requirements Version 1.2.1/B01/ in particular, the project's baseline, additionality, and compliance with relevant Gold Standard 4 Global Goals requirements/B01//B02/ and host party criteria. Gold Standard 4 Global Goals requirements specific conditions are validated to confirm that the project design (as documented)/01/ is complete, reasonable and meets the stated requirements and identified criteria. Validation is seen as necessary to provide assurance to stakeholders about the quality of the project and its ability to generate proposed amount of Verified Emission Reductions (VERs).

1.2. Scope and Criteria

The scope is defined as an independent and objective review of the Project Activity. The GS PDD/01/ is reviewed against the requirements of GS4GG Land Use & Forests Activity Requirements Version 1.2.1/B01/, GS4GG Principles & Requirements/B02/ and applicable decisions by the GS secretariat. The validation team has employed a risk-based approach, focusing on the identification of significant risks for project implementation and the generation of GS VERs.

The validation is not meant to provide any consulting towards the project participants. However, stated requests for clarifications and/or corrective actions may have been provided as input for improvement of the project design.

While carrying out the validation, CCIPL determines if the project activity/01/ complies with the requirement of,GS4GG requirements/B01/B02/, specifically the applicability conditions of the selected methodology/B03/ and also assesses the claims and assumptions made in the GS4GG PDD/01/, other related templates and documents/02-46/ without limitation on the information provided by the project developer.

On-site inspection and stakeholder interviews/i-xvi/ have also been conducted as part of the design certification process.

1.3. Level of Assurance

The Design Certification assessment has been conducted to indicate the reasonableness of assumptions, limitation, and methods on the likelihood of the proposed Project Activity/01/, achieving the anticipated net anthropogenic GHG removals and SDG impacts stated in the GS PDD/01/. VVB confirms that all assumptions and statements made by the PD are valid and appropriate with possible reasonableness. Based on the assessment of VVB, (06) six CARs, (18) eighteen CLs have been raised. Furthermore, during the preliminary review SustainCert raised (00) zero FAR's.

2. Methodology

The design certification consists of the following four phases:

1. Completeness check of the GS PDD/01/ and other GS4GG A/R templates and requirements/B01/B02/.
2. Review of project documentation (GS PDD/01/, monitoring plan, applied methodology/B03/, applicable tools in particular attention to the frequency of measurements, QA/QC procedures and other relevant documents and regulations).
3. On-site inspection (including follow-up interviews with project stakeholders, when deemed necessary).
   The On-site inspection and interviews assessment include the following:
   - An assessment of the Project design/01/ in line with the baseline and monitoring methodology/B03/
   - An assessment of baseline scenario & additionality.
   - Review of PA's eligibility of the GS LUF requirements/B01/.
   - Review of PA's compliance with SDG claims
   - Review of permanence of GHG removal/02/ including risk rating and measures
   - Review of LSC (including SFR)/20/ and grievance mechanism/22/ including interviews/i-xvi/ with the relevant stakeholders/20/
   - Interview with relevant personnel to determine whether the operational and data collection procedures are implemented and in accordance with monitoring plan (for both carbon calculations & SDG).
   - Review of assumptions made in calculating the GHG removal estimations/02/.
   - Assessment of QA/QC procedure in-line with the GS PDD/01/ and methodology requirement/B03/.
4. Resolution of outstanding issues and the issuance of the Final Design Certification Report and Certification statement.

The following sections outline each step in more detail:

Duration of Audit:

- Signing of Letter of Engagement: 12/06/2023
- On-site inspection: 04/03/2024 – 08/03/2024

3. Means of Validation

3.1 Desk/Document Review

List of all documents reviewed or referenced during the validation are as below:

Sr. No.	Documents	Reference
/01/	GS4GG PDD	V1.0 V5.0 dated 24/07/2024
/02/	B.1 tree biomass Chapman Richard English B.2 403_V1.0_0.7_LUF_AR Methodology Soil Carbon Tool B.3 Rapport Final B.4 403.01_V1.0_LUF_AR-Methodology_Integrated-filled CO2-calculation_area calculation 19-06-2024	Ex-ante biomass and SOC calculation sheet
/03/	C.1 DEM VMAC.202108.10004 210831 2 tractors (99.000 USD) Salary plantation 2021 Tree planting Official opening Vice premier minister.jpg Tree transfer declaration.pdf	Start date
/04/	A.2 203G_V1.0_AR_LUF_Risks-Capacities-Assessment_RevLaGoo_230620 JeThe	GS Risk tool
/05/	Congolese land politics – Le droit coutumier Folder_ D.1 Land ownership	Land Records
/06/	D.2 Timeline budget	
/07/	Dossier NSITU Actes modificatifs	
/08/	E.1-E.2 EIES_PROJET_PLANTATION_VP_REVISEE_AREAU_COMPARE_V21092021_SIGNED	
/09/	E.3 ELEMENTS_SUSTAINABILITY_LM_2	
/10/	E.4 501_V2.0_AR_GHGs_ODA-Declaration-Form	
/11/	H.3 20210303 Smart Technics CO2 neutralisation_budget_blurred	
/12/	J.1 ORG CHARTS Osipe 140623	
/13/	J.2 mesurer biomasse des arbres_v3 (2)	
/14/	J.2 Mesurer la biomasse des arbres	
/15/	J.2 planning monitoring in dry season	
/16/	J.5 assistant monitoring_description travail	
/17/	J.6 RE Roger monitoring	
/18/	J.7 Sustainable Forest Management Plan -Nsitu Pelende	
/19/	J.10 NP - emission, fertiliser, fuel and utilities	
/20/	K.1 T-PreReview_V2.0-Stakeholder-Consultation-Report	
/21/	K.2-K.5 Rapport de la mission de prospection au Kwango v.f_0	
/22/	K.6 231221_Procédure de reclamation	-
/23/	K.6 Liste de plaintes Proposition for the gender Strategy document	
/24/	Folder_ L.1-L.2 literature references	
/25/	Folder_ G.2 maps and shapefiles Forest/non fores anaysis/LULC analysis	GIS maps & Shapefiles
/26/	K. Mokany, R. J. Raison, A. S. Prokushkin (2005). Critical analysis of root : shoot ratios in terrestrial biomes. Global Change Biology, 12(1), pp. 84-96 https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1365-2486.2005.001043.x	Root shoot ratio reference
/27/	Chave J., M. Réjou-Méchain, A. Búrquez, E. Chidumayo, M. S. Colgan, W. B.C. Delitti, A. Duque, T. Eid, P. M. Fearnside, R. C. Goodman, M. Henry, A. Martínez-Yrízar, W. A. Mugasha, H. C. Muller-Landau, M. Mencuccini, B. W. Nelson, A. Ngomanda, E. M. Nogueira, E. Ortiz-Malavassi, R. Pélissier, P. Ploton, C. M. Ryan, J. G. Saldarriaga, G. Vieilledent (2014) Improved allometric models to estimate the aboveground	Allometric equation

	biomass of tropical trees. 10 May 2014 https://doi.org/10.1111/gcb.12629	
/28/	Xu L., S.S. Saatchi, A. Shapiro, V. Meyer, A. Ferraz, Y. Yang, J.-F. Bastin, N. Banks, P. Boeckx, H. Verbeeck, S.L. Lewis, E. Tshibasu Muanza, E. Bongwele, F. Kayembe, D. Mbenza, L. Kalau, F. Mukendi, F. Ilunga & D. Ebuta. (2017). Spatial Distribution of Carbon Stored in Forests of the Democratic Republic of Congo. Nature, scientific reports, 7(15030). DOI:10.1038/s41598-017-15050-z	Growth model
/29/	Plants of world online- Kew sciences Millettia laurentii De Wild. | Plants of the World Online | Kew Science	Species references
/30/	Pangolin | Species | WWF (worldwildlife.org)	Species reference
/31/	Informes Individuales IUCN 2020.indd	Species reference
/32/	https://www.fao.org/fileadmin/user_upload/nutrition/docs/policies_programmes/Good_practices/12.FSNL_Factsheet_Caterpillars_in_DRC.pdf	FAO nutrition-Insects in local diets
/33/	Law No. 11-009 of 9 July 2011 on the fundamental principles relating to environmental protection	Congolese law
/34/	Forest code: LOI N°011/2002 DU 29 AOUT 2002 PORTANT CODE FORESTIER	Forest law
/35/	Environmental and social impact study of project area by SARL 07/2023 to underpin the baseline scenario of severely degraded grasslands	Impact study
/36/	Evidence for the fire brigades, fire corridor images and community sensitization documents.	Others
/37/	CODEVCO I GUCE.pdf (founding) Dossier NSITU Actes modificatifs.pdf (name change) OSIPE-Doc administratifs-Etat congolais.pdf ODA document_signed.pdf	Others
/38/	JRC_africa_soil_atlas_part1.pdf	
/39/	RESUME PAIE FEV AVRIL 2024 KIMBAKATA and RESUME PAIE FEV AVRIL 2024 Helene-MbanguKiala-Resume 2022.pdf. CV Jan schockaert.pdf	GS risk tool
/40/	Gender Strategy.docx	
/41/	EIES_PROJET_PLANTATION_VP_REVISEE_AREAU_COMPARE_V21092021_SIGNE To underpin that the project follows the social and environmental legislations	
/42/	Declaration on title N'situ Pelende.pdf	
/43/	https://constitutionnet.org/sites/default/files/DRC%20-%20Congo%20Constitution.pdfn	DRC constitution
/44/	High level cash flow document to prove the project funding by Colruyt group. Cash flow analysis sheet Balance sheets/Jaarrekening-2023	
/45/	Congolese labour right laws and acts LABOUR LAW 2002 (leganet.cd)	DRC labour law
/46/	invasiveness of tree species	Evidence for non-native species
/B01/	GS4GG Land use & Forest Activity requirements	V1.2.1
/B02/	GS4GG Principles & requirements	V1.2
/B03/	GS A/R GHG Emissions reduction & Sequestration methodology, v2.0	V2.0
/B04/	GS4GG Stakeholder consultation and engagement requirements v2.1	V 2.1
/B05/	• Gold Standard A/R Soil Carbon Tool • 500-GS4GG-GHG-Emissions-Reduction-Sequestration-Product-Requirements-1.2 • CDM Tool for the identification of degraded or degrading lands for consideration in implementing CDM A/R project activities	Others
/B05/	• CDM: https://cdm.unfccc.int/Projects/index.html • VCS: https://registry.verra.org/app/search/VCS/All%20Projects • GSF: https://registry.goldstandard.org/projects?q=&page=1 • Plan Vivo: https://www.planvivo.org/pages/category/projects?Take=28	Other registries

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Tel: +91 120 4373114 | **URL**: www.carboncheck.co.in | **e-mail:** info@carboncheck.co.in

/B06/	Other supporting literature: • UNDP Human Development Indicator: http://hdr.undp.org/en/data/profiles/ • ICRAF Database - Wood Density (worldagroforestry.org) • Zanne, A.E., Lopez-Gonzalez, G.*, Coomes, D.A., Ilic, J., Jansen, S., Lewis, S.L., Miller, R.B., Swenson, N.G., Wiemann, M.C., and Chave, J. (2009). Global xuwood density database. Dryad. Identifier: http://hdl.handle.net/10255/dryad.235 • Ludwig F., Franssen W., Jans W., Beyenne T., Kruijt B., SupitI. (2013): Climate change impacts on the CongoBasin region. In:Climate Change Scenarios for the CongoBasin. [Haensler A., Jacob D., Kabat P., Ludwig F. (eds.)]. Climate Service Centre Report No. 11, Hamburg, Germany, ISSN: 2192-4058 • B.K. Bakshi, online. FAO – dealing with pests and diseases in tropical forests (https://www.fao.org/4/h2575e/h2575e04.htm) • https://thinkhazard.org/en/report/68-democratic-republic-of-congo/EH	
/B07/	• https://www.cabidigitallibrary.org/doi/10.1079/cabicompendium.48989 • Albizia chinensis (Chinese albizia) | CABI Compendium (cabidigitallibrary.org) • Senna siamea (yellow cassia) | CABI Compendium (cabidigitallibrary.org) • Leucaena leucocephala (leucaena) | CABI Compendium (cabidigitallibrary.org) • Acacia mangium (brown salwood) | CABI Compendium (cabidigitallibrary.org) • IUCN Red List of Threatened Species • Artocarpus heterophyllus (jackfruit) | CABI Compendium (cabidigitallibrary.org) • Hevea brasiliensis (rubber) | CABI Compendium (cabidigitallibrary.org)	Supporting study for non-native tree species

3.2. On-site inspection and follow-up interviews with project stakeholders

An on-site inspection has been performed by the members of the certification team of Carbon Check from 04/03/2024 to 08/03/2024 at PD office and sample plantation sites in Swa kasongo and Swa kahumba included within the project activity. VVB has also visited the nurseries established by project developer to observe the saplings for plantation. VVB team has interacted with the project representatives and stakeholders interviewed were:

Sl. No.	Name (Organisation)	Date	Type	Topic
/i/	Jan Schockaert (General Director N' Situ Pelende)	04/03/2024 – 08/03/2024	☒ On-site ☒ Face to Face ☐ Telephone ☐ Email ☐ Skype	• PP's roles and responsibilities. • Baseline scenario. • Sustainability and local stakeholders meeting. • Project implementation. • Future project plans. • Organization structure, roles and responsibilities. • Input and grievance mechanism • Non-Permanence Risk analysis • DNHA Assessment • Ownership of land titles • Ownership of carbon credits • Monitoring plan • Capacity building training programs
/ii/	Helena Vanrespaille (Colruyt Group)	04/03/2024 & 08/03/2024	☐ On-site ☐ Face to Face ☐ Telephone ☐ Email ☒ Skype	
/iii/	Benjamin Blessings (N'situ Pelende)	05/03/2024	☒ On-site ☒ Face to Face ☐ Telephone ☐ Email ☐ Skype	• Baseline scenario. • Project implementation. • Plantation techniques • Species selection • Project operation, roles and responsibilities • Input and Grievance mechanism • Capacity building
/iv/	Rebeca Ngwafwana (Agronomist, Head plantation Swakasongo)	05/03/2024	☒ On-site ☒ Face to Face ☐ Telephone ☐ Email ☐ Skype	• Stakeholder consultation process • Grievance mechanism • Role and responsibilities of community • Capacity building training programs •
/v/	Kutica (Chief, Kinzuzu)	05/03/2024	☒ On-site ☒ Face to Face ☐ Telephone ☐ Email ☐ Skype	
/vi/	Tresor Nzasi (Nursery Head), Kambakata)	06/03/2024	☒ On-site ☒ Face to Face ☐ Telephone ☐ Email ☐ Skype	• Sustainability and local stakeholder meetings • Grievance mechanism • Land procurement process

				• Ceasing charcoal preparation • Ceasing open grazing practice • Plantation roles and responsibilities • Capacity training programs • Ownership of carbon credits
/vii/	Luzavu (Team Lead)	06/03/2024	☒ On-site ☒ Face to Face ☐ Telephone ☐ Email ☐ Skype	
/viii/	Albert (Chief, Paye)	04/03/2024	☒ On-site ☒ Face to Face ☐ Telephone ☐ Email ☐ Skype	
/ix/	Lvasu Blanchard (Gestonnaine de filieres Onsite)	07/03/2024	☒ On-site ☒ Face to Face ☐ Telephone ☐ Email ☐ Skype	
/x/	Kicha Kikala (Agronomist, Head nursery Bethanie)	07/03/2024	☒ On-site ☒ Face to Face ☐ Telephone ☐ Email ☐ Skype	
/xi/	Kapaija Fistor (Agronomist,Plantation Onsite)	07/03/2024	☒ On-site ☒ Face to Face ☐ Telephone ☐ Email ☐ Skype	
/xii/	Batsmenga Bathon (Agronomist Plantation Onsite)	07/03/2024	☒ On-site ☒ Face to Face ☐ Telephone ☐ Email ☐ Skype	
/xiii/	Mayenere Nzasi (Agronomist Onsite)	07/03/2024	☒ On-site ☒ Face to Face ☐ Telephone ☐ Email ☐ Skype	
/xiv/	Uzasi Claris (Agronomist Plantation Onsite)	07/03/2024	☒ On-site ☒ Face to Face ☐ Telephone ☐ Email ☐ Skype	

Fig: On-sit visit interviews with PD, Chefe de village and community members

3.3. Sampling Approach

N/A

3.4. Resolution of outstanding issues

The objective of this phase of the validation is to resolve any outstanding issues (issues that require further elaboration, research or expansion) which have to be clarified/corrective action done prior to final VVB's conclusions on the project design, monitoring plan and management system. In order to ensure transparency, a validation protocol is completed for the project. The protocol shows in transparent manner criteria (requirements), means of validation and resulting statements on verification of project against identified criteria.

The validation protocol serves the following purposes:

- It organizes in a table form, details and clarifies the requirements, a GS4GG project is expected tomeet GS4GG requirements/B01/B02/.
- It ensures a transparent validation process where the VVB will document how a particular requirement has been verified.
- It ensures that the issues are accurately identified, formulated, discussed and concluded in the Design Certification report.

The validation protocol consists of a table i.e., tables of findings and preliminary and final opinion of the VVB on every particular issue raised during the validation process.

The findings of validation process are summarized in the tables below:

CAR/ CL/ FAR ID	xx	**Section no.**		**Date:** DD/MM/YYYY
Description of CAR/ CL/ FAR				
PD response				**Date:** DD/MM/YYYY
Documentation provided by the PD				

In Table 1, FAR shall reflect the forward actions initiated by the validation team if the project design, monitoring, reporting or any other aspect require attention and/or adjustment for the verification period.

Findings during the validation can be interpreted as a non-compliance with GS criteria or a risk to thecompliance.

Corrective action requests (CARs) are raised, in case:

(a) Non-conformities with the monitoring plan or methodology are found in monitoring and reporting and have not been sufficiently documented by the project participants, or if the evidence provided to prove conformity is insufficient.
(b) Modifications to the implementation, operation and monitoring of the registered project has not been sufficiently documented by the project participants.
(c) Mistakes have been made in applying assumptions, data or calculations of emission reductions which will impair the estimate of emission reductions.
(d) Issues identified in a FAR during validation/previous verification(s) that are not been resolved by the project participant(s) to be verified during current verification.

Requests for clarification (CLs) are raised if information is insufficient or not clear enough to determine whether the applicable GS4GG requirements have been met.

A forward action request (FAR) is raised during validation to highlight issues related to project implementation/monitoring that require review during the subsequent verification of the project. FARs shall not relate to the GS4GG requirements for issuance.

Areas of validation of compliance	No. of CL	No. of CAR	No. of FAR
General description of Project	04	02	--
Technical requirements a. Key project information b. GIS vector layer c. Uncertainty of LUF parameters d. Requirements for LUF smallholder & microscale project e. Spatial forest/non-forest assessment f. LUF input & grievance mechanism	04	04	
Legal ownership of products generated by the Project and legalrights to alter use of resources required to service the project		--	--
Location of Project			
Technologies and/or measures	01		
Scale of the Project	--		
Funding sources of Project	--		
Application of approved gold standard Methodology (ies) reference of approved methodology (ies) a. Applicability of methodology (ies) b. Project boundary	04		
Establishment and description of baseline scenario	01		
Demonstration of additionality	--		

Data and parameters fixed ex ante	01		
Ex ante estimation of SDG impact	01		
Monitoring plan a. Data and parameters to be monitored b. Sampling plan c. Other elements of monitoring plan	--		
Duration and crediting period			
Safeguarding principles and gender sensitive assessment including assessment of appendix 1 of GS Project PDD	01		
Stakeholder consultation a. Local stakeholder consultation b. Stakeholder feedback round c. Continuous input / grievance mechanism	--		
LUF Additional Information			
LUF Risk and Capacities	01		
Total	18	06	

3.5. Internal quality control

The final validation report has passed a technical review before being submitted to the project participant and SustainCert. A technical reviewer qualified in accordance with CCIPL's qualification scheme for GS4GG validation and verification performed the technical review.

4. Validation findings

The findings of the assessment are described in the following sections. The validation criteria (requirements), the means of assessment are documented in detail below.

4.1 General description of Project

Means of validation	DR, OSV, I
Findings	CL01, CL02, CL03, CL12 and CAR01 & CAR02 have been raised and satisfactorily closed.
Conclusion	Based on the review of the GS PDD/01/ and on-site inspection/interviews/i-xiv/, the proposed project *"N'situ Pelende by Colruyt Group*" is located in province of Kwango/25/ of Democratic Republic of the Congo with a duration of 50 years starting from 23/12/2021/03/ to 22/12/2071. The estimated GHG removals for the proposed project activity are 3,289,369 tCO_2e over the crediting period of 50 years, with an annual average of 64,497 tCO_2e with removal rate of 10.12 tCO_2e/ha/yr/02/ (Before deducting -20% buffer). The on-site visit of proposed project activity has been conducted in month of March, which is start of dry season and with decreasing rainfalls in the country. As part of the project activities, communities from groupments- Swa Kasongo, Swa Kahumba, and Kobo were engaged for employment and to oversee day-to-day project operations. During the on-site inspections/interviews/i-xiv/, VVB has visited villages within these groupments, and conducted interviews/i-xiv/

	with chefe de village, relevant individuals from both the groupments and the PD to confirm baseline scenario and project implementation. During the site visit, VVB inspected a nursery established by PD in the groupment Swa Kasongo for growing saplings. It was revealed during on-site inspection/ interviews with team leader (nursery head) and PD[/i-xiv] that the seeds used in the nursery were purchased from local village communities. Furthermore, it has been confirmed that the PD has developed or will develop additional economic benefit activities for local communities, such as apiculture and Cassava cultivation on land provided by PD outside the project boundary. VVB has also visited and eye-witnessed a few of these apiculture and Cassava cultivation activities. This aspect serves as an alternative source of financial benefit for these communities, demonstrating the positive impact of the project's implementation. In line with GS4GG PDD[/01/] and confirmed through on-site inspection/interviews[/i-xiv/] the main objectives of proposed activities are: • Aim to increase in CO2 sequestration and biodiversity. • Collaboration with the local communities. • Development of local carbon activities. • Providing infrastructure for the local communities. Prior to project activities implementation, the Project Developer (PD) acquired land concessions[/05/] from the state in the groupments- Swa Kasongo, Swa Kahumba, and Kobo in accordance with the laws of the Democratic Republic of the Congo (DRC) and the same land documents[/05/] has been verified by the VVB during on-site inspection/interviews. [/05/]and found to be appropriate. (Refer section 4.4 assessment) The proposed project comprises of total area of 7109.8 hectares[/25/] of which 10% are set aside as conservation area which is 716 hectares and of the remaining eligible area i.e., 6,376.2hectares[/25/], has been/will be planted with mixed native and exotic trees for the conservation objectives. Furthermore, VVB confirms that the proposed afforestation activities were carried out on 6,376.2 hectares are only eligible for the generation of carbon credits and the 716 hectares set a side only for the purpose of conservation and there will be no claim of carbon credits over it. (Refer assessment to section 4.2(b) of this report). During on-site inspection interviews[/i-xiv/] VVB was informed that the project area had been prone to frequent man-made fires prior to the implementation of proposed activities, resulting in land degradation. PD has effectively engaged stakeholders to raise awareness of the ongoing activities and their benefits. Educational initiatives have also been initiated to educate individuals about controlled fire practices. Furthermore, VVB confirms that PD has secured all necessary land use rights for the proposed activities through legal land concessions with state[/05/], with no public access permitted without prior consent. This has been further checked and confirmed by interviewing brigadier (guard) and PD.

Based on the review of GS4GG PDD[/01/], and on-site inspection/interviews[/i-xiv/], VVB verifies that the project involves planting 32 different exotic and native species, including a combination of fast-growing plantation species and slow-growing forest trees.

Selected tree species for proposed project activities:

Sl no	Species selected		
No.	**Scientific name**	**Origin**	**Forest layer**
1	*Acacia hybrid (mangium x auriculiformis)*	Exotic	Under canopy
2	*Acacia mangium*	Exotic	Under canopy
3	*Albizia chinensis*	Exotic	Under canopy
4	*Albizia lebbeck*	Exotic	Main canopy
5	*Artocarpus heterophyllus*	Exotic	Under canopy
6	*Canarium schweinfurthii*	Endemic	Emergent
7	*Cassia floribunda*	Exotic	Shrub
8	*Cassia siamea*	Exotic	Under canopy
9	*Croton sylvaticus*	*Endemic*	*Under Canopy*
10	*Dacryodes edulis*	Endemic	Under canopy
11	*Detarium microcarpum*	*Exotic*	*Shrub*
12	*Dichrostachys cinerea*	Endemic	Shrub
13	*Entandrophragma cylindricum*	Endemic	*Emergent*
14	*Erythrophleum suaveolens*	Endemic	Under canopy
15	*Harungana madagascariensis*	Endemic	Shrub
16	*Hevea braziliensis*	Exotic	Under canopy
17	*Leucaena leucocephala*	Exotic	Shrub
18	*Macaranga spinosa*	Endemic	*Shrub*
19	*Maesopsis eminii*	Endemic	Main canopy
20	*Milicia excelza*	Endemic	Main canopy
21	*Millettia laurentii*	Endemic	Main canopy
22	*Musanga cecropioides*	Endemic	*Shrub*
23	*Pentaclethra eetveldeana*	Endemic	Under canopy
24	*Pentaclethra macrophila*	Endemic	Main canopy
25	*Piptadeniastrum africanum*	Endemic	Emergent
26	*Pterocarpus soyauxii*	*Endemic*	*Main Canopy*
27	*Ricinodendron heudelotii*	Endemic	Main canopy
28	*Schizolobium parahyba*	Exotic	Main canopy
29	*Scorodophloeus zenkeri*	Endemic	Main canopy
30	*Terminalia superba*	Endemic	Emergent
31	*Treculia Africana*	Endemic	Emergent
32	*Uapaca heudelotii*	Endemic	Shrub

As assessed above and in line with the PDD[/01/], 10 of the 32 tree species that have been planted or will be planted in the proposed project area are exotic (non-native). The PD has provided evidence[/46/] that these exotic species have adapted to the conditions of the host country and do not have an invasive effect

	on the ecosystem. This has been further confirmed through own research[/B07/] and on-site inspections/interviews by VVB[/i-xiv/]. Additionally, the VVB confirms that these exotic species are adapted to the conditions of the host country and do not meet the definition of *invasive species* as specified in the GS4GG Land Use and Forestry (LUF) Activity Requirement v1.2.1[/B01/]. Overall, in the opinion VVB, that the project description stated in the PDD[/01/] is in compliance with section 6.1.1 (a) of GS4GG Principles & Requirements[/B02/] and section 4.1.2 (a) of GS4GG LUF Activity Requirements[/B01/].

4.2. Technical requirements

a. Key project information

Means of validation	DR, OSV, I
Findings	CL04, CL05, CL11 & CL13 and CAR03, CAR05 & CAR06 have been raised and closed satisfactorily by VVB.
Conclusion	VVB, based on the desk review[/01/], confirms that all the information stated on cover page of GS PDD[/01/], including Key Project Information is in line with the GS4GG template and section 6.1.1 (a) of GS4GG Principles & Requirements[/B02/] and section 4.1.2 (a) of GS4GG LUF Activity Requirements[/B01/].

b. GIS vector layer

Means of validation	DR, OSV, I
Findings	CAR04 has been raised and satisfactorily closed.
Conclusion	In line with GS4GG PDD[/01/], based on the review of GIS shapefiles[/25/], the spatial forest/ non-forest analysis[/25/] was conducted on the total project area of 7109.8ha, The analysis concludes 7,023.2 ha as eligible land and 86.6 ha as non-eligible land with 716 ha, set aside as conservation area. The 716-ha conservation area includes 655.9 ha from the eligible area, 60.6 ha from the non-eligible area, and remaining 26 ha is considered as non-eligible for both conservation and planting due to cloud cover and conservatively excluded as per the requirements of section 1.1.6 of Annex-C of GS4GG LUF Activity Requirements v1.2.1[/B01/]. Based on this analysis, the VVB has determined that 6,367 ha is the eligible planting area for implementing the proposed activities and meets the definition of a *planting area* as specified in the GS4GG LUF Activity Requirements v1.2.1[/B01/]. Overall, the VVB considers that the PD has identified the conservation area in compliance with section 3.1.5 of GS4GG LUF Activity Requirements v1.2.1[/B01/]. VVB confirms that the eligible area does not include wetlands and appropriately demonstrates the absence of any forest land, 10 years prior to the project activity start date[/25/] and in line with applied methodology requirements. VVB, based on desk review including the assessment of GIS shapefiles[/25/] (of project area, eligible area and conservation area), confirms that the shapefiles and project boundary has been appropriately defined and are consistent with the information provided in the GS PDD[/01/] and in compliance with Annex C of GS4GG LUF Activity Requirements v1.2.1[/B01/].

c. Uncertainty of LUF parameters

Means of validation	DR, OSV, I
Findings	CL 14 has been raised and satisfactorily closed.
Conclusion	VVB has reviewed the carbon fixation calculation spread sheet/02/ and supporting literature/26/27/28/ has conducted the reliability estimates for species in accordance with Approach 2 of ANNEX A of the GS4GG LUF Activity Requirements v1.2.1/B01/. Baseline tree measurements such as height, DBH are taken from the field measurements measuring diameter and height of the trees in the project area in plots of 20x20 and for the calculation of the baseline AGB, the allometric equation is adopted from the widely accepted country specific study by Chave. j et al (2005 and 2014)/27/, study which is developed by destructive research method measuring tree biomass in the tropics of Democratic republic of Congo with an allometric model accuracy of 90%, therefore the same accepted and deems to be valid by VVB. For the ex-ante estimation of tree biomass, the Chapman-Richards model a widely used and cited tree growth model was applied. Parameters such as Ymax, k, and p were applied according to this model. Specifically, the YMAX value, based on data from Xu et al. (2017), was set at 113 tC, which is considered conservative. The parameters k and p were set to 0.07 and 3, respectively. These values have been validated through a review of literature that pertains to tropical forest conditions in the host country. The above parameters resulted in Above-Ground Carbon (AGC) estimates, which were then converted to carbon stock using a CO2e fraction factor of 44/12. Furthermore, root-to-shoot ratio values of 0.235 and 0.205 for tropical tree species were used, following the widely accepted study by Mokany et al., 2005/26/. Specifically, for above-ground biomass carbon (AGBC) greater than 62.5 tC/ha, the below-ground biomass (BGB) is estimated as BGBest = 0.235 * AGB. For AGBC less than or equal to 62.5 tC/ha, the estimation used is BGBest = 0.205 * AGB then this factor was multiplied with AGB to calculate the total below ground biomass (BGB). The VVB reviewed and verified the ex-ante carbon fixation sheets, confirming the accuracy of the calculations. Based on the review of the ex-ante CO2 fixation sheets, the VVB confirms that the estimated removal rate for the proposed activity is 10.12 tCO2e/ha/yr. In the opinion of the VVB, this estimate is conservative and aligns with the range reported in a study by the Organisation for Economic Co-operation and Development (OECD) on afforestation activities in tropical Africa (pdf (oecd.org)17/En/pdf)) which is 10tCO2e/ha/yr. Additionally, this estimate is considered conservative compared to a GS4GG certified project in the Democratic Republic of the Congo https://platform.sustain-cert.com/public-luf-project/2804, which reported a removal rate of 73.33 tCO2e/ha/yr. All other parameters for the carbon calculation such as area (as verified by reviewing the forest/non forest analysis/25/ and other legal contracts/05/B06/,

	default values[/26/] have been checked by the VVB and found to be correct. Based on the assessment above, VVB confirms that the PD has appropriately demonstrated uncertainty analysis and the CO2 estimates are conservative and in compliance with Approach-2 of ANNEX A of the GS4GG LUF Activity Requirements v1.2.1[/B01/].

d. Requirements for LUF smallholder & microscale project

Means of validation	DR, OSV, I
Findings	--
Conclusion	Based on the review of the PDD[/01/], GIS files[/25/] and ER sheets[//02/] VVB confirms that this section is not applicable, since the project is large scale as per the GS4GG LUF Activity Requirements v1.2.1[/B01/]

e. Spatial Forest/Non-Forest Assessment

Means of validation	DR, OSV, I
Findings	CL 13 & CAR 04 has been raised and satisfactorily closed.
Conclusion	VVB, based on the review of Forest/ Non-Forest Analysis[/25/], confirms that PD has appropriately conducted a forest/non-forest assessment to determine eligible areas to issue GSVERs in compliance with Annex C of the GS4GG Land Use & Forests Activity Requirements, version 1.2.1[/B01/]. VVB confirms that the remote sensing scenes have been dated: i at least 10 years before the start date of the project, and ii at project start date Furthermore, the forest/non-forest assessment[/25/] has been conducted for the entire project area. In compliance with Annex C of the GS4GG Land Use & Forests Activity Requirements, version 1.2.1[/B01/], VVB confirms that the following information/data have been reported in the PDD[/01/]: **i. Type of sensor used, spatial resolution, path/row, date of the scenes used** All the Landsat products for 2010 and 2021 were obtained from Landsat 5 and Landsat 8 satellites (QA Cloud & QA Pixel) (30m resolution) and training data for the image classification was digitised using high-resolution satellite imagery. **ii. Description of the method and software used in the pre-processing and classification process** VVB, as verified through the Forest and non-analysis report[/25/] confirms that the NDVI (Normalised difference vegetation index) was used for satellite images, and specific thresholds were iteratively determined for each image to distinguish between forested and non-forested areas. Using these NDVI values and thresholds, a raster image was generated where pixels were assigned values of 0 for non-forest and 1 or 2 for forested regions. Subsequently, leveraging this raster alongside the project area shapefile, a new shapefile delineating eligible and non-eligible areas was crafted. NDVI values were computed for satellite images, and specific thresholds were iteratively determined for each image (0.365 in Figure 2 of the PDD for 2021

and 0.298 in Figure 3 of PDD for 2010) to distinguish between forested and non-forested areas. Using these NDVI values and thresholds, a raster was generated where pixels were assigned values of 0 for non-forest and 1 or 2 for forested regions. Subsequently, leveraging this raster alongside the project area shapefile, a new shapefile delineating eligible and non-eligible areas was crafted.

iii. Description of how issues with areas under clouds/shadows were dealt with:

In the case of scenes that date 10 years before the project start date, the Project Developer should conservatively consider all areas under shadows/clouds as not eligible

In the case of scenes at project start date, if the start date is more than 1 year before the start of Preliminary Review, then the Project Developer should conservatively consider all areas under shadows/clouds as not eligible. In such cases, a Project Developer could prove eligibility by conducting a ground- truthing exercise to verify the land-cover for areas under clouds/shadows. The Project Developer shall report on how the ground-truthing was conducted, and which areas were visited (only visited areas can be included in such analysis; sampling is not allowed)

In line with the above requirements, as verified through the Forest and non-analysis report[/25/] Cloud-covered areas in the project in 2010 and 2021 were omitted from the eligible area by PD. For 2010 (Landsat 5), pixels with QA_CLOUD value 2 were considered as clouds. For 2021 (Landsat 8), pixels with QA_PIXEL value 22280 were considered as clouds.

- **Clearly map all polygons covered by shadows/clouds and present a table with the areas of each polygon and the total area in hectares**

In line with the above GS requirements, the PDD section 2.1.1 provides map shows all polygons covered by shadows/clouds and a table with the areas of each polygon and the total area in hectares as provided below and further cloud-covered areas of the project in 2010 and 2021 were omitted from the eligible area by PDD:

Modelling unit	Total area (eligible + non-elgibile)	Cloud coverage
SwaKasongo_SwaYamfu	3609.4 ha	22.87 ha (0.63%)
SwaKahumba_Kobo	3500.4 ha	2.39 ha (0.07%)

Develop a combined mask for the areas under clouds/shadows in both scenes and apply it to the scenes proceeding to the classification

As assessed above and based on the review of the forest and non-forest analysis report[/25/] VVB confirms that to address the cloud problem the quality assessment band layer present in QA_CLOUD is used for Landsat 5 in 2010 and QA_PIXEL for Landsat 8 in 2021 data products.

iv. Include a map of the classified scenes (10 years before and at project start date) with the forest/non-forest classes before and after the application of the selected forest definition as MPU (resampling).

VVB, based on the review of forest/non-forest assessment[/25/], confirms that the map of the classified scene 10 years prior to the project start date Figure 18 of the report[/25/] demonstrates compliance with paragraph iv of the requirements, the results of mapped forest and non-forest areas for 2010 and 2021 at original spatial resolution of Landsat 5 and Landsat 7 data.

Furthermore, the mapped areas forest and non-forest areas have been resampled at minimum mapping unit level of 0.05 hectare to report eligibility areas using the cumulative forest for 2010 and 2021. The forest and non-forest vegetation cover maps for 2010 and 2021 are represented in the Forest/Non-Forest report/25/ and PDD/01/.

v. Classify the scenes with the original spatial resolution. Then, resample the classification products for each scene. The final non-eligible areas within the project area will be the cumulative forest areas from both classified scenes. Generate a shapefile of the eligible area.

VVB, based on the review of forest/non-forest assessment/25/, confirms that the Figure 18 & Figure 19 of the same report/25/ demonstrates scenes with the original spatial resolution and eligible areas in compliance with above paragraph requirements.

vi. Include a description of how the accuracy assessment was conducted (e.g. how the assessment points were selected and how the confusion matrix was prepared and interpreted). The accuracy must be calculated and reported on class-by-class and for the overall classification. The accuracy assessment of the classification must be conducted using ground-truth data (surveys) or remote sensing imagery of higher resolution of that used for the classification. The minimum overall accuracy for each class should be 90%.

Based on the review of GIS files provided by PD, VVB confirms that the information required in section 1.1.6 & 1.1.7 of Annex C of the GS LUF activity requirements and detailed information on confusion matrix, ground truthing and accuracy assessment points has been included appropriately in the forestry and non-forestry report/25/, the overall minimum accuracy rate (overall minimum accuracy rate over 95%) was confirmed. The shapefiles used for the accuracy assessment was provided as per was required in compliance with the GS LUF activity requirements/B01/ satisfactory.

vii. Provide a shapefile with the points used for the accuracy assessment.

Based on the review of GIS files/25/ provided by PD, VVB confirms that shapefile with the points used for the accuracy assessment is provided appropriately as per the above requirements.

viii. A final table indicating the total area (in hectares) of the project area, modelling units (planting area), and the 10% set aside for the conservation area.

Based on the review of PDD/01/ and Forest and non-forest analysis/25/ VVB confirms that the PD has kept 716 ha of area for conservation activities in compliance with section 3.1.5 of GS4GG LUF Activity Requirements v1.2.1/B01/ and a table indicating the total area (in hectares) of the project area, modelling units (planting area), and the 10% set aside for the conservation area is provided appropriately as follows:

Project area	7109.8 ha
Eligible area	7023.2 ha
Non-eligible area	86.6 ha
Conservation area (eligible+non-eligible)	716.5 ha
MU_SwaKasongo_SwaYamfu (eligible)	3530.3 ha
MU_SwaKahumba_Kobo (eligible)	3492.9 ha

ix. The use of already classified remote sensing products coming from official sources (national/government institutions) is allowed. If

	this data is used, then the Project Developer shall explain the type of remote sensing imagery used in that analysis, the method, and the accuracy as reported by the original source. Not applicable. x. **When using publicly available remote sensing products that show tree cover instead of forest cover (i.e. Global Forest Watch), then a Project Developer should prove that the selected tree cover percentage is representative of the DNA or national host or FAO forest definition, as necessary.** Not applicable. **References used in the Forest/ Non-Forest Analysis[/25/]** Jean-Francois Pekel, Andrew Cottam, Noel Gorelick, Alan S. Belward, High-resolution mapping of global surface water and its long-term changes. Nature 540, 418-422 (2016). (doi:10.1038/nature20584)

f. LUF input & grievance mechanism

Means of validation	DR, OSV, I
Findings	-
Conclusion	Through on-site inspection/interviews[/i-xiv/] and on review of GS4GG stakeholder consultation report[/20/] VVB, confirms that the grievances of each groupment are documented[/22/] weekly by brigadiers at designated locations within in the groupments. Additionally, brigadiers will conduct awareness campaigns in the villages every six months to gather any grievances. The grievances collected by brigadiers are then reported to the complaints manager at the PD office, and they will work in collaboration with brigadiers and chefe de village to address these grievances. This information has been verified through evidence review[/20/22/] and confirmed by VVB. VVB confirms that any stakeholder can directly reach out to the PD office for any inquiries. These inquiries are recorded and resolved by the PD in the presence of the chefe de village and other PD personnel. Additionally, grievances can be recorded and expressed through the Grievance Expression Process book on a quarterly and biannual basis. This has been confirmed by reviewing the Grievance Expression Process logbook during on-site inspections and interviews[/i-xiv/]. Based on the above assessment, VVB confirms that the LUF input & grievance mechanism have been appropriately demonstrated in line with ANNEX D of GS4GG LUF Activity requirements v1.2.1[/B01/] and Section 4.1.34 of GS4GG Principles and Requirements v1.2[/B02/]

4.3 Eligibility of the Project

Means of validation	DR, OSV, I
Findings	CL 02 and CL05 has been raised and successfully closed.
Conclusion	VVB based on document review[/03/05/25/33/34/35/] and on-site inspection/interviews[/i-xiv/], confirms that the PD has appropriately demonstrated eligibility of Project activity. The detailed assessment of eligibility of project is in line with the requirement of section A.1.1 of GS4GG PDD[/01/] is as follows:

As per section 3.1.1 of GS4GG Principles & Requirements/B02/	
Eligibility Criteria	**Compliance**
Types of Projects: Eligible projects shall include physical action/implementation on the ground. Pre-identified eligible project types are identified in the Eligibility Principles and Requirements section.	Based on the desk review/01/25/ and on-site inspection/interviews/i-xiv/, VVB confirms that the project is an Afforestation/ Reforestation project whose plantations activities are implemented on ground. The project includes plantations of 32 different exotic and native species as part of afforestation and improve the biodiversity and community livelihood of the project region/01/25/.
Location of Project: Projects will be located in any part of the world	Based on the on-site inspection/interviews/i-xiv/, cross check of project area shapefiles/25/ and desk review/01/, VVB confirms that the project is located in Kwango province of Democratic Republic of Congo (DRC).
Project Area, Project Boundary and Scale: The Project Area and Project Boundary shall be defined.Projects may be developed at any scale although certain rules,requirements and limitations may apply under specific Activity Requirements, ImpactQuantification Methodologies and Products Requirements. In order to avoid double countingthe Project shall not be includedin any other voluntary or compliance standards programme unless approved by Gold Standard (for example through dual certification). Also, if the Project Area overlaps with that of another Gold Standard or other voluntary or compliance standard programme of a similar nature, the Project shall demonstrate that there is no double counting of impacts at design and performance certification (for example use of similar technology or practicesthrough which the potential arises for double counting or misestimation of impacts amongst projects)	Based on the on-site inspection/interviews/i-xiv/, review of the shapefiles/25/ and desk review/01/02/25/, VVB confirms that the Project Area/25/ is 7109.8ha and eligible area of 7023.2 ha and the Project Boundary have been appropriately defined and there are no overlaps with any other projects. Furthermore, VVB, based on the review of the declaration/42/ and checking the public website of other emission trading programs (VCS/Social Carbon /Plan Vivo)/B05/, confirms that the project has not been registered under any other GHG programs and is not seeking registration under any other GHG programs.
Host Country Requirements: Projects shall be in compliancewith	Based on the on-site inspection/interviews/i-xiv/ and desk

	applicable Host Country's legal, environmental, ecologicaland social regulations.	review of host country laws/regulations/01/02/33/34/37/, VVB confirms project is in compliance with applicable host Country´s regulations/33/34/37/. Furthermore, VVB confirms that Congolese legislation/33/ permits forestry and agricultural concessionaires to negotiate with local communities for developing basic socio-economic infrastructure alongside their projects. According to the DRC's framework law on the environment/34/, any development project, particularly in agriculture and forestry, that might impact the environment must undergo a prior environmental and social impact assessment (Art. 21, Law No. 11/009 of 9 July 2011)/33/. This requirement led to the environmental and social impact assessment of the N'situ Pelende Project. The same has been confirmed by reviewing document/35/ by the VVB.
	Contact details As part of the Project Documentation the Project Developer shall provide (i) name and (ii) contact details of all Project Participants; and in case of an organisation (iii) the legal registration details and (iv) documentation by the governing jurisdiction that proves that the entity is in good standing(defined as being a legal or other appropriate entity registered in or allowed to operate within the required jurisdiction and with no evidence of insolvency or legal/criminal notices placedagainst it or any of its Directors). Gold Standard retains the right (at its own discretion) to refuse use of the Standard where reputational concerns are highlighted.	Based on the on-site inspection/ interviews/i-xiv/ anddesk review/01/37/02/, VVB confirms that the PD has provided the name, contact details and legal registration/37/ details in section A1.1 of the GS PDD/01/ is valid and appropriate in line with GS4GG requirements/B01/. Furthermore, VVB, during the on-site inspection/interviews/i-xiv/, has reviewed the DRC govt certificates/37/ which provides the contact details in line with GS4GG Requirements/B01/B02/. CL02 has been raised on the same and satisfactorily closed by the VVB.
	Legal Ownership: Full and uncontested legalownership of any Products that are generated	Based on the on-site inspection/interviews/i-xiv/ and desk review/01/05/, VVB confirms that the PD

	under Gold Standard Certification, (for example carbon credits) shall be demonstrated. Where such ownership is transferred from project beneficiaries this must be demonstrated transparently and with full, prior and informed consent (FPIC). Note that for certain Project types there is a requirement for full and uncontested legal land title/tenure to be demonstrated. These are contained within specific Activity or ProductRequirements. All projects shall immediately report to Gold Standard any land title/tenure disputes arising.	has provided the legal ownership details in section A.1.2 of the PDD/01/ are deems to be valid and appropriate, Furthermore, VVB has verified the land concession documents/05/ confirmed that the concessions were obtained by PD prior to implementation of proposed activities. It was also verified that the lands are owned by the state. Through on-site inspection/interviews/i-xiv/ with chefe de village and PD, VVB confirms that article 207 in DRC constitution/43/ recognizes customary rights *"customary law (droit coutumier) recognizes the role of the traditional chiefs (chefs coutumiers)".* "*On behalf of the state, the chef coutumier can assign land use rights to a physical person or a private or public legal entities. If this person is a Congolese the land use right can be perpetual, unlimited in time. Often, such contracts are made informally without registration and are hence difficult to trace back. If this is a non-Congolese person or a legal entity, land use rights are given in concession, which means they assigned for a limited period of 25 years that can be renewed endlessly."* In accordance with the above requirement the PD has secured land concessions/05/ with the state for the implementation of proposed activities aimed at climate benefits for a period of 25 years, with the option for extension for an additional 25 years. This has been further verified by reviewing land concessions/06/ during on-site inspection/interviews/i-xiv/. According to Article 8 of the DRC Forestry Code of 2002/32/, *"natural or planted forests included in lands regularly granted under the land legislation belong to their*

		concessionaire." Based on this regulation, VVB confirms that the PD has the right to implement the proposed activity and holds full uncontested ownership of generated forest products (VERs) through this activity and in line with the section 2.1.9 & 2.1.10 of GS4GG LUF Activity Requirements[/B01/B02].
	Other Rights: As well as legal title and ownership, the Project Developer shall also demonstrate where required uncontested legal rights and/or permissions concerning changes in use of other resources required to service the Project (for example, accessrights, water rights etc.). Any known disputes or contested rights must be declared immediately to Gold Standard bythe Project Developer and resolved prior to further project implementation in affected areas.	Please refer the above legal ownership assessment. Further based on the inspection/interviews[/i-xiv/] and review of the project documents[/01-43/] VVB confirms that project use river water from forest galleries, in adherence to local customs of Article 36 of the 2002 Forestry Code[/32/]. No disputes found over land use rights.
	Official Development Assistance (ODA) Declaration: All Project Developers applying for project activities located in acountry named by the OECD Development Assistance Committee's ODA recipient list and seeking Gold Standard Certification for carbon credits shall declare the Official Development Assistance (ODA) support. The Project Developer shall follow the GHG EmissionsReduction & Sequestration Product Requirements and submit the declaration at the time of Design Certification.	On-site inspections and interviews[/i-xiv/] have confirmed that the proposed activities are self-funded. The project is financed by the Belgium-based company Colruyt Group, and N'situ Pelende sasu executes the project on behalf of Colruyt Group. Based on the review of the ODA[/10/] declaration form, VVB confirms that Colruyt Group has officially declared and submitted the ODA declaration form in compliance with section 6.1.2 of GS4GG Emissions Reductions & Sequestration Product Requirements v2.2.
	As per section 2 of GS4GG Land Use & Forests Requirements[/B01/]	
	Eligible project types: Eligible project types are Afforestation & Reforestation Projects (A/R).	Based on the on-site inspection/ interviews[/i-xiv/] and desk review[/01/09/15/18/], VVB confirms that the project includes plantation of mixed native and exotic trees on lands previously held as degraded savanna grasslands and project is an Afforestation & Reforestation Project (A/R).
	No Deforestation:	Based on the on-site

	The eligible area shall not meet the definition of forest 10 years before project start date and at project start date.	inspection/interviews[/i-xiv/] forest non forest analysis shapefiles[/25/] and desk review[/01/25/], VVB confirms that the eligibility of the project area (non-eligible area, planting area, conservation area) has been demonstrated by a remote forest/non-forest spatial assessment[/25/] including the satellite images at the Project level. Hence, VVB confirms that eligible area does not meet the definition of forest prior to 10 years of project start date. Further, VVB raised CAR04 on the same and closed satisfactorily.
	Eligible A/R projects: • Can include planting trees. • Can include single- species plantations. • Can apply all silvicultural systems, e.g. conservation forests (no use of timber); forests with selective harvesting;rotation forestry All projects can include agriculture (agroforestry) or pasture (silvi-pasture) activities	Based on the on-site inspection/interviews[/i-xiv/] and desk review[/01/18/], VVB confirms that the project activity includes plantation of mixed native and exotic tree species to restore the biodiversity of degraded savannah grasslands in the project region. Furthermore, the proposed activity designed for the conservation objectives with no use of timber or harvesting of timber in compliance with section 2.1.2 (a.i) applied methodology requirements[/B03/]. This was further confirmed by reviewing projects management plan[/18/].
	FSC Dual Certification	Not applicable
	Secured Titles: For all project participants, the following information and evidence shall be provided: (a) Name and contact details Each entity's legal registration number and documentation by the governing	VVB, based on the review of the evidence[/01/05/], confirms that PD has appropriately demonstrated the secured legal rights through land concessions[/05/]. Moreover, according to DRC forestry code of 2002, the natural or planted forests included in lands regularly granted under the land legislation belong to their concessionaire. Hence, VVB affirms that the full land rights for project implementation and CO2 user rights or carbon sequestration rights generated (VERs) by the project held with PD. This has been further reviewed and confirmed through on-site inspection/interviews[/i- xiv/].

		Furthermore, VVB confirms that PD has provided contact details and legal registration details in Appendix-2 of GS PDD[/01/] and further detailed assessment on the land titles[/05/] are provided in the above sections (legal ownership section).
	Safeguarding Principles & Requirements: The Project Developer shall conduct the SafeguardingPrinciples Assessment following Safeguarding Principles &Requirements and Risks & Capacities Guideline assessed for the Project Area, taking into account likely issues in the context of the Project Region.	Refer to Assessment of Safeguarding Principles[/01/] in Appendix 1 of this report.
	Protected Areas: A minimum of 10% of the total Project Area shall be identified and used to protect or enhance the biological diversity following High Conservation Value (HCV) approach.	Based on the on-site inspection/interviews[/i- xiv/] project area shapefiles[/25/] and desk review[/01/25/], VVB confirms that the designated protected areas of 716.5 ha (10 % of the total project area of 7109.8ha), are located within the project area and are managed bythe project developer. Eligible areas are to be planted with mix of native & exotic tree species with the purpose of conservation forests. Furthermore, VVB has verified the conservation area and eligible area by reviewing GPS coordinates and shapefiles[/25/] and in compliance with section 3.1.5 of GS4GG LUF Activity Requirements v1.2.1[/B01/]. (Refer VVB assessment to section 4.2(b) of this report).
	Buffer zones for water bodies: The Project Developer shall maintain a buffer zone of 15 meters for water bodies on both sides of any permanent or temporary water bodies such as lakes, streams,rivers, wetlands, etc., Irrigationchannels are excluded from thisrequirement.	Based on the on-site inspection/interviews[/i-xiv/] and desk review of shapefiles[/01/25/], VVB confirms that buffer zone of 15 meters have beenmaintained for water bodies which includes all existing native trees, no usage of fertilizer and pesticides, no usage of heavy machinery and no cropping or logging activities are not allowed in this areas and PD confirms that in case trees

		are being planted in these areas, the plants will be native tree species. This has been further reviewed and checked by VVB during the onsite inspections/interviews/i- xiv/.
	Stakeholder inclusivity: The Stakeholder Consultation shall be conducted prior to the projectstart date. The Project Developer shall refer to Stakeholder Consultation Engagement Requirements for further details.	Based on the on-site inspection interview/i-xiv/ and desk review/01/20/, VVB confirms that the project and stakeholder inclusivity comply with the requirement of section 3.1 of GS4GG Stakeholder Consultation and Engagement Requirements (version 2.1)/B04/. The stakeholder consultation (1st meeting) was conducted on 19/06/2021 (regular project cycle) before to the project start date 23/12/2021 and in line with section 3.2.1 of GS4GG Stakeholder Consultation and Engagement Requirements (version 2.1)/B04/. The same has been confirmed by reviewing the LSC report/20/. The supporting finding CL05 has been raised on the same and closed satisfactorily closed.
	Crediting period: The crediting period shall be a minimum of 30 years and maximum 50 years. The crediting period starts either with the Project Start Date or three years prior to the date of Project Design Certification, whichever occurs later	Based on the review of section C.2 of the GS PDD/01/, start date evidence/03/ and on-site inspection/interviews/i- xiv/, VVB confirms that the crediting period of the project is of 50 years i.e., 23/12/2021 to 22/12/2071 and in compliance with section 3.1.9 of GS4GG LUF Activity Requirements v1.2.1/B01/. Further, the CL04,05 and CL11 are raised in relation to the project start date and satisfactorily closed based review of evidence/03/.
	Additionality: Any Project shall demonstrate additionality as per the Principles & Requirements, or GHG Emissions Reduction and Sequestration Product Requirements, as applicable.	Refer assessment of section 4.11 of this report.

4.4. Legal ownership of products generated by the Project and legal rights to alter use of resources required to service the project

Means of validation	DR, OSV, I
Findings	CAR03 has been raised and closed satisfactorily.
Conclusion	In compliance with section 3.1.1 (f) of the GS4GG Principles and Requirements v1.2/B02/ and section 2.1.9 of the GS4GG LUF Principles & Requirements v1.2.1/B01/, PD has appropriately defined section A.1.2 of the GS PDD/01/. In line with the template instructions, VVB has assessed the section as follows: i. <u>Full and uncontested legal ownership of all Products that are generated under Gold Standard Certification (Where such ownership is transferred from project beneficiaries this must be demonstrated transparently and be discussed during local stakeholder consultations)</u> VVB, based on the review of the evidence/01/05/, confirms that PD has appropriately demonstrated the ownership of all products generated (VERs) from proposed project activities through land concessions. Moreover, according to DRC forestry code of 2002, *the natural or planted forests included in lands regularly granted under the land legislation belong to their concessionaire*. Hence, VVB affirms that theCO2 user rights or carbon sequestration rights generated by the project held with PD. This has been further reviewed and confirmed through on-site inspection/interviews/i- xiv/. For further assessment of the ownership rights, please refer section 4.3 of this report. ii. <u>Legal rights concerning changes in use of resources required to service the Project (e.g water rights)</u> Based on the inspection/interviews/i-xiv/ and review of the project documents/01-43/ VVB confirms that project use river water from forest galleries, in adherence to local customs of Article 36 of the 2002 Forestry Code/32/. iii. <u>Full and uncontested legal land title/tenure required to implement the Project (e.g., A/R projects, see LUF Activity Requirements)</u> Through on-site inspection/interviews/i- xiv/, VVB confirms that article 207 of DRC constitution recognizes customary rights. *Customary law (droit coutumier) recognises the role of the traditional chiefs (chefs coutumiers). On behalf of the state, the chef coutumier can assign land use rights to a physical person or a private or public legal entities. If this person is a Congolese the land use right can be perpetual, unlimited in time. Often, such contracts are made informally without registration and are hence difficult to trace back. If this is a non-Congolese person or a legal entity, land use rights are given in concession, which means they assigned for a limited period of 25 years that can be renewed endlessly*. In accordance with the above requirement the PD has secured land concessions/05/ with the state for the implementation of proposed project

	activities aimed at climate benefits for a period of 25 years, with the option for extension for an additional 25 years. This has been further verified by reviewing land concessions[/05/]. According to Article 8 of the DRC Forestry Code of 2002, *"natural or planted forests included in lands regularly granted under the land legislation belong to their concessionaire."* Based on this regulation, VVB confirms that the PD has the legal right to implement the proposed activity and holds ownership of forest products (VERs) through this activity and in compliance with requirements of section 2.1.9 & 2.1.10 of GS4GG LUF Activity Requirements v1.2.1[/B01/].

4.5. Location of Project

Means of validation	DR, OSV, I
Findings	CAR04 has been raised and closed successfully.
Conclusion	In line with section A.2 of the GS PDD[/01/] and document review[/01/], shapefiles[25/], the project area is located in Democratic Republic of Congo. Furthermore, VVB verified the geo- coordinates[/25/] of all participating groupments during the field visit and reviewing maps and shapefiles[/25/].

4.6. Technologies and/or measures

Means of validation	DR, OSV, I
Findings	CL07 has been raised and satisfactorily closed.
Conclusion	The proposed project comprises of total area of 7109.8 (7023.2 ha eligible area) hectares of which 10% are set aside as conservation area which is 716.5 hectares and of the remaining eligible area i.e., 6376.2 hectares, has been/will be planted with 32 species it contains a mix of fast-growing plantation species and slow growing forest trees, including as many endemic tree species as possible for the conservation objectives. Based on desk review[/01/] and on-site inspection/interviews[/i- xiv/], VVB confirms that following mix of native and exotic tree species included in project:

	Species selected		
No.	**Scientific name**	**Origin**	**Forest layer**
1	*Acacia hybrid (mangium x auriculiformis)*	Exotic	Under canopy
2	*Acacia mangium*	Exotic	Under canopy
3	*Albizia chinensis*	Exotic	Under canopy
4	*Albizia lebbeck*	Exotic	Main canopy
5	*Artocarpus heterophyllus*	Exotic	Under canopy
6	*Canarium schweinfurthii*	Endemic	Emergent
7	*Cassia floribunda*	Exotic	Shrub
8	*Cassia siamea*	Exotic	Under canopy
9	*Croton sylvaticus*	*Endemic*	*Under Canopy*
10	*Dacryodes edulis*	Endemic	Under canopy
11	*Detarium microcarpum*	*Exotic*	*Shrub*
12	*Dichrostachys cinerea*	Endemic	Shrub

13	*Entandrophragma cylindricum*	Endemic	*Emergent*
14	*Erythrophleum suaveolens*	Endemic	Under canopy
15	*Harungana madagascariensis*	Endemic	Shrub
16	*Hevea braziliensis*	Exotic	Under canopy
17	*Leucaena leucocephala*	Exotic	Shrub
18	*Macaranga spinosa*	Endemic	*Shrub*
19	*Maesopsis eminii*	Endemic	Main canopy
20	*Milicia excelza*	Endemic	Main canopy
21	*Millettia laurentii*	Endemic	Main canopy
22	*Musanga cecropioides*	Endemic	*Shrub*
23	*Pentaclethra eetveldeana*	Endemic	Under canopy
24	*Pentaclethra macrophila*	Endemic	Main canopy
25	*Piptadeniastrum africanum*	Endemic	Emergent
26	*Pterocarpus soyauxii*	*Endemic*	*Main Canopy*
27	*Ricinodendron heudelotii*	Endemic	Main canopy
28	*Schizolobium parahyba*	Exotic	Main canopy
29	*Scorodophloeus zenkeri*	Endemic	Main canopy
30	*Terminalia superba*	Endemic	Emergent
31	*Treculia Africana*	Endemic	Emergent
32	*Uapaca heudelotii*	Endemic	Shrub

As assessed above and in line with the PDD/01/, 10 of the 32 tree species that have been planted or will be planted in the proposed project area are exotic (non-native). The PD has provided evidence/46/ that these exotic species have adapted to the conditions of the host country and do not have an invasive effect on the ecosystem. This has been further confirmed through own research/B07/ and on-site inspections/interviews/i-xiv/. Additionally, the VVB confirms that these exotic species are adapted to the conditions of the host country and do not meet the definition of *invasive species* as specified in the GS4GG Land Use and Forestry (LUF) Activity Requirement v1.2.1/B01/.

In line with GS4GG PDD/01/, document review/01-46/ and on-site inspection/interviews/i-xiv/, VVB confirms that the technological and measures as follows:

Tree nursery and planting:

The project area is divided into Swa Kasongo (west) and Swa Kahumba (east). Groupement Swa Yamfu is adjacent to Swa Kasongo and is considered part of the Swa Kasongo side while groupement Kobo is adjacent to groupement Swa Kahumba and is part of the Swa Kahumba side.

Two nurseries were set up in Swa Kasongo November 2021 to support planting in the first season named Pépinière Bethany and Pépinière Tembe.The plantation of Swa Kasongo currently consists of 47 + 28 blocks (total 1990 ha) with firebreaks ('coupe-feus') between them. The tree nursery and plantation in Swa Kahumba are named Pépinière Kingungu and Pépinière Kimbakata. The plantation in Swa Kahumba consists of 55 blocks (total 1380 ha) with firebreaks. This has been further confirmed by visiting one of nurseries established by PD during on-site inspection/interviews/i-xiv/.

Fig: Nursery established by PD in groupment SwaKasongo

Plantation Details:

Based on the review of GS4GG PDD[/01/], document review[/01/18/,] and on-site inspection/interviews[/i- xiv/], VVB confirms that the trees are planted in a grid of 3 by 2.5 meters. On average, 1,260 plantlets are used per hectare and grids include three types of trees: plantation trees, pioneer trees, and forest trees. Plantation trees are fast-growing and sequester CO2. They are alternated with short-lived pioneer trees (SLP) and long-lived pioneer trees (LLP) as well as forest trees.

As the plantation trees mature, they make room for the slower-growing pioneer and forest trees, enhancing biodiversity. Tree species selection criteria include being fast-growing, endemic to the region, and having other uses (e.g., medical or edibility). Ease of growing is evaluated in the tree nursery during the project. Different canopy layers are filled by various tree species.

Land Preparation and Planting:

PD clarified that before planting, land is plowed using a tractor ('labourer'). Plowing is done perpendicular to the slope, but if the land is too steep, manual plowing occurs (e.g., in parts of Swa Kahumba). When trees are present, the tractor plows around them. After plowing, trees from the nursery are manually planted. Post-planting, the land is manually weeded with a hoe ('sarclage') once or twice. Key dates and tree species planted are recorded per block by the NGO (on paper) and digitally by the project host (N'situ Pelende SASU) in GIScloud and Excel files[/08/]. Communication between NGOs and N'situ Pelende SASU is conducted in French.

Fire prevention:

Based on the onsite inspection/interviews[/i-xiv/] and evidence document review[/36/] VVB confirms that around and between all blocks, there are firebreaks ('coupe-feus') to prevent fire from entering and spreading from one block to the other. In P2 activities there is a plan for sensibilization to the local community. When good traditional reasons to set fire are brought up by local

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	communities, we promote controlled fire instead of simply forbidding it. There are three types of firebreaks: 1. A firebreak of at least 10 m between all blocks of about 50 ha. 2. A firebreak of at least 15 m surrounding the planting area. This will stop external fires from farmers in the forest galleries near the river from spreading to the plantations uphill. 3. Firebreaks of at least 10m at each side of roads crossing the plantations. Firebreaks are maintained at least yearly to prevent overgrowth. Maintenance methods include, manual weeding ('sarclage'), use of a tractor and combining maintenance with agriculture. Twelve guards (brigadiers) oversee the plantations and surrounding villages monitoring for fires and other forest-related dangers. CL02 has been raised to address tree species included in the project and satisfactorily closed by VVB, as the PD has provided appropriate justification. Further, the same has been confirmed during on-site inspection interviews.

4.7. Scale of the project

Means of validation	DR, OSV, I
Findings	CAR01 has been raised and closed satisfactorily.
Conclusion	Based on the review of GS PDD/01/, supporting documents/01/02/25/ and on-site inspection/interviews/i-xiv/, VVB confirms that project activity has been implemented on state lands of 7023.2 hectares (eligible area) for which PD has land concessions/05/ with state. The area is managed by developer, professionals, and other employed local community members. Hence, the project activity does not fall under the scope of Annex-B of GS LUF Activity Requirements V1.2.1/B01/. Furthermore, in line with section A.4 of the GS PDD/01/ the expected net anthropogenic GHG removals/02/ by sinks are expected to be 64,497 tCO_2e/yr, which are greater than 16,000 tCO_2 per year. Hence, VVB ascertains that the project also does not fall under scope of section 2.3.1 (a) of *GS4GG RU_2021-LUF-smallholder-definition.* Therefore, the project is a "large scale".

4.8. Funding sources of Project

Means of validation	DR, OSV, I
Findings	FAR02 has been raised by Sustain Cert and closed satisfactorily.
Conclusion	Based on document review/01/10/, high level cashflow document/44/, Balance sheets/Jaarrekening-2023/44/ and on-site inspection/interviews/i-xiv/, VVB confirms that the project has been funded by the Belgium based company Colruyt Group. Furthermore, project developer has signed and submitted ODA declaration/10/ in compliance with section 6.1.2 of GS4GG Emissions Reductions & Sequestration Product Requirements v2.2.

4.9. Application of approved Gold Standard Methodology (Ies) and/or

Demonstration of SDG Contributions

a. Methodology (ies) reference of approved methodology (ies)

Means of validation	DR, OSV, I
Findings	CL06 has been raised and satisfactorily closed.
Conclusion	Based on the review of section B.1 of the PDD/01/, PD has appropriately providedreferences of applied methodology and tools referred as follows: • GS4GG AR GHG Emissions Reduction & Sequestration Methodology v2.0/B03/ • GS4GG A/R Soil Carbon tool/B05/ • GS4GG-GHG-Emissions-Reduction Sequestration Product requirements v1.2/B05/ • AR-LUF activity requirements v1.2.1/B01/ • GS4GG Principles & requirements/B01/

b. Applicability of methodology (ies)

Means of validation	DR, OSV, I	
Findings	CL16, CL17 & CL18 have been raised and satisfactorily closed.	
Conclusion	VVB based on desk review/01/25/02/18/ and on-site inspection/interviews/i-xiv/ confirms that the PD has appropriately demonstrated eligibility of Methodology requirements/B03/. The detailed assessment of eligibility of methodology in line and provided in section B.2 of GS PDD/01/ is as follows:	
	As per section 2.1.2 of GS A/R Methodology, Version 2.0/B03/	
	Methodology requirements	**Assessment of compliance**
	1. Projects shall apply Gold Standard for the Global Goals Principles & Requirements and all other associated and referenced documents.	Based on desk review/01/ and on-site inspection/interview/i-xiv/, VVB confirms that GS4GG principles and requirements/B01/B02/B03/ and all associated and referenced documents/B01-B05/ have been applied by the PD.
	2. Projects that include the planting of trees on land that does not meet the definition of a forest at planting start are eligible to apply this methodology. The project area shall meet all of the requirements below for this methodology to be applicable for the calculation of CO_2-certificates from the project.	Based on document review (NDVI Forest/non-forest analysis)/01/25/18/05/ and on-site inspection/interview/i-xiv/, VVB confirms that the project area is previously held as degraded savannah grass lands and does not meet the definition of forest 10 years before project start date and at project start date and is therefore considered to be eligible. This has been further reviewed/25/ and checked by VVB.
	3.Projects can apply all silvicultural systems: • Conservation forests (no	Based on desk review (Sustainable Forest management plan)/01/18/ and on-site inspection/interview/i-xiv/,

	use oftimber) • Forests with selective harvesting • Rotation forestry All projects can include agriculture (agroforestry) or pasture (silvopasture) activities.	VVB confirms that project includes plantation of mixed tree species without harvesting and thus comes under conservation (no use of timber) type of silvicultural system.
	4. Project Areas shall not be on wetlands	Based on the review of the PDD[/01/], project area[/25/] consists of plantation of 32 tree species on lands which are previously held as degraded savanna grass lands. Furthermore, VVB confirms that the project area does not include wetland. This has been further verified by the VVB by doing on-site inspection/interviews[/i-xiv/] and reviewing the GIS shapefiles[/25/], maps[/25/], Forest/non-forest analysis report[/25/].and web source.
	5. Project Areas with organic soils shall not be drained or irrigated (except for irrigation for planting).	Based on the review of GS PDD[/01/], project area is distributed with Ferralic arenosol soils[/38/] which are not organic soils. Project activities do not involve any drainage or irrigation. This has been further verified by VVB during on-site inspection/interview[/i-xiv/] and reviewing the GIS shapefiles[/25/], maps[/25/] along with Forest/Non-Forest Analysis report[/25/] and the Africa Soil Atlas[/38/].
	6. Soil disturbance (through ploughing, digging of pits, stump removals, infrastructure, etc.) on organic soils shall be in less than 10% of the area that is submitted to certification (not 10% of the entire project area).	Based on the assessment above[/38/], VVB confirms that the soil disturbance is not applies since the Ferralic arenosol (mineral soil) soils present in the project area are not organic soils.
	7. The most likely scenario without the project (baseline scenario) shall be defined for the project area. This scenario shall not show any significant increase of the Baseline biomass ('tree' and 'non-tree').	In compliance with section 3.4.1 of GS4GG A/R Methodology[/B03/], PD has appropriately demonstrated baseline scenario for the project area in section B.4 of the PDD[/01/]. (Refer section 4.10 of this report for detailed assessment.)
	CL08 and CL03 are raised in relation to applied methodology eligibility and satisfactorily closed upon reviewing supporting evidence[/01to44/] and responses from the PD.	

c. Project boundary

<table>
<tr><td>Means of validation</td><td>DR, OSV, I</td></tr>
<tr><td>Findings</td><td>-</td></tr>
<tr><td>Conclusion</td><td>
Carbon Pools
Based on the review of GS PDD[/01/] and compliance with section 3 of the Gold Standard Afforestation/Reforestation (A/R) GHG Emissions Reduction & Sequestration Methodology, version 2.0[/B03/], VVB has reviewed the project boundary carbon pools and emissions as follows:

Carbon Pools
<table>
<tr><th>Carbon Pools</th><th colspan="2">Includes</th><th>CO_2-Fixation</th><th>Baseline</th></tr>
<tr><td rowspan="2">Tree Biomass</td><td>Above ground</td><td>Stem, branches, bark</td><td>Yes</td><td>Yes</td></tr>
<tr><td>Belowground</td><td>Tree roots</td><td>Yes</td><td>Yes</td></tr>
<tr><td rowspan="2">Non-tree biomass</td><td>Aboveground</td><td>Shrubs</td><td>No</td><td>Yes</td></tr>
<tr><td>Belowground</td><td>-</td><td>No</td><td>Yes</td></tr>
<tr><td colspan="2">Soil</td><td>Organic material</td><td>Yes</td><td>Yes</td></tr>
<tr><td colspan="2">Harvested wood (timber & energy wood)</td><td>Furniture, construction</td><td>No</td><td>No</td></tr>
<tr><td colspan="2">Litter & Lying dead-wood</td><td>Leaves small fallen branches, lying dead wood</td><td>No</td><td>No</td></tr>
</table>
<table>
<tr><th colspan="2">As per section 3.8 of GS A/R Methodology v2.0</th></tr>
<tr><th>Criteria</th><th>Assessment of compliance</th></tr>
<tr><td>Site Preparation: Where existing ‘tree’ and ‘non-tree’ biomass of the Baseline is burned for the purpose of land preparation, an additional 10% of the Baseline shall be deducted. This is to account for the non-CO_2 green-house-gas emissions (N_2O and CH_4) that are released during the burning process.</td><td>Based on the review of section A.3 & B.3 of GS PDD[/01/], management plan[/18/] and on-site inspection/interviews[/i-xiv/], VVB confirms that no burning has been done for the purpose of land preparation[/18/]. Further CL18 has been raised and closed satisfactorily.</td></tr>
<tr><td>Fertilizer 0.005 tCO_2 per kg of nitrogen (N) fertiliser shall be deducted. No differentiation is made between synthetic and organic fertiliser.</td><td>VVB based on the review of the GS PDD[/01/], management plan[/18/] and through on-site inspection/interviews[/i-xiv/], VVB confirms that no use of nitrogen</td></tr>
</table>
</td></tr>
</table>

		fertilizers included in the management plan[/18/]. Instead, compost will be used only in the nurseries. Further CL18 has been raised and closed satisfactorily. However, if applied 0.005 tCO2 per kg of N fertilizer will be deducted
	Combustion of fossil fuel: CO_2 and Non-CO_2 green-house-gasemissions caused by the use of fossil fuel from project activities (flights, management operations, etc.) are insignificant and may therefore be neglected.	Not applicable for the proposed project. Since the CO_2 and non-CO_2 GHG emissions from fossil fuels are considered insignificant as per the applied GS4GG methodology[/B03/] and moreover based on the onsite inspections/interviews[/i-xiv/] VVB confirmed that there are no such activities undertaken as part of the project activity.
	N-fixing trees: CO_2 and non-CO2 green- house-gas emissions caused by the use of N-fixing species may be conservatively assumed to be zero.	In line with the requirements of the applied methodology[/B03/] the CO_2 and non-CO_2 GHG emissions caused by using N-fixing species may be conservatively assumed to be zero, therefore the same is accepted by the VVB.
	Overall, in the opinion of VVB project boundary is correctly defined and in compliance with the applicable methodology[/B03/] and GS requirements[/B01/B02/].	

4.10. Establishment and description of baseline scenario

Means of validation	DR, OSV, I
Findings	CL08 has been raised and satisfactorily closed.

Conclusion	Based on the review of the PDD/01/ section B.4 VVB, confirms that the project applied option. II of GS AR methodology/B03/ for the demonstration of the additionality and PD has used the "CDM Tool for the identification of degraded or degrading lands for consideration in implementing CDM A/R project activities"/B05/ and demonstrated that the baseline scenario of the project is severely degraded grasslands on the uphill area. According to the applied tool/B05/ stage.1 approach PD has demonstrated that the area has been classified as "degraded" by a verifiable local environment assessment/35/ carried out by the PD and cross verified by the VVB for the confirmation project baseline as severely degraded grasslands. Further following needs to be demonstrated as per section III, para c) "Demonstrate through direct evidence based on selected indicators of land degradation that the area is "degraded" and/or "degrading"", where the soil corresponds to 2 different criteria. ii) "Decline in organic matter content and/or recession of vegetation cover as shown by reduction in plant cover or productivity due to overgrazing or other land management practices, thinning of topsoil organic layer, scarcity of topsoil litter and debris (GPS and photo evidence should be provided) as well as". iv) "A reduction in plant cover or productivity due to overgrazing or other land management practices". VVB assessment: VVB based on the verification of the PDs direct evidence Environmental and Social impact assessment of project area by SARL/35/ and LULC/Forest non-forest analysis/25/ confirms that the project areas are severely degraded lands and continued to be degraded with declined vegetations in the absence of the project due to frequent human interventions and the same further confirmed during the onsite inspections/interviews/i-xiv/. Furthermore, the PD justified that the project areas are severely degraded grasslands due severe pressure from the local communities for the charcoal burning (trees with a minimum size), agricultures, hunting and manmade fires, same verified through environment social impact assessment/35/. Also, as per the Soil analysis/35/ VVB confirms that the soil carbon is relatively lower in the project areas "only 22 t C/ha in the savanna" as compared to the Soil Atlas of Africa/38/ which reported the soil organic carbon fraction is expected to be between 51 and 60 t C/ha in project region (Jones et al., 2013. Soil Atlas of Africa)/38/, therefore it is confirmed that there is a decline in organic matter content, vegetation cover and productivity due to frequent manmade fires, charcoal production and other human interventions, land management practices by local communities as provided in the PDD. The same was further confirmed during the onsite inspections/interviews/i-xiv/ as well. Hence, VVB confirms that the project is in line with paragraph c) clause. ii & iv of the above referred CDM AR tool for the identification of degraded or degrading lands for consideration in implementing CDM A/R project activities /B05/. Therefore, based on the above assessment VVB confirms that the baseline scenario of the project activity is appropriately established as severely degraded savannah lands and the same was valid and plausible for the project activity. Furthermore, VVB has raised CL07 and CL08 in relation to baseline and closed satisfactorily upon reviewing the supporting documentation/01/35/25/38/.

Fig: Project implementation (above) and Baseline Scenario (below) of visited areas within groupments of Swa Kasongo and Kobo

4.11. Demonstration of additionality

Means of validation	DR, OSV, I

Findings	FAR02 by Sustain Cert,) CL12, and CAR02 are raised and closed satisfactorily.
Conclusion	Based on document review and on-site inspection interviews[/i-xiv/], VVB confirms that the project additionality has been demonstrated in compliance with Positive list as per section 3.1.16 (b) of GS4GG LUF Activity Requirements v1.2.1[/B01/]. **Additionality Option 2- Positive list** Specify the methodology, activity requirement or product requirement that establishes deemed additionality for the proposed project (including the version number and the specific paragraph, if applicable). VVB confirms that the PD has appropriately demonstrated project additionality as per section 3.2.1 of applied methodology *"Gold Standard Afforestation/Reforestation (A/R)GHG Emissions Reduction & Sequestration Methodology, version 2.0.[/B03/]"* and section 3.1.16(b) of applied activity requirement *"GS LUF Activity Requirements v1.2.1.[/B01/]"* **Option 2- Positive list (As per section 3.1.16 (b) of GS LUF activity requirements v1.2.1)** In compliance to section 3.1.16 (b) of GS LUF Activity Requirements v1.2.1[/B01/], The project shall meet **all** of the requirements (a), (b) and (c) in the list below in order to be considered as additional under Option 2- Positive List (a) The project is located in a Less Developed Country (LDCs) or in a region with a recent *UNDP Human Development Indicator* below 0.8. (b) The project shall have no intention of creating a forest for the commercial use of the timber or non-timber forest products. (c) The project activities shall not be mandatory by any law or regulation, OR if it is mandatory, it shall demonstrate that these laws or regulations are systematically not enforced. **VVB Assessment:** a) Based on the review of the UNDP Human Development Index for 2021 (latest published data)[/B06/], VVB confirms that the score is 0.479. Furthermore, the same has been confirmed during on-site inspection/ interviews[/i-xiv/] with PD. b) VVB based on the desk review[/1/25/18/] and on-site inspection/interviews[/i-xiv/] confirms that the project activities intend to restore degraded savannah grass lands and does not include harvesting of trees for commercial use in their management plan[/18/] in line with section 2.1.2(a) of GS4GG A/R Methodology v2.0[/B03/]. c) VVB, based on own research of applicable laws[/33/34/43/], confirms that there are currently no laws in DRC which mandates tree plantation and the restoration of degraded grass land through tree planting.

Conclusion: VVB based on above assessment on-site inspection interviews[/i-xvi/] confirms that the project has met all the requirements of (a), (b) and (c).

In compliance to section 3.1.16 (b) of GS LUF Activity Requirements v1.2.1[/B01/], The project shall meet **at least one of the requirements from (d) to (g)** in order to be considered as additional under Option 2-Positive List

d) The project area is located in a region with a mean annual precipitation of less than 600 mm.

e) The soil pH of the planting area is less than 4.0.

f) The planting area is planted with minimum 5 different native tree species in mixed stands, covering at minimum 50% of the planting area.

g) The project area is located:

- In a country or region with a recent *UNDP Human Development Indicator* below 0.5, OR
- In a *Small Island Developing State (SIDS)*

VVB Assessment:

d. Not applicable. Only one requirement needs to be fulfilled (section 3.1.16 (b) of GS LUF Activity Requirements v1.2.1[/B01/])

e. Not applicable. Only one requirement needs to be fulfilled (section 3.1.16 (b) of GS LUF Activity Requirements v1.2.1[/B01/])

f. Based on the review of GS PDD[/01/], Sustainable Forest Management Plan - Nsitu Pelende[/18/] and on-site inspection/interviews[/i-xiv/], VVB confirms that the project includes plantation of 22different native tree species and 10 exotic species for entire project area (Refer section 4.6 of this report). Further, VVB has raised a CL12 on the same and satisfactorily closed.

g. Based on the review of the UNDP Human Development Index for 2021 (latest published data)[/B06/], VVB confirms that the score is 0.479. Furthermore, the same has been confirmed during on-site inspection/ interviews[/i-xiv/] with PD and therefore it is confirmed that project is located in a country or region with a recent *UNDP Human Development Indicator* below 0.5

-

Overall Conclusion

Overall, based on the above assessment[/B06/18/], VVB confirms that the proposed project deems to be additional. This is as per section 3.2.1 of applied methodology[/B03/] and section 3.1.16(b) of GS4GG LUF Activity Requirements V1.2.1[/B01/].

4.12. Data and parameters fixed ex ante

Means of validation	DR, OSV, I	
Findings	CL09 has been raised and closed satisfactorily.	
Conclusion		
	Data and parameters fixed ex ante	**Assessment of Compliance**
	Baseline Value	In line with section B.6.2 of the VPA-DD, the Baseline carbon value i.e., 29.1 tCO2e/ha has been applied. VVB, based on document review/01/02/ confirms that the value applied for baseline quantification of the proposed project is valid and appropriate.
	Growth parameters Ymax, k and p in Chapman Richard model	In accordance with section B.6.2 of the GS PDD/01/, the growth parameters in Chapman Richard model were utilized for ex-ante carbon calculations. Based on the literature review, it is confirmed that the following values of growth parameters are applied for ex-ante carbon calculations and are considered valid and appropriate. • Y_{MAX}- 113 tC/ha. • k- 0.070, • p- 3
	Root-to-shoot ratio	In accordance with section B.6.2 of the PDD, the following factors for R-t-S have been used for calculating carbon in BGB by the approach followed in the Chapman-Richards model: • 0.235 if AGC ≤ 125 t DM/ha (= 229 t CO2/ha) • 0.205 if AGC > 125 t DM/ha (= 229 t CO2/ha) The VVB, based on document review, confirms that the values for R-t-S included in the project are valid and appropriate.
	Nitrogen content	VVB based on the review of PDD/01/ and onsite inspection/interviews/i-xiv/ it has been confirmed that the PD limitedly use the synthetic nitrogen fertilizer (UREA) in tree nursery. For ex-ante estimates based on product purchased data PD has appropriately assumed the use of 100kg N/year and there in line with section 3.8.3 of applied GS-AR methodology/B03/, PD has appropriately deducted the emissions of 0.5 ton CO2/ year and the same was confirmed through ER sheets/02/. Further PD also clarified this parameter will be reported annually during the project period.
	Conversion factor 'C' to 'CO_2e'	In line with section B.6.2 of the PDD, default value of Conversion factor 'C' to 'CO_2e' i.e., 44/12 tCO_2/tC has used as per Table of Mendeljev.

4.13. Ex-ante estimation of SDG impact

Means of validation	DR, OSV, I

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<table>
<tr><td>Findings</td><td colspan="2">CAR03 and CL13 has been raised and closed satisfactorily.</td></tr>
<tr><td>Conclusion</td><td colspan="2">In line with PDD/01/, VVB assessed the compliance of section B.6 in line with GS PDD/01/ template instructions as follows:</td></tr>
<tr><td></td><td>Sustainable Development Goals Targeted</td><td>Assessment of SDG Impact</td></tr>
<tr><td></td><td>2- Zero hunger
2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers.</td><td>VVB, through on-site inspection/interviews/i-xiv/ document review/18/23/ and review of the PDD/01/, confirms that the proposed activities aim to monitor and contribute “Number of smallholder businesses and their revenues, differentiated by gender of the holder, by location and by agronomic sector” as part of the project activity to fulfill the SDG.2.</td></tr>
<tr><td></td><td>3- Good health and well being
3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases</td><td>VVB, through on-site inspection/interviews/i-xiv/, and review of PDD/01/ confirms that the proposed activities aim to construct and upgrade the 1 health center, providing enhanced medical facilities and facilitating early access to medicine for local communities, hence VVB confirms that the project will contribute SDG 3 by improving the health care facilities as a part of project activity.</td></tr>
<tr><td></td><td>4- Quality education
4.a Build and upgrade education facilities that are child, disability, and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all.</td><td>VVB, through on-site inspection/interviews/i-xiv/, confirms that the implementation of proposed activities will upgrade 2 existing school to provide improved educational facilities for local communities, therefore VVB confirms that the project will contribute SDG 4. a.</td></tr>
<tr><td></td><td>8- Decent work & Economic growth
8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value</td><td>VVB, based on the on-site inspection/interviews/i-xiv/, document review/23/ and PDD/01/ confirms that the project activity will create employment opportunities for the members of the local communities in all 4 groupments. Furthermore, VVB based on desk review/01/ and on-site inspection/interviews/i-xiv/ confirms that 1200 jobs have been targeted to be planned to be employed as part of the project activities, therefore VVB confirms that SDG 8 will be contributed as part of the project implementation by providing the employment opportunities.</td></tr>
</table>

	13 Climate Action	Based on the review of section B.6.4 of GS PDD[/01/] and CO_2 fixation spreadsheet[/02/], VVB confirms that the estimated GHG removals (Biomass +SOC) from the project, calculated as 3,289,369 tCO_2e for 50 years with annual average of 64,497[/02/] tCO_2e (before deducting buffer – 20%) is valid and plausible. **Leakage:** VVB based on the document review[/01/25/], social impact assessment[/35/] and onsite inspections/interviews[/i-xiv/] confirms that no leakage was caused by the project. Since there is no displacement of activities to outside of the project boundary and no collection of wood for firewood or charcoal or harvesting of timber. Furthermore, based on document review[/01/25/] and onsite inspections/interviews[/i-xiv/] VVB confirmed that no agricultural lands are part of the project areas and there is enough land left out from the project area for the grazing activity. This is as per section 3.7 of the applied methodology[/B03/] **Other emissions:** VVB based on the on- site inspection/interviews[/i-xiv/] and document review[/01/25/18/] confirms that there are no other emissions caused by the project, resulting from land preparation techniques, from the use of fertilisers and energy during project activities, and from nitrogen-fixing trees and emissions from organic fertilizers application and further none of such activities are part of the project. However, if applied 0.005 tCO2 per kg of N fertilizer will be deducted.
	15- Life on land 15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase	VVB based on the on- site inspection/interviews[/i-xiv/] and document reviews[/01/25/18/], confirms that 7023.2 ha will be afforested with mixed native and exotic tree species plantation and contributes SDG 15 by implementation of sustainable

afforestation and reforestation globally.	management of all forests and by improving the biodiversity of the project areas.

VVB confirms that the ex-ante carbon estimations have been calculated following the Gold Standard Afforestation/Reforestation (A/R) GHG Emission Reduction & Sequestration Methodology, Version 2.0/B03/. The detailed estimations have been reviewed from the spreadsheet *CO2-calculation_area calculation 19-6-2024*/02/'.

Year	Baseline (tCO2e/year)	Other emissions (tCO2e/year)	Net Annual GHG Removals (Biomass+SOC) (tCO2e/year)
2021	2086.47	1	-2087
2022	89250	1	-89065
2023	27738	1	-19525
2024	54883	1	-40691
2025	30418	1	-5580
2026	0	0	36,329
2027	0	0	47,289
2028	0	0	58,849
2029	0	0	70,232
2030	0	0	80,916
2031	0	0	90,571
2032	0	0	99,008
2033	0	0	106,142
2034	0	0	111,959
2035	0	0	116,500
2036	0	0	119,836
2037	0	0	122,062
2038	0	0	123,283
2039	0	0	123,612
2040	0	0	123,157
2041	0	0	122,027
2042	0	0	120,170
2043	0	0	111,407
2044	0	0	106,784
2045	0	0	99,845
2046	0	0	94,484
2047	0	0	92,108
2048	0	0	88,908
2049	0	0	85,900
2050	0	0	82,564
2051	0	0	78,882
2052	0	0	75,221
2053	0	0	71,605
2054	0	0	68,054
2055	0	0	64,585
2056	0	0	61,211
2057	0	0	57,943
2058	0	0	54,787
2059	0	0	51,750
2060	0	0	48,834

2061	0	0	46,043
2062	0	0	43,376
2063	0	0	40,833
2064	0	0	38,413
2065	0	0	36,113
2066	0	0	33,931
2067	0	0	31,863
2068	0	0	29,906
2069	0	0	28,056
2070	0	0	26,310
2071	0	0	24,662
Total	**204,375**	**5**	**3,289,369**
Crediting Period		**50 Years**	
Estimated Annual Average		**64,497 tCO2e/yr (Before -20% buffer deduction)**	

In summary, VVB confirms that PD has correctly calculated and considered baseline emissions and Project emissions are plausible and in compliance with section 3.3 of applied methodology[/B03/].

4.14. Monitoring plan

a. Data and parameters to be monitored

Means of validation	DR, OSV, I	
Findings	CAR014 has been raised and closed satisfactorily.	
Conclusion		
	Data and parameters to be monitored	**Assessment of Compliance**
	SDG 2 Zero Hunger	
	By 2030, Double the agricultural productivity and incomes of small-scale food producers	VVB, through on-site inspection/interviews[/i-xiv/] and review of the PDD[/01/], confirms that the proposed activities will monitor and contribute SDG2. Specifically, the project will track the "Number of smallholder businesses and their revenues, differentiated by gender of the holder, by location, and by agronomic sector." The VVB has confirmed that this parameter can be effectively monitored through data collection and bookkeeping.
	SDG 3 Good health and well being	
	By 2030, End the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases	VVB, through on-site inspection/interviews[/i-xiv/] and review of the PDD[/01/] confirms that the proposed activities are expected to construct and upgrade the 1 health center, providing enhanced medical facilities and facilitating early access

		to medicine for local communities, hence VVB confirms that the project will contribute SDG 3 by improving the health care facilities as a part of project activity.
	SDG 4 Quality education	
	Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all	VVB, through on-site inspection/interviews[/i-xiv/], confirms that the implementation of proposed activities is expected to upgrade 2 existing school to provide improved educational facilities for local communities, As a result, the VVB confirms that the project will contribute to SDG 4..
	SDG 8 Decent work and economic growth	
	Number of jobs created	VVB, based on the on-site inspection/interviews[/i-xiv/] confirms that the project activity is expected to create employment opportunities for the members of the local communities in all 4 groupments. Furthermore, VVB based on desk review[/01/] and on-site inspection/interviews[/i-xiv/] confirms that 1200 jobs have been targeted to be employed, therefore VVB confirms that SDG 8 will be contributed as part of the project implementation by providing the employment opportunities.
	SDG 13 Climate action	
	Emission reductions / natural carbon removals through reforestation of former pastureland measured in t CO2e /ha/year	Based on the review of section B.6.4 of GS PDD[/01/] and the CO2 fixation spreadsheet[/02/], VVB confirms that the proposed activity is expected to remove an estimated 3,289,369 tCO2e of GHG (Biomass + SOC) over 50 years, with an annual average of 64,497 tCO2e (before deducting a 20% buffer). This estimation is deemed valid and conservative.
	SDG 15 Life on land	
	Hectares (ha) of degraded grassland reforested with predominantly native tree species	VVB based on the on- site inspection/interviews[/i-xiv/] and document review[/01/18/25/], confirms that 7023.2 ha will be afforested with mixed native and exotic tree species plantation by implementation of

		sustainable management of all forests and by improving the biodiversity of the project region.

b. Sampling plan

Means of validation	DR, OSV, I
Findings	--
Conclusion	Based on the review of the PDD/01/ and the sampling guideline has been designed to meet the Gold Standard requirements/B01/B02/ for conducting forest inventories for Performance Certification. **Laying of plots for measurement** The plot's location must be defined beforehand in case of first monitoring. A 20x20 m plot during the first measurement years. The second time the monitoring is done, the old plot is found with GPS and a metal detector. When the trees have a diameter of over 20 cm, the plot's dimensions are extended to 35x35 m and all trees in a plot are measured for width and height, using a tape measure and a clinometer, to calculate the total biomass. Materials • Metal points • 4 bamboos • 55m rope, marked at 20m, 40m and 68.3m If the trees are > 20 cm in diameter: 120 m rope, marked at 35 m, 70 m and 119.5 m. • Spray Paint • Surveyor • Tape measure • Vernier callipers • Clinometer **First step a) set out the dimensions of the block** The plot location will be indicated per block relative to the firebreak's distance. When entering the block, always follow the direction of the ridges. • The distance from the firebreak 1 is the distance from the corner to the place where the block is entered. • The distance from firebreak 2 is the distance after entering the block. • Once you have arrived at the location, you must set out the exact location and dimensions of the 20x20 m plot. 1) Person 1 holds the corner, persons 2 and 3 stand 20 m away from person 1. Person 3 picks up the end of the rope from person 2, the diagonal must be 28.3 m long to form a 90° angle. The direction of the plot follows the direction of the ridges in the plantation.

2) If everyone has found the right place, each corner of the rectangle is marked with a metal dot that is pushed into the ground and painted fluorescent, in addition a bamboo is pushed into the ground.

3) This process is repeated on the other side to form the 4th corner of the rectangle.

4) The GPS coordinates of each corner are registered in the *GIS cloud*. The nearest tree is also indicated with paint.

b) find the dimensions of the plot

To find an existing plot, the location must first be found with the help of the firebreak distances or the location in the GIS cloud. Then the corners of the exact plot are found with a metal detector. At each corner, a bamboo is installed to mark the dimensions. The measurement is then carried out. Before leaving the plot, the flags are removed and taken to the next plot.

c) Extend the dimensions of the plot

Only applicable if the trees have a diameter of > 20 cm. If the trees have a diameter of >20 cm, the dimensions of the plot are extended to 35 x 35 m. The northernmost corner of the plot is used as a reference and remains the same. Corners 2, 3 and 4 are extended to 35 m.

Step 2: Numbering and plot information

Each plot is given a name, the name of the block, followed by a "." and a number. For example, plot A01.1, A01.2... B09.1, B09.2...

The **distances of firebreaks** 1 and 2 are noted.

Slope The direction of the slope and the slope are noted. The direction is measured with a compass to the highest point seen from the measurement location. The slope is measured with the clinometer of the compass. The compass should be held at the level of the bubble, look at the vegetation at the highest point and note the corner of the slope.

Step 3: Measure the size of a tree.

1.1 Tree numbering and information

The trees are numbered 101, 102, 103... and 201, 202, 203... Where the first digit indicates the number of the ridge, and the last two digits indicate the number of the tree in the ridge. The northern corner of the log is the reference. The northernmost ridge is ridge one. The northernmost tree is tree 101.

The tree information is noted in the form.

- If the tree is alive, the tree species is noted.

- If the tree is cut down, we note "cut down". Measuring is not possible, so the other cells remain empty.

- If the tree is there, but dead, note "dead". o If it is possible to guess the species of the tree, it is noted.

    - If the tree still has all the branches and is complete, it is scored "complete".

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- Otherwise, if the tree is missing branches or has holes, it is partially decomposed and is marked "decomposed". In both cases the diameter and height of the tree are measured.

1.2 The diameter

The diameter is measured with a callipers at chest height. The chest height is defined as 1.3 meters. The diameter is measured twice: the second time the diameter is measured perpendicular to the first measurement. In case the tree shape is a bit odd, the tree should be measured as drawn below.

1.3 Circumference

The circumference is measured with a tape measure at chest height. The tape measure should be straight and under tension around the entire trunk. The circumference is noted.

1.4 Height

The height of the tree is measured by a clinometer at 15m from the tree. The measuring wheel indicates 15 m from the tree. It must be straight and under tension when the distance is taken.

- The height is noted on the left in the Suunto (the lower number)

If the tree is taller than 20 m

- You must go to 20 metres. The surveyor indicates 20 m from the tree. It must be straight and under tension when the distance is taken.

- Note the height which is indicated on the right in the Suunto (the higher number)

If the top of the tree is not visible, note "no".

Establishment of new plots

a) Shape and size

As per PDD[/01/], circular nested plots will be established of 1m, 4m, 14m and 20m in diameter using measuring equipment and a fixed central point.

b) Number of sample plots

As per PDD[/01/], sample plots are established as prescribed in the Gold standard A/R requirements[/B01/]. It will be estimated using following equation

$$n=(\Sigma Lh=1 Nh*sh)^2/\ N^2*E^2t^2+(\Sigma^L h=1 Nh*sh^2)$$

Where:

E = allowable error or the desired half-width of the confidence interval. Calculated by multiplying the mean carbon stock by the desired precision (that is, mean carbon stock x 0.1, for 10 percent precision, or 0.2 for 20 per cent precision),

t = the sample statistic from the t-distribution for the 90 per cent confidence level

Nh = number of sampling units for stratum h (= area of stratum in hectares or area of the plot in hectares),

	n = number of sampling units in the population sh = standard deviation of stratum h. **a) Laying out of permanent plots** The plots will be randomly selected without bias with a grid layer on ArcGIS randomization tool in ArcMap. The plot locations will be identified with the help of the Global Positioning System (GPS) device in the field. For each plot the geographic position (GPS coordinates), number of stratum and series number of each plot and respective grid will be recorded and archived. **b) Monitoring equipment protocols** As per the GS PDD/01/, GPS, diameter tape, Calliper, Digital measuring device and ARC GIS will be used for the monitoring of sample plots. **c) Monitoring frequency** The monitoring assessment will be conducted every five years. VVB, based on document review/01/, confirms that the sampling plan is in compliance with the applied methodology/B03/ and tools/B05/.

c. Other elements of monitoring plan

Means of validation	DR, OSV, I
Findings	--
Conclusion	Based on the review of section B.7.3 of the PDD/01/, the elements of monitoring are QA/QC procedures/18//20/ for monitoring including general outlines for data collection for carbon accounting and storage management. VVB confirms that the QA/QC procedures defined are valid and applicable.

4.15. Duration and crediting period

Means of validation	DR, OSV, I
Findings	CL04 and CL011 has been raised and closed satisfactorily.
Conclusion	Based on the review of section C.2 of the GS4GG PDD/01/, VVB confirms that the crediting period of the project is of50 years starting from 23/12/2021 to 22/12/2071.

4.16. Safeguarding principles and gender sensitive assessment including assessment of appendix 1 of PDD

a. Safeguarding Principles Assessment

Means of validation	DR, OSV, I
Findings	--
Conclusion	The PD has done the safeguarding principles assessment/01/ analysis and represented assessment in Appendix 1 of GS PDD/01/. The assessment has been performed in accordance with requirements prescribed in the GS4GG Principles & Requirements, Version 1.2/B02/ & GS4GG Safeguarding Principles &Requirements, Version 1.2. A detailed assessment of safeguarding principle

	is provided in Appendix 2.

b. Safeguarding Principles that will be monitored

Means of validation	DR, OSV, I
Findings	-
Conclusion	VVB, based on review of GS PDD/01/ and on-site inspection/interviews/i-xiv/, confirms that the following safeguard principles relevant to the project will be monitored: Principle 4.3 Land tenure rights and Principle 9.4 Release of pollutants. Based on the review of the GS PDD/01/, document review and monitoring plan, VVB confirms that the mitigation measures provided in section D.1 of the GS PDD/01/ are valid and applicable.

c. Assessment that project complies with GS4GG Gender Sensitive requirements

Means of validation	DR, OSV, I	
Findings	CL15 has been raised and closed satisfactorily.	
Conclusion	Section D.2 of the GS PDD/01/ has been assessed by the VVB in line with Gold Standard for The Global Goals Gender Equality Requirements & Guidelines, Version 1.1 and GS template instructions:	
	GS4GG Gender Sensitive requirement Questions	**Assessment of Compliance**
	Question 1 – Explain how the projectreflects the key issues and requirements of Gender Sensitive design and implementation as outlined in the Gender Policy?	Based on the on-site inspection/ interviews/i-xiv/ and desk review/23/01/20/B04/, VVB confirms that the Project takes into account gender roles and the abilities of women and men to participate in the decision/designs of the project activities. For example, women's will be employed and receive equal payment for the same work as part of the project activities. PD has ensured equal opportunities for women to participate in LSC/20/.
	Question 2 – Explain how the projectaligns with existing country policies, strategies and best practices	VVB, based on the document review/23/ and during the on-site inspection and interviews/i-xiv/, observed the project doesn't endorse any form of discrimination based on gender. Furthermore, the project aligns with the Democratic Republic of the Congo gender policies/23/43/33/34/ i.e., • National policy on Gender mainstreaming, family and

		child promotion, MGFE, Kinshaha, July 2008 • National strategy to combat gender-based violence (SNVBG), MGFE, Kinshasa, November 2009 • Action plan of the government of the DRC for the United Nations Security Counsil Resoultaion 1325, MDFE, Kinshasa, January 2010. Through on-site inspection/interviews[/i-xiv/]and document review[/43/23/] VVB confirms that the project is making efforts to increase women participation and employment. This has been further reviewed and checked by VVB.
	Question 3 – Is an Expert required for the Gender Safeguarding Principles & Requirements?	Based on review of the PDD[/01/] and onsite inspections/interviews[/i-xiv/] VVB confirms that project has a legal expert assists the project with regard to Gender Safeguarding Principles and requirements, among others.
	Question 4 – Is an Expert required to assist with Gender issues at the Stakeholder Consultation?	N/A. Based on the review of stakeholder consultation report[/20/] and onsite inspections/interviews[/i-xiv/] VVB confirms that there are no gender specific issues are raised at stakeholder consultations.

4.17. Stakeholder consultation

a. Local stakeholder consultation

Means of validation	DR, OSV, I	
Findings	CL05 has been raised and closed satisfactorily by the VVB.	
Conclusion	In compliance to GS4GG Stakeholder Consultation and Engagement RequirementsVersion 2.1[/B04/], VVB has conducted the assessment of section E of GS4GG PDD [/01/] and Stakeholder Consultation Report[20/] as follows:	
	GS4GG Stakeholder Consultation and Engagement Requirements[/B04/]	**Assessment of Compliance**
	A separate stakeholder consultation shall be organized for proposed project.	Based on desk review[/01/20/] VVB confirms that PD has conducted Local stakeholder consultations for proposed project[/01/] in

		compliance with section 4.1.25 of GS4GG Principles and Requirements v1.2/B02/ and section 3.1 of GS4GG Stakeholder Consultation and Engagement Requirements Version 2.1/B04/.
	The PD shall submit the stakeholder consultation report of project activity at the time of first submission (i.e., Preliminary review of project).	Based on document review/01/20/ and on-site inspection/interviews/i-xiv/, VVB confirms that the PD has provided with the stakeholder consultation report/20/ and in line with section 5.1.8 (a) of GS4GG Principles and Requirements v1.2/B02/
	The Gold Standard reserves the right to enforce new stakeholder consultation(s) for regular projects	VVB based on the document review/20/ confirms that the proposed project adheres to same GS4GG requirements/B01/B02/B04/, since the proposed project is regular project activity/20/.
	A grievance mechanism shall be established and made available for project activity.	Refer to section 4.17.C assessment.

b. Summary of stakeholder mitigation measures

Means of validation	DR, OSV, I
Findings	CL05 has been raised and closed satisfactorily by VVB.
Conclusion	VVB confirms that the PD has conducted the live stakeholder's meeting. The PD has conducted the 1st LSC on 19/06/2021. The LSC has been conducted at project level as per section E of the PDD/01/. Sample stakeholders who attended the meeting were also interviewed/i-xiv/ during the on-site inspection and their feedback on the project was positive. Furthermore, they have also confirmed that they have attended the LSC meeting/20/. The summary of the comments received during the meeting is complete and PD has taken appropriate steps to address each query/concern and gathered feedback and all the comments received during the SFR period have been provided in the LSC report. Design certification team based on review of LSC report/20/ confirms that the feedback from the SFR has been appropriately addressed by the PD. In the opinion of VVB confirms, that PD has considered the comments received during SFR and addressed appropriately in line with the requirements of section 3.7 of GS4GG Stakeholder Consultation and Engagement Requirements v2.1/B04/.

c. Continuous input / grievance mechanism

Means of validation	DR, OSV, I

Findings	-
Conclusion	Based on the review of the stakeholder consultation report/20/, GS PDD/01/ and through on-site interviews/i-xiv/ with the communities, VVB confirms that the grievance mechanism developed by PD is in line with the section 4.1.34 of GS4GG Principles & requirements v1.2/B02/. The grievances are recorded by brigadiers appointed by PD/36/. The grievances are recorded and expressed through the Grievance Expression Process book quarterly and biannually. Furthermore, the same has been confirmed by reviewing Grievance Expression Process book during on-site inspection/interviews/i-xiv/. Furthermore, as assessed in section 4.2(f) grievances are documented weekly by brigadiers at designated locations. Additionally, brigadiers will conduct awareness campaigns in the villages every six months to gather any grievances. The grievances collected by brigadiers are then reported to the complaints manager at the PD office, and they will work in collaboration with brigadiers and chefe de village to address these grievances. This information has been verified through evidence review/01/20/22/36/ and checked by VVB for the confirmation. In the opinion of VVB confirms, the PD has appropriately setup continuous grievance mechanism and in line with section 3.8 of GS4GG Stakeholder Consultation and Engagement Requirements Version 2.1/B04/.

4.18. LUF Additional Information

Means of validation	DR, OSV, I
Findings	-
Conclusion	As per APPENDIX 3 of the PDD/01/, the following additional informationhas been provided by the World Vision Ethiopia and further assessed by the VVB:
	Risk of change to the Project Area and activities during Project Certification Period: Risks of change to the project area described as negligible as the project developed on lands for which PD holds land concessions/05/ and public access is restricted without prior consent from PD, ensuring control over the area. Hence, VVB affirms that the risk of change to the Project Area is negligible. This has been further confirmed through on-site inspection/interviews/i-xiv/. As assessed above the risk of change to the project activities described as low risk. The has been further confirmed by VVB through on-site interviews/i-xiv/.
	Land-use history and current status of Project Area: VVB has confirmed, through on-site inspections/interviews/i-xiv/, and desk review of LULC analysis/01/25/, that the land use history of the project area reveals degraded savannah grasslands subjected to slash and burn practices. The current status of the project area is subjected to restoration and conservation of forest as part of the project activity.
	Socio-Economic history: The socio-economic history of the project area is subjected to Limited subsistence agriculture, hunting for bushmeat. This has been further confirmed through on-site inspection/interviews/i-xiv/ and verified through Social Impact Assessment report/35/

	Forest management applied (past and future) Based on the desk review[/01/18/], GIS files[/25/] and on-site inspection/interviews[/i-xiv/], VVB confirms that past forest management involved slash-and-burn practices, while future management will focus on biodiversity conservation without burning as result of project activity implementation.
	Forest characteristics (including main tree species planted) Based on the desk review[/01/18/] and through on-site inspection/interviews[/i-xiv/], VVB confirms that the forest type within the project area comprises a mixture of deciduous and evergreen elements, with 50% consisting of fast-growing acacia and the remaining 50% comprising endemic species, forming evergreen montane forest and evergreen shrub habitats.
	Main social impacts (risks and benefits) Based on the document review[/01/] , Environmental Social Impact Assessment report[/35/] and onsite inspections/interviews[/i-xiv/] VVB confirms that this project aims to create long-term employment and improved Social Infrastructure such as bridge over Konzi river, 2 schools, 1 medical Center, 15 manioc mills. The risks include social instability in communities.
	Main environmental impacts (risks and benefits) Based on the document review[/01/02/18/35/] and onsite inspections VVB confirms that this project contributes to the reducing emissions from fire, increasing CO2-sequestration and improved biodiversity with planation of native, exotic and epidemic tree species as result of project implementation and it also mitigates climate change impacts since the carbon sequestration in the project scenario is significantly higher than that in baseline scenario. The PD has provided evidence[/45/] that these exotic species have adapted to the conditions of the host country and do not have an invasive effect on the ecosystem. This has been further confirmed through own research[/B07/] and on-site inspections/interviews[/i-xiv/].
	Financial structure Based on the review high level cashflow document[/01/44/] VVB confirms that the project is financed by Belgium based company Colruyt group[/44/]. ODA[/10/37/] declaration has been provided by the Colruyt group.
	Infrastructure (roads/houses): Based on the review of KML files[/25/], VVB confirms that the PD has appropriately demonstrated the infrastructure (roads/houses) located in project areas.
	Sites with special significance for indigenous people and local communities - resulting from the Stakeholder Consultation: None
	Where indigenous people and local communities are situated: None
	Where indigenous people and local communities have legal rights, customary rights or sites with special cultural, ecological, economic, religious or spiritual significance: None

4.19. LUF Risk and Capacities

<table>
<tr><td>Means of validation</td><td>DR, OSV, I</td></tr>
<tr><td>Findings</td><td>CL10 has been raised and closed satisfactorily by the VVB</td></tr>
<tr><td>Conclusion</td><td>In line with GS Risks & Capacities Guideline for ‘Land Use & Forest’, VVB has conducted the assessment of LUF Risks and Capacities as follows:
<table>
<tr><th>Risk and Capacities</th><th>Assessment of Risks</th></tr>
<tr><td colspan="2">1. Natural Disturbance</td></tr>
<tr><td>1.1 Fire Damage</td><td>Probability of the risk
In line with Risk and Capacities tool/04/, medium (score 2) has been considered as the event is expected to occur once or more in 11-20 years.

It has been confirmed through on-site inspection/ interviews/i-xiv/ that the local communities start man-made fires at the beginning of the dry season to avoid wildfires on the Savannah. VVB has verified the above information by reviewing the source (https://thinkhazard.org/en/report/68-democratic-republic-of-congo/WF)

Impact of the risk
In line with Risk and Capacities tool/04/, Medium (Score 2) has been considered as the fires can fully destroy parts of the planted forest.

PD scored the impact conservatively as medium with mitigation measures provided in the fire mitigation measures/36/.

VVB has verified the evidence provided/36/ and confirms that the score for impact of fire risk is appropriate and valid.

Scale of the risk
In line with the Risk and Capacities tool/04//, low (Score 1) has been considered because the event is expected to destroy smaller parts of the project area.

Mitigation Measure
In line with the Risk and Capacities tool/04/, to prevent fires and its spread in the project area certain measures have been taken. VVB has reviewed the implementation of these measures on ground during on site visit/i-xiv/ and confirms that the mitigation measures provided/36/ are valid and applicable. The mitigation measures include</td></tr>
</table></td></tr>
</table>

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		fire corridors (coupes-feus), to prevent fires from spreading from the Savannah to the forest and within the blocks of the forest with forest blocks of max 50 ha è this is 0.5% of the total concession size (10.000ha), a sensibilization program is started with the local communities to explain the importance of controlled fire. Species such as *Acacia* whose seeds when laying on the forest floor are triggered by heat stress to reshoot and *Milettia Laurentii* which can to a certain extent withstand forest fires and reshoot due to its deeply embedded roots are also planted. Further, the same was confirmed by VVB during the on-site inspection and interviews[/i-xiv/] with the local communities.
	1.2 Wind damage (e.g.,hurricanes, typhoon)	**Probability of the risk** In line with the Risk and Capacities tool[/04/], Medium(Score 2) has been considered as an event that is expected to occur once in 11- 20 years. The probability of the risk is low, as hurricanes or typhoons are not common in the project area. The same has been confirmed during on-site inspection/interviews[/i-xiv/] and by reviewing the https://thinkhazard.org/en/report/68-democratic-republic-of-congo/CY **Impact of the risk** In line with Risk and capacities tool[/04/] the impact of the risk on destruction of the products/GHG benefits is low i.e. trees can lose branches. In worst case scenarios trees can even be uprooted but still the forest is expected to be able to recover. Hence VVB validates the score of 1 (Low). **Scale of the risk** In line with the Risk and Capacities tool[/04/], the scale of the risk is relatively low. Hence VVB validates the risk score 1 (Low). **Mitigation measures** No mitigation measures have applied as the risk is low.

	1.3 Animals (e.g., domestic or wild animals' encroachment)	**Probability of the risk** In line with the Risk and Capacities tool/04/, Low (Score 1) has been considered as an event is expected to occur less than once every 20 years. The probability of the risk is low, as animal encroachment is not allowed. Moreover, due to frequent fires in the Savannah no large animals are present in the region. Goats are held in nearby villages which might harm the forest but only during the early phase of the plantation which would be taken care of. The same has been confirmed during on-site inspection/interviews/i-xiv/. **Impact of the risk** In line with Risk and Capacities tool/04/, the impact of the risk on destruction of the products/GHG benefits is high (3) as there is a probability that younger plantations could be eaten by the animals nearby which has been discussed by the VVB during onsite inspection/interviews/i-xiv/ **Scale of the risk** In line with the Risk and Capacities tool/04/, the scale of the risk is low. Less than 5% of the projected is expected to be harmed. Hence VVB validates the risk score 1 (Low). **Mitigation measures** Villagers are sensitized/36/ to control their animals, by shedding or herding and are aware of criticality of the event which was confirmed by VVB through on-site inspection Interviews/i-xiv/.
	1.4 Pest and disease outbreaks (e.g.,insects, bacteria, viruses, fungi)	**Probability of the risk** In line with the Risk and Capacities tool/04/, Low (Score 1) has been considered as an event that is expected to occur less than once every 20 years/B06/. The probability of the risk is low, as the insects like caterpillars and grasshoppers are part of direct diet of the local communities there, so they are naturally controlling the insect pressure. Also, trees have been planted in diverse stands in order to prevent outbreak of diseases and prevent maximum harm from pests/18/. The same has been confirmed during on-site inspection/interviews/i-xiv/. **Impact of the risk** In line with Risk and Capacities tool/04/ the impact of the risk on destruction of the products/GHG benefits is medium as if trees gets affected by pests or diseases it will hinder their growth. But as a variety of species is planted to reduce the risk the impact of risk is reduced. Hence VVB validates the score 2 (Medium).

		Scale of the risk In line with the Risk and Capacities tool[/04/], the scale of the risk is medium as disease outbreaks can affect the plantation on local as well as larger scales. Hence VVB validates the risk score 2 (Medium). **Mitigation measures** Mitigation measures adopted includes plantation of trees in diverse stands which has been confirmed and validated by VVB during On Site inspection/interviews[/i-xiv/] and document review[/18/].
	1.5 Temperature extremes (e.g., extreme heat, frost)	**Probability of the risk** In line with the Risk and Capacities tool[/04/], Medium (Score 2) has been considered as an event that is expected to occur less than once every 11 - 20 years. The probability of the risk is medium, as climate changes may lead to temperature and heat stress along with drought. The same has been confirmed during on-site inspection/interviews[/i-xiv/] and source https://thinkhazard.org/en/report/68-democratic-republic-of-congo/EH **Impact of the risk** In line with Risk and Capacities tool[/04/], the impact of the risk on destruction of the products/GHG benefits is low. Heat stress can result in slow growth during the period of higher temperatures, but it doesn't affect the trees on long term. Hence VVB validates the score 1 (Low). **Scale of the risk** In line with the Risk and Capacities tool[/04/], the scale of the risk is Medium as in case of a heat wave some tree species are more prone to get affected as not all species presents are heat resistant. Hence validates the risk score 2 (Medium). **Mitigation:** No mitigation measures have applied as the total score of the risk is low.
	1.6 Water extremes (e.g. droughts, heavy rains, floods, mudslides, avalanches, ice-storms)	**Probability of the risk** In line with the Risk and Capacities tool[/04/], Medium (Score 2) has been considered as an event that is expected to occur once or more in 11-20 years. The probability of the risk is medium, although tropical storms with heavy rains occurs frequently but the project area has well drained sandy which also makes the amount of available water limited during dry seasons on the other hand, but trees are able to bridge this period. Hence VVB validates the risk score is 2 deemed to be valid and appropriate. The same was supported through the source (https://thinkhazard.org/en/report/14960-democratic-

		republic-of-congo-bandundu-kwango/DG) **Impact of the risk** In line with Risk and Capacities tool/04/ the impact of the risk on destruction of the products/GHG benefits is low as drought might hinder growth of trees during dry season but after first showers growth can ace up. Hence VVB validates the score 1 (Low). **Scale of the risk** In line with the Risk and Capacities tool/04/, the scale of the risk is high. As whole plantation will be affected by droughts, VVB validates the risk score 3. **Mitigation measures** Native tree species which are well adapted and grow well in dry climate are chosen for plantation. However, the overall risk is low.
	1.7 Changing climate (e.g. long draught period, seasonal variability of rainfall pattern, water availability)	**Probability of the risk** In line with the Risk and Capacities tool/04/, Medium (Score 2) has been considered as an event that is expected to occur once or more in 11-20 years. The differences between the dry season and the rainy seasons are fading. This may affect planting, because the planting season becomes less predictable. Rainfall patterns are changing, with generally more rain expected over the season. Rainfall is expected to increase 0-20% between December, January and February. Whereas 0-10% reduction of precipitation is expected between June, July and August (Ludwig et al., 2013) and the same has been confirmed by VVB during on-site inspection/interviews/i-xiv/ and supporting literature review/B06/ **Impact of the risk** In line with Risk and Capacities tool/04/ the impact of the risk on destruction of the products/GHG benefits is low. Hence VVB validates the score 1 (Low). Although shifting rainy seasons are a problem in proper planning of planting season but once the trees are grown there is not much impact of these seasons on their growth. **Scale of the risk** In line with the Risk and Capacities tool/04/, the scale of the risk is High as Impacts of climate change will cover whole forest and not some part of it. VVB validates the score risk score 3 (High). **Mitigation measures** No mitigation measures have applied as the risk is low.

	1.8 Earthquake and induced landslides	**Probability of the risk** In line with the Risk and Capacities tool[/04/], Low (Score 1) has been considered as an event that is expected to occur lessthan once every 20 years. The probability of the risk is low, as the project area is not in earthquake risk zone and the same has been confirmed by VVB during on-site inspection/interviews[/i-xiv/] and through the web source https://thinkhazard.org/en/report/14960-democratic-republic-of-congo-bandundu-kwango/EQ) **Impact of the risk** In line with Risk and Capacities tool[/04/] the impact of the risk on destruction of the products/GHG benefits is low. Hence VVB validates the score 1 (Low). **Scale of the risk** In line with the Risk and Capacities tool[/04/], the scale of the risk is low as only hillsides are prone to landslides. Hence VVB validates the risk score 1 (Low). **Mitigation Measures** Forests Plantation has not been done on hills and the same was confirmed during onsite inspections/interview[/i-xiv/].
	1.9 Geological risk (e.g. volcanic eruption, desert progression	**Probability of risk** In line with Risk and Capacities tool[/04/], VVB validates the risk score 1 for Geological risk is valid and appropriate as the project area is not geologically active region, the same was confirmed through the source https://thinkhazard.org/en/report/68-democratic-republic-of-congo/VA . **Impact of risk** In line with the Risk and Capacities tool[/04/], the impact the impact of the risk on destruction of the products/GHG benefits is low. Hence VVB validates the score 1 (Low). **Scale of risk** In line with the Risk and Capacities tool[/04/], the scale of risk is also very low (1). Hence VVB validates the score 1 (Low). **Mitigation measures** Since the total score of the risk is low hence no mitigation measures were required and hence not implemented
	2. Political risks	

	2.1Political interventions (e.g. wars, riots, civil strife, terrorism, corruption, land occupation, community resistance)	**Probability of risk** In line with the Risk and Capacities tool[/04/], Medium (Score 2) has been considered as an event that is expected to occur less than once in 11-20 years. The probability of the risk is medium as the Kwango province is currently stable and peaceful. Also, the project area is next too Congo's main route national 1, it is within political interest to keep the region stable, but the risk of riots cannot be excluded completely and the same was confirmed through the source https://credendo.com/en/knowledge-hub/democratic-republic-congo-credendos-political-risk-classifications Customary law[/33/] defines land use rights, but the coûtumes are not very well administered and cause disputes about land use rights and the same has been confirmed by VVB during on-site inspection/interviews[/i-xiv/]. **Impact of the risk** In line with Risk and Capacities tool[/04/], the impact of the risk on destruction of the products/GHG benefits is medium. In some cases, the acquired land cannot be planted due to disputes about land ownership, even though it is legally in order. But apart from startup issues, once the land has been agreed to put into concession there is limited to no risk. Hence VVB validates the corrected score 1 (Low). **Scale of the risk** In line with the Risk and Capacities tool[/04/], the scale of the risk is also low. Hence VVB validates the risk corrected score 1 (Low), since the mitigations measures are in place. **Mitigation Measures** Mitigation measures includes - During stakeholder consultation, the communities have been consulted to understand the borders of land use rights (collaborative cartography). Hence, disputes about land use rights are avoided. The administrator de terre of the Kwango Province has visited the project area and clearly administered the borders of land use. A sensibilisation program is also running with the local population and always stay in contact with the local communities.

	2.2 Confiscation of property (e.g. expropriation, infrastructure development)	**Probability of risk** In line with the Risk and Capacities tool[/04/], Low (Score 1) has been considered as an event that is expected to occur once in 20 years. The probability of the risk is low, as the properties of the projects are respected by the administration of the Province of Kwango and the local communities and same been confirmed by during on-site inspection/interviews[/i-xiv/] by the VVB. **Impact of the risk** In line with Risk and Capacities tool[/i-xiv/] the impact of the risk on destruction of the products/GHG benefits is Medium. Hence VVB validates the score 2 (Medium). **Scale of the risk** In line with the Risk and Capacities tool[/04/], the scale of the risk is also low. Hence VVB validates the risk score 1 (Low). **Mitigation Measures** No mitigation measures have applied as the risk is low.
	2.3 Irregular resettlement	**Probability of risk** In line with the Risk and Capacities tool[/04/], Low (Score 1) has been considered as an event that is expected to occur once in 20 years. The probability of the risk is low, as the villages have been respected and the local communities are settled. Any irregular resettlement is also not expected and the same has been confirmed by VVB during on-site inspection/interviews[/i-xiv/] and reviewing GIS maps[/25/] **Impact of risk** In line with the Risk and Capacities tool[/04/], the scale of the risk is also medium. Hence VVB validates the risk score 2 (Medium). **Scale of risk** In line with the Risk and Capacities tool[/04/], the scale of the risk is also low. Hence VVB validates the risk score 1 (Low). **Mitigation measures** No mitigation measures have applied as risk is low.
	2.4 Exploitation of natural resources (e.g mining, water, oil)	**Probability of Risk** In line with Risk and Capacities tool[/04/], low score (1), has been considered as an event that is expected to occur once in 20 years. The probability of the risk is low as no valuable resources can be found in the underground of the region and the same has been confirmed by VVB during on-site inspection/interviews[/i-xiv/] and review of

		"Map of Congo's mining regions" provided in AR_LUF_Risks-Capacities-Assessment/04/ **Impact of the risk** In line with the Risk and Capacities tool/04/, the scale of the risk is high (3). Hence VVB validates the risk score 3 (High). **Scale of the risk** In line with the Risk and Capacities tool/04/, the scale of the risk is also low. Hence VVB validates the risk score 1 (Low). **Mitigation Measures** No mitigation measures have applied, as the evaluated risk is low.
	3. Project Management risks	
	3.1 Project failure due to: ● insufficient internal technical capacity (e.g. Due to high fluctuation of season workers or permanent staff, not sufficient training), OR ● dependency on continuous external technical support	**Probability of the risk:** In line with the Risk and Capacities tool/04/, low (Score 1) has been considered as an event that is expected to occur lessthan once in 11-20 years. The probability of the risk is low, as a team of experts is locally employed, and season workers are employed from the villages neighboring the plantation and the same has been confirmed by VVB during on-site inspection/interviews/i-xiv/ and VVB has verified the CVs/39/ and resumes/39/ of project to confirm the technical of capacity of the project team. **Impact of the risk** In line with Risk and Capacities tool/04/ the impact of the risk on destruction of the products/GHG benefits is medium. Hence VVB validates the score 2 (Medium). **Scale of the risk** In line with the Risk and Capacities tool/04/, the scale of the risk is also low. Hence VVB validates the risk score 1 (Low). **Mitigation Measures** No mitigation measures have applied as the risk is low.

	3.2 Project failure due to dependency on key technical individuals in the organization that are difficult to replace.	**Probability of the risk** In line with the Risk and Capacities tool/04/, Low (Score 1) has been considered as an event that is expected to occur less than once every 20 years. The probability of the risk is low, as the project location is relatively close to Kinshasa where educated staff can be found and the same has been confirmed by VVB during on-site inspection/interviews/i-xiv/. **Impact of the risk** In line with Risk and Capacities tool the impact of the risk on destruction of the products/GHG benefits is medium. Hence VVB validates the score 2 (Medium). **Scale of the risk** In line with the Risk and Capacities tool/04/, the scale of the risk is also low. Hence VVB validates the risk score 1 (Low). **Mitigation Measures** Project location is relatively close to Kinshasa where educated staff can be found.
	3.3 Project failure due to: ● to the lack of technical equipment (e.g. machinery), OR ● planting material (e.g import barriers such as taxes, bureaucracy)	**Probability of the risk** In line with the Risk and Capacities tool/04/, medium (Score 2) has been considered as an event that is expected to occur once in 11 - 20 years. The probability of the risk is medium as tree seeds are only seasonally available. Some tree seeds are harder to find than others and the quality (germination) is also not guaranteed. Although the necessary machinery has been provided but, in some cases, certain pieces require replacement, for which it may be hard to find replacing pieces and import barriers may apply and the same has been confirmed by VVB during on-site inspection/interviews/i-xiv/. **Impact of the risk** In line with Risk and Capacities tool/04/ the impact of the risk on destruction of the products/GHG benefits is low. Hence VVB validates the score 1 (Low). **Scale of the risk** In line with the Risk and Capacities tool/04/, the scale of the risk is medium. Hence VVB validates the risk score 2 (Medium). **Mitigation Measures** Mitigation measures include buying seeds in advance and storing them in dry and cool conditions as required. Also,

		a local technician supports the maintenance of the machinery.
	3.4 Project failure due to: ● insufficient internal financial accounting and management capacity, or ● dependency on continuous external financial accounting and management support	**Probability of the risk** In line with the Risk and Capacities tool[/04/] Low (Score 1) has been considered as an event that is expected to occur lessthan once every 20 years. The probability of the risk is low, as the project is funded by Colruyt group[/44/], a large retailer in food and non-food and the same has been confirmed by VVB during on-site inspection/interviews[/i-xiv/] and supporting high level cashflow/funding document[/44/] **Impact of the risk** In line with Risk and Capacities tool[/04/] the impact of the risk on destruction of the products/GHG benefits is low. Hence VVB validates the score 1 (Low). **Scale of the risk** In line with the Risk and Capacities tool[/04/], the scale of the risk is also low. Hence VVB validates the risk score 1 (Low). **Mitigation Measures** As a mitigation measure the project budget schedule is being strictly followed and however the risk is evaluated as low
	3.5 Project failure due to dependence on key financial accounting and management expertise of individuals in the organization that are difficult to replace	**Probability of the risk** In line with the Risk and Capacities tool[/04/], Low (Score 1) has been considered as event is expected to occur less than once every 20 years. The probability of the risk is low, as there are multiple accountants and several mechanisms in place to follow up accounting of the project, and the same has been confirmed by VVB during on-site inspection/interviews[/i-xiv/]. **Impact of the risk** In line with Risk and Capacities tool[/04/] the impact of the risk on destruction of the products/GHG benefits is low. Hence VVB validates the score 1 (Low). **Scale of the risk** In line with the Risk and Capacities tool[/04/,] the scale of the risk is also low. Hence VVB validates the risk score 1 (Low). **Mitigation Measures** Mitigation measures include inclusion of sufficiently big project staff and as well as overlap in scopes so if key personnel leaves or falls out sick, there are no issues with accounting or whatsoever.

	3.6 Project failure due to: ● insufficient internal legal management capacity, OR ● dependency on continuous external legal management support	**Probability of the risk** In line with the Risk and Capacities tool[/04/], Low (Score 1) has been considered as an event that is expected to occur less than once every 20 years. The probability of the risk is low, as the team is supported by a local lawyer and his back office as well as Deloitte and there is a good relationship with the administration of the Kwango Province and the same has been confirmed during on-site inspection/interviews[/i-xiv/]. **Impact of the risk** In line with Risk and Capacities tool[/04/] the impact of the land disputes risk on destruction of the products/GHG benefits is medium. Hence VVB validates the score 2 (medium). **Scale of the risk** In line with the Risk and Capacities tool[/04/], the scale of the risk is also medium since the PD clarifies that no plantations are carried out on dispute lands. Hence validates the risk score 2 (medium). **Mitigation Measures** In case of disputes of land occupation, the project is deemed to respect both legal administration and customs. Legally, everything is in order[/05/]. Also, the PD always stays in conversation with the chefs de villages.
	3.7 Project failure due to dependence on key legal management individuals in the organization that are difficult to replace.	**Probability of the risk** In line with the Risk and Capacities tool[/04/], Low (Score 1) has been considered as an event that is expected to occur lessthan once every 20 years. The probability of the risk is low, as the team is supported by a local lawyer and his back office as well as contact with international law experts, so the replacement is possible and the same has been confirmed by VVB during on-site inspection/interview[/i-xiv/]. **Impact of the risk** In line with Risk and Capacities tool[/04/] the impact of the risk on destruction of the products/GHG benefits is low. Hence VVB validates the score 1 (Low). **Scale of the risk** In line with the Risk and Capacities tool[/04/], the scale of the risk is also low. Hence validates the risk score 1 (Low). **Mitigation Measures** No mitigation measures have applied as the risk is low.
	3.8 Project failure due to: ● insufficient internal capacity to	**Probability of the risk** In line with the Risk and Capacities tool[/04/], Low (Score 1) has been considered as an event that is expected to occur lessthan once every 20 years. The probability of the risk

	support to maintain third-party certification, OR ● dependency on continuous external support to support to maintain third-party certification	is low, as a carbon verification engineer within the team is dedicated to support the third-party certification. In-house experience is also being build up and the same has been confirmed by VVB during on-site inspection/interviews/i-xiv/. **Impact of the risk** In line with Risk and Capacities tool/04/ the impact of the risk on destruction of the products/GHG benefits is medium. Building up experience is time consuming and may slow down the process therefore VVB validates the score 2 (Medium). **Scale of the risk** In line with the Risk and Capacities tool/04/ the scale of the risk is also low. Hence validates the risk score 1 (Low). **Mitigation Measures** No mitigation measures required have applied the risk is low.
	3.9 Project failure due to dependence on key individuals to support to maintain third-party certification in the organization that are difficult to replace.	**Probability of the risk** In line with the Risk and Capacities tool/04/, Low (Score 1) has been considered as an event that is expected to occur lessthan once every 20 years. The probability of the risk is low, as a carbon verification engineer within the team is dedicated to support the third-party certification and supported by colleagues within the team that could take over and the same has been confirmed by VVB during on-site inspection/interviews/i-xiv/. **Impact of the risk** In line with Risk and Capacities tool the impact of the risk on destruction of the products/GHG benefits is low. Hence VVB validates the score 1 (Low). **Scale of the risk** In line with the Risk and Capacities tool/04/, the scale of the risk is also low. Hence validates the risk score 1 (Low). **Mitigation Measures** No mitigation measures have applied as the risk is low.
	4. Financial risks	
	4.1 Late achievement of the project cumulative cashflow break-even point	**Probability of the risk** In line with the Risk and Capacities tool/04/, score 3 (high) has been considered as the project achieve break-even within 5 years from the date of the gold standard certification. Also, the main goal of the project is not to be profitable, but to compensate for the emissions of the company and same has been confirmed during on-site

		inspection/interviews[/i-xiv/] and supporting high level cashflow/funding document[/44/] **Impact of the risk** In line with the Risk and Capacities tool[/04/], low (Score 1) has been considered as the project is generating sufficient carbon credits within 5-10 years from the certification, to meet the wishes of the company. The same was confirmed through the supporting high level cashflow/funding document[/44/]. Hence VVB validates the score. **Scale of the risk** In line with the Risk and Capacities tool[/04/], the scale of the risk is low. Hence validates the risk score 1 (low). **Mitigation** No mitigation measures have applied since the evaluated risk is low.
	4.2 Lack of secured continued financial resources for project implementation until the project's the cumulative break-even cash flow (for profit projects) / total cost until end of crediting (non-profit projects)	**Probability of the risk** In line with the Risk and Capacities tool, low (Score 1) the project is initialized by a large retailer that funds the project in order to compensate its own emissions. Sufficient funding[/44/] is also secured from Colryut group as long as the provided budget is respected. Hence VVB validates the risk score 1. **Impact of the risk** In line with the Risk and Capacities tool[/04/], low (Score 1) has been considered as secured funding is more than 70% of funding volume. The same was verified through the document[/44/] and onsite interviews[/i-xiv/]. Hence VVB validates the risk score. **Scale of the risk** In line with the Risk and Capacities tool[/04/], the scale of the risk is low. Hence validates the risk score 1 (low). **Mitigation** No mitigation measures have applied as the risk is low.
	5. Market risks	
	5.1 Lack of liquidity/financial resources due to price variations (e.g. crop/timber produced, CO2-	**Probability of the risk** In line with the Risk and Capacities tool[/04/], Low (Score 1) has been considered as an event that is expected to occur lessthan once every 20 years. The probability of the risk is low, as the project is initialized by a large retailer that funds the project in order to compensate its own emissions. The project is fully prefinanced during the

	certificates, fertilizer, machines)	plantation phase. Hence, project failure due to lack of liquidity/financial resources does not occur and the same has been confirmed by VVB during on-site inspection/interviews and the same was confirmed through the document review/44/ **Impact of the risk:** In line with Risk and Capacities tool/04/ the impact of the risk on destruction of the products/GHG benefits is low. Hence VVB validates the score 1 (Low). **Scale of the risk:** In line with the Risk and Capacities tool/04/, the scale of the risk is also low. Hence VVB validates the risk score 1 (Low). **Mitigation measure** No mitigation measures are applied as the risk is low.
	5.2 Project failure due to competing commodities (e.g palm oil, soya)	**Probability of the risk** In line with the Risk and Capacities tool/04/, Low (Score 1) has been considered as an event that is expected to occur lessthan once every 20 years. As verified through the GIS files/LULC files/25/ of the project areas, VVB confirms that the agriculture and plantations are not common in the region. People live from subsistence farming and hunting. Thus, VVB confirms the risk score applied is valid. **Impact of the risk** In line with Risk and Capacities tool/04/ the impact of the risk on destruction of the products/GHG benefits is low. Hence VVB validates the score 1 (Low). **Scale of the risk:** In line with the Risk and Capacities tool/04/, the scale of the risk is also low. Hence VVB validates the risk score 1 (Low). **Mitigation measures** No mitigation measures are applied as the risk is low.
	5.3 Project failure due to competing infrastructure (e.g settlements, roads)	**Probability of the risk** In line with the Risk and Capacities tool/04/, Low (Score 1) has been considered as an event that is expected to occur lessthan once every 20 years. The probability of the risk is low, as the unpaved, sandy roads are limitedly present in the concession. Settlements are relatively small and not expected to expand in the concession. Hence, project failure due to competing infrastructure does not exist and

		the same has been confirmed by VVB during on-site inspection/interviews[/i-xiv/]. **Impact of the risk** In line with Risk and Capacities tool[/04/], the impact of the risk on destruction of the products/GHG benefits is low. Hence VVB validates the score 1 (Low). **Scale of the risk** In line with the Risk and Capacities tool[/04/], the scale of the risk is also low. Hence VVB validates the risk score 1 (Low). **Mitigation measures** No mitigation measures required as the risk is low. In line with the Risk and Capacities tool[/04/], the scale of the risk is also low. Hence VVB validates the risk score 1 (Low).
	1. Other risks	
	6.1 Any other specific project risk that endangers the viability of the project (e.g. project failure due to crop robbery/illegal timber logging, due to disputes with the cooperative)	**Probability of the risk** In line with the Risk and Capacities tool[/04/, medium (Corrected score 2) has been considered as an event that is expected to occur once in 11- 20 years. The probability of the risk is high as unsustainable forest exploitation by the local communities for charcoal production is a main source of income for many families which may endanger the project. Hence, VVB confirms that the risk score is valid and appropriate. **Impact of the risk:** In line with Risk and Capacities tool[/04/, the impact of the risk on destruction of the products/GHG benefits is medium. Hence VVB validates the score 2 (Medium) as people manually log trees in the Savannah surrounding their villages which is also illegal timber logging. **Scale of the risk:** In line with the Risk and Capacities tool[/04/], the scale of the risk is also low. Hence VVB validates the risk score 1 (Low). **Mitigation measure:** A sensibilization program has started to sensitize the communities (P2) about the project rules. Exploitation of the project is strictly forbidden. In P3 activities, the project is considering installing an *Acacia* plantation for sustainable charcoal production to provide an alternative to unsustainable exploitation.

	In accordance with section 11.1.1 of GS4GG GHG Emissions Reductions & Sequestration Product Requirements v2.3, PD has deposited or will deposit 20% of buffer credits (6,57,854 tCO_2e) from the estimated GHG removals of proposed activity (3,289,369 tCO_2e).

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5. Certification Opinion

CCIPL has performed the design certification of the proposed Gold Standard project activity *"N'situ Pelende by Colruyt Group"* with start date of 23/12/2021/03/ and the crediting period of 50 years from 23rd December 2021 to 22nd December 2071

This design certification was conducted on the basis of the Gold Standard Afforestation/Reforestation (A/R) GHG Emissions Reduction & Sequestration Methodology (Version 2.0)/B03/, GS4GG Principles & Requirements v1.2/B02/, GS4GG Land Use & ForestsActivity Requirements Version 1.2.1/B01/, Risks & Capacities Guideline for Land Use & Forest projects Version 1.0.

The validation activities conducted by CCIPL included: collection of information, documents and data supporting the estimated GHG removals and GHG calculation spreadsheets/02/. The estimated ex-ante CO_2 fixation/02/ for the 50 years is 3,289,369 tCO2e with average annual ERs of 64,497 tCO2e/year (Before -20% buffer deduction).

The VVB has raised 18 (Eighteen) clarification (CLs), 06 (six) corrective action requests (CARs) and closed satisfactorily upon the review of the supporting documentation provided/01/- 46 and 00 (zero) FARs are raised. Furthermore, during preliminary review SustainCert has 3 FARs and closed satisfactorily by the VVB based on thorough review of supporting documentation/01-46/.

The VVB concludes with a reasonableness of assumptions and defaults that the project is in conformance with applied GS4GG Principles & Requirements v1.2/B02/, GS4GG LUF Activity Requirements v1.2.1/B01/ and Gold Standard Afforestation/Reforestation (A/R) GHG Emissions Reduction & Sequestration Methodology (Version 2.0)/B03/. No qualifications or limitations exist with respect to the validation opinion reached by theauditor.

Appendix 1. Safeguarding Principles Assessment

Assessment Questions/ Requirements	Justification of Relevance (Yes/potentially/no)	**How Project will achieve Requirements through design,management or risk mitigation.**	Mitigation Measures added to the MonitoringPlan (if required)	VVB Assessment
Principle 1. Human Rights				
The Project Developer and the Project shall respect internationally proclaimed human rights and shall not be complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights. The Project shall not discriminate with regards to participation and inclusion	No. The project aligns with the Universal Declaration of Human Rights and national legislation, ensuring that the rights of employers are respected. Employment opportunities are available to individuals aged 16 and above without discrimination based on gender, religion, age, origin, sexual orientation, or political opinions. Additionally, the project design incorporates environmental and social considerations as outlined in the impact analysis report[/18/]	The rights of employers are respected following the Universal Declaration of Human Rights and the national legislation. The project follows the Universal Declaration of Human rights. All employers from the age of 16 can be employed, they will not be discriminated based on gender, religion, age, origin, sexual orientation, or political opinions.	Not required	Appropriateness for this safeguarding principle was validated and confirmed through on-site inspection interviews with: Representatives of PD Local Stakeholders VVB confirms that the project will achieve requirements through design and management, hence no mitigation is needed.
Principle 2. Gender Equality				
The Project shall not directly or indirectly lead to/contribute to adverse impacts on gender equality and/or the situation of women. Projects shall apply the principles of non-discrimination, equal treatment, and equal pay for equal work. The Project shall refer to the	No.	1. A gender sensitive approach is included in the project pillars. 2. Women are not excluded for work and receive equal payment for the same work 3. The project complies to DRCs national gender Policies and strategies. - National Policy on Gender Mainstreaming, Family and Child Promotion, MGFE, Kinshasa, July 2008	Not required.	Appropriateness for this safeguarding principle was validated and confirmed throughsupporting document review[/23/] and on-site inspection interviews[/i-xvi/] with: Representatives of PD Local Stakeholders VVB confirms that the project emphasizes on women

country's national gender strategy or equivalent national commitment to aid in assessing gender risks Summary of opinions and recommendations of an Expert Stakeholder(s).		- National strategy to combat Gender-Based Violence (SNVBG), MGFE, Kinshasa, Novembre 2009 - Action plan of the government of the DRC for the United Nations Security Council Resolution 1325, MDFE, Kinshasa, January 2010.		participation and engaging them the project also complies to DRCs national gender Policies and strategies[/23/].
Principle 3. Community Health, Safety and Working Conditions				
The Project shall avoid community exposure to increased health risks and shall not adversely affect the health of the workers and the community.	No. Since the project does not pose community risks in relation to health, safety and working conditions. No adverse impacts on ecosystems and no ecosystem services relevant to communities' health. No air pollution, noise, vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, sanitation will be resulted with project activity implementation and the same confirmed during the onsite inspections[/i-xvi/]. P3.1- Potentially. The project involves the construction and/or infrastructure development (e.g., roads, buildings, dams), the project activity involves construction of a bridge, two schools, and a medical center, fuel for tractors, cars, and motorcycles is stored and used in a controlled environment within the garage, with limited access. The evidence pictures are provided in the PDD[/01/] and the same confirmed during the onsite inspections[/i-xvi/].	The project does the maximal to avoid dangerous situations and prevent incidents. In case of an incident, this is listed and evaluated if it could be avoided in the future.	Not required	Based on the review of the PDD[/01/], stakeholder consultation report[/20/] and during the onsite inspections[/i-xvi/] VVB, confirms that the project activity does not include any activity exposing the community to any kind of health risk. Thus, the mitigation measures are not required. Moreover, the project involves the construction of schools, bridges which will be positively impact the community livelihood[/01/].
Principle 4.1 Sites of Cultural and Historical Heritage				

Does the Project Area include sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture?	**No,** The area has been selected with land occupation as a first selection criterium. Sites, structures, and objects with historical, cultural, artistic, traditional, or religious values or intangible forms of culture are excluded from the planting area. The same was confirmed through the review of project GIS shapefiles[/25/]**.**	The project implementation does not involve any activity which violets the principle.4 of the safeguarding requirements.	Not required	VVB, based on review of the stakeholder consultation report[/20/], GIS files of the project[/25/] and on onsite inspections[/i-xvi/]confirms that the project site does not include any sites, structures or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture.
Principle 4.2 Forced Eviction and Displacement				
Does the Project require or cause the physical or economic relocation of peoples (temporary or permanent, full or partial)?	**No,** There are no displacements of people or villages by the project. The same was confirmed during the onsite inspections/interview[/i-xvi/] and moreover PD has clear land concessions[/05/] with no disputes exists.	Not required.	Not required.	Appropriateness for this safeguarding principle was validated and confirmed through on-site inspection interviews with Representatives of PD Local Stakeholders[/i-xvi/]. The same was confirmed through land concessions[/05/] document with no disputes over the land tenure and rights.
Principle 4.3 Land Tenure and Other Rights				
Does the Project require any change, or have any uncertainties related to land tenure arrangements and/or access rights, usage rights or land ownership? For Projects involving land use tenure, are there any uncertainties with regards to	**Yes,** Parts of the region are under administered with regards to land tenure rights. There are some (non-serious) uncertainties about land use, related to conflicts between land grantors and spoliators, which are manifested only by the excitement of the Nsitu Pelende Project activities.	Conflict procedure; The project will try to find a solution that goes with both parties. That could mean: 1) Work with provincial government and *Chefferie* to resolve issues; 2) not planting the areas of land in question until resolved, even though it is legally under concession of the project, 3) if negotiations do not lead to any solution, the court of Kenge will solve legal disputes	Effective planting area is part of the monitoring plan.	Appropriateness for this safeguarding principle was validated and confirmed through on-site inspection interviews with Representatives of PD Local Stakeholders[/i-xvi/] The same was further confirmed during through the clear land concessions[/05/] with no

land tenure, access rights, usage rights or land ownership? The Project Developer shall identify all such sites/matters potentially affected by the Project. For all such sites/matters identified the Project shall respect and safeguard: (a) Legal rights, or (b) Customary rights, or (c) Special cultural, ecological, economic, religious or spiritual significance of people shall be demonstrably promoted/protected. Changes in legal arrangements must be in line with relevant law and must be carried out in strict adherence with such laws. All legal disputes must be resolved prior to the Project being carried out in such areas. All such changes must be demonstrated as having been agreed with free, prior and informed consent.		about land-tenure rights. Locations of farms are mapped in Fermes.shp In case doubt about land-tenure rights is raised, the project will first address and negotiate with the government and the landowners as well as with the *Chefferie*, *chef coutumier* and *chef de villages*. The minister of the province of Kwango can assists to clarify land-tenure rights. In case doubt about land-tenure rights is raised, the project will first address and negotiate with the government and the landowners as well as with the *Chefferie*, *chef coutumier* and *chef de villages*. The minister of the province of Kwango can assists to clarify land-tenure rights.		disputes exists over the land tenure and rights.

The Project Developer must hold uncontested land title for the entire Project Boundary to complete Project Design Certification.		The concession contract is an uncontested land title for the entire project boundary.		
Principle 4.4 - Indigenous people				
Are indigenous peoples present in or within the area of influence of the Project and/or is the Project located on land/territory claimed by indigenous peoples?	**No,** People in the area are not considered indigenous.	Not required.	Not required.	Appropriateness for this safeguarding principle was validated and confirmed through document review/43/33/ and on-site inspection interviews with Representatives of PD Local Stakeholders/i-xvi/
Principle 5. Corruption				
The Project shall not involve, be complicit in or inadvertently contribute to or reinforce corruption or corrupt Projects	No. Since the project the project does not involve, or is it complicit in, contributing to or reinforcing corruption or corrupt projects and not have a risk of encouraging bribery, kickbacks, or other unethical behavior	The project follows the subsidiarity principle. Negotiations for land run with regional politicians on the lowest level possible. The closer politicians are to their people, the lower the risk of corruption.	Not required.	Appropriateness for this safeguarding principle was validated and confirmed through document review/43/ and on-site inspection interviews with: Representatives of PD

				Local Stakeholders[/i-xvi/]
Principle 6.1 Labour Rights				
The Project Developer shall ensure that all employment is in compliance with national labour occupational health and safety laws and with the principles and standards embodied in the ILO fundamental conventions. Workers shall be able to establish and join labour organizations. Working agreements with all individual workers shall be documented and implemented and include: a) Working hours (must not exceed 48 hours per week on a regular basis), and b) Duties and tasks, and c) Remuneration (must include provision for payment of overtime), and d) Modalities on health insurance, and e) Modalities on termination of the contract with provision for voluntary resignation by employee, and f) Provision for annual leave of not less than 10 days per year, not including sick and casual leave. No child labour is allowed (Exceptions for children working	No.	The project respects all employer's rights, with regards to health and safety. All employers are contracted with a description of working hours, duties and tasks, remuneration, modalities over contract termination and provision of annual leave. No child labour is allowed. Laborers get appropriate equipment for their work and safety.	Not required.	Appropriateness for this safeguarding principle was validated and confirmed through documentary evidence[/45/], stakeholder consultation report[/20] and during on-site inspection interviews with: Representatives of PD Local Stakeholders[/i-xvi/]

on their families' property requires an Expert Stakeholder opinion) The Project Developer shall ensure the use of appropriate equipment, training of workers, documentation and reporting of accidents and incidents, and emergency preparedness and response measures				
Principle 6.2 Negative Economic Consequences				
Does the project cause negative economic consequences during and after project implementation?	**No,** Economic development is part of pillar 3 in the project.	Not required.	Not required.	Appropriateness for this safeguarding principle was validated and confirmed through on-site inspection interviews [i-xvi/] with that project has no negative consequences during and after implementation of project.
Principle 7.1 Emissions				
Will the Project increase greenhouse gas emissions over the Baseline Scenario?	**No,** Fires are common in the region, causing baseline N2O and CH4 and CO2 emissions. A fire prevention and fire sensitisation program are part of the project pillar 2 and will reduce emissions over the baseline scenario.	Not required.	Not required.	VVB based on the on-site inspection/interviews, confirms that there is a fire prevention and fire sensitization program being followed.
Principle 7.2 Energy Supply				
Will the Project use energy from a local grid or power supply (i.e., not connected to a national or regional grid) or fuel resource (such as wood, biomass) that	**No,** The project has installed solar panels and batteries to provide its own energy. Fuel is purchased in the nearest city. No local fuel	Not required.	Not required.	VVB based on the on-site inspection/interviews confirms the project will not use any energy in the designated areas.

provides for other local users?	resource is used.			
Principle 8.1 Impact on Natural Water Patterns/Flows				
Will the Project affect the natural or pre-existing pattern of watercourses, ground-water and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity?	**No,** The plantation is rainfed. Only the tree nurseries use very limited amounts of river water, well within the boundaries of the natural capacity.	Not required.	Not required.	Appropriateness for this safeguarding principle was validated and confirmed through environment impact assessment report[/35/] and on-site inspection interviews [i-xvi/] with: Representatives of PD Local Stakeholders.
Principle 8.2 Erosion and/or Water Body Instability				
Could the Project directly or indirectly cause additional erosion and/or water body instability or disrupt the natural pattern of erosion? Is the Project's area of influence susceptible to excessive erosion and/or water body instability?	**No.** The landscape is sloped and the rains are heavy tropical rains. The soils are sandy, reducing the risk of erosion. There is a low to moderate risk of erosion, especially on the slopes of the river valley.	The project only ploughs and plants on the weak slopes. Heavy slopes are either left untouched or manually laboured. When ploughing on weak slopes, there is left a grass ridge between the laboured strips. Once forested, the soil will be less prone to erosion. Also, the fire prevention measures will prevent erosion in the region.	Not required.	Appropriateness for this safeguarding principle was validated and confirmed through on-site inspection interviews [i-xvi/] with: Representatives of PD Local Stakeholders
Principle 9.1 Landscape Modification and Soil				
Does the Project involve the use of land and soil for production of crops or other products?	Yes, There is a limited area of land (about 250 ha) set aside for the development of agricultural activities under pillar 3.	The forest will equally - provide food - provide fuel wood - allow for rainwater infiltration (a) litter deposition from trees will enrich the soil and fire prevention will prevent the degradation of soil fertility under baseline scenario.	Soil organic carbon is part of the monitoring plan.	Appropriateness for this safeguarding principle was validated and confirmed -site inspection interviews [i-xvi/] with: Representatives of PD Local Stakeholders

>> To ensure healthy soils the following aspects shall be identified, and appropriate measures shall be put in place to protect them: (a) Soil types, AND (b) Biota, AND (c) Erosion Measures shall be incorporated to minimise soil degradation (e.g., through crop rotation, composting, no use of heavy machinery, use of N-fixing plants, reduced tillage, no use of ecologically harmful substances).		(b) litter will increase the soil organic carbon and soil biota (c) (c) erosion: tree roots will prevent erosion. (a) Soil type: ferralic arenosol (b) biota: Savannah grasslands (c) (c) erosion: under baseline scenario, erosion takes place in the transition between the plateau and river valleys. Agriculture is preferred on non slopy areas. N-fixing plants such as beans and peanuts are used in rotation. Agricultural activities are developed in close cooperation with local communities. P2 and P3 adopt appropriate and culturally sensitive sources.		

Projects that involve the production, harvesting, and/or management of living natural resources by small-scale landholders and/or local communities shall adopt the appropriate and culturally sensitive sustainable resource management practices.				
Principle 9.2 Vulnerability to Natural Disaster				
Will the Project be susceptible to or lead to increased vulnerability to wind, earthquakes, subsidence, landslides, erosion, flooding, drought or other extreme climatic conditions?	**No,** Trees will reduce vulnerability to wind and will provide shade in the sun. The tree roots will slow the runoff of rainwater on sloped hills and allow for better infiltration.	Not required.	Not required.	Appropriateness for this safeguarding principle was validated and confirmed through AR LUF Risks-Capacities-Assessment report with risk assessment on natural risks[/04/], supporting evidence fire risk mitigation are verified[/36/] and the same was further confirmed during on-site inspection/interviews [i-xvi/] with Representatives of PD Local Stakeholders
Principle 9.3 Genetic Resources				
Could the Project be negatively impacted by or involve genetically modified organisms or GMOs (e.g., contamination, collection and/or harvesting,	**No,** Endemic unmodified tree seeds are used. Seeds for agricultural crops are sourced locally and are non GMO.	Not required.	Not required.	VVB based on the on-site interviews[/i-xvi/] and review of PDD[/01/] confirms that no GMO has been used for planting and seeds have been collected

commercial development, or take place in facilities or farms that include GMOs in their processes and production)?				from endemic tree spp. Seeds for agricultural crops also are sourced locally
Principle 9.4 Release of pollutants				
Could the Project potentially result in the release of pollutants to the environment?	**No.** .		Not required.	Appropriateness for this safeguarding principle was validated and confirmed through and document review[/35/] on-site inspection interviews [i-xvi/] with: Representatives of PD Local Stakeholders and confirms that project activity implementation only involves the plantation activity and does not result in any release of the pollutants.
Principle 9.5 Hazardous and Non-hazardous Waste				
Will the Project involve the manufacture, trade, release, and/ or use of hazardous and non-hazardous chemicals and/or materials?	**Yes.** No hazardous or non-hazardous chemicals are used and only Plastic bags from the tree nursery.	During planting the plastic bags from the tree nursery are collected and reused, if possible. Otherwise, they are collected and disposed to a recognised waste collection company.	Follow up of waste collection.	Appropriateness for this safeguarding principle was validated and confirmed through document review[/35/] and on-site inspection interviews [/i-xvi/] with: Representatives of PD Local Stakeholders and confirms that project activity implementation only involves the plantation activity and does not result in any release of hazardous waste products except poly bags which are appropriately managed to

				prevent the waste.
Principle 9.6 Pesticides & Fertilisers				
Will the Project involve the application of pesticides and/or fertilisers?	**Potentially,** Application of pesticides and fertilisers is allowed, only if necessary, in the tree nurseries.	In the tree nurseries, a limited amount of fertilizer is mixed with soil in planting bags. The tree saplings absorb most of the nutrients, with sufficient water provided to ensure nutrient uptake without causing leaching.	Not required.	VVB based on the on-site inspection/interviews[-xvi/] and document review[/36/] confirms that the application of pesticides and fertilizers is allowed (limitedly with no excess use of Pesticides & Fertilizers), only if necessary, in the tree nurseries. Therefore, this can be considered as insignificant, and confirmed that the project does not violate the principle 9.6 requirements.
Principle 9.7 Harvesting of Forests				
Will the Project involve the harvesting of forests	**No,** Forest is planted for biodiversity only goals.	Project activity involves the conservation forest with mostly endemic species, and if exotic species are used, PD make sure that they are known not to be invasive	. Not required.	Appropriateness for this safeguarding principle was validated and confirmed during on-site inspection interviews [/i-xvi/] with: Representatives of PD Local Stakeholders and through the review of the PDD[/01/] and Forest Management Plan-Nsitu Pelende[/18/] confirms that the project does not involve any harvesting of trees or forests ecosystems,
Principle 9.8 Food				

Does the Project modify the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives? >> The Project activity shall not negatively influence access to and availability of food for people affected.	**Yes,** The project will be developing agricultural activities in P2 and P3 to promote economic growth. Development of agricultural activities will diversify the diet and improve nutritional quality.	Development of agricultural activities will diversify the diet and improve nutritional quality.		Appropriateness for this safeguarding principle was validated and confirmed on-site inspection/interviews[/i-xvi/] with: Representatives of PD Local Stakeholders.
Principle 9.9 Animal husbandry				
Will the Project involve animal husbandry?	**Potentially,** The project will stimulate smallholder farmers to grow animals to replace bushmeat from the Savannah.	In P2 activities smallholder farmers will be sensitized about animal growing and animal welfare.		VVB, based on review of GS PDD[/01/] document review[/35/]and through on-site inspection/interviews [i-xvi/] confirms that the project will stimulate smallholder farmers to grow animals to replace bushmeat from the Savannah.
Principle 9.10 High Conservation Value Areas and Critical Habitats				
Does the Project physically affect or alter largely intact or High Conservation Value (HCV) ecosystems, critical habitats, landscapes, key biodiversity areas or sites identified?	**No,** The Savannah grasslands in the Kwango province are not identified as High Conservation Value ecosystems, critical habitats, landscape, or key biodiversity area. They are not part of a national government or WWF program. However, in line with the GS LUF activity requirements, PP has identified the 716.5 ha[/25/] of conservation area where natural regeneration and conservation activities are	Not required	Not required.	Appropriateness for this safeguarding principle was validated and confirmed by VVB through review of Environment impact Assessment[/35/] and during on-site inspection interviews [/i-xvi/] with Representatives of PD Local Stakeholders.

	carried out.			
Principle 9.11 Endangered Species				
Are there any endangered species identified as potentially being present within the Project boundary (including those that may route through the area)?	**No,** The area is not part of any conservation of biodiverse area. It is not part of a national government or WWF program. As far as known, species within the project boundary are not endangered.	Not required.	Not required.	Appropriateness for this safeguarding principle was validated and confirmed through on-site inspection interviews[/i-xvi/] with Representatives of PD Local Stakeholders and based on review of PDD[/01/], Environment impact assessment[/35/] VVB confirms that project activity only involves the plantation activity without any adverse effects on the environment and endangered species.
P 9.11.2 distortion of habitats of endangered species? If answer to the above question is “yes”, does the project plan to protect and enhance them? Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	Endangered species like the pangolin inhabit the remaining forest galleries is identified in the project region. PP will expand and improve their habitat by planting of mixed forests nearby and conservation activity.	Not required.	Not required.	
Does the Project potentially impact other areas where endangered species may be present through transboundary affects?	No transboundary effects are expected.			
Principle 9.12 Invasive Alien Species				

Does project introduce any alien species (not currently established in the country or region of the project) into new environments	Yes. As part of the project activity exotic trees like Acacia mangium, Acacia hybrid, Albizia lebbeck, Albizia chinensis, Senna siamea, and Senna floribunda are introduced. As it is previously introduced in similar DRC regions, they have not shown invasive behavior. Some, like Cassia floribunda, are already naturalized in DRC.			Appropriateness for this safeguarding principle was validated and confirmed through document review/B07/ and environment impact assessment document/35/, on-site inspection interviews/i-xvi/ with Representatives of PD Local Stakeholders.

Appendix 2: Findings Log

Table 1. FARs from Sustain CERT Review

FAR	01	**Section no.**	FAR 1 SustainCERT Preliminary review Finding	**Date:** 07/03/2024
Description of FAR				
The PD shall supply supporting data for all parameters in time for validation/design review, or allocation may be delayed. This includes and is not limited to: Maps, ER spreadsheets, individual study calculations, survey results, study reports etc. as included in the PoA and VPA.				
Project developer response				**Date:** 19/04/2024
Documentation provided by project developer				
VVB assessment				**Date:** 08/05/2024
No response was provided by the project developer. FAR is still open.				
Project developer response				**Date:** 17/05/2024
Maps of the project area with eligible and non-eligible areas have been included in the PDD (figure 1, page 6; figure 6, page 20; figure 20, page 44), non-eligible areas (figure 2, page 10 and figure 3, page 11) Maps of the geographic location have been included in the PDD (figure 4 and 5, page 19) Maps of the tree_non-tree and wetland analysis are in the report of Forest_non-forest and wetland analysis. ER-spreadsheet has been included. Survey results on soil analysis has been included. Other literature has been included.				
Documentation provided by project developer				
Maps: Project design document and Report *Forest_non-forest and wetland analysis_17-5-2024* *ER calculations: CO2-calculation_area calculation 17-5-2024* *Survey results: Environmental agency SARL 2023.pdf* *Study reports: Ludwig et al., 2013; Xu et al Spatial Distribution of Carbon stored in forests of the Democratic Republic of Congo.pdf, JRC_africa_soil_atlas_part1.pdf*				
VVB assessment				**Date:**06/06/2024
Based on the review of the PDD, VVB Confirms that the PD updated with the inclusion of the project area maps, Survey results (SARL) and study reports to support the mentioned information in the PDD. Further the PP also provided the ER calculation sheet as well. **FAR has been closed.**				

FAR	02	**Section no.**	FAR 2 SustainCERT Preliminary review Finding	**Date:** 07/03/2024
Description of FAR				

PD may optionally include further supporting documentation at validation regarding funding sources in support to the claim of financial additionality. A high-level overview of the cash flow can be submitted during the next design review phase.

Project developer response	**Date:** 17/04/2024

We have further underpinned the financial additionality criteria:

Colruyt group NV finances the projects and N'situ Pelende executes the project in order of Colruyt group NV. A budget of 64 million $ over the span of 25 years is assigned to the project. A high-level overview of cash flow between Colruyt group NV and N'situ Pelende has been included.

Documentation provided by project developer

A high-level overview of cash flow has been included in attachment
High-level overview cash-flow.docx

VVB assessment	**Date:** 08/05/2024

The section A.5 of the PDD is revised with explanation on the funding, it is justified that the project activities are fully funded by the Colruyt group. The supporting high-level overview of the cashflow document is provided and verified by the audit team to confirm that a budget of 64M $ over the span of 25 years is assigned to the project by the Colruyt group.

FAR has been closed.

FAR	03	**Section no.**	FAR 3 SustainCERT Preliminary review Finding	**Date:** 07/03/2024

Description of CL

The PD must use the A/R Soil Carbon Tool Guidelines – A/R Soil Carbon – Gold Standard for the Global Goals in order to account for soil carbon change. Soil Organic Framework Methodology - version 1.0 is specifically for SOC projects and cannot be used to account for SOC for AR projects. PD must use this tool and change the reference stated in PDD Section B.1 accordingly.

Project developer response	**Date:** 14/04/2024

The updated A/R Soil Carbon Tool is now included in the attachments, and this is also mentioned in the PDD.

Documentation provided by project developer

B.2 403_V1.0_0.7_LUF_AR Methodology_Soil Carbon Tool_12-4-2024

VVB assessment	**Date:** 08/05/2024

The section B.1 of the PDD is revised on the use of the soil carbon tool v1.0, added reference of A/R soil carbon tool as per the requirements and PP has provided the tool calculation sheet is checked for the confirmation.

FAR has been closed.

Table 1. CLs from this Design Certification

CL	01	**Section no.**	OBS 1 SustainCERT Preliminary review Finding	**Date:** 07/03/2024
Description of CL				
PD shall clarify on the following observations: 1. PD may add "A/R Soil Carbon Tool" to the "Methodology (ies) applied and version number" section of the KPI. 2. PD seems to have made an error in "10% Set Aside Conservation area (ha)" which is set to the same value as the eligible area in ha. At minimum, the HCV area must be atleast 10% of the total project area.				
Project developer response				**Date:** 19/04/2024
1. OK 2. The conservation area has been clarified. A total area of 716,5 ha (666,5 ha eligible) in three different locations has been appointed as conservation area.				
Documentation provided by project developer				
Project area.shp and eligible area.shp				
VVB assessment				**Date:** 09/05/2024
1. The section B.1 of the PDD is revised on the use of the soil carbon tool v1.0 and added reference of A/R soil carbon tool as per the requirements. 2. It is checked that the PD updated the PDD, by justifying that the 10% of the total project area i.e. 716.5 ha is taken as the conservation area in line with the section 3.1.4 of the principle.2 of the GS4GG AR LUF activity requirements. **CL has been closed**.				

CL	02	**Section no.**	OBS 2 SustainCERT Preliminary review Finding	**Date:** 07/03/2024
Description of CL				
The PD shall state in the Section A.1.1 of the PDD if the project satisfies the eligibility criteria stated in 3.1.1 clause of the Principles & Requirements – Gold Standard for the Global Goals.				
Project developer response				**Date:** 19/04/2024
Ok, statement has been added				
Documentation provided by project developer				
VVB assessment				**Date:** 09/05/2024
Based on the review of the PDD section A.1.1, it is confirmed that in line with section 3.1.1 of the Principles & Requirements – Gold Standard for the Global Goals the eligibility criteria of the project is appropriately justified. However, as per the section 3.1.1 clause. E of Principles & Requirements – Gold Standard for the Global Goals requirements "*in case of an organisation (iii) the legal registration details and (iv) documentation by the governing jurisdiction that proves that the entity is in good standing (defined as being a legal or other appropriate entity registered in or allowed to operate within the required jurisdiction and with no evidence of insolvency or legal/criminal notices placed against it or any of its Directors)"* the PDD is not transparent on the same, PP shall provide the supporting document to demonstrate the same. Provide the "Official Development Assistance (ODA) Declaration". **CL is still open.**				
Project developer response				**Date:** 15/05/2024

	N'situ pelende has been founded under the name CODEVCO I in 2021. The name has been changed to N'situ Pelende SASU in 2023. The documents after founding and for name change have been included. OSIPE founding has also been included. The ODA declaration has been included again.
Documentation provided by project developer	
CODEVCO I GUCE.pdf (founding) Dossier NSITU Actes modificatifs.pdf (name change) *OSIPE-Doc administratifs-Etat congolais (1).pdf* *ODA document_signed.pdf*	
VVB assessment	**Date:** 06/06/2024
PD provided the supporting documents CODEVCO I GUCE.pdf (founding) Dossier NSITU Actes modificatifs.pdf (name change) and OSIPE-Doc administratifs-Etat congolais that are verified by VVB and confirms the legal registration details and governing jurisdiction i.e Democratic Republic of Congo that proves the entity is in good standing (defined as being a legal appropriate entity registered in or allowed to operate within the required jurisdiction) in line with the section 3.1.1 clause. E of the Principles & Requirements – Gold Standard for the Global Goals. PD has provided the ODA document and checked by the audit team. **CL has been closed.**	

CL	03	**Section no.**	OBS 4 SustainCERT Preliminary review Finding	**Date:** 07/03/2024
Description of CL				
The PD shall update Section B.4 "Soil organic carbon measurements" section of the PDD since the PD is required to apply the A/R Soil Carbon Tool and not the SOC Framework.				
Project developer response				**Date:** 12/04/2024
Section B.4 has been updated, the part about the SOC Framework has been omitted.				
Documentation provided by project developer				
VVB assessment				**Date:** 09/05/2024
It is checked that section B.4 of the PDD is revised on the use of the soil carbon tool v1.0 and added reference of A/R soil carbon tool in line with the requirements. **CL has been closed.**				

CL	04	**Section no.**	OBS 5 SustainCERT Preliminary review Finding	**Date:** 07/03/2024
Description of CL				
The PD has submitted the invoice for purchase of a tractor worth 99,000 USD dated 31 August 2021 in support of their start date of 1st September 2021. The PD must note however that from LAND USE & FORESTS ACTIVITY REQUIREMENTS v1.2.1: *"Project start i. A/R specific: The project start date shall be the earliest date when the first trees are planted".* The PD must therefore reconsider the start date and update the documentation accordingly.				
Project developer response				**Date:** 02/04/2024
The project date has been changed to 1st of December 2021 when the first trees have been transfered from the tree nursery in Tembe to the plantation block A06. This new project date has been taken up in the PDD. In support a declaration of tree transfer has been added to supporting documents.				
Documentation provided by project developer				
Declaration of tree transfer.pdf				
VVB assessment				**Date:** 09/05/2024

It is clarified that the start of the project start date is changed to 1st December 2021, that is the date on which the first trees have been transferred from the tree nursery in Tembe to the plantation block A06, the supporting declaration on the same is provided and checked by the audit team.
However, the provided supporting document and justification is still not clear on whether the trees are planted or not on that date and further demonstrate start date with evidence as per the requirements.
CL is still open.

Project developer response	**Date:** 23/05/2024

Salary payment for plantation personnel has been included. This salary has been payed out by CADIM. CADIM was one of the NGOs working for N'situ Pelende until OSIPE took over on the plantation activities.
A picture from the Vice Prime Minister planting a tree during the official opening of the project in DRC on 21 December 2021 has been included. The first planting activities took place before the Vice Prime minister was invited for the official opening, but no photographic evidence was retained from this event.

Documentation provided by project developer

salary plantation 2021
Tree planting Official opening Vice premier minister.jpg

VVB assessment	**Date:**06/06/2024

PD has provided the appropriate evidence that is the salary receipt on 23/12/2021 paid for the plantation personal and further picture of the planting a tree by vice prime minister in the project is provided, verified by the VVB and confirmed the project start date is in line with the LAND USE & FORESTS ACTIVITY REQUIREMENTS v1.2.1.
However, as per the provided salary payment evidence and picture, the start date of the plantation activity is 23/12/2021 which is inconsistent with the start date mentioned in PDD. Thus, PD is requested to clarify the inconsistency or revise the project start date.

CL is still open.

Project developer response	**Date:** 07/06/2024

Plantation date has been changed in the PDD version 4 to 23/12/2024 to be in better compliance with Gold Standard requirements.

Documentation provided by project developer

VVB assessment	**Date:** 28/06/2024

In line with the Gold Standard LAND USE & FORESTS ACTIVITY REQUIREMENTS v1.2. requirements, project start date is revised to 23/12/2024 it is date on which plantations are carried out on field, the supporting payment receipts for plantations and picture plantations are verified by the audit team for the confirmation and thus opted start date has been accepted and deems to valid for the project by VVB.

CL has been closed.

CL	05	**Section no.**	Key Project Information	**Date:** 07/03/2024
Description of CL				

As per section 4.1.42 of Principles and requirements V1.2,

"The project starts date, and the stakeholder consultation date determines the project as,

(a) Regular Projects, for which the Stakeholder Consultation (1st round) has been conducted before the Project Start Date.
(b) Retroactive Projects, for which the Stakeholder Consultation (1st round) is conducted after the Project Start Date."

In the key project information section, the project cycle has been marked as *retroactive* whereas in section A.1.1 "Eligibility of the project under Gold Standard" it has been states that,

"*Stakeholder consultation was conducted before the project start date as shown in the Stakeholder consultation document*."

Furthermore, GS Stakeholder Consultation Report states that the first physical stakeholder meeting was conducted on 19/6/2021 and Section C.1.1 of the GS PDD claims the project start date to be 01 September 2021.

PD is requested to clarify on the cycle of the project in compliance with above mentioned requirements.

Project developer response	**Date:** 12/04/2024
The key project information has been changed to a regular project cycle. Stakeholder meetings took place before project start date.	
Documentation provided by project developer	
VVB assessment	**Date:** 09/05/2024
It is confirmed that, in line with section 4.1.42 of Principles and requirements V1.2, the project is considered as the "regular project cycle" since the stakeholder consultation is done before the project start date. The same was revised in the project key information A1.1 of PDD. Additionally, VVB has verified it through the stakeholder consultation report and on-site interviews. **CL has been closed.**	

CL	06	**Section no.**	GS LUF Soil Carbon Tool	**Date:** 06/02/2024
Description of CL				
According to GS LUF-Activity-Requirements v1.2.1, Planting Area is defined as, "*The planting area is the eligible area of A/R projects where tree planting activities take place. The planting area is the part of the project area which meets the applicability conditions of the applied Gold Standard Methodology*." Furthermore, as per section 3.1.4 of GS A/R Methodology v2.0 states that, *"The A/R Soil Carbon Tool estimates the change in soil organic carbon stocks due to the planting of forests and applies to soils on planting areas only".* On review of document *"B.2 403_V1.0_0.7_LUF_AR Methodology_Soil Carbon Tool",* VVB observed that the SOC credits were claimed for the entire project area of 10,656 hectares. (as indicated on the cover page of the GS PDD). PD is requested to clarify on the SOC estimations in compliance with section 3.1.4 of applied GS A/R methodology v2.0.				
Project developer response				**Date:** DD/MM/YYYY
The project area and eligible area have been updated. In the document B.2 403_V1.0_0.7_LUF_AR Methodology_Soil Carbon Tool, the updated eligible area has been used for each MU.				
Documentation provided by project developer				
Updated B.2 403_V1.0_0.7_LUF_AR Methodology_Soil Carbon Tool				
VVB assessment				**Date:** 09/05/2024

It is checked that the project area is updated to 7109 ha and eligible area to 7042.7 ha and this eligible area used for each MU is taken in A/R Soil carbon tool calculations in line with the requirements section 3.1.4 of the GS A/R Methodology v2.0.

CL has been closed.

CL	07	**Section no.**	GS LUF Soil Carbon Tool	**Date:** 06/02/2024

Description of CL

As per section B.1 of GS PDD it has been given that,

"We are starting from severely degraded grassland (caused by frequent manmade fires in the area)" and as per document *"B.2 403_V1.0_0.7_LUF_AR Methodology_Soil Carbon Tool",* PD has claimed the management under pre-project activities as "Severely Degraded".

In compliance with the tool *"Tool for the identification of degraded or degrading lands for consideration in implementing CDM A/R project activities",* PP is requested to provide justification (with evidence) to substantiate that the area is degraded or degrading.

Project developer response **Date:** 24/04/2024

Justification for the claim about severely degraded grasslands has been added to the methodology, following CDM Tool for the identification of degraded or degrading lands for consideration in implementing CDM A/R project activities. More specifically, we have used (c) "Demonstrate through direct evidence based on selected indicators of land degradation that the area is "degraded" and/or "degrading"", where the soil correspond to 2 different criteria:

ii) Decline in organic matter content and/or recession of vegetation cover as shown by reduction in plant cover or productivity due to overgrazing or other land management practices, thinning of topsoil organic layer, scarcity of topsoil litter and debris (GPS and photo evidence should be provided);

as well as

iv) a reduction in plant cover or productivity due to overgrazing or other land management practices

Documentation provided by project developer

Updated integrated methodology
403.01_V1.0_LUF_AR-Methodology_Integrated-filled

VVB assessment **Date:** 09/05/2024

In line with the requirements of "tool for the identification of degraded or degrading lands for consideration in implementing CDM A/R project activities", in the section B.1 of PDD the PP justified that the project areas are severely degraded grasslands due severe pressure from the local communities for the charcoal burning (trees with a minimum size), agricultures, hunting and manmade fires. Also, demonstrated that the soil carbon is relatively lower in the project areas (only 22 t C/ha in the savanna) as compared to the soil map of Africa which shows the soil organic carbon fraction is expected to be between 51 and 60 t C/ha in project region (Jones et al., 2013. Soil Atlas of Africa). Which is in line with paragraph c) clause. ii & iv of the above referred tool.
However, PP to provide the supporting referred document for the mentioned information in section B.4 of PDD.

CL is still open.

Project developer response **Date:** 14/05/2024

Environmental agency SARL 2023 refers to the soil sampling report. That has been included again. Jones et al., 2013. Soil Atlas of Africa refers to the soil atlas of Africa.

Documentation provided by project developer

Environmental agency SARL 2023.pdf
JRC_africa_soil_atlas_part1.pdf

VVB assessment **Date:** 06/06/2024

The supporting Soil atlas of Africa (Jones et al 2013) and SARL environmental assessment report documents are provided by the PD and checked by the VVB to confirm the information on soil of project area in section B.4 of the PDD and are valid.

CL has been closed.

CL	08	**Section no.**	B.4 GS PDD, Baseline	**Date:** 06/02/2024

Description of CL

On review of the multiple sections of GS PDD, VVB noted that improper establishment of baseline scenario of the project activity i.e.,

1. Section A.1 of the PDD states that,

"The focus is to prevent forest burning through educating people about controlled fire, as slash and burn is the traditional way of agriculture."

2. *Table 6 of the PDD:*

"Stratification of the baseline Shows 905 ha of land stratified for agriculture in Swa Kahumba".

3. Section B.2. of the PDD states that,

"The grasslands on the plateaus have remained without trees by man-made fires before the start of the dry season and grazing by mostly goats and cattle".

In view of above inconsistencies, PD shall clearly establish and demonstrate baseline scenario of project in compliance with section 3.4.1 of applied methodology. Furthermore, it is unclear how the project can be reasonably assumed to have zero leakage if the baseline scenario is subsistence agriculture or grazing.

While doing so, PD shall provide evidence that the project meets any of the conditions required by CDM AR-Tool 15 which would allow for leakage emission attributable to the displacement of grazing activities and agriculture activities and section 3.7 of applied methodology.

Project developer response **Date:** 03/05/2024

This choice of baseline has been better described under B.4. Establishment and description of baseline scenario.

1. frequent fires take place in the area before project activities. This has been better described under B.4 However, in the established baseline we used a fixed baseline, assuming no burns. This is a conservative approach, because we are neglecting a positive impact (prevention of wildfires) of our own project in comparison to the baseline.

2. The area of land under agriculture has been rescaled to 329 ha under the adapted project areas.

We consider the impact of agriculture negligible because

- it is only 5% of the project area, most of the agricultural activities take place in the forest galleries,
- the project design keeps a diameter of at least 700 m around villages, which leaves enough space for activities of the local communities.
- there are other areas (on grasslands outside the project area) where we work with the local communities on agriculture projects.

So sufficient alternatives are offered to prevent a shift from the project area into forested areas.;

3. mostly fires are important

- In the project design leaves sufficient place around the villages for activities of the local communities.

Documentation provided by project developer

Updated integrated methodology *403.01_V1.0_LUF_AR-Methodology_Integrated-filled*	
VVB assessment	**Date:** 08/05/2024
1. The section B.4 of the PDD is revised and justifies the project baseline as severely degraded grasslands due the pressure from the from the local communities for the charcoal burning (trees with a minimum size), agricultures, hunting and manmade fires. If there are fires in the baseline, PP to clarify how the assuming no fires is considered as conservative approach. 2&3. It is clarified that the areas of agriculture land is 329 ha, however the PDD table.4 still states 412 ha of area and project design excludes at least 700m around the villages, which leaves the enough space for community activities and also stated that there are other agriculture projects implemented by the PP. However, it is still not clear on that how the project meets any of the conditions required by CDM AR-Tool 15, which would allow for leakage emission attributable to the displacement of grazing activities and agriculture activities and section 3.7 of applied methodology. **CL is still open.**	
Project developer response	**Date:** 23/05/2024

1.assuming no fires is a conservative approach
In the baseline scenario there are fires set by the local population, they cause emissions of nitrous oxygen and methane. In the project activities we expect a reduction in the size and the emissions of the fires due to the fire risk mitigations that have been set in place. Hence, we expect an actual reduction in emissions caused by fires with the project scenario compared to the baseline. This is thus a positive action for climate.
When omitting the effect of fires from the baseline and project, we ignore the positive effects of the project activities working on fire prevention. This is a conservative approach.

2&3.
The CDM tool approaches leakage due to grazing as following:
Leakage emission attributable to the displacement of grazing activities under the following conditions is considered insignificant and hence accounted as zero:
(a) Animals are displaced to existing grazing land and the total number of animals in the receiving grazing land (displaced and existing) does not exceed the carrying capacity of the grazing land;
(b) Animals are displaced to existing non-grazing grassland and the total number of animals displaced does not exceed the carrying capacity of the receiving grassland;
(c) Animals are displaced to cropland that has been abandoned within the last five years;
(d) Animals are displaced to forested lands, and no clearance of trees, or decrease in crown cover of trees and shrubs, occurs due to the displaced animals;
(e) Animals are displaced to zero-grazing system.

In the Integrated methodology grazing is described as
“The number of displaced animal heads is negligible with regards to the surface of the area. During socio-economic research we have asked people about the number of animals they are holding. On average a household has 7.3 chickens, 1.6 goats, 1.2 sheep and 0.2 pigs. There are 939 households on the concession of 10,000 ha with an estimated total of 6854 chickens, 1502 goats, 1127 sheep and 188 pigs. Chicken and pigs are fed on vegetable waste and do not graze. 70% of the sheep and goats graze in the direct surroundings of the farms, 30% of the sheep and goats are being displaced. There are sufficient remaining Savannah grasslands where those animals can graze without causing extra pressure.”

This could be summarized under the conditions (a) and (b) mentioned in the CDM AR tool 15:
In case of the grasslands near the villages, condition (a) Animals are displaced to existing grazing land and the total number of animals in the receiving grazing land does not exceed the carrying capacity of the grazing land. And in case the savanna grasslands are further away from the villages and were not grazed before, they fall under condition (b) Animals are displaced to existing non-grazing grassland and the total number of animals does not exceed the carrying capacity of the grazing land.

Documentation provided by project developer	
VVB assessment	**Date:06/06/2024**

1. PD has clarified that in the baseline scenario, local fires emit nitrous oxide and methane. Project activities aim to reduce fire size and emissions through mitigation measures, leading to decreased emissions compared to the baseline. Ignoring fire effects in both scenarios underplays the project's positive impact. VVB confirms that the project activities includes fire risk mitigation that have been correctly implemented and documented.

2&3. It is confirmed that the number of displaced animals is insignificant relative to the area's size. On average, each household owns 7.3 chickens, 1.6 goats, 1.2 sheep, and 0.2 pigs. With 939 households on a 10,000 ha of concession, there are approximately 6,854 chickens, 1,502 goats, 1,127 sheep, and 188 pigs. Chickens and pigs are fed vegetable waste and don't graze, while 70% of sheep and goats graze near farms and 30% are displaced. It is clarified that there are ample Savannah grasslands remain for grazing without additional pressure. Therefore, VVB confirms the project meets the conditions of AR TOOL15, para 10: “a) Animals are displaced to existing grazing land and the total number of animals in the receiving grazing land (displaced and existing) does not exceed the carrying capacity of the grazing land;” “(b) Animals are displaced to existing non-grazing grassland and the total number of animals displaced does not exceed the carrying capacity of the receiving grassland”. Thus, the leakage can be considered zero as per the requirements.

CL has been closed

CL	09	**Section no.**	B.6.1, GS PDD	**Date:** 06/02/2024
Description of CL				
As per section 3.1.4 of GS A/R Methodology v2.0 states that, *“The A/R Soil Carbon Tool estimates the change in soil organic carbon stocks due to the planting of forests and applies to soils on planting areas only.”* As per section B.6.1 of the GS PDD it has been given that, *“The Soil organic carbon pool will be included based on the Soil Organic Framework Methodology - version 1.0 – using a combination of approach 1 (on site measurements) and approach 2 (modelling approach based on peer reviewed publications)”.* Given that the project falls under A/R, it is unclear to VVB regarding the application of the Soil Organic Framework, which is typically associated with AGR projects. Therefore, PD is kindly requested to provide clarification on this inconsistency.				
Project developer response				**Date:** DD/MM/YYYY
References to the Soil Organic Framework methodology were remnants to methodology that we abandoned. References to the Soil Organic Framework methodology were removed and only references to the A/R Soil carbon tool have been kept.				
Documentation provided by project developer				
VVB assessment				**Date:** 10/05/2024
As per the requirements of the section 3.1.4 of A/R methodology, it is checked that the PP has used the soil carbon tool for estimation of the change in the soil carbon tool, instead of earlier referred soil organic framework was excluded from the PDD in line with requirements. **CL has been closed.**				

CL	10	**Section no.**	GS LUF Risks and Capacity	**Date:** 06/02/2024
Description of CL				

According to V1.0_AR_LUF_Risks & Capacities Guideline it has been states that,

"The project owner may use any type of creditable information to support his statements, including but not limited to scientific report, studies, historic data, pictures, maps, credible websites, aerial imagery, CVs, legal documents, etc."

VVB noted that, no such evidence has been provided for the risk claims as provided in the *AR_LUF_Risk-Capacities-Assessment report*. Hence, PD is requested to provide creditable information in compliance with above mentioned requirements.

Project participant response	**Date:** 26/04/2024
Risks have been updated with references from Thinkhazard for natural disasters and Credendo for some of the political risks. Management Risks, we have judge by our experiences after two years of activity in the project region.	
Documentation provided by project participant	

VVB assessment	**Date:** 10/05/2024
It is checked that in line with the requirements of the AR LUF risks & capacities guidelines, PD has revised the project AR-LUF risk document with the references of the literature and other data sources for the adopted scores such as https://thinkhazard.org/en/report/68-democratic-republic-of-congo/WF. However, the following clarifications are raised which need to be addressed: 1. However, PP shall provide the evidence for the fire mitigation measures are implemented. 2. PP shall demonstrate risks 1.4 Pest and disease outbreaks (e.g. insects, bacteria, viruses, fungi), 1.5 Temperature extremes (e.g. extreme heat, frost) and 1.6 Water extremes (e.g. droughts, heavy rains, floods, mudslides, avalanches, ice-storms) with reference to any data in support of the given scoring. 3. Provide the referred study Ludwig et al., 2013. Clarify probability of the risk 1.7 Changing climate (e.g. long draught period, seasonal variability of rainfall pattern, water availability) with supporting data as per the given scoring. 4. PP shall provide the CVs of the project management team. 5. Provide cashflow analysis to confirm the project's breakeven point. The probability of the identified risks not clear on the time period. **CL is still open.**	
Project developer response	**Date:**05/06/2024

1. Proof of Fire mitigation measures

Multiple mitigation measures are implemented: 1) fire corridors (coupes-feus) have to prevent fires from spreading from the Savannah to the forest and within the blocks of the forest with forest blocks of max 50 ha ➔ this is 0.5% of the total concession size (10.000ha) 2) 12 fire brigadiers are actively guarding the forests and prevent and control fires in collaboration with the local community. 3) a sensibilization program is started with the local communities to explain the importance of controlled fire. We stress that starting fire in the forest is strictly forbidden. 3) we plant species such as Acacia which seeds laying on the forest floor are triggered by heat stress to reshoot 4) we plant Milettia Laurentii which can to a certain extent withstand forest fires and reshoot due to its deeply embedded roots

Proof of mitigation measures

1) Fire corridors: Satellite imagery of 6-may 2024 showing coupes-feux (Figure 1) and figure showing how coupes-feux are preventing fire (Figure 2)
2) Salary calculations for the brigadiers in Swa Kasongo and Kimbakata: - RESUME PAIE FEV AVRIL 2024 KIMBAKATA and RESUME PAIE FEV AVRIL 2024 Swa kasongo
3) Sensibilisation program: see document "Contenu des sensibilisation.pdf « explaining in French how sensibilisation should happen

4 and 5) see tree species list in PDD

2. References to risks have been included into the risk A.2 203G_V1.0_AR_LUF_Risks-Capacities-Assessment_23-5-2024
3. reference included
4. The CVs of Helene MbanguKiala (Chairwoman of OSIPE) and Jan Schockaert (General director of N'situ Pelende) are included.
5. Colruyt group has for purpose to use the carbon credits to compensate its own emissions. The value of these carbon credits have been taken into account into the updated high level cash overview, as well as the value of carbon credits that are not claimed by Colruyt group. The break-even point has been estimated in 2038.

Documentation provided by project developer

1.
1.1) 6-5-2024 sentinel 2 plantation malundu.png; coupe-feux preventing fire to enter.png; coupe-feux preventing fire to enter (2).png
1.2) RESUME PAIE FEV AVRIL 2024 KIMBAKATA and RESUME PAIE FEV AVRIL 2024 Swa kasongo
1.3 contenu sensibilisation.pdf
2. A.2 203G_V1.0_AR_LUF_Risks-Capacities-Assessment_23-5-2024
3. Ludwig et al., 2013
4. Helene-MbanguKiala-Resume 2022.pdf; cv jan schockaert.pdf
5. high level cash overview_29_05_2024

VVB assessment	**Date:** 06/06/2024

1. As per the requirements the PD has provided supporting evidence for the implemented fire mitigation measures such as fire brigades, fire corridors images and community sensibilization documents and verified by the audit team for the confirmation.
2. Based on the review of the AR_LUF_Risks-Capacities-Assessment_23-5-2024 document VVB confirms that the information on the risks from pest and diseases, Water extremes and Temperature extremes is demonstrated with reference data sources such as https://thinkhazard.org/en/report/14960-democratic-republic-of-congo-bandundu-kwango/DG, FAO.
3. Supporting study Ludwig et al., 2013 and Thinkhazard are appropriately provided as reference the given scoring and clarified probability of 20% chance droughts will occur in the coming 10 years is justified.
4. PD has provided the CVs of the project team and verified the expertise for the implementation of the project.
5. Based on the review of high-level cash overview document, VVB confirms that breakeven point of the project is more than 10 years and project secured funding is more than 70 % of funding volume at year 2038. VVB based on the "A.2 203G_V1.0_AR_LUF_Risks-Capacities-Assessment_23-5-2024" confirms that the low risk of total score 1 has been applied for financial risk. PD is requested to provide the cashflow analysis through spreadsheet and proof of funding secured.

CL is still open.

Project developer response	**Date:** 07/06/2024

The high level cash overview has been updated with information about financial status of Colruyt group, including links to the Belgian enterprise monitoring and stock exchange. An extract of the financial yearly report of 2023 has been provided (jaarrekening 2023-00481198.pdf), showing a revenue of 7,46 billion euros and a net profit of 161 million euros.

The cash flow analysis has been provided through a spreadsheet (cashflow analysis_GS_31052024)

Documentation provided by project developer

high level cash overview_07-06-2024.pdf
jaarrekening 2023-00481198.pdf (language dutch)
cashflow analysis_GS_31052024.xlsx

VVB assessment	**Date:** 28/06/2024

Based on the review of the PD provided Cash flow sheet and revised High level cashflow document VVB, confirms that breakeven point of the project is more than 10 years and confirmed that the project funded by the Colruyt group which one renowned entity in Belgium with enough funds to implement the project activity and confirms that project secured funding is more than 70 % of funding.

Based on the above conclusion,

the CL has been closed.

CL	11	**Section no.**	C.1.1, GS PDD Project start date	**Date:** 06/02/2024
Description of CL				

According to scope of section 4.1.41 of GS4GG Principles and Requirements v1.2, and according GS4GG LUF Activity Requirements v1.2.1:

Project start is defined as *"A/R specific: The project start date shall be the earliest date when the first trees are planted".*

Upon review of C.1 DEM VMAC.202108.10004 210831 2 tracteurs (99.000 USD), VVB observed that the evidence is unclear to demonstrate the project start date on 1st September 2021, specially of such A/R projects.

Hence PD is requested to provide additional justification supported by evidence such as Seedling purchase receipt, Nursery receipts etc. to claim start date on mentioned date in line with above mentioned requirement.

Project developer response	**Date:** 12/04/2024

The project start date has been updated to the first date of planting in the field (December 2021) Because the project is growing its own trees in the tree nursery, we cannot provide evidence of the purchase of tree plantlets. Instead, a self-declaration has been provided to support the earliest date of trees planted.

Documentation provided by project developer

Tree transfer declaration.pdf

VVB assessment	**Date:** 10/05/2024

It is clarified that the start of the project start date is changed to 1st December 2021, it is the date on which the first trees have been transferred from the tree nursery in Tembe to the plantation block A06, the supporting declaration on the same is provided and checked by the audit team.
However, the provided supporting document and justification is still not clear on whether the trees are planted or not on that date and further demonstrate start date with evidence as per the requirements. Kindly demonstrate through labour payment receipts, time stamped photos, etc.
CL is still open.

Project developer response	**Date:** 23/05/2024

Salary payment for plantation personnel in December 2021 has been included. This salary has been payed out by CADIM. CADIM was one of the NGOs working for N'situ Pelende until OSIPE took over on the plantation activities.
A picture from the Vice Prime Minister planting a tree during the official opening of the project in DRC on 21 December 2021 has been included. The first planting activities took place before the Vice Prime minister was invited for the official opening, but no photographic evidence was retained from the first trees planted on 1st December.

Documentation provided by project developer

salary plantation 2021.jpg
Tree planting Official opening Vice premier minister.jpg

VVB assessment	**Date:** 06/06/2024

As per the provided salary payment evidence and picture, the start date of the plantation activity is 23/12/2021 which is inconsistent with the start date mentioned in PDD. Thus, PD is requested to clarify on the inconsistency or revise the project start date.

CL is still open.

Project developer response	**Date:** 07/06/2024

Plantation date has been changed in the PDD version 4 to 23/12/2024 to be in better compliance with Gold Standard requirements.

Documentation provided by project developer

VVB assessment	**Date:** 28/06/2024

In line with the Gold Standard LAND USE & FORESTS ACTIVITY REQUIREMENTS v1.2. requirements, project start date is revised to 23/12/2024 it is date on which plantations are carried out on field, the supporting payment receipts for plantations and picture plantations are verified by the audit team for the confirmation and thus opted start date has been accepted and deems to valid for the project by VVB.

CL has been closed.

CL	12	Section no.	A.1 & A.3, tree species.	Date: 06/02/2024
Description of CL				
A per section A.1 of the GS PDD it has been mentioned that, *"a list of 20 tree species has been selected for plantation"* whereas *in table 4 21 tree species has listed* and appendix-3 of GS PDD, *PD has listed characteristics of 18 tree species.* Furthermore, in section A.1.1 of GS PDD, it has been given that, *"The plantation contains one endangered species (Millettia Laurentii), eleven species are native and endemic to the region, ten species occur more widely in the tropical zone and are naturalized in the region"* and under B.6.2 wood density values have been provided for 23 tree species. In view of above inconsistencies, PD is requested to clarify on the no. of tree species included over the project activity.				
Project developer response				**Date:** 24/04/2024
During the preparations, new tree species have been added to the tree species list. We now have a total of 32 tree species of which 21 endemic and 11 exotic tree species. This has been updated throughout the document.				
Documentation provided by project developer				
VVB assessment				**Date:** 10/05/2024
Based on the review of the PDD, it is clarified and confirmed that, project activity involves the 32 tree species out of which 21 endemic and 11 exotic species. The same was made consistent throughout the current version of the PDD and has also been verified by VVB through on-site inspection/interviews. **CL has been closed**.				

CL	13	Section no.	Project Area	Date: 06/02/2024
Description of CL				

In the "Land-use & Forest Key Project Information" section of the GS PDD there are multiple area inconsistencies.

1. The *AR_LUF-Activity-Requirements* document states that:
   "*The planting area is the eligible area of A/R projects where tree planting activities take place. The planting area is the part of the project area which meets the applicability conditions of the applied Gold Standard Methodology*."

   The eligible area for the project is 10,556 ha. The planting area for SwaKasongo is 3,991 ha and for SwaKahumba_Kobo is 6,656 ha making it a total of 10,647 ha which is higher than the eligible area.

2. In the planting area section, the area for SwaKahumba_Kobo.shp is given as 6,656 ha whereas in the modelling unit section it is given as 6,665 ha.

3. Adding up all the land parcels mentioned in the Contract agreements, the total area allotted to the PD comes up to 11,838 ha.

4. SwaKasongo.shp area through GIS analysis = 3,939 ha, value given in PD = 3,991 ha
   SwaKahumba_Kobo.shp area through GIS analysis = 6577 ha, value given in PD = 6,656 ha

5. Under Table 1 for SDG 15 area has been mentioned as 10,000 ha.

PD is requested to provide clarification and fix all the area inconsistencies in the GS PDD and shapefiles.

Project developer response	**Date:** 19/4/2024

All areas and files have been updated. We have removed inconsistencies in the PDD and other documents. We hope no inconsistencies have been missed out.

project area (epsg:4051): 7109.8 ha
eligible area (epsg:4051): 7042.7 ha (total)
eligible area (epsg:4051): 6376.2 ha (without 10% set-aside conservation area)
set-aside conservation area: 666.5 ha
non-eligible area (epsg:4051):67.1 ha

modelling units
MU_Swa Kasongo (epsg:4051): 3547.4 ha
MU_Swa Kahumba (epsg:4051): 3495.3 ha

Documentation provided by project developer

VVB assessment	**Date:** 10/05/2024

1. It is clarified that the total project area is 7109 ha, eligible area is 7042.7, eligible area of 6376.2 excluding the conservation area. The areas of MU's SwaKasongo_SwaYamfu: 3,547.5 ha, Swa Kahumba and Kobo: 3,495.3 ha. It is checked that the same was made consistent throughout the PDD as a result of assessment and supporting updated shapefiles for the same are provided and checked.

CL has been closed.

CL	14	**Section no.**	Ex-ante carbon calculation sheet	**Date:** 06/02/2024

Description of CL

PD shall clarify on the following inconsistencies,

- PD shall provide the source data for the Y_{Max}, K, P which are hardcoded.
- In section B.6.2 of GS PDD, value for Ymax is given as 113 tC/ha, whereas in ex-ante calculation sheet the value applied for Ymax is 110 tC/ha.
- As per document *"B.4 403.01_V1.0_LUF_AR-Methodology_Integrated-filled",* value for baseline emissions given as 0.6 tCO_2e/ha, whereas in ex-ante calculations baseline of *"-30"* has been deducted from estimations. While doing so, PD shall provide baseline calculations transparently.
- In section B.6.4 of the GS PDD, estimations of project activity provided till 2070, however, in ex-ante calculation sheet CO2e estimations given till 2071.
- Output of SOC calculations not found in ex-ante calculation sheet. While doing so, PD shall keep A/R calculations and SOC calculations separate.
- PD shall clarify on the source & reference for the root to shoot ratio value, i.e., 1.232.
- In document *"B.4 403.01_V1.0_LUF_AR-Methodology_Integrated-filled",* planting year is given as 2021. However, in row B14 of tab "PROJECT" of ex-ante calculation sheet, no. of plantation carried out in 2021 is given as 0.
- In section B.6.2 of GS PDD, under data and parameter "wood density", for purpose of data it has been given that *"calculating the aboveground biomass"*, However, it is unclear to VVB whether wood density values used for calculating AGB or not. While doing so, PD shall clarify on the equation used in row D.
- Under section B.1 of GS PDD for other emissions, it has been stated that,

"A limited amount of ureum is used in the tree nurseries. Ureum use will be reported annually and 0.005 tCO2 per kg of nitrogen (N) fertilizer shall be deducted"

However, upon review of ex-ante calculation sheet, in compliance with equation 1 of applied methodology, VVB noted that no other emissions were deducted from the net amount of CO2 estimates.

Overall, PD Is requested to recheck and revise the ex-ante calculations in compliance with equation 1 of GS A/R methodology.

Project participant response	**Date:** 24/04/2024

- Ymax is set as 113 tC/ha, also in the CO_2-calculation sheet and references to Xu et al. (2017) are included
- Baseline has changed slightly due to shifts in area which also affected the area distribution of the strata. With the shift in strata areas, the baseline has been recalculated as 29.1 t CO_2/ha in total of which 0.5 t CO_2/ha is in the tree biomass and 28.7 t CO_2/ ha in the non-tree biomass (difference of 0.1 due to mathematical rounding)
- A line has been added for 2071
- A column for Soil organic carbon has been added
- Mokany et al. (2006)
- An area of 171 ha was planted in 2021, but the CO2-capation is set to 0 because plants were still too small and CO2-captation in 2021 was negligible.
- Wood density per species is used for monitoring, but not for ex ante calculations. Values for wood density have been moved to section B.7. Monitoring plan
- Fertiliser estimations have been added to ex ante calculations as well

Documentation provided by project participant

VVB assessment	Date: 11/05/2024
1. It is clarified that the Ymax is taken as 113 tC/ha, K set to 0.070 and P as 3, which is adopted from the Xu et al. 2017 study. However, the source study document for the same is still not provided. 2. Ymax value 113 tC/ha is made consistent in the ER calculation sheet. 3. It is checked that the baseline estimates of 29.1 updated and made consistent in the ex-ante calculation sheet and LUF_AR-Methodology_Integrated-filled document. 4. It is checked that the section B.6.4 of the GS PDD, the ER estimations of project activity provided till 2071. 5. Based on the review it is confirmed that the ex-ante calculations are updated with SOC calculations. 6. PP has provided the Mokany et al. (2006) study document used for adopted root to shoot ratio and the checked by the audit team K. Mokany, R. J. Raison, A. S. Prokushkin (2005). Critical analysis of root shoot ratios in terrestrial biomes. Global Change Biology, 12(1), pp. 84-96 https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1365-2486.2005.001043. 7. Based on the review of the updated ex-ante calculations sheets it is confirmed the plantation carried out in the 2021 year is 71 ha. 8. PD is requested to update the data and parameters monitored as wood density is used for the monitoring. It is checked that values for wood density added to table.6 of section B.7. Monitoring plan. 9. Based on the review of calculation sheets and LUF_AR-Methodology_Integrated-filled, it is confirmed that in the ex-ante estimations, PP has assumed the use of 100 kg N/year in each tree nursery during the plantation phase of the forest (2021-2025), giving an emission of 0.5-ton CO2/ year during five years in MUs. In the provided ER calculation sheet (CO2 area calculation) the spreadsheet named cumulative is empty. **CL is still open.**	
Project developer response	**Date:** 14/05/2024
1. document has been included again 8. Table 1 List of tree species with wood density for each tree species used for monitoring 9. The cumulative CO2-credits are given in column H of the sheet “Total” the sheet “cumulatieve” has been removed for clarification.	
Documentation provided by project developer	
1. Xu etal Spatial Distribution of Carbon stored in forests of the Democratic Republic of Congo.pdf *8. updated PDD* *9. CO2-calculation_area calculation 17-5-2024*	
VVB assessment	**Date:** 06/06/2024
1. VVB confirms that the source “Xu L., S.S. Saatchi, A. Shapiro, V. Meyer, A. Ferraz, Y. Yang, J.-F. Bastin, N. Banks, P. Boeckx, H. Verbeeck, S.L. Lewis, E. Tshibasu Muanza, E. Bongwele, F. Kayembe, D. Mbenza, L. Kalau, F. Mukendi, F. Ilunga & D. Ebuta. (2017). Spatial Distribution of Carbon Stored in Forests of the Democratic Republic of Congo. Nature, scientific reports, 7(15030). DOI:10.1038/s41598-017-15050-z” is provided. 8. Based on the review of the project GS PDD, VVB confirms PDD section B.7. is updated on the wood density values included in the monitoring plan. 9. PD has clarified that the cumulative CO2-credits are given in column H of the sheet “Total” the sheet “cumulative” has been removed for clarification and the same was confirmed through the ER sheets. **CL has been closed.**	

CL	15	Section no.	Section D.2, GS PDD	Date: 06/02/2024
Description of CL				

PD shall provide evidence to show how level of gender-sensitivity compliance has been demonstrated in line with Gold Standard for The Global Goals Gender Equality Requirements & Guidelines, Version 2.0 and GS template instructions:

- Establishes a checklist of gender–sensitive processes, procedures and implementation risks against which auditors can check for the level of gender-sensitivity compliance.

- Provides guidance on gender analysis, or similar methods to assess the potential roles, benefits and risks for women and men of different ages, ethnicities, and social structure and status. These studies may be used to inform project formulation, implementation, and monitoring and evaluation

Project developer response	**Date:** 26/04/2024
The response on the gender sensitive design has been elaborated in section D.2, including references to the gender strategy that has been introduced in June 2023	
Documentation provided by project developer	
Gender Strategy.docx	
VVB assessment	**Date:** 11/05/2024
Based on the review of the PDD section D.2, it is confirmed that the gender-sensitivity process and risk is demonstrated in compliance the requirements of GS4GG. **CL has been closed.**	

CL	16	**Section no.**	B.2, GS PDD	**Date:** 07/03/2024
Description of CL				
As per section 2.1.2 (e) of GS4GG A/R Methodology v2.0, *"Soil disturbance (through ploughing, digging of pits, stump removals, infrastructure, etc.) on organic soils shall be in less than 10% of the area that is submitted to certification (not 10% of the entire project area)".* *In document "LUF_AR Methodology_Soil Carbon Tool", under project description it has been given that there is 100% soil disturbance in the project area.* Based on review of PDD, document "B.3 Rapport_Final" and on-site inspection/interviews, VVB observed that the soil in the project area is not organic. However, PD shall provide a clear explanation of how the soil has undergone 100% disturbance. To ensure consistency in both documents (i.e., PDD and A/R Soil carbon tool) PD must add this information in the relevant section of GS PDD.				
Project developer response				**Date:** DD/MM/YYYY
• Soil disturbance has been set to 3.5% Planting 1260 trees per ha in a round pit of 30 cm diameter, gives 3.5% of the area is disturbed during planting.				
Documentation provided by project developer				
VVB assessment				**Date:** 11/05/2024
Based on the review of the PDD and ex ante calculation sheets, it is confirmed that the soil disturbance is estimated as 3.5% since it is clarified that the planting 1260 trees/ha in a round pit of 30 cm diameter, gives 3.5% of the area is disturbed during planting. It is checked that the same was made consistent PDD and soil carbon tool as verified. **CL has been closed.**				

CL	17	**Section no.**	B.3, GS PDD	**Date:** 07/03/2024
Description of CL				

According to table 1 under section 3.1 of applied methodology, accounting for emissions from lying dead wood has been excluded from the baseline boundary.

However, in section B.3 of GS PDD, justification for including CO_2 under both tree biomass & non-tree biomass in the baseline scenario it has been given as,

"Sequestration in dead and living biomass, aboveground and belowground"

PP is requested to provide clarification on this in consistency in compliance with applied methodology.

Project developer response	**Date:** 26/04/2024
We have rephrased this sentences to standing-dead biomass in section B.3 Sequestration in dead and living biomass, aboveground and belowground"	
Documentation provided by project developer	
VVB assessment	**Date:** 13/05/2024
In line with the section 3.1.2 table.1 requirements of the applied methodology, the sentence was corrected to standing dead biomass in the PDD section B.3. **CL has been closed**.	

CL	18	**Section no.**	B.3, GS PDD	**Date:** 07/03/2024

Description of CL

According to section 3.8.2 of applied methodology,

"Site preparation - Where existing 'tree' and 'non-tree' biomass of the Baseline is burned for the purpose of land preparation, an additional 10% of the Baseline shall be deducted. This is to account for N2O and CH4 emissions that are released during the burning process. Based on project specific data, a lower percentage may be applied when justified based on relevant literature and other sources".

In section B.3 of the GS PDD, it states that *CH4 and N2O emissions from biomass burning are conservatively set to zero*. However, multiple sections of the PDD mention man-made fires. Therefore, it is unclear to VVB whether these fires occurred for land preparation purposes. If so, in compliance with above mentioned requirement, PD should deduct an additional 10% from the baseline and reflect this in the ex-ante CO2 calculation sheet.

Project developer response	**Date:** 16/04/2024

The sentence "CH4 and N2O emissions from biomass burning are conservatively set to zero" is referring to the baseline scenario, not the site preparation.

In the baseline scenario there is frequent burning of the savanna grasslands by the local population. This is now better described in the section B.4 establishment and description of the baseline scenario. Even though fires are frequent in the area, we assume the baseline scenario to be fixed, neglecting the emissions that are caused by biomass burning by the population. This is a conservative approach.

Soil tillage is used for site preparation. This is described under section A.3
Before planting, the land is prepared by plowing with a tractor ('labourer') (figure 9). Plowing is done perpendicular to the slope if the land is sloped. If land is too sloped for the tractor, the land is either left untouched (Swa Kasongo) or plowed manually (parts of Swa Kahumba). When trees occur on the lands, the tractor must plough around the trees. A few weeks after ploughing the trees from the nursery are planted manually ('planter').

Documentation provided by project developer	
Annex description of landscape	
VVB assessment	**Date:** 13/05/2024

Based on the review of the PDD section B.6.1, it confirmed that the there no baseline biomass burning is used on the site preparations. Thus, no emissions are accounted for from this source in line with the section 3.8.2 of the applied methodology.
However, PP has still not clarified about man-made fire incidences whether they burn it as part of the project activity or not.

CL is still open.

Project developer response	**Date:** 14/05/2024

Soil tillage is used for site preparation. This is described under section A.3
Before planting, the land is prepared by plowing with a tractor ('labourer') (figure 9). Plowing is done perpendicular to the slope if the land is sloped. If land is too sloped for the tractor, the land is either left untouched (Swa Kasongo) or plowed manually (parts of Swa Kahumba). When trees occur on the lands, the tractor must plough around the trees. A few weeks after ploughing the trees from the nursery are planted manually ('planter').

"Making or setting fire does not make part of any of the project activities." This statement has been made explicit to the PDD in section A.3 under P1 and P2 activities.
"Making or setting fire does not make part of any of the project activities. On the contrary, we are limiting the impact of fires set by local communities (under the responsibility of the local communities, not under control of the project)."

Documentation provided by project developer

VVB assessment	**Date:** 06/06/2024.

PD has clarified that there are no man-made fire incidences are done as part project activity, or during project site preparations. Only ploughing was done. The same revised was revised in the PDD sections A.3. Same was further confirmed during the VVB onsite inspections as well.

CL has been closed.

Table 1. CARs from this Design Certification

CAR	01	**Section no.**	Editorials	**Date:** 06/02/2024
Description of CAR				
PD Shall complete the following as per template instructions, a. PD shall use and refer latest version of PDD template. b. PD shall provide completion date of version as per template instructions. c. PD shall provide project boundary diagram or map (physical delineation) in section B.3 of GS PDD as per template instructions. d. Under section B.5 of GS PDD, PD shall specify the methodology, activity requirement or product requirement that establishes deemed additionality for the proposed project (including the version number and the specific paragraph, if applicable). e. Under section A.4 of GS PDD, it has been stated that the project activity is *large scale: 10,656 ha*. However, PD shall justify the scale referring to the applied Activity Requirements and section 2.3.1 of GS RU_2021-LUF-smallholder-definition. f. Under section A.1 of GS PDD, PD shall provide information of project boundary as per template instructions. g. Under C.1.1 of GS PDD, PD shall, justify if the project is regular, or retroactive and ensure KPI table matches as per GS4GG principle 4 and template instructions. h. PD shall complete cover page of GS LSC report as per template instructions.				
Project developer response				**Date:** 26/04/2024
a. Template V1.5 has been used now, dating from 29/06/2023 b. Completion date added c. Map included in Figure 18 d. Statement include: LAND-USE & FORESTS ACTIVITY REQUIREMENTS 3.1.16 (b) Option 2 - positive list e. Justification for large scale has been added to the PDD in section A.4 f. Map included in Figure 1 and GHG-boundaries (project and baseline) are added in the text. g. Project has been justified as a regular project. KPI table with planning about the plantation activities has been included. h. Cover page of the Stakeholder Consultation has been completed				
Documentation provided by project developer				
VVB assessment				**Date:** 14/05/2024
a. It is checked that PD has updated the PDD to latest template version V1.5. b. It is checked that PD has updated the completion date of version as per template requirement in revised PDD. c. It is checked that PD has included project boundary map in section B.3 of GS PDD as per the template requirements. d. Based on the review, PD has updated section B.5 of GS PDD by including methodology, activity requirement or product requirement that establishes deemed additionality for the proposed project. e. PD has justified that the project scale with reference to the applied Activity Requirements. f. PD has updated section A.1 of GS PDD by providing information of project boundary as per template requirements. g. It is checked that PD has justified the project as regular project as per instructions of GS4GG principle 4 and template. h. PD has updated GS LSC Report in line with the template requirements. **Thus, CAR is closed**				

CAR	02	Section no.	A.1.1, GS PDD	Date: 06/02/2024

Description of CL

Section A.1.1 of the GS PDD template states that,

"Show how the project meets the eligibility criteria as per section 3.1.1 of GS4GG Principles & Requirements".

These requirements are missing from the PDD section A.1.1. Therefore, PD is requested to revise the GS PDD Section A.1.1 with e section 3.1.1 of GS4GG Principles & Requirements.

Project developer response | **Date:** 16/04/2024

The response has been split up into general eligibility criteria and specific eligibility criteria; The whole section has been more elaborated and in attachment are included: relevant legislation and documents underpinning we have responded to the legislation.

Documentation provided by project developer

3.1.1
(c) Host Country Requirements:

Legislation Law No. 11/009 of 9 July 2011 on the fundamental principles relating to environmental protection

environmental impact assessment *:*
EIES_PROJET_PLANTATION_VP_REVISEE_AREAU_COMPARE_V21092021_SIGNE
To underpin that the project follows the social and environmental legislations

2.1.9 A/R specific

i. CO2-user rights
To be sent Declaration between N'situ Pelende sasu and Colruyt group NV to affrim the ownership of carbon credits

Iii. We have included More explanation about the rights of the chefs coûtumier to decide about the land use of common grounds are taken up in the attachment
Congolese land politics – le droit coûtumier .docx

And included relevant legislation
RDC code forestier, loi no. 011-2002 of 29th August 2002
To make clear that the trees on the land concessions are of ownership of N'situ pelende

v. participate in the financing of the project.
A high level overview of cash flow has been included in attachment
High-level overview cash-flow.docx

3.1.4 Risk and capacities

have been underpinned using Thinkhazard for natural risks and credendo for political risks. Management risks have been estimated with our best estimate after 2 years management experience in the region.

VVB assessment | **Date:** 13/05/2024

Refer the CL02 VVB assessment. Based on the review of the PDD section A.1.1, clause a) to g) it is confirmed that in line with section 3.1.1 of the Principles & Requirements – Gold Standard for the Global Goals the eligibility criteria of the project is appropriately justified.

CAR has been closed.

CAR	03	Section no.	B.6.1, GS PDD	Date: 06/02/2024

Description of CAR

According to section B.6.1 of the GS PDD template instructions

"Under headings for each SDG, explain how the methodological steps in the selected methodology(ies) or proposed approach for calculating baseline and project outcomes are applied. Clearly state which equations will be used in calculating net benefit."

For example, under SDG 13, PD shall clearly explain proposed approach for baseline, project, leakage and other emission estimations in compliance with 3.3 of applied methodology.

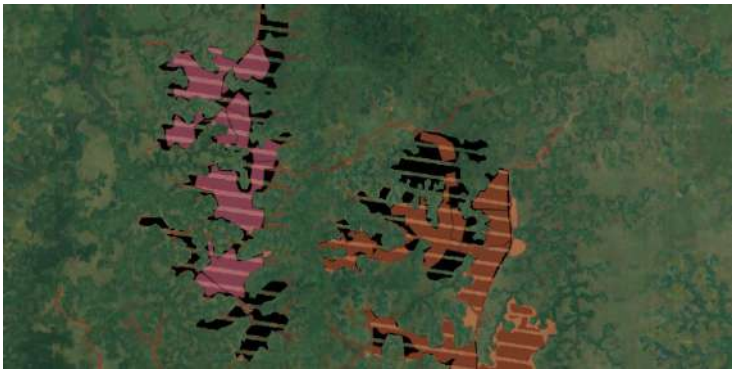
PD shall revise the section B.6.1 of GS PDD as per above requirement.

Project participant response	**Date:** DD/MM/YYYY
Section B.6.1 has been revised and more elaborated to	
Documentation provided by project participant	
To underpin the baseline scenario of severely degraded grasslands*: Environmental agency SARL 2023*	
VVB assessment	**Date: 13/05/2024**
VVB checked that section B6.1 of the current PDD is revised on the SDG contribution descriptions including indicator, goals, approaches to contribute in line with section B.6.1 of the GS PDD template instructions. **CAR has been closed.**	

CAR	04	**Section no.**	Shapefiles	**Date:** 06/02/2024
Description of CL				

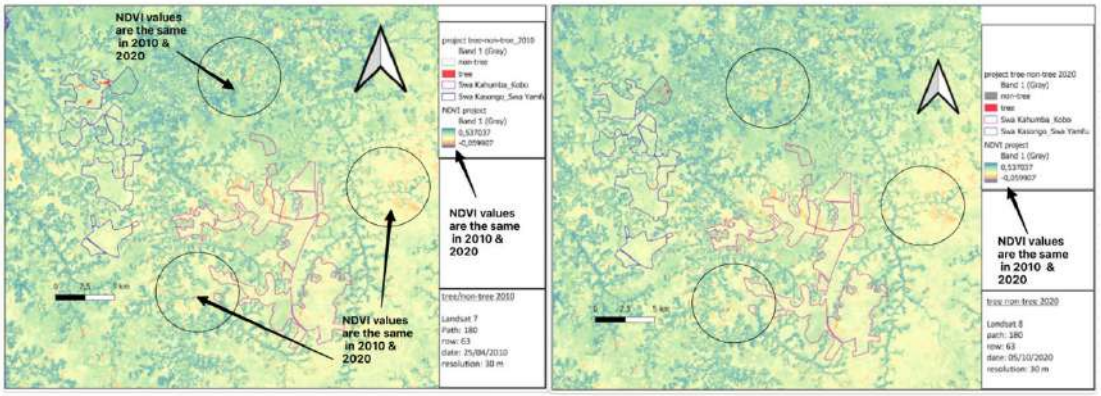
1. Section 4.1.3. of the *GS4GG AR_LUF-Activity-Requirements* mentions a list of vector shapefiles that are required to be submitted. PD is also requested to submit the Conservation area shapefile in compliance with section 3.1.5 of GS4GG LUF Activity Requirements v1.2.1.

2. A .tif image of the eligible area boundary has been provided by the PD. As per section 4.1.3 of the *GS4GG AR_LUF-Activity-Requirements,* the PD is required to provide a vector shapefile instead of a raster tif image. There is also an error in eligible area tif image. By visualizing the project boundary and the eligible area tif image in QGIS, VVB observed that the eligible area boundary was larger than the project boundary shapefile. PD is requested to provide a vector shapefile of the eligible area boundary and fix any boundary errors.

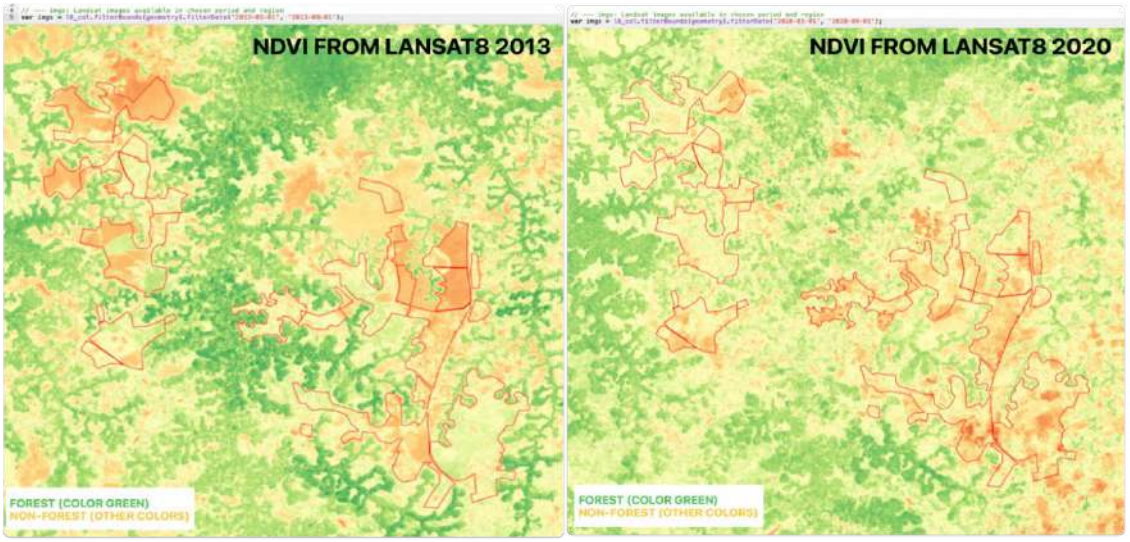


Eligible area tif image covers a larger boundary than the Project boundary shapefiles provided.

3. *The Forest and non-Forest analysis presented in PDD section A.1.1 the Figure 1 & 2 not evidenced a difference between NDVI 2010 from Lansat 7 & NDVI 2020 from Lansat 8, In the figure below is possible to verify that both NDVI are the same, despite that NDVI are from different year and sensor.*

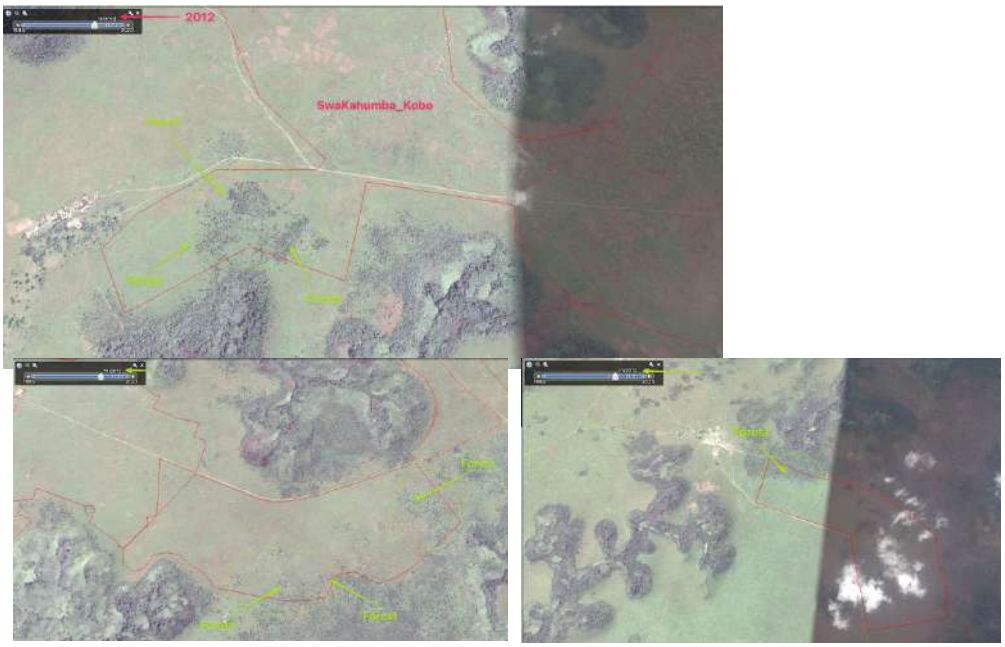


4. *Please see for your reference the figure below evidenced the difference between NDVI 2013 vs 2020 for the project area, the colour green represents forest and other colour represent non-forest and both NDVI change in the time as response of the vegetation change.*



5. The Wetland analysis data and report is missing, the PD shall provide the files to fulfill conditions of section 2.1.2 (c) of applied GS A/R Methodology and shapefiles of riparian buffer zones in compliance with section 3.1.6 of GS4GG LUF Activity Requirements v1.2.1

6. The LULC shapefiles for prior 10 year before beginning date of project is missing, additionally the project exhibits eligible area inside of forest area. In the figure below Google earth imagery close to 2010 exhibit forest inside of eligible area of the project, furthermore, the forest area were not excluded from eligible area.



7. The project area according to the PDD is 10,656 ha vs 10,525.38 ha differ with the area of the shapefiles provided ("GoldStandard_SwaKahumba_Kobo_copy.shp" & "GoldStandard_SwaKasongo.shp"), The PD should provide separately shapefiles for the eligible area, planted area and project area.

PD is requested to provide the missing shapefiles and fix any errors mentioned. While doing so, PD shall provide remote sensing forest and non-forest assessment report in compliance with Annex-c of GS54GG LUF Activity Requirements v1.2.1

Project developer response	**Date:** 19/04/2024

The several issues raised have been responded in a separate report and the required 1.shp-files have been provided
1. the vector files to provide have been updated
2. a .shp-file has been provided to describe the eligible area
3. The NDVI-images have been updated, calculated from a Landsat 5 image from 2010 and a Landsat 8 image from 2021. (There was a problem with quality of landsat 7 showing, so that's why the more recent Landsat image had been used before as a background, though the landsat 7 had been used for tree/non-tree analysis)
4. idem
5. a wetland analysis has been performed based on Cowardin et al. 1979 - Classification of Wetlands and Deepwater Habitats of the United States. This analysis has been included in the 403.01_V1.0_LUF_AR-Methodology_Integrated-filled
6. Tree/non-tree vector has been created containing values 0,1 and 2
7. separate shapefiles for the eligible area, MUs and project area are provided seperately

Documentation provided by project developer

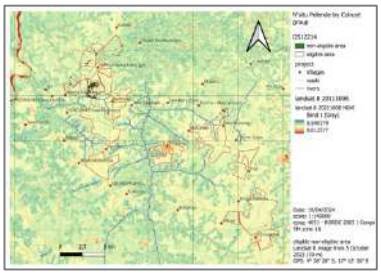
Report Forest_non-forest analysis.docx
403.01_V1.0_LUF_AR-Methodology_Integrated-filled (for wetland analysis)

VVB assessment	**Date:** 14/05/2024

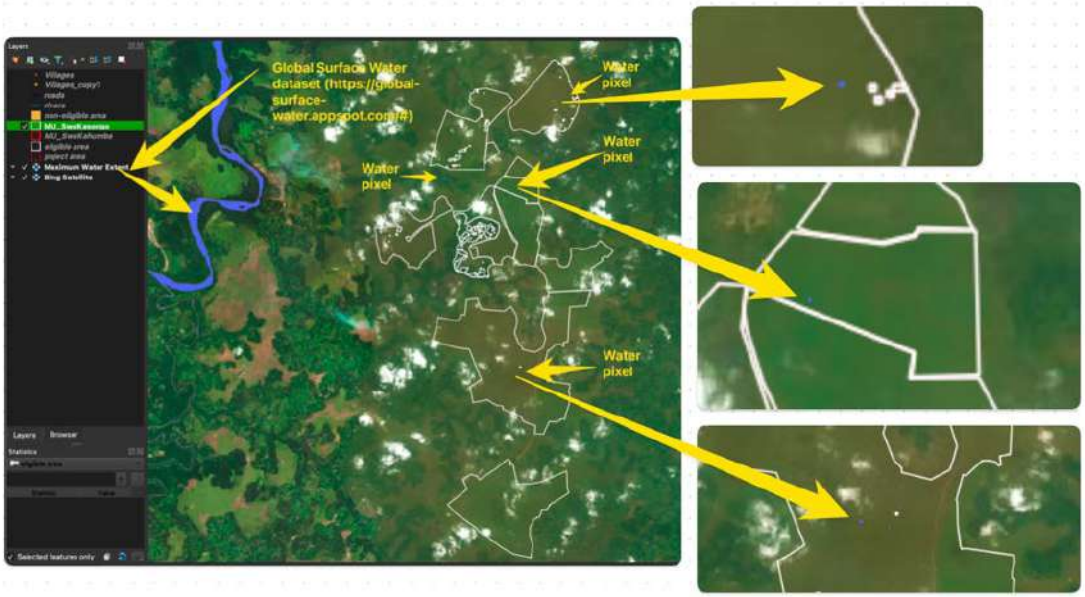
Based on the review of the files and response provided by PD, VVB confirms that:

1. The PP provided a shapefile of the conservation area shapefile in compliance with section 3.1.5 of GS4GG LUF Activity Requirements v1.2.1. (see the figure below for reference). **(Findings closed)**

1- **Findings 2,3,4 & 6:** The PP provided the shapefile of the eligible area boundary and fix any boundary errors. Furthermore, the shapefiles provided are in compliance with the VCS standard. (see the figure below for reference, where the left figure represents the Figure 17 of Forest and non- forest report and the figure in the right is the shapefiles of eligible area of the project). (**Findings closed)**



2- Findings 5: The PP provided an evidenced the wetland analysis that has been based on Cowardin et al. 1979 - Classification of Wetlands and Deepwater Habitats of the United States. This analysis has been included in the 403.01_V1.0_LUF_AR-Methodology_Integrated-filled, additionally the eligible areas was verified with the Global Surface Water (https://global-surface-water.appspot.com/#) and only in the MU of SwaKasongo that are 4 pixels corresponding to water; PP is requested to exclude from eligibility area all pixel of water found inside of eligible area (see the figure below for reference). **(Finding open).**



3- Finding 7: The shapefiles provided by PD, and after a area calculation and verification from shapefiles shared VVB confirms that all areas and files have been updated and consistency with the shapefiles provided in compliance with GS requirements**. (Findings closed).**

CAR is still open.

Project developer response	**Date:** 17/05/2024

The wetland analysis has been included in the shp-files. The area has been distracted from the eligible area and MUs. The diference was 0.3 ha. The shp-files of the eligible area and Mus have been updated. The Forest/non-Forest report has been updated, as well as the CO2-calculations in the excel sheet and in the PDD.

Documentation provided by project developer

wetland area_17-05-2024.shp
all other shp-files: eligible, non-eligible area and MU-Swa Kasongo_Swa Yamfu have been updated.
Report Forest_non-forest and wetland analysis_17-5-2024

VVB assessment	**Date:** 06/06/2024

Based on the review of the updated shapefiles provided by PD, VVB confirms that the wetland analysis was updated, and PD excluded water pixels within the eligible areas of the project, in satisfactory compliance with the GS requirements.

However, PDD is not transparent on Spatial Forest/Non-Forest Assessment information as per the section 1.1.6 & 1.1.7 Annex-C of GS LUF Activity Requirements. PD is requested to revise the section 2.1 of the GS PDD to reflect the same.

CAR is still open.

Project developer response	**Date:** 08/06/2024

The PDD had been updated with more information explaining the sources of the wetland analysis, as per LUF activity requirements in Annex C.
The cloud analysis has been clarified, and corresponding pictures and tables have been included.

Documentation provided by project developer

Updated PDD : T-PreReview_V1.5-Project-Design-Document_third feedback round
Report Forest_non-forest and wetland analysis_21-6-2024

VVB assessment	**Date:** 28/06/2024

Based on review of the files provided by PD, VVB confirms that the information required in section 1.1.6 & 1.1. 7 of Annex C of the GS LUF activity requirements has been integrated into the PDD and detailed information has been included in the forestry and non-forestry report, where PD demonstrates compliance with paragraphs i-iii by evidencing them in the report description of the imagery data source used; then, the map of the classified scene 10 years prior to the project start date (Figure 10) demonstrates compliance with paragraph iv of the requirements, the Figure 18 of the report demonstrates compliance with paragraph v and complements it with the shapefile of the eligible area (eligible area_21-06-2024. shp), regarding paragraph vi of the accuracy assessment description, the report clarifies that in the accuracy assessment process the PD has used higher resolution remote sensing imagery (drone imagery, as shown in Figure 12), but the overall minimum accuracy rating was not mentioned; finally, the PD does not provide a shapefile with the points used for the accuracy assessment nor any clarification on paragraph vi of the GS LUF activity requirements.
CAR is still open.

Project participant response	**Date:** 12/7/2024

The PDD has been updated with to be in correspondence with criteria in annex C. Accuracy ratings have been added to the project design document. More details can be found in the Report Forest/non-forest/wetland analysis.

Documentation provided by project participant

Accuracy.shp
Report Forest_non-forest and wetland analysis_12-7-2024
Updated PDD

VVB assessment	**Date:** 15/07/2024

Based on the review of files provided by PD, VVB confirms that the information required in section

1.1.6 & 1.1. 7 of Annex C of the GS LUF activity requirements has been integrated into the PDD and detailed information has been included in the forestry and non-forestry report, the last point raised about the overall minimum accuracy rate (overall minimum accuracy rate over 95% , and for each class is over 90 % required) was updated and the shapefiles used for the accuracy assessment was provided as per was required in compliance with the GS LUF activity requirements satisfactory. **CAR has been closed.**

CAR	05	**Section no.**	B.6.2, GS PDD	**Date:** 06/02/2024
Description of CL				
As per template instructions of section B.6.2 of GS PDD, *"Under headings for each SDG, include a compilation of information on the data and parameters that are not monitored during the crediting period but are determined before design certification and remain fixed throughout the crediting period (like IPCC defaults and other methodology defaults)"* *Upon review of ex-ante calculation sheet, VVB noted that calculations are estimated using parameters (values) such as CO2e conversion factor, root to shoot ratio, baseline value etc. However, this information is missing under SDG 13 of section B.6.2.* *PD is requested to revise section B.6.2 in compliance with template instructions.*				
Project participant response				**Date:** 16/04/2024
In section B.6.2 extra parameters have been added.				
Documentation provided by project participant				
VVB assessment				**Date:** 13/05/2024
Based on the review of the section B 6.2 of revised PDD, it is confirmed that the parameters CO2e conversion factor, root to shoot ratio, growth parameters Ymax, K, P and baseline values used in the ex-ante estimations are added in the PDD in line with the applied methodology and section B.6.2 of GS PDD template instructions. **CL has been closed.**				

CAR	06	**Section no.**	B.6.1, GS PDD	**Date:** 06/02/2024
Description of CL				
In section, B.1 of GS PDD it has been stated has, *"A limited amount of ureum is used in the tree nurseries. Ureum use will be reported annually and 0.005 tCO2 per kg of nitrogen (N) fertilizer shall be deducted".* However, VVB finds it unclear how the project has fulfilled requirements of section 3.8 (in particularly, sections 3.8.2, 3.8.4 & 3.8.5) of applied methodology. The PD is requested to provide information of other emissions requirements in relevant sections of PDD.				
Project participant response				**Date:** 16/04/2024
The use of fertiliser has been taken up into the ex ante CO2-calculation sheet. Other emissions, such as site preparations, have been better explained in the PDD.				
Documentation provided by project participant				
VVB assessment				**Date:** 14/05/2024

Based on the review of revised PDD section B.6.1, other emissions are justified as fallows in related to various project activities, Site Preparation- it is clarified that the soil tillage with a tractor is used, but no biomass burning occurs, so emissions from burning are not counted. Fertilizer use- limited use of urea is assumed in tree nurseries, emissions are reported annually, deducting 0.005 tCO2 per kg of nitrogen (N) fertilizer is accounted as required by methodology and Ureum contains 30 kg N per 100 kg. Combustion of fossil fuels- not considered in emissions calculations per methodology requirements. N-fixing Trees- emissions assumed to be zero as per methodology requirements. Based on the above assessment, it is confirmed that the project fulfils section 3.8.1 to 3.8.5 of the GS AR methodology requirements.

CAR has been closed.

Appendix 3: Certificates of Competency

Carbon CHECK

Carbon Check (India) Private Limited

Certificate of Competency

Mr. Vempally Prashanth

has been qualified as per CCIPL's internal qualification procedures in accordance with the requirements of CDM AS (V7.0), ISO/IEC14065:2020, ISO/IEC 17029:2019 and other applicable GHG programs:

for the following functions and requirements:

☒ Validator	☒ Verifier	☒ Team Leader	☒ Technical Expert
☐ Technical Reviewer	☐ Health Expert	☐ Gender Expert	☐ Plastic Waste Expert
☐ CCB Expert	☐ Legal Expert	☐ Financial Expert	☐ Environmental, Health and Safety financial matters
☐ SDG+	☐ Social no-harm(S+)	☐ Environment no-harm(E+)	
☒ Local Expert for India			

in the following Technical Areas:

☐ TA 1.1	☐ TA 1.2	☐ TA 2.1	☐ TA 3.1	☐ TA 4.1
☐ TA 4. n	☐ TA 5.1	☐ TA 5.2	☐ TA 7.1	☐ TA 8.1
☐ TA 9.1	☐ TA 9.2	☐ TA 10.1	☐ TA 13.1	☐ TA 13.2
☒ TA 14.1	☐ TA 15.1	☐ TA 16.1		

Issue Date

5th December 2023

Expiry Date

31st December 2024

Priya Suman

Ms. Priya Suman
Compliance Officer

Mr. Sanjay Kumar Agarwalla
Technical Director

Revision History of the document:

Revision date	Summary of changes
Dec 2023	Initial Adoption

CCIPL_FM 7.9 Certificate of Competency_V4.0_112023

[1] Please refer to previous version of FM 7.9 for the revision history

Carbon Check (India) Private Limited

Certificate of Competency

Kambale Manzalo Ghislain

has been qualified as per CCIPL's internal qualification procedures in accordance with the requirements of CDM AS (V7.0), ISO/IEC14065:2020, ISO/IEC 17029:2019 and other applicable GHG programs:

for the following functions and requirements:

☐ Validator	☐ Verifier	☐ Team Leader	☐ Technical Expert
☐ Technical Reviewer	☐ Health Expert	☐ Gender Expert	☐ Plastic Waste Expert
☐ CCB Expert	☐ Legal Expert	☐ Financial Expert	☐ Environmental, Health and Safety financial matters
☐ SDG+	☐ Social no-harm(S+)	☐ Environment no-harm(E+)	
☒ Local Expert for DRC			

in the following Technical Areas:

☐ TA 1.1	☐ TA 1.2	☐ TA 2.1	☐ TA 3.1	☐ TA 4.1
☐ TA 4. n	☐ TA 5.1	☐ TA 5.2	☐ TA 7.1	☐ TA 8.1
☐ TA 9.1	☐ TA 9.2	☐ TA 10.1	☐ TA 13.1	☐ TA 13.2
☐ TA 14.1	☐ TA 15.1	☐ TA 16.1		

Issue Date

1st December 2023

Expiry Date

31st December 2024

Priya Suman

Ms. Priya Suman
Compliance Officer

Sanjay Agarwalla

Mr. Sanjay Kumar Agarwalla
Technical Director

Revision History of the document:

Revision date	Summary of changes
May 2023	Initial Adoption
Dec 2023	Template changes to include additional functions and TA

CCIPL_FM 7.9 Certificate of Competency_V4.0_112023

[1] Please refer to previous version of FM 7.9 for the revision history

Carbon Check (India) Private Limited

Certificate of Competency

Mr. Amit Anand

has been qualified as per CCIPL's internal qualification procedures in accordance with the requirements of CDM AS (V7.0), ISO/IEC14065:2020, ISO/IEC 17029:2019 and other applicable GHG programs:

for the following functions and requirements:

☒ Validator	☒ Verifier	☒ Team Leader	☒ Technical Expert
☒ Technical Reviewer	☐ Health Expert	☐ Gender Expert	☒ Plastic Waste Expert
☒ CCB Expert	☐ Legal Expert	☒ Financial Expert	☐ Environmental, Health and Safety financial matters
☒ SDG+	☒ Social no-harm(S+)	☒ Environment no-harm(E+)	
☒ Local Expert for India and RSA			

in the following Technical Areas:

☒ TA 1.1	☒ TA 1.2	☐ TA 2.1	☒ TA 3.1	☐ TA 4.1
☐ TA 4. n	☐ TA 5.1	☐ TA 5.2	☐ TA 7.1	☒ TA 8.1
☐ TA 9.1	☐ TA 9.2	☐ TA 10.1	☒ TA 13.1	☒ TA 13.2
☒ TA 14.1	☒ TA 15.1	☐ TA 16.1		

Issue Date

5th December 2023

Expiry Date

31st December 2024

Priya Suman

Ms. Priya Suman
Compliance Officer

Sanjay Agarwalla

Mr. Sanjay Kumar Agarwalla
Technical Director

Revision History of the document:

Revision date	Summary of changes
2022[1]	Annual revision
Jan 2023	Annual revision
Dec 2023	Change in the template due to revision in TA and function

CCIPL_FM 7.9 Certificate of Competency_V4.0_112023

[1] Please refer to previous version of FM 7.9 for the revision history