

VCS & CCB 1ST VERIFICATION REPORT FOR GUOLUO GRASSLAND SUSTAINABLE MANAGEMENT PROJECT



Document Prepared By TÜV NORD CERT GmbH

Project Title	Guoluo Grassland Sustainable Management Project
Version	04
Report ID	8003029834 - 21/018

Report Title	VCS & CCB 1 st Verification Report for Guoluo Grassland Sustainable Management Project
Client	Climate Bridge (Shanghai) Ltd.
Pages	122
Date of Issue	19-November-2021
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Summary

- **A brief description of the verification and the project**

The project activity developed in Maqin County, Dari County, Gande County, Jiuzhi County, Banma County and Maduo County, Guoluo Tibetan Autonomous Prefecture, Qinghai Province, P. R. China, conducts seeding a variety of species of native grass (*Elymus dahuricus Turcz.*, *Poa annuaL.* and *Festuca sinensis Keng*) on black soil beaches of 160,548.96 ha which reduces GHG emission by restore the degraded grassland ecosystem on black oil beached to sustainable grassland management. The project not only sequester carbon but also increase soil organics, mitigate the impact of climate change on the local ecological environment, slow down the melting of snow-capped mountains, enhance the capabilities of local communities and residents and increase local biodiversity. The project started seeding on 20-June-2016 and GHG accounting period was chosen by PP started from 20-June-2016 and it applied by VCS under Project ID 2458 in conjunction with the Climate, Community and Biodiversity Standard (CCBS).

- **The purpose and scope of verification**

The objective of the verification is to have an independent review ex post determination by a VVB (Validation and Verification Body) of the monitored GHG removals by sink that have occurred as a result of the implementation of the project activity during a defined monitoring period.

- **The monitoring period**

This is the first Monitoring period started from 20-June-2016 to 31-December-2020.

- **The method and criteria used for verification**

Verification is conducted using TÜV NORD CERT GmbH procedures in line with the requirements specified in the latest version of the VCS Validation and Verification Manual and applying auditing techniques. The verification team assessed the project activity's compliance against the VCS Version 4.1, the CCB Standard Third Edition (version 3.1), the selected methodology and the project monitoring report. The project is eligible under Project Scope 14. The verification criteria followed the guidance documents provided by VCS and CCB included the following:

VCS Version 4.1, VCS Program Guide Version 4.0, AFOLU Non- Permanence Risk Tool version 4.0, CCB Standards version 3.1, CCB Program Rules version 3.1 and the applied VCS methodology VM0026 – "Sustainable Grassland Management" (version 1.0).

- **The number of findings raised during verification**

In the course of the verification, 39 Corrective Action Requests (CARs), 10 Clarification Requests (CLs) were raised and successfully closed. No FAR was raised. The assessment is included in the report.

- **Any uncertainties associated with the verification.**

There are no restrictions of uncertainty.

- **Summary of the verification conclusion.**

Climate Bridge (Shanghai) Ltd. has commissioned the TÜV NORD JI/CDM Certification Program to carry out the Verified Carbon Standard (VCS) joint with Climate, Community & Biodiversity (CCB) 1st periodic verification of the project, “Guoluo Grassland Sustainable Management Project” (2458) with regard to the relevant requirements of VCS standard Version 4.1 and CCB Standards version 3.1. TÜV NORD confirms all verification activities including objectives, scope and criteria, level of assurance, monitoring and monitoring report adhere to VCS Version 4.1 and CCB Standards version 3.1 and all associated updated as documented in this report, are complete.

TÜV NORD concludes that the project activity “Guoluo Grassland Sustainable Management Project” in China, as described in the Monitoring Report version 05 of 11-October-2021, meets all relevant requirements for VCS and CCB verification activity and correctly applied the methodology VM0026 version 1.0. Hence TÜV NORD is able to certify that the GHG removals by sink from the project during the monitoring period 20-June-2016 to 31-December-2020 amount to **2,884,619 tCO₂e**.

Table of Contents

1.	Introduction	5
1.1	Objective	5
1.2	Scope and Criteria	5
1.3	Level of Assurance	5
1.4	Summary Description of the Project	5
2.	Verification Process	7
2.1	Audit Team Composition (<i>Rules 4.3.1</i>)	7
2.2	Method and Criteria	8
2.3	Document Review	10
2.4	Interviews	10
2.5	Site Inspections	13
2.6	Resolution of Findings	14
2.7	Eligibility for Validation Activities	15
3.	Validation Findings	16
3.1	Participation under Other GHG Programs	16
3.2	Methodology Deviations	16
3.3	Project Description Deviations (<i>Rules 3.5.7 – 3.5.10</i>)	16
3.4	Minor Changes to Project Description (<i>Rules 3.5.6</i>)	16
3.5	Grouped Project (G1.13 – G1.15, G4.1)	16
4.	Verification Findings	17
4.1	Public Comments (<i>Rules 4.6</i>)	17
4.2	Summary of Project Benefits	17
4.3	General	18
4.4	Climate	30
4.5	Community	71
4.6	Biodiversity	78
4.7	Additional Project Implementation Information	84
4.8	Additional Project Impact Information	84
5.	Verification Conclusion	85
	Appendix 1: Abbreviations	87
	Appendix 2: Documents reviewed or referenced	88
	Appendix 3: Clarification requests, corrective action requests and forward action requests	98
	Appendix 4 Competence of team members and technical reviewers	122

1. INTRODUCTION

1.1 Objective

Climate Bridge (Shanghai) Ltd. has commissioned the TÜV NORD JI/CDM Certification Program to carry out the Verified Carbon Standard (VCS) joint with Climate, Community & Biodiversity (CCB) 1st periodic verification of the project for the monitoring period from 20-June-2016 to 31-December-2020. The objective of verification is to have an independent review ex-post determination by a DOE of the monitored GHG removals by sink that have occurred as a result of the project activity implemented during a defined monitoring period. The evaluation is done against the requirements of the VCS Version 4.1 and CCBS third edition (version 3.1), based on the monitoring report. In order to confirm that the GHG removals by sink sound reasonable and meet the identified criteria, the verification involves the assessment of monitoring plan conformance to VCS/CCB rules and applied methodology. Verification is requirement and is seen as necessary to provide assurance on the generation of VCUs.

1.2 Scope and Criteria

The scope of the verification is to verify that: (a) the actual monitoring system and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan; (b) the GHG removals by sink data and express a conclusion with a reasonable level of assurance about whether he reported GHG removals by sink data are free from material misstatement; (c) the reported GHG emissions data is sufficiently supported by evidence. Verification shall ensure that the reported GHG removals by sink are complete and accurate in accordance with the applicable VCS criteria in order to be certified. Verification is conducted using TÜV NORD procedures in line with the requirements specified in the VCS Program and ISO14064-3 requirements and applying auditing techniques. Verification team assessed and determines that the implementation and operation of the project activity, and steps to report GHG removals by sink comply with the VCS rules. The verification involved a document review of relevant documentation and interview with the project participants. Verification is not meant to provide any consultancy towards the project participants; however, stated request for clarifications and/or corrective actions may have provided input for improvement of the monitoring.

1.3 Level of Assurance

All GHG sinks, sources and GHG emissions equal to or greater than 1% of the total GHG assertions are considered. The project area covers 160,548.96 ha and estimated to generate average of 448,829 tCO₂ GHG sinks per year(average), and therefore can be considered as a normal project per the VCS rules for this monitoring period, in regards to its scale, subject to a 1% materiality threshold.

The assessment was conducted to provide a reasonable level of assurance of compliance against the defined audit criteria and materiality threshold within the audit scope. Based on the audit findings the verification statement reasonably assures that the GHG assertion is materially correct and is a fair representation of the GHG data and information.

1.4 Summary Description of the Project

The Guoluo Grassland Sustainable Management Project is implemented by Qinghai Guanglv Landscaping Co., Ltd and it aims to restore the degraded grassland ecosystem by seeding a variety of species of native grass, which would continue to remain black soil type grassland degradation. The total area of the project has an extension of 160,548.96 hectares and it is located inside the Maqin County, Dari County, Gande

County, Jiuzhi County, Banma County and Maduo County, Guoluo Tibetan Autonomous Prefecture, Qinghai Province, China.

The project zone consists of Guoluo Tibetan Autonomous Prefecture, in project areas, 3 grass species have been chosen for the project: *Elymus dahuricus Turcz.*, *Poa annuaL.* and *Festuca sinensis Keng*, these species grew up successfully, which has been verified by on-site inspection and interview with the project developer.

The proposed project activity will reduce GHG emission by restore the degraded grassland ecosystem on black oil beached to sustainable grassland management which will increase soil organics, mitigate the impact of climate change on the local ecological environment, slow down the melting of snow-capped mountains, enhance the capabilities of local communities and residents by providing them with relevant technical skills and training, and increase local biodiversity. The project has resulted in the benefits as described in Section 1 of the Monitoring Report. The project is registered under the Verified Carbon Standard (VCS) and the Climate, Community and Biodiversity Standard (CCBS).

2. VERIFICATION PROCESS

2.1 Audit Team Composition (*Rules 4.3.1*)

Lead Auditor/VCS-CCB Validator: Zhao Xuejiao (Fancy) is qualified by TÜV NORD in Validation and Verification of Clean Development Mechanism Requirements (CDM projects) and other voluntary schemes as VCS, ISO14064-2, GS, CCB and Social Carbon (SC). She has experience with more than 200 validation and verification projects including VCS forestry project and GS forestry project in China since year of 2010. She has a bachelor degree of Biological Engineering and master degree of Environmental Engineering. Based on the education background, she engaged in the sustainable development survey when worked as consultant for three years and worked with WWF, GEI (Global Environment Institute) and other NGOs for studying the social and cultural, ecological and biodiversity in China so that to achieve the sustainable development for many projects. Also based on more than 10 years site investigation and interview with local stakeholders and designers of the projects during the CDM, GS, SC, CCB and VCS validation and verification process, she knows how to conduct the community audit well and gained many of social expertise in China. Furthermore, as She has a bachelor degree of Biological Engineering and the main subject is plant pathology, hence she knows the knowledge of biodiversity and gained many biodiversity expertise during the validation and verification site inspection in China. She has conducted more than 20 CDM projects in Qinghai Province and more than 15 VCS&CCB AR project validation and/or verification¹, thus has the relevant social and cultural expertise in this region and also have relevant ecological and biodiversity experience due to the education background. She speaks mandarin which is the common language in China and the regional residents can speak and understand this language.

Technical Expert: Li Guifang has Bachelor degree in Agriculture Resources and Environment and Master degree in Plant Nutrition, and work experience more than 5 years in consultancy under the GHG, ecological and biodiversity to the development of forestry management and A/R projects, qualified by TÜV NORD in Scope 14. Thus she has the relevant agriculture, forestry and or other land use experience in China due to education background and working experience. She has conducted more than 15 VCS&CCB AR project validation and/or verification ², thus has the relevant social and cultural expertise and also have relevant ecological and biodiversity experience due to the education background. Furthermore, as her education background, she has engaged in the Agriculture and Environment, especially the plant research in some survey fields in China and with the consultancy work for forestry management and A/R projects, so that to develop the project well, she spent many time in site for community and biodiversity survey and research thus accumulated the related biodiversity and social expertise in China through interview with locals and conducted questionnaires survey and study the biodiversity in the sample plots etc.. She speaks mandarin which is the common language in China and the regional residents can speak and understand this language.

The verification team member and technical reviewer composition are listed in the below tables,

¹ VCS+CCB projects including project No. 1855, 1865, 1866, 1847, 1825, 1826, 1832, 1864, 2070, 1895, the team leader has conducted the community validation and verification activities on site for all the listed projects. And for 2301, 2305, 2310, 1896, the team leader has conducted the community validation activities on site.

² VCS+CCB projects including project No. 1855, 1865, 1866, 1847, 1825, 1826, 1832, 1864, 2070, 1895, the team member has conducted the community validation and verification activities on site for all the listed projects. And for 2301, 2305, 2310, 1896, the team member has conducted the community validation activities on site.

Table 2-1 Verification team member

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Desk/Doc review	On-site inspection	Interview(s)	Verification findings
1.	Team Leader (also verifier)	EI	ZHAO	Xuejiao	-	☒	☒	☒	☒
2.	Team member (External Technical Expert)	EI	LI	Guifang	-	☒	☒	☒	☒

Table 2-2 Technical reviewer and approver

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1.	Technical reviewer	IR	Nuske	Alexandra	TÜV NORD CERT GmbH
2.	Approver	IR	Stöhr	Christina	TÜV NORD CERT GmbH

Refer to Appendix 4 for Competence of team members and technical reviewer.

2.2 Method and Criteria

A project specific Verification and Sampling plan was developed to guide the verification auditing process to ensure efficiency and effectiveness. The purpose of the verification and sampling plant is to present a risk assessment for determining the nature and extent of validation procedures necessary to ensure the risk of auditing error is reduces to a reasonable level. According to the ISO14064-3, the criteria are the policy, procedure or requirement used as reference against which evidence is compared. Therefore verification of the monitoring plan and the reported project results were measured for compliance against the following criteria:

- VCS Standard, v4.1^{/VCS/}
- VCS Program Guide, v4.0^{/VCSPG/}
- VCS Program Definitions, v4.1^{/VCSPD/}
- VCS AFOLU Non-Permanence Risk Tool, v4.0^{/NPRT/}
- CCB Climate, Community & Biodiversity Standards^{/CCBS/}
- CCB Program Rules, v3.1^{/CCBPR/}

The verification process derived from all items in the verification criteria stated above. Field sampling and techniques based on the project parameters, scope and best professional judgement of the verification

team in order to meet a reasonable level of assurance. The verification consisted of the following three phase:

- Document review
- On-site assessment
- The resolution of outstanding issues and the issuance of the final verification report and certification.

The verification process derived from all items in the verification criteria stated above. Field sampling and techniques based on the project parameters, scope and best professional judgement of the verification team in order to meet a reasonable level of assurance.

The sampling plan during on-site verification is determined taking into account the accessibility and similitude of the areas and the tool for sampling was referred by verification team for the site verification.

The sampling design (number of plot, location) is considered to be in line with the requirements for validation (IAF Guidance on the Application of ISO/IEC Guide 66 - G.5.3.12. : $x=\sqrt{y}$, where x is the sampling size by verification team and y is the sample plots number determined by PP in MR), and it has ensured a representative cross-section of the properties in the areas.

Sample plots selected by VVB is calculated as below,

- Stratum 1, number of plots y is 12. $X=\sqrt{12}=4$
- Stratum 2, number of plots y is 6. $X=\sqrt{6}=3$
- Stratum 3, number of plots y is 6. $X=\sqrt{6}=3$
- Stratum 4, number of plots y is 6. $X=\sqrt{6}=3$
- Stratum 5, number of plots y is 6. $X=\sqrt{6}=3$
- Stratum 6, number of plots y is 6. $X=\sqrt{6}=3$
- Stratum 7, number of plots y is 6. $X=\sqrt{6}=3$
- Stratum 8, number of plots y is 6. $X=\sqrt{6}=3$
- Stratum 9, number of plots y is 6. $X=\sqrt{6}=3$
- Stratum 10, number of plots y is 6. $X=\sqrt{6}=3$
- Stratum 11, number of plots y is 6. $X=\sqrt{6}=3$
- Stratum 12, number of plots y is 6. $X=\sqrt{6}=3$

A ground inspection of the project area was conducted during the site visit and members of the verification team visited 37 sample plots within the different strata in project areas.

During site visit, by sample plots observation and inspection, the verification team checked the sample plots location, measured the sample plot diameter and area, counted the types of grasses inside plot, checked laboratory test data^{LTR/} and confirmed the monitored value from PP sampling data are correct and reasonable, hence it is verified that the calculation method used in the MR is correct and actual.

2.3 Document Review

The VCS&CCB MR^{MR/} and supporting background documents related to the project implementation and carbon sink, climate, community, biodiversity change monitoring were reviewed. Documents review was conducted to ensure consistency with and identify any deviation from VCS and CCB program requirements. Desk review included an examination of the project details, data and parameters, and quantification of GHG removals.

Furthermore, the verification team used additional documentation by third parties like host party legislation, technical reports referring to the monitoring or to the basic conditions and technical data.

The references used in the course of this verification are summarized in Appendix 2.

The verification was performed basing on the documents check and site inspection/measurements, refer to the section 4 of this report for the verification process detail and corresponding documents review.

2.4 Interviews

The objective of the interview process was to solicit important information from personnel related to project and relevant to the verification process. Onsite interviews and information discussions were conducted with project developer^{/11/}, local government officer^{/12/}, local residents (including women)^{/13/} and Project VCS&CCB development consultant^{/14/}. The interviews were performed by the verification team on-site (within the project area, in Maqin County, Dari County, Gande County, Jiuzhi County, Banma County and Maduo County, Guoluo Tibetan Autonomous Prefecture, Qinghai Province, China) and the following is a list of the main interviewees and subject.

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Ma ^{/11/}	Guangchuan	Qinghai Guanglv Landscaping Co., Ltd/ Manager	29/03/2021~02/04/2021	-Chronological description of the project activity with documents of key steps of the implementation. -Technical details of the project realization, project feasibility, designing, operational life time -Baseline and Additionality -Project Boundary -Eligibility criteria -ER calculation - Monitoring plan and arrangements -Crediting period -Project activity starting date -Ownership -local stakeholder consultation	Zhao Xuejiao, Li Guifang
2.	Yi ^{/12/}	Lvbei	Qinghai Provincial Forestry and	29/03/2021~02/04/2021	-National legislation to grassland and grazing	Zhao Xuejiao, Li Guifang

			Grassland Bureau/ Senior Engineer of Carbon Sink Center		- Provincial legislation to seeding -Local grassland development and management -local grazing status - Roles & responsibilities of the government -local communities situation -local biodiversity situation -local climate -local environment	
3.	Jin ^{/12/}	Yongzhong	Forestry and Grassland Bureau of Guoluo/ Bureau Chief	29/03/2021~02/04/2021		
4.	Nan ^{/12/}	Mei	Local County Forestry and Grassland Bureau/ Staff	29/03/2021		
5.	Jia ^{/12/}	Mao	Local County Forestry and Grassland Bureau/ Staff	29/03/2021		
6.	He ^{/12/}	Youlong	Guoluo Forestry and Grassland Station/ Station Chief	29/03/2021~02/04/2021		
7.	Luo ^{/12/}	Xueyun	Guoluo Forestry and Grassland Station/ Station staff/ monitoring staff	29/03/2021~02/04/2021		
8.	Xu ^{/12/}	Wei	Guoluo Forestry and Grassland Station/ Director	29/03/2021~02/04/2021		
9.	Chen ^{/12/}	Zhanmin	Guoluo Forestry and Grassland Station/ Staff	29/03/2021		
10.	Zhu ^{/12/}	Yongqing	Local County Forestry and Grassland Station/ Engineer	29/03/2021		
11.	Duo ^{/12/}	Budan	Local Resident/	29/03/2021	-job opportunities -living condition	Zhao Xuejiao,

			Secretary of village		-training -local grazing status -local stakeholder consultation -impact to local residents -impact to local environment -impact to local biodiversity	Li Guifang
12.	Duo ^{/13/}	Re	Local Resident/ Secretary of village	29/03/2021		
13.	Geng ^{/13/}	Jia	Local Resident/ Secretary of village	29/03/2021		
14.	Zhaxi ^{/13/}	Nima	Local Resident/ Work for grassland management	29/03/2021		
15.	San ^{/13/}	Zhi	Local Resident	29/03/2021		
16.	Ni ^{/13/}	Ma	Local Resident/ Secretary of village/ Monitoring Staff	29/03/2021		
17.	Duo ^{/13/}	Dan	Local Resident/ Monitoring Staff	29/03/2021		
18.	Dan ^{/13/}	Ba	Local Resident/ Vice Secretary of village	29/03/2021		
19.	Wu ^{/13/}	Mao	Local Resident/ herdsman/ Work for grassland management	29/03/2021		
20.	Geng ^{/13/}	Gaji	Local Resident/ herdsman/ Work for grassland management	29/03/2021		
21.	Lou ^{/13/}	Bao	Local Resident/ herdsman/ Work for grassland management	29/03/2021		

22.	Huang ^{/14/}	Shanfeng	Climate Bridge (Shanghai) Ltd./ Technical Director	29/03/2021~02/04/2021	- Editorial issues of the VCS&CCB PD - Calculation of Emission reductions and removals	Zhao Xuejiao, Li Guifang
23.	Lin ^{/14/}	Mao	Climate Bridge (Shanghai) Ltd./ Project Manager	29/03/2021~02/04/2021		

2.5 Site Inspections

The verification site inspection was conducted on 29-March-2021~02-April-2021. A ground inspection of the project area was conducted during the site visit and members of the verification team visited 37 sample plots within the project area. During the site inspection the verification team was accompanied by the project developer, local government officers, consultant and grassland guardians.

During the site inspection, the 37 sample plots are determined by the verification team by checking the map of the project location and PP sampling plots inventory^{/SPI/}, details as following table,

Table 2-1 Locations for site inspection

Site Visit time	Area	Coordinates		Inspection Results
29/03/2021	strata 6, sample 1	99.1494E	34.2103N	During site visit, by sample plots observation and inspection, the verification team checked the sample plots location, measured the sample plot diameter and area, counted the types of grasses inside plot, checked laboratory test data ^{/LTR/} and confirmed the monitored value from PP sampling data are correct and reasonable, hence it is verified that the calculation method used in the MR is correct and actual.
	strata 5, sample 2	98.9730E	34.5828N	
	strata 6, sample 3	99.2483E	34.2078N	
	strata 5, sample 4	99.4677E	33.9417N	
	strata 5, sample 6	100.5489E	34.3435N	
	strata 6, sample 6	99.6745E	34.1559N	
30/03/2021	strata 10, sample 2	97.5709E	34.9189N	
	strata 10, sample 4	98.0372E	35.0621N	
	strata 10, sample 5	98.1511E	34.5613N	
	strata 9, sample 1	98.4577E	34.3764N	
	strata 9, sample 3	98.9847E	34.3341N	
	strata 9, sample 5	99.0137E	34.3180N	
	strata 2, sample 2	99.0418E	34.1761N	
	strata 1, sample 4	99.3684E	33.4352N	
	strata 2, sample 3	98.8242E	33.9221N	
31/03/2021	strata 1, sample 7	98.9701E	33.8409N	
	strata 2, sample 5	98.7925E	33.8719N	
	strata 1, sample 9	98.9709E	33.7280N	

	strata 1, sample 12	99.9621E	33.5319N
	strata 11, sample 1	99.9232E	33.1040N
	strata 12, sample 2	100.3674E	32.9578N
	strata 12, sample 4	100.3935E	32.9512N
	strata 11, sample 4	100.2531E	32.9749N
	strata 12, sample 6	100.3655E	32.9607N
	strata 11, sample 6	100.4676E	33.1379N
01/04/2021	strata 8, sample 1	100.7900E	33.6154N
	strata 7, sample 2	100.4902E	33.5235N
	strata 7, sample 5	100.7444E	33.2973N
	strata 7, sample 6	100.7900E	33.2135N
	strata 8, sample 3	100.8137E	33.6143N
	strata 8, sample 5	100.8921E	33.2513N
02/04/2021	strata 4, sample 2	100.6512E	34.2455N
	strata 3, sample 1	99.4984E	33.9865N
	strata 3, sample 3	99.6039E	33.9449N
	strata 3, sample 6	100.2021E	33.7188N
	strata 4, sample 4	99.5632E	33.9912N
	strata 4, sample 6	99.5908E	33.9589N

There are total 12 project stratifications for carbon calculation in the 6 Counties, the verification team visited targeted area for each project stratification, total 37 sample plots. Refer to the section 4.4.1 of this report for the details of the sampling approach conducted by the verification team during site inspection and refer to table 4-5 of this report for the details of the sampling results concluded by the verification team.

2.6 Resolution of Findings

Material discrepancies identified in the course of the validation are addressed either as CARs, CLs or FARs.

A **Corrective Action Request (CAR)** is established where:

- The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions;
- The VCS Version 4.1 requirements have not been met;
- The CCBS third edition requirements have not been met;
- There is a risk that the emission reductions cannot be monitored or calculated.

A **Clarification Request (CL)** will be issued where information is insufficient, unclear or not transparent enough to establish whether a requirement is met.

A **Forward Action Request (FAR)** will be issued when certain issues related to project implementation should be reviewed during the first verification.

A detailed list of the CARs CLs and FAR raised and discussed in the course of this validation is included in Appendix 3 of this report.

In the course of the validation 39 Corrective Action Requests (CARs), 10 Clarification Requests (CLs) were raised and successfully closed. The assessment is included in the report.

2.6.1 Forward Action Requests

This is the first verification, and there is no FAR raised in the validation report^{VAL/}.

And for this verification, no FAR was raised.

2.7 Eligibility for Validation Activities

The VVB TÜV NORD CERT GmbH hold accreditation for both validation and verification for the relevant sectoral scope 14.

As per the VCS standard, “Validation (including project crediting period renewal validation) and the first verification of a project (in a given project crediting period) may be undertaken by the same validation/verification body”, this is the first verification which was conducted jointly with validation conducted by TÜV NORD CERT GmbH.

3. VALIDATION FINDINGS

3.1 Participation under Other GHG Programs

The verification team is not aware of project involvement in other forms of environmental credits from its activities. The project has not been registered, and is not seeking registration, under any other GHG programs.

3.2 Methodology Deviations

During the monitoring period, there are no methodology deviations.

3.3 Project Description Deviations (*Rules 3.5.7 – 3.5.10*)

During the monitoring period, there are no deviations to project description.

3.4 Minor Changes to Project Description (*Rules 3.5.6*)

During the monitoring period, there are no minor changes to project description.

3.5 Grouped Project (G1.13 – G1.15, G4.1)

This section is not applicable as the project is not a grouped project.

4. VERIFICATION FINDINGS

4.1 Public Comments (Rules 4.6)

The MR is available in both English^{/MR/} and Chinese (as a summary document of the MR)^{/MRS/}. Both the documents were made available on the CCB website (<https://registry.verra.org/app/projectDetail/CCB/2458>) for the public consultation period.

The public comment period was held from 26-March-2021 to 24-April-2021. No public comments were received via checking the above website.

And via checking the MR and all the supporting evidence as listed in Appendix 3 of this report and by site inspection, it is confirmed that there were no any manual transposition errors occurred during the monitoring period.

4.2 Summary of Project Benefits

As per the information available in the MR^{/MR/} against the project benefits as determined in the PD^{/PD/} and confirmed by the PP during the on-site interview, the climate objectives consist in the seeding of a variety of species native grass on black soil beach, which would continue to remain black soil type degraded grassland, increasing the carbon stocks in the following pools: above-ground woody biomass and soil organic carbon. Community objectives would ensure the creation of employment and provide relevant training (skilled labour force), which would positively influence the livelihoods and well-being of the population. Biodiversity objectives would preserve the conservation of wildlife and of biodiversity in the defined region.

The project seeks to provide experience of grassland sustainable management in high-altitude area, the mitigation of the local black soil type degraded grassland caused by over grazing and the improvement of the ecological environment of surrounding area as the unique project benefits, and generate GHG emission removals, create sustainable grassland cover, provide employment, training and improve skills to community members thus improve their livelihood and well-being, and beneficial to biodiversity conservation and globally Critically Endangered or Endangered species in Three River Source region.

By comparing the information given in the PD^{/PD/}, it is confirmed that this section of project benefits is completed appropriately, the achievements during this monitoring period is verified by the verification team and confirmed as correct and actual.

For the achievement in Climate benefits, via checking all the ex ante determined data in PD^{/PD/} as listed in the section 3.1.1 of the MR and monitoring results for all the monitored parameters as listed in the section 3.1.2 of the MR, it is verified that the carbon stocks in the following pools: above-ground woody biomass and soil organic carbon have been increased during this monitoring period which has been assessed detail in the section 4.4 of this report for verifying that all achievements reported are substantiated with information provided in the section 3 of MR^{/MR/}.

For the achievement in Community benefits, via checking all the monitoring results for all the monitored parameters as listed in the section 4.3.1 of the MR, it is verified that the community objectives would ensure the creation of employment and provide relevant training (skilled labour force), which would positively influence the livelihoods and well-being of the population during this monitoring period which has been assessed detail in the section 4.5 of this report for verifying that all achievements reported are substantiated with information provided in the section 4 of MR^{/MR/}.

For the achievement in Biodiversity benefits, via checking all the monitoring results for all the monitored parameters as listed in the section 5.3.1 of the MR, it is verified that the biodiversity objectives would preserves the conservation of wildlife and of biodiversity in the project zone during this monitoring period which has been assessed detail in the section 4.6 of this report for verifying that all achievements reported are substantiated with information provided in the section 5 of MR^{/MR/}.

For the achievement in Gold Level - exceptional biodiversity benefit, via checking the records of the observation activities for trigger species conducted from April 2019 to April 2020^{/BSRM/} as listed in the section 5.4 of the MR, it is verified that all the trigger species were observed within the project zone during this monitoring period which has been assessed detail in the section 4.6.13 and 4.6.14 of this report for verifying that all achievements reported are substantiated with information provided in the section 5 of MR^{/MR/}.

Refer to below related sections 4.4, 4.5 and 4.6 for detail assessment.

As stated in section 2.4.4 of the monitoring report, sustainable financing from carbon revenue for the site is essential to enable conservation action to ensure project implementation and continuation achievement of CCB benefits.

Thus it is concluded that all achievements reported are substantiated with information provided in the body of the monitoring report and confirmed by the assessment in the body of the verification report.

CAR 01 and CL 01 were raised and successfully closed, Refer to Appendix 3 for details.

4.3 General

4.3.1 Implementation Status (G1.9)

The project activity is mainly implemented and in operation in accordance with the description contained in the validated PD^{/PD/}. As confirmed during the on-site inspection, interviews, the project developer has implemented the activities as described in the PD in compliance with the VCS and CCBS requirements. The actual seeding area accounts to 160,548.96 ha with 3 species native grasses (*Elymus dahuricus Turcz.*, *Poa annua*L.and *Festuca sinensis Keng*) which is same to the PD.

The implementation status of the project activity is identified and the assessment steps are taken as the following,

Table 4-1 Assessment of implementation status of the project activity

Item	Assessment
The existence of any material discrepancies between project implementation and the project description.	No material discrepancies have been noted; absence of such material discrepancies was confirmed through onsite inspection and interviews with the project personnel.
The implementation status of the monitoring plan and the completeness of monitoring, including the suitability of the implemented monitoring system (i.e., process and schedule for obtaining, recording, compiling and analyzing the monitored data and parameters).	The monitoring has been carried out mainly in accordance with the monitoring plan contained in the validated PD ^{/PD/} . The project stratifications for carbon calculation is ex post determined as 12 which is consistent with the PD. And the total sample plots are determined as 78. According to the tool Guidelines for sampling and surveys for CDM project activities and programmes of

	activities (version 4.0)^{GSSI}, the number of plots within each stratum is calculated and total is confirmed as 18 by using a precision of 15 percent at the 95 percent confidence level, considering the large area of the project boundary, the actual sample size has been increased into 78, by tripling the individual sample size of each strata with a minimum number of 6. The sample plots calculation sheet^{SPCS} is checked and verified by verification team as correct and reasonable. As per the monitoring plan in the PD, it has stated that if there are changes in the area and boundary, the carbon stratification of the project needs to update. In addition, if the number of carbon stratum and the area change, the number of sample plots need to be recalculated, the project needs to consider tree species, patterns and other factors in actual planting, and update stratification to post-stratification. Due to there is no change to the area, boundary, tree species and planting, thus the post-stratification is consistent with the ex-ante determined in the PD and suitable for actual project implementation which is verified as reasonable and correct as per the methodology and tool. It is verified that the actual monitoring complies with the actual implementation of the project and that data have been assessed to correctly support the emission removals being claimed.
The existence of any material discrepancies between the actual monitoring system, and the monitoring plan set out in the project description and the applied methodology.	As assessed above, there is no change of the sampling plots in the actual monitoring system comparing with the monitoring plan. Through detailed review and data testing on implementation of all relevant aspects of actual monitoring system, it is confirmed there is no material discrepancy between methodology and actual monitoring system. The actual monitoring system is implemented in line with the applied methodology.
Whether the GHG emission reductions or removals generated by the project have become included in an emissions trading program or any other mechanism that includes GHG allowance trading.	It is confirmed, applying professional judgment, that there is very low risk of GHG removals having included in any other trading program or any other mechanism that includes GHG allowance trading which has been assessed and verified in the validation process.

Whether the project has received or sought any other form of environmental credit, or has become eligible to do so since validation or previous verification.	The verification team is unaware of any other environmental crediting program that project would be eligible to participate in since validation.
Whether the project has participated or been rejected under any other GHG programs since validation or previous verification.	There is no evidence of the project's rejection from any other GHG programs as the GS ^{/gs/} , VCS ^{/vcs/} and CDM ^{/unfccc/} project data base since validation.
Sustainable development contributions.	The project generates GHG emission removals by the afforestation of barren or degraded lands which would remain barren or degraded; it also generates social and environmental co-benefits as conservation of the biodiversity.
List any previously validated methodology deviations, project description deviations, and minor changes to the project description (each verification report must contain an exhaustive list of all deviations or changes applied to the project).	This is the first periodic verification, so there were no previously validated methodology deviations, project description deviations, and minor changes to the project description.

Based on above assessment, it is concluded that the project has been implemented as described in the project description.

CAR 02, CAR 03, CAR 04, CAR 05, CAR 06 and CL 02 were raised and successfully closed. Refer to Appendix 3 for details.

4.3.2 Risks to the Community and Biodiversity Benefits (G1.10)

The PD states the overall risks to the project are low, no major risks have arisen that may cause any loss of project benefits for the local community, climate and biodiversity, so that the long-term viability is assured. Natural risk identified are fire, rodents and pests, overgrazing and frost risks in PD^{/PD/}.

Fire risk is considered low because seeding area is mostly degraded land with low coverage, with the increase of grassland coverage, the risk of fire may increase, the local government carry out the construction of grassland fire prevention facilities in the open air according to the Chinese Grassland Law^{/law/} and furthermore, the technical and awareness training have been provided to local herders/communities and grassland guardians^{/TTR/}, strengthening patrolling and monitoring have been conducted during this monitoring period according to the Grassland Management Manual^{/GMM/}. It is confirmed that no fires occurred in the project areas during this monitoring period as verified during the on-site visit and interview with local officers^{/12/} and grassland guardian^{/13/}.

The prevention and control methods by using biological control instruments such as building eagle's nest to control pests and rodents have been mainly adopted during this monitoring period, upon routine overseeing, the rodents and pests have been treated immediately which has been as verified during the on-site visit and interview with local officers^{/12/} and grassland guardian^{/13/}. The chemical pesticides can be appropriately used for the areas where the rodents and insect pests are particularly serious and pesticide will be strictly managed by well trained staff to minimize the potential effect according to National Pesticides Policy which has been determined in the Grassland Management Manual^{/GMM/}. As the biological measures

to control pests and rodents by building eagle's nest have been mainly adopted, the pesticide application was none during this monitoring period. There was no damage caused by pests and rodents and no use of pesticide during this monitoring period which is confirmed during the on-site visit and interview with local officers^{/12/} and grassland guardian^{/13/}.

Overgrazing risks are considered because overgrazing is the main factor leading to grassland degradation. However, by implementation of the project, the local government guide herders to carry out sustainable grazing, grazing is forbidden in the first five years after seeding, and then controlled grazing will be allowed depending on the growth situation of the forage. Besides, as the sustainable management, local herders are employed as grassland guardians, they protect and manage the grassland under the guidance of the project proponent and local government like forestry and grassland bureaus, and also the local governments vigorously promote grassland protection. PP provided the technical and awareness training^{/TTR/} for the local herders on the knowledge and skills of sustainable grazing to alleviate climate change during this monitoring period as confirmed during the on-site visit and interview with local officers^{/12/} and grassland guardian^{/13/}.

Considering the data based on weather reports collected from historic records^{/whr/}, the frost damage has little impact on grasslands in the project area by considering the species planted in the project are native species, which can adapt to the local climate. Frost risk are identified as low, and even there was a frost, the grass can still grow smoothly in the second year. There was no grass damage occurred in the project area during this monitoring period which is confirmed during the on-site visit and interview with local officers^{/12/} and grassland guardians^{/13/}.

Based on above assessment, it is confirmed that reasonable actions were in place and taken to mitigate risks to community and biodiversity benefits during this monitoring period.

CAR 07 was raised and successfully closed. Refer to Appendix 3 for details.

4.3.3 Community and Biodiversity Benefit Permanence (G1.11)

The measures needed and taken to extend project benefits beyond the project lifetime include the selection of the species planted which forage suitable for alpine region as confirmed in the Grass Seed Purchase Contract^{/GSPC/}, the land use with the land owner and project developer as defined in the official approval^{/APDR/}, local government will take over of the responsibility beyond the project lifetime^{/12/}. The measures taken will extend many of the project benefits in the project lifetime.

By the on-site visit it is confirmed that reasonable measures have been taken to enhance project benefits beyond the project lifetime, including grassland sustainable management, aspects protecting the project lands and attempts to tie community success to achieve project's success.

Thus it is concluded that reasonable measures have been taken to enhance project benefits beyond the project lifetime in accordance with the validated project description document.

CAR 08 was raised and successfully closed. Refer to Appendix 3 for details.

4.3.4 Stakeholder Access to Information (G3.1- G3.3)

At the time of validation process, the PD as well as a summary in local languages were made available to the community through summary sheet of the project. The full project documentations was published on VCS and CCB website for public comments. Thus the local communities and other stakeholders can easily download documents from the website. The project developer has published the monitoring manual and monitoring plan to the local stakeholders on the notice board from 01-September-2020 to 15-September-

2020 which has been confirmed by checking the photo of the communities and stakeholders watching notice board^{/RVAR/} and interview with local residents^{/I3/}.

Within the project area was made a Participatory Rural Appraisal (PRA) survey in November 2015 before the project started with stakeholder meeting by the PP inviting local villagers, permanent and temporary workers in the project, grassland experts and government officers to inform people of the possible impact in terms of economics, social and biodiversity aspects that the project might have on the community. This was confirmed by the PPs and by the Participatory Rural Appraisal (PRA) survey report^{/PRA/} provided during the site visit. Via checking the contents in the PRA, it is concluded that the project design details, relevancy and adequacy of the information has been provided to communities, and the analysis of project benefits to communities including all the potential impacts are provided to the stakeholders to let all the participants know the project's potential costs, risks and benefits. All the costs, risks and benefits are identified completely and adequately in the PRA process and during the site visit, by interviewed with the local stakeholders, it is verified that they understand the project's potential costs, risks and benefits to communities with the project development and process. There is no any important costs, risks and benefits missed.

Furthermore, during this monitoring period, the project's potential costs, risks and benefits to communities with the project implementation has been explained to local stakeholders through questionnaires survey conducted from 15-September-2020 to 15-October-2020 which has been confirmed by checking the 60 filled questionnaires^{/CMQ/} collected during this period and cross verified by on-site interview with the local stakeholders^{/I2/, I3/}.

The project developer published the monitoring plan and monitoring manual on the local bulletin boards to explain the monitoring process to communities and other stakeholders which has been verified by checking the photo of the communities and stakeholders watching^{/RVAR/}.

Next, the monitoring results, monitoring plan and summary of the monitoring plan in local language, have been made publicly available on the CCB website (<https://registry.verra.org/app/projectDetail/CCB/2458>), which can be downloaded by stakeholders.

During the on-site verification, second round of stakeholder meetings with the villagers, local officers, grassland guardians and stakeholders have been carried out on 29-March-2021 at the office of Guoluo Prefecture Autonomous Prefecture Forestry and Grass Bureau. By on-site checking the routine villager assembly record^{/RVAR/}, it is confirmed by the verification team that the monitoring plan and monitoring manual were published in the bulletin boards for each of the villages and towns of the 6 Counties from 01-September-2020 to 15-September-2020. And by checking the letter issued by project developer to the Guoluo Prefecture Autonomous Prefecture Forestry and Grass Bureau^{/LVSM/} and on-site observation, it is verified that the local forest and grass bureau received letter and considered the importance of inviting the local stakeholder comments. During the meeting, project developer introduced the monitoring results during this monitoring period and copies of monitoring report is available at the meeting room to anyone requests it. Verification team has participated and the results are also verified by checking the meeting minute and questionnaires filled by stakeholders^{/VSM/}.

Therefore, it is concluded that the method for dissemination of project information, especially to local communities, appears to be effective.

CAR 09, CAR 10, CAR 11, CAR 12 and CAR 13 were raised and successfully closed. Refer to Appendix 3 for details.

4.3.5 Stakeholder Consultation (G3.4 – G3.5)

The PD discusses the way stakeholders were involved in the project design initially, furthermore, the MR discusses the meeting and consultation regarding design, implementation, monitoring and benefits are shared with stakeholders and communities. Pertinent information about the project is being well disseminated by the project, through traditional channels of communication. Adequate levels of information are reaching stakeholders.

As stated in PD, a consultation through PRA and meetings with the stakeholders was made for introducing people about the project impacts and ask them to raise their opinions of the project design and their willingness to participate the implementation. This has been confirmed by checking the PRA^{/PRA/} and related meeting questionnaires^{/QUE/}. The stakeholders are invited to provide their comments regarding the project implementation and impacts to them, also PP considered their participation in decision-making by asking all the participants to fill the questionnaires. Via checking all the questionnaires^{/QUE/} and by interview with the representatives during site visit, it is confirmed that all the participants agreed the implementation of the project, therefore, from that point, the project design was not modified and the project started with local stakeholder's agreement. Therefore, it is verified that the comments from community groups and other stakeholders have been considered and would influence project implementation if necessary through effective consultation.

Before the project started, the stakeholder input on project implementation has been documented through meeting minutes and questionnaires as stated above.

Furthermore, during this monitoring period, the stakeholder input on project implementation have been monitored through in-person meetings and questionnaires survey conducted from 15-September-2020 to 15-October-2020 which has been confirmed by checking the 60 filled questionnaires^{/CMQ/} collected during this period and cross verified by on-site interview with the local stakeholders^{/I2/,I3/}. In addition, during the on-site verification, stakeholder meetings with the villagers, local officers, grassland guardians and stakeholders have been carried out on 29-March-2021. During the meeting, project developer introduced the monitoring results during this monitoring period and the comments from all the stakeholders have been documented as meeting minute. Via checking all the documents, it is verified that there is no grievances and negative comments received during this monitoring period. During the stakeholder meetings in verification process with auditor, the project developer also reported the accomplished monitoring activities and draft monitoring results during this monitoring period, some of the representatives thought it was too complicated to calculate the emission removals which was time consuming and costly. The project developer explained the general concept of VCS and CCB standard regarding the requirement for monitoring and calculation in a simple and straightforward way, so that the representatives finally understood the importance of all the necessary procedures to guarantee the real and measurable benefits of the project.

During on-site interview with project developer and grassland guardians, it is confirmed that the project developer has a plan for continued communication. It is carried out by maintaining a direct line of communication with community members and relevant stakeholders through grassland guardians located in each field. The grassland guardians will conduct continuous in-person meetings with identified community groups and other stakeholders. And the project developer will consider all the recommendations and comments to improve or change project implementation if necessary. This is verified by on-site interview with project developer and grassland guardians and also by checking the daily working log^{/WL/} recorded by the grassland guardians which including the stakeholder consultation process and results. Furthermore, the project developer promised that they will carry out the continued communication as planning.

Based on above demonstration, it is confirmed that all consultation and participatory process have been undertaken directly with communities and other stakeholders through village notice boards and stakeholder meetings. And 60 representatives from local stakeholders filled the questionnaires whom covered different locations, different ages, different occupations and different education levels. Also 20 representatives from local stakeholders participated in the validation & verification process stakeholder interview.

Hence, it is concluded that the project's method for conducting communities and stakeholders consultations is effective.

CAR 14 and CAR 15 were raised and successfully closed. Refer to Appendix 3 for details.

4.3.6 Stakeholder Participation in Decision-making and Implementation (G3.6)

Before the project implementation, as assessed in the PD, a consultation through PRA and meetings with the stakeholders was made for introducing people about the project impacts and ask them to raise their opinions of the project design and their willingness to participate the following implementation. This has been confirmed by checking the PRA^{/PRA/} and related meeting questionnaires^{/QUE/}. The stakeholders are invited to provide their comments regarding the project implementation and impacts to them, also PP considered their participation in decision-making by asking all the participants to fill the questionnaires. Via checking all the questionnaires^{/QUE/} and by interview with the representatives^{/12,13/} during site visit, it is confirmed that all the participants agreed the implementation of the project, therefore, from that point, the project design was not modified and the project started with local stakeholder's agreement.

During the project implementation, local consultations, community monitoring, dissemination of project and monitoring information are taken. The identified stakeholders are local government and villagers located in surrounding villages. Representatives of stakeholders covering different locations in project zone, different age, gender and culture background have been distributed by questionnaires and all the feedback are considered by project developer for changing the project implementation if necessary. Via checking all the questionnaires^{/CMQ/} and by interview with the representatives^{/12,13/} during site visit, it is confirmed that all the participants agreed the project implementation and they confirmed they have effectively participated and involved in project implementation, monitoring, and evaluation by communication with project developer, noticed by village notice boards and asked to fill the related questionnaires. Therefore, from that point, the project monitoring was not modified.

Due the nature of stakeholders identified and the actions taken by the project developer for their involvement can confirm the project enabled community participation in project implementation.

Furthermore, via on-site interview with the local women stakeholders and grassland guardians, it is verified that they are encouraged by PP to participate the working, stakeholder meeting and maintaining the regular communications with officers of local counties. Thus the culture and gender-sensitivity of implementation of such actions has been demonstrated.

4.3.7 Anti-discrimination (G3.7)

During the interview with the project developer, local officers and grassland guardians, it is verified that the project proponent and all other entities involved in project design and implementation are not involved in or complicity in any form of discrimination or sexual harassment with respect to the project due to the labor contract was signed based on the <Labor Law of the People's Republic of China>^{/11c/} with anti-discrimination assurance. <Labor Law of the People's Republic of China> is the national law to protect the legitimate rights and interests of workers, the clause 12 in this law is related to anti-discrimination assurance. Thus this law as specific policy is put in place by the project proponents to prevent discrimination, thus it is ensured that

the project proponent and all other entities involved in project design and implementation will not violate the standard's anti-discrimination requirement. The stakeholder involvement was inclusive without any discrimination of gender, cultural identity and religion. The own policies guarantee that no type of discrimination is tolerated at any point of the project implementation.

The stakeholder involvement was inclusive without any discrimination of gender, cultural identity and religion. The national policies^{/llc/} guarantee that no type of discrimination is tolerated at any point of the project implementation.

Furthermore, via checking the labor contracts with grassland guardians^{/LC/} and interview with the women stakeholders and grassland guardians, it is verified that about 6,023 local people are employed as grassland guardians, over a half of them (3,100) are women who were employed as grassland guardians and maintenance workers and they are under the protection of the national laws and policies and no any form of discrimination or sexual harassment with respect to the project.

4.3.8 Stakeholder Feedback and Grievance Redress Procedure (G3.8)

A grievance redress process is in place as per the PD^{/PD/} and validation report^{/VAL/}. A specific staff is nominated for in charge of recording and collecting conflicts and grievances of local communities and individual farmers. He was nominated who is the first responsible for responding to requests from the community. Besides, all of the grassland guardians are coming from local communities whose name and contact number were published through villager assembly. Stakeholders can either appeal through village representatives or directly to the local Forestry and Grass Bureau.

During the on-site interview with the specific staff and checking his recordings^{/CGL/} about the conflicts and grievances of local communities during this monitoring period, it is verified that there was no any grievances raised in this monitoring period.

Hence, it is confirmed that the formal grievance process was outlined sufficiently in the monitoring report and confirmed on-site during discussion with project personnel and it is concluded that the grievance redress procedure has been implemented according to the project's validated design.

4.3.9 Worker Relations (G3.9 – G3.12)

The steps taken to verify the project proponent has taken actions and implemented measures to ensure that the relationship between the project and workers meet the CCB requirements have been listed as below:

1. Build the capacity of the communities through job training and employment

Grassland Management Manual^{/GMM/} includes technical advice is provided for each technician and trainings are offered for all the grassland guardians immediately once they were hired and continuously for different topics like physical safety measures, health, fire prevention, rodent control and grassland management which are useful for effective grassland management and monitoring. By checking the sample of training records of the grassland guardians^{/TTR/}, it is verified that the trainings are offered for all the grassland guardians immediately once they were hired. Furthermore, till the time of verification, two trainings were provided to grassland guardians in October 2015 and May 2019 respectively related to grassland management, rodent control and seeding grass skills and experience for workers which verified by checking the training records^{/TTR/}. Besides, in order to carry out a successful and efficient monitoring survey, special trainings providing orientation for the field measurement, project monitoring, community surveys were

provided to local herders and technical staff from 03-September-2020 to 10-September-2020 prior to the monitoring activities for this monitoring period. The continuous training is confirmed as provided.

In addition, via on-site interview with the local herders, it is verified that Monitoring Manual has been distributed to each village by notice board and the local officers from Forest and Grass Bureau had provided the live demonstrations.

Thus, it is demonstrated that the project is building local capacity through job skills training and manual distribution.

2. People from the communities are given an equal opportunity to fill work positions

The project makes an effort to hire locally as confirmed by the project manager during the on-site visit and hiring criteria are based on skill sets without discrimination. Actually 6,023 persons (3,100 are women) from the local communities are involved in the project activity during this monitoring period and they are properly hired as grassland guardians and maintenance workers for grassland management, inspection and monitoring by verifying the labor contracts^{/LC/}. Furthermore, via checking the monthly payroll^{/PP/} to grassland guardians, it is verified that an equal opportunity and payment are given to the employments.

3. The project in compliance with all relevant laws and regulations regarding worker's rights and workers are informed of their rights

A relevant law to which the PPs shall comply is available in the validated PD^{/PD/} and in the monitoring report, the hiring process is governed by the labour code and all workers have a contract in which its duties, rights and laws that protect them are reported, this is confirmed via checking the labor contracts^{/LC/} and on-site interview with local government officer^{/I2/} and grassland guardians^{/I3/}.

4. Inform workers of risks and how to minimize risk and Minimize workplace risk using best work practices.

The PD states that the project developer shall meet <Labor Law of the People's Republic of China>^{/llc/} regarding workers' health and safety. Both the two regulations are confirmed as international and national rule and laws which can be used as the occupational safety regulations to obey. The activities that endanger workers are those related to workplace accidents including fire, driving, and unexpected situations in the wild due to the use of dangerous machinery that requires qualified personnel and basic supplies and uniform to prevent accidents and the workers are also trained providing information and practical exercises to prevent any risk which has been verified by checking the training records^{/TTR/}. During the monitoring period, due to the fire risk, fire emergency drills, field emergency rescue, and safe driving training are provided to the grassland guardians which has been confirmed during site observation and interview with the grassland guardians^{/I3/}.

Based on above step-wise assessment, it is concluded that the relationship between workers and the project upholds the intent and design presented in the validated project description.

CAR 16 and CAR 17 were raised and successfully closed. Refer to Appendix 3 for details.

4.3.10 Management Capacity (G4.2 – G4.3)

The steps taken to verify the project proponent has taken actions and implemented measures to ensure the capacity exists to implement the project over the project lifetime is demonstrated as below:

1. Key technical and management skills

Key technical skills required to implement the project are mentioned in the PD^{/PD/}. Via checking the staff list of three actors of Guoluo Tibetan Autonomous Prefecture Forestry and Grassland Bureau, Qinghai Guanglv

Landscaping Co., Ltd. and Climate Bridge (Shanghai) Ltd.^{/LCI/PP/}, it is confirmed that for each individual, experience and education and other qualifications are cited. The management team have the skills necessary to be required to implement the project successfully, including community engagement, biodiversity assessment and carbon measurement and monitoring skills. The project team at the time of the validation process is confirmed in the monitoring report. During the on-site verification process, the verification team conducted the sampling to the sample plots for monitoring measurement, it is confirmed that the PPs and team have the skills to the project implementation and CCB measurement and monitoring.

2. Financial health

During the on-site visit and checking the business license^{/BL/} of the participant parties, it is confirmed that the project proponent Qinghai Guanglv Landscaping Co., Ltd is a privacy and legally registered company. Other involved entities Local Forestry and Grassland Bureau and Guoluo Tibetan Autonomous Prefecture Finance Bureau are financially supported by local government, Climate Bridge (Shanghai) Ltd. is also a legally registered company in China. The PD states that neither the project developer and nor the other parties have been suspected of charged with or found guilty of corruption, bribery, embezzlement, fraud, favoritism, cronyism, nepotism or collusion. Furthermore, through checking the company information in National Enterprise Credit Information Publicity System^{/necl/}, it is confirmed that during this monitoring period, all the companies are legally operated, the financial health is verified. And by checking the website, it is confirmed that during this monitoring period neither the project developer and nor the other party have been suspected of charged with or found guilty of corruption, bribery, embezzlement, fraud, favoritism, cronyism, nepotism or collusion. Via checking the public website of credit information system^{/CGL/} of Chinese company^{/necl/}, it is confirmed that the statement in MR is actual and credible.

Furthermore, based on the carbon development experience of Climate Bridge (Shanghai) Ltd., it can be ensured that the project proponent would receive adequate financial support from carbon credit to operate the project throughout the whole life cycle. Thus, it is concluded that the financial health of the implementing organizations is verified and they can ensure adequate financial support over the project lifetime.

3. Not complicit in any form of corruption

As legally registered companies according to above assessment, the project proponent and other involved entity in project implementation have the obligation to comply with relevant regulations, including anti-corruption law. This is verified by checking the company information in National Enterprise Credit Information Publicity System^{/necl/} and on-site observation with company business license^{/BL/}. Thus it is concluded that the project is not involved or complicit in any form of corruption during this monitoring period.

Therefore, it is verified that the project has the capacity to implement the project in accordance with the validated project description^{/PD/}.

CAR 18, CAR 19 and CL 03 were raised and successfully closed. Refer to Appendix 3 for details.

4.3.11 Commercially Sensitive Information (Rules 3.5.13 – 3.5.14)

None of the commercially sensitive information found in all the documents of the project.

4.3.12 Rights Protection and Free, Prior and Informed Consent (G5.1-G5.5)

The steps taken to verify actions taken and measures implemented by the project proponent to protect the rights of Indigenous Peoples, communities and other stakeholders are listed as below:

1. Property rights

As validated PD and validation report^{/VAL/}, and via checking the Land Management Law of China and Grassland Law of People's Republic of China ^{/law/}, prior to the project initiation, the ownership of all 160,548.96 ha grassland of the project belongs to the state and collectives.

The local governments and collectives have the right to the use of land, and Guoluo Tibetan Autonomous Prefecture Forest and Grassland Bureau applied to Guoluo Tibetan Autonomous Prefecture government for the grassland carbon sink project and obtained approval, which is confirmed by checking the Approval of project design report^{/APDR/} and land use statement^{/APDR/} and confirmed by site interview with local officers^{/12/}. And in the early phase, the Guoluo Tibetan Autonomous Prefecture Forest and Grassland Bureau has organized and managed the project implementation including conducting baseline survey, signing consultant agreement for development of carbon credits.

Due to Qinghai Guanglv Landscaping Co., Ltd is in rich experience of maintenance and management of the grassland, thus Guoluo Tibetan Autonomous Prefecture Forestry and Grassland Bureau authorized Qinghai Guanglv Landscaping Co., Ltd as the Project Proponent of the project, the rights grassland management and Carbon credits of the project during the project crediting period from 2016 to 2076^{/POA/}, and the collective economic organizations and village collectives all agreed with this which is verified by checking the Proof of land qualification as defined in the project approval^{/APDR/}. Thus it is verified that prior and informed consent has been obtained from state and collectives whose property rights are affected by the project through a transparent and agreed process.

2. Does not encroach uninvited on private, community or government property.

The project proponent and Guoluo Tibetan Autonomous Prefecture Forestry and Grassland Bureau are responsible for the comprehensive implementation and management of the project as defined in the land use statement in the project approval^{/APDR/}. Via on-site interview with the local officers, it is verified that no entity can encroach the project area as private property and change the land usage type without all state and collectives' agreement. And by checking the project approval^{/APDR/} and stated by local officer, it is confirmed that the Guoluo Tibetan Autonomous Prefecture governments will be responsible to supervise the state and collective's right to the lands.

Hence, based on above assessment, it is concluded that the project does not complicit of involuntary relocation as within the project area through checking the land use defined in project approval^{/APDR/} and onsite observations and interview with local residents^{/13/}. However, due to grazing was strictly forbidden in the first five years after seeding, some herders maybe affected by the project, but these herders have been provided by job opportunities^{/LC/} and payment^{/PP/}, which will increase their income in long term, thus finally herders in the project area can receive corresponding subsidies. The subsidy standards for grazing prohibition vary from county to county, ranging from 4.1 RMB/mu to 10.4 RMB/mu which is verified as in line with the local government standard through interview with local officers. All the impacted herders agree with the method of receiving related subsidies and during this monitoring period, it is confirmed that all the impacted herders got the corresponding subsidies and they all agreed with the figures which has been confirmed by checking the subsidies receiving receipts^{/SRR/} and site interview with representatives from local herders^{/13/}.

In conclusion, the project will not violate the ownership of the land by the state and collectives, and then will not encroach uninvited on private property, community property, or government property, which is in line with the CCB rules.

3. Free, prior and informed consent

The project is implemented in project land which is state-owned lands and village collective property as defined in the land use statement^{/APDR/}. Local governments and the village collective voluntarily use these lands to seeding grasses confirmed by checking the land use statement^{/APDR/}, and they all agreed to authorize Qinghai Guanglv Landscaping Co., Ltd the rights of grassland management and carbon credits of the project area, the land use statement^{/APDR/} is confirmed governments and all the village collective consent are obtained before the project implementation

Furthermore, via checking the PRA report^{/PRA/} and filled questionnaires^{/QUE/} prior to the implementation of the project, it is confirmed that all the information of socio-economic situation on the surrounding area have been explained to the local stakeholders prior to project initiation to collect their willingness to participate and take advantage of the demands of the proposed project activity and analysis the potential socio-economic and environmental impacts of the proposed project activity, and all the representatives of local stakeholders agree with the project implementation, thus it is verified that prior and informed consent has been obtained from local stakeholders.

Thus it is verified that prior and informed consent has been obtained from governments and all the village collective whose property rights are affected by the project through a transparent and agreed process.

4. Appropriate restitution or compensation

As stated in the validated PD, it is verified that the project area are mostly degraded black soil beach type grassland with no residents in baseline scenario, thus it is confirmed that there were no residents to be migrated. And by checking the PRA process results, it is verified that all the local stakeholders voluntarily agreed the implementation of the project before started, and as above statement, it is confirmed that due to the voluntarily using mostly degraded grasslands to seeding grasses, thus no compensations need to be allocated to any parties whose lands have been or will be affected by the project, this is confirmed by on site interview with officers from county Forestry and Grassland Bureau^{/12/} and local residents^{/13/}. However, due to grazing was strictly forbidden in the first five years after seeding, some herders maybe affected by the project, but these herders have been provided by job opportunities^{/LC/} and payment^{/PP/}, which will increase their income in long term, thus finally herders in the project area can receive corresponding subsidies. The subsidy standards for grazing prohibition vary from county to county, ranging from 4.1 RMB/mu to 10.4 RMB/mu which is verified as in line with the local government standard through interview with local officers. All the impacted herders agree with the method of receiving related subsidies and during this monitoring period, it is confirmed that all the impacted herders got the corresponding subsidies and they all agreed with the figures which has been confirmed by checking the subsidies receiving receipts^{/SRR/} and site interview with representatives from local herders^{/13/}.

5. Do not lead to the involuntary removal or relocation

Based on above assessment, it is concluded that the project does not complicit of involuntary relocation as within the project area. However, due to grazing was strictly forbidden in the first five years after seeding, some herders maybe affected by the project, but these herders have been provided by job opportunities^{/LC/} and payment^{/PP/}, which will increase their income in long term, thus finally herders in the project area can receive corresponding subsidies. The subsidy standards for grazing prohibition vary from county to county, ranging from 4.1 RMB/mu to 10.4 RMB/mu which is verified as in line with the local government standard through interview with local officers. All the impacted herders agree with the method of receiving related subsidies and during this monitoring period, it is confirmed that all the impacted herders got the corresponding subsidies and they all agreed with the figures which has been confirmed by checking the subsidies receiving receipts^{/SRR/} and site interview with representatives from local herders^{/13/}.

6. Reduce illegal activities

Via on-site interview with local government officers, communities, grassland guardians and on-site observation, it is verified that there are no illegal activities inside the project area or in neighboring areas; the area is considered as being peaceful and excluded from social conflict. Furthermore, any illegal logging activities will be fined or sentenced to punishment according to Chinese laws^{/law/}, and the forests are preserved by project staff regularly as determined in the Grassland Management Manual^{/GMM/}, thus it is confirmed no illegal deforestation occurred during this monitoring period. In conclusion, the project's climate, community and biodiversity impacts will not be affected by the illegal activities.

7. None of unresolved dispute

As forest farms and the village collective have voluntarily authorized the right of grassland management to the project proponent during the project crediting period, thus there are no ongoing unresolved conflicts over land rights territories and resources in the project zone. This is confirmed by on site interview with officers from local Forestry and Grass Bureau^{/12/} and PP^{/11/} and checking the land use statement^{/APDR/}. And as stated by local officer, it is confirmed that the local government was responsible to supervise the PP and land owner's right to the land. And the project did not violate the ownership of the land from state and local collectives, and then did not encroach uninvited on private property, community property, or government property during this monitoring period, which is in line with the CCB rules.

Therefore, it is concluded that the project has protected the rights of indigenous peoples, communities and other stakeholders in accordance to the third edition of the CCB standard and the validated project description^{/PD/}.

CL 04 was raised and successfully closed. Refer to Appendix 3 for details.

4.3.13 Legal Status (G5.6)

Both the validated PD^{/PD/} and the MR^{/MR/} provide an extensive list of internal agreements, regulations, national and local laws and explain their applicability to the project and the way compliance with the law is achieved by the project where applicable. The laws and regulations are confirmed through checking the public website^{/law/, /regu/} which has been compared with the actual situation of the project by on-site observation during this monitoring period, and by interview with the local officers, it is verified that the project is not in violation of any local or national laws or regulations.

4.4 Climate

4.4.1 Accuracy of GHG Emission Reduction and Removal Calculations

Monitoring approach

The monitoring has been carried out in accordance with the monitoring plan contained in the validated PD^{/PD/}.

The following table describe for each parameter which data are fixed ex-ante. Data and parameters fixed ex-ante as listed in the monitoring report have been cross-checked and reviewed as applicable against the validated PD and applied methodology.

The following list shows the default values used in this verification for GHG removals calculation:

Table 4-2 Assessment of ex-ante determined parameters

No.	Data/ Parameter	Unit	Description	Determination method
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1	GWP _{N₂O}	t CO ₂ e/t N ₂ O	Global-warming potential for N ₂ O	Value of 265 tCO ₂ e/tN ₂ O derived from IPCC fifth assessment ^{/AR5/} is used as Global-warming potential for N ₂ O, which are confirmed as in line with the section 3.14.4 requirement in VCS standard version 4.1 ^{/VCS/} .
2	EF _{Nfert}	kgN ₂ O-N/kg N applied	N ₂ O emission factor for synthetic N fertilizer use	IPCC default value 0.01 from 2006 IPCC Guidelines for National Greenhouse Gas Inventories ^{/IPCC/}
3	Frac _{GAS,F}	kg N volatilized/kg N applied	Fraction of synthetic N fertilizer that volatilizes as NH ₃ and NO _x	IPCC default value 0.1 from 2006 IPCC Guidelines for National Greenhouse Gas Inventories ^{/IPCC/}
4	EF _{4,SN}	kg N ₂ O-N/(kg NH ₃ -N + NO _x -N volatilized)	N ₂ O emission factor for atmospheric deposition of synthetic N on soils and water surfaces	IPCC default value 0.01 from 2006 IPCC Guidelines for National Greenhouse Gas Inventories ^{/IPCC/}
5	EF _{4,MD}	kg N ₂ O-N/(kg NH ₃ -N + NO _x -N volatilized)	N ₂ O emission factor for atmospheric deposition of urine and manure N on soils and water surfaces	IPCC default value 0.01 from 2006 IPCC Guidelines for National Greenhouse Gas Inventories ^{/IPCC/}
6	GWP _{CH₄}	t CO ₂ e/t CH ₄	Global-warming potential for CH ₄	Value of 28 tCO ₂ e/t CH ₄ derived from IPCC fifth assessment ^{/AR5/} , which are confirmed as in line with the section 3.14.4 requirement in VCS standard version 4.1 ^{/VCS/} .
7	P _{I,b}	Dimensionless	Population of grazing livestock type I, in baseline year b	Cattle: 267,582 Sheep: 133,791 The values are derived from the PRA report ^{/PRA/} , which is in line with the requirement of the applied methodology.
8	EF _I	kg CH ₄ /(head * year)	Enteric CH ₄ emission factor per head of livestock type I per year	Dairy cattle: 68 Cattle: 47 Sheep: 5 Default values from 2006 IPCC Guidelines for National Greenhouse Gas Inventories ^{/IPCC/}
9	EF _{3,PRP,PPP}	kg N ₂ O-N/kg N input	N ₂ O emission factor for cattle (dairy, non-dairy and buffalo), poultry and pigs manure and urine deposited on of applied to grassland	IPCC default value 0.02 from 2006 IPCC Guidelines for National Greenhouse Gas Inventories ^{/IPCC/}
10	EF _{3,PRP,SO}	kg N ₂ O-N/kg N input	N ₂ O emission factor for sheep and other animals manure and urine deposited on of applied to grassland	IPCC default value 0.01 from 2006 IPCC Guidelines for National Greenhouse Gas Inventories ^{/IPCC/}
11	N _{exl}	kg N deposited/(t	Nitrogen excretion of livestock type I	Dairy Cattle: 0.47 Cattle: 0.34

		livestock mass * day)		Sheep: 1.17 Goats: 1.37 Default values from 2006 IPCC Guidelines for National Greenhouse Gas Inventories^{/IPCC/}
12	$W_{l,b}$	kg	Average weight of livestock l, in baseline year b	Cattle: 300 Sheep: 45 The values are derived from the Local expert judgment which is reported in PRA report^{/PRA/}, this is in line with the requirement of the applied methodology.
13	$W_{l,p}$	kg	Average weight of livestock under project	Cattle: 300 Sheep: 45 The values are derived from the Local expert judgment which is reported in PRA report^{/PRA/}, this is in line with the requirement of the applied methodology.
14	$Days_{l,b}$	Days	Grazing days for livestock type l in baseline year b	Value of 10 is derived from Survey of Grazing Displacement and Relocation Plans ^{/SGD/} , this is in line with the requirement of the applied methodology.
15	$H_{l,b}$	Hours	Average grazing hours for livestock type l per day during the grazing season in baseline year b	Value of 12 is derived from Survey of Grazing Displacement and Relocation Plans ^{/SGD/} , this is in line with the requirement of the applied methodology.
16	$Frac_{GAS,MD}$	kg N volatilized/kg of N deposited	Fraction of volatilization from manure and urine deposited by grazing animals as NH_3 and NO_x	Dairy Cow: 30% Cattle: 45% Sheep/goats: 12% Default values from 2006 IPCC Guidelines for National Greenhouse Gas Inventories^{/IPCC/}
17	$EF_{l,M}$	kg CH_4 /(head * year)	CH_4 emission factor from manure of livestock type l	Dairy Cows: 9 Other cattle: 1 Sheep: 0.10 Goats: 0.11 Default values from 2006 IPCC Guidelines for National Greenhouse Gas Inventories^{/IPCC/}
18	$EF_{CO_2,k}$	t CO_2 /GJ	CO_2 emission factor by fuel type k	Gasoline: 0.0693 Diesel: 0.0741 Default values from 2006 IPCC Guidelines for National Greenhouse Gas Inventories^{/IPCC/}
19	NCV_k	GJ/t fuel	Thermal value of fuel type k	Gasoline: 44.3 Diesel: 43.0

				Default values from 2006 IPCC Guidelines for National Greenhouse Gas Inventories ^{/IPCC/}
20	SOC _{s,Baseline}	t C/ha	Baseline SOC stock in the top 30 cm of soil layer (or greater depth if required) in stratum s	Refer ER calculation sheets for values used. Option 2 was selected by PP to be applied to estimate project removals due to changes in SOC, and the procedures of Section 8.2.8 in VM0026 were follow. The values are derived from Laboratory test data report^{/LTR/} and the test was conducted from September to October in 2015 which is less than two years prior to the project start time, and via checking the Laboratory test data report^{/LTR/}, it is verified that the organic carbon, bulk density and sand-gravel ratio (percentage of rocks larger than 2mm, roots, and other dead residues with a diameter in the top 30 cm of soil) of 223 soil samples were measured in the Soil Science Laboratory of Beijing Forestry University. The nationally-approved standard Method for Determination of Soil Organic Matter (NY/T 1121.6-2006)^{/MDS/} was used to measure SOC of the soil samples, thus procedures of Section 8.2.8 in VM0026 were follow and the General Guidelines for Sampling and Surveys for Small-Scale CDM Project Activities^{/GSS/} has been followed to determine the soil sampling procedures and the sample size.

It is confirmed that the parameters listed above are fixed ex-ante and used for baseline and project emissions calculation in accordance with the applied methodology, methodological tools and validated PD.

The following table describe for each parameter which is to be measured according to the monitoring plan and how the verification team has verified that the actual monitoring complies with the monitoring plant and that data have been assessed to correctly support the GHG removals being claimed.

Table 4-3 Assessment of ex-post determined parameters

No.	Data /Parameter	Unit	Description	Assessment for this MP
1	M _{SNi,t}	t fertilizer	Mass of synthetic N fertilizer type i applied in year t	Monitored values are derived from project records for mass and nitrogen content of fertilizer ^{/M_{NFR}/} . The records recorded how many bags of fertilizer are consumed, each bag of fertilizer is 50 kg, the record was conducted by County Forestry and Grassland Bureau.

				Monitoring frequency is each application of fertilizer during this monitoring period. QA/QC procedure is provided which is verified as in compliance with Guidance provided in IPCC, 2000 chapter 8 is applied^{/IPCC/}. The final value for this monitoring period is calculated by number of bags for this MP multiply with 50 kg/bag/1000kg/ton. The value in ER sheet is verified as correct.
2	NC _{SNi,p}	g N/g fertilizer	Nitrogen content of synthetic N fertilizer type i applied under project	Monitored values are derived from manufacturer product label^{/MPL/}. Monitoring frequency is each application of fertilizer during year t. The fertilizer for the project was purchased from the same manufacturer, and the nitrogen content of the fertilizer was marked on the fertilizer bag and recorded by the County Forestry and Grassland Bureau as confirmed in project records for mass and nitrogen content of fertilizer^{/MNFR/}. QA/QC procedure is provided which is verified as in compliance with Guidance provided in IPCC, 2000 chapter 8 is applied^{/IPCC/}. Via checking the manufacturer product label^{/MPL/} photos and project records for mass and nitrogen content of fertilizer^{/MNFR/} during this monitoring period taken for each application of fertilizer, it is confirmed that below monitored values are correct to be applied for GHG removals calculation. Diammonium phosphate: 0.18 Urea: 0.462
3	P _{i,t}	Head	Population of livestock type i under project in year t	Monitored values are derived from project records for grazing^{/PRG/}. The project proponent and the County Forestry and Grassland Bureau visited all the project participants every year to investigate the situation of the project. Monitoring frequency is annually during this monitoring period. QA/QC procedure is provided which is verified as in compliance with Guidance provided in IPCC, 2000 chapter 8 is applied^{/IPCC/}. The value in ER sheet is verified as correct.
4	H _{i,t}	Hours	Average grazing hours per day of livestock type i during grazing season in year t	Monitoring value are derived from project records for grazing^{/PRG/}. The project proponent and the County Forestry and Grassland Bureau visited all the project participants every year to investigate the situation of the project. Monitoring frequency is annually.

				QA/QC procedure is provided which is verified as in compliance with Guidance provided in IPCC, 2000 chapter 8 is applied ^{/IPCC/} . The value in ER sheet is verified as correct.
5	Days _{i,t}	Days	Grazing days of lives tock l in year t under project	Monitoring value are derived from project records for grazing ^{/PRG/} . The project proponent and the County Forestry and Grassland Bureau visited all the project participants every year to investigate the situation of the project. Monitoring frequency is annually. QA/QC procedure is provided which is verified as in compliance with Guidance provided in IPCC, 2000 chapter 8 is applied ^{/IPCC/} . The value in ER sheet is verified as correct.
6	FC _{p,j,k,t}	Kg fuel	Fuel consumption by type k, machine type j, parcel grassland p, in year t under project	Monitored values are derived from project records for fuel consumption ^{/PRF/} . Trucks and tractors were used in the project, which consumed diesel oil. The County Forestry and Grassland Bureau recorded fuel consumption just after the application of machine. Monitoring frequency is record fuel consumption just after the application of machine during this monitoring period. QA/QC procedure is provided which is verified as in compliance with Guidance provided in IPCC, 2000 chapter 8 is applied ^{/IPCC/} . The final value for this monitoring period is sum of the recorded values of diesel oil consumption for machines. The value in ER sheet is verified as correct.
7	PA _{mG,s,i,t}	ha	Project areas of grassland with management practice mG in stratum s in year t	Monitoring value are derived from project records for grassland management ^{/PRM/} . The County Forestry and Grassland Bureau recorded the area of grassland with management practice mG in stratum s. Monitoring frequency is recording the area and management practice just after the management practice has taken place and report annually. QA/QC procedure is provided which is verified as in compliance with Guidance provided in IPCC, 2000 chapter 8 is applied ^{/IPCC/} . The value in ER sheet is verified as correct.
8	SOC _{mG,s,i,t}	g C/kg soil	SOC stock in the top 30 cm of soil (or greater depth if required) for management practice mG, stratum s (or	Monitored values are derived from project records from Laboratory test ^{/LTR/} . Soil samples were collected by soil drill, monitoring staff collected 3-4 soil samples in S shape at each sampling site, and finally mixed into one sample, which is put into a ziplock bag and mailed to the laboratory for measuring.

			greater depth if desired), sampling site i	Guidance provided in Section 8.2.8 of VM0026 is applied and the Method for determination of soil organic matter (NY/T 1121.6-2006)^{/MDS/} which is used in China as National standard for measuring the soil organic matter and via checking this standard, it is confirmed that the requirement in the standard in line with the Section 8.2.8 of VM0026. Measuring equipment are soil drill, ziplock bag. Soil drill was used to collect soil samples. Monitoring frequency is at least once every five years, at the end of growing season in the ear measured, until the end of the project crediting period. During this monitoring period, via checking the project records from Laboratory test^{/LTR/}, it is confirmed that the soil samples were collected from 15-September-2020 to 19-October-2020, and the SOC_{mG,s,i,t} were measured by Shandong Huasheng Tiantong Standard Technical Service Co., Ltd., from 02-November-2020 to 10-December-2020, and the test report was issued on 10-December-2020. So, it is verified that the soil sampling time was at the end of growing season, and the monitoring frequency meets the requirements of methodology. All soil samples have been backed up. If there is a problem with the testing equipment or the data is abnormal, retest the corresponding soil sample. The measurement of SOC was carried out by a laboratory named Shandong Huasheng Tiantong Standard Technical Service Co., Ltd., which was registered in Jinan City, Shandong Province in 27-August-2015. The laboratory complied with the principles of good laboratory practice outlined in the OECD (1998) which is verified by checking the certificate of the lab^{/COL/}.
9	BD _{mG,s,i,t}	g soil/cm ³	Soil bulk density in the top 30 cm of soil (or greater depth if required) for management practice <i>mG</i> , stratum <i>s</i> (or greater depth if desired), sampling site <i>i</i>	Monitored values are derived from project records from Laboratory test^{/LTR/}. Monitoring staff collect one soil samples with rubber hammers and ring knives in each sample site and placed in aluminum box, and mailed to the laboratory for measuring. Guidance provided in Section 8.2.8 of VM0026 is applied and the nationally-approved standard Soil Quality Guidelines for Soil Sampling Techniques (GB/T 36197-2018)^{/SQG/} was used for soil sampling and Method for determination of soil bulk density (NY/T 1121.4-2006)^{/MDSBD/}

				was used to measure $BD_{mG,s,i,t}$ of the soil samples, via checking this standard, it is confirmed that the requirement in the standard in line with the Section 8.2.8 of VM0026. Measuring equipment are ring knife, aluminium box, electronic scale, rubber hammer, drying box. Monitoring frequency is at least once every five years, at the end of growing season in the ear measured, until the end of the project crediting period. During this monitoring period, via checking the project records from Laboratory test^{/LTR/}, it is confirmed that the soil samples were collected from 15-September-2020 to 19-October-2020, and the $BD_{mG,s,i,t}$ were measured by Shandong Huasheng Tiantong Standard Technical Service Co., Ltd., from 02-November-2020 to 10-December-2020, and the test report was issued on 10-December-2020. So, it is verified that the soil sampling time was at the end of growing season, and the monitoring frequency meets the requirements of methodology. All soil samples have been backed up. If there is a problem with the testing equipment or the data is abnormal, retest the corresponding soil sample. The measurement of SOC was carried out by a laboratory named Shandong Huasheng Tiantong Standard Technical Service Co., Ltd., which was registered in Jinan City, Shandong Province in 27-August-2015. The laboratory complied with the principles of good laboratory practice outlined in the OECD (1998) which is verified by checking the certificate of the lab^{/COL/}.
10	$FC_{mG,s,i,t}$	Percent	Percentage of rocks with a diameter larger than 2mm, roots, and other dead residues in the top 30 cm of soil (or greater depth if desired), for management practice mG , stratum s, sampling site i	Monitored values are derived from project records from Laboratory test^{/LTR/}. Monitoring staff collect one soil samples with rubber hammers and ring knives in each sample site and placed in aluminum box, and mailed to the laboratory for measuring. Guidance provided in Section 8.2.8 of VM0026 is applied and the Research progress on determination methods of gravel content in soil[J]. Soils, 2012,44(1):17-22^{/RPDMS/} which is used for measuring the Percentage of rocks as there is no nationally recognized standard for measuring this, and via checking this research, it is confirmed that the requirement in the standard is almost same to the Section 8.2.8 of VM0026.

				Measuring equipment are ring knife, electronic scale and sieve. Monitoring frequency is at least once every five years, at the end of growing season in the ear measured, until the end of the project crediting period. During this monitoring period, via checking the project records from Laboratory test^{/LTR/}, it is confirmed that the soil samples were collected from 15-September-2020 to 19-October-2020, and the BD_{mG,S,i,t} were measured by Shandong Huasheng Tiantong Standard Technical Service Co., Ltd., from 02-November-2020 to 10-December-2020, and the test report was issued on 10-December-2020. So, it is verified that the soil sampling time was at the end of growing season, and the monitoring frequency meets the requirements of methodology. All soil samples have been backed up. If there is a problem with the testing equipment or the data is abnormal, retest the corresponding soil sample. The measurement of SOC was carried out by a laboratory named Shandong Huasheng Tiantong Standard Technical Service Co., Ltd., which was registered in Jinan City, Shandong Province in 27-August-2015. The laboratory complied with the principles of good laboratory practice outlined in the OECD (1998) which is verified by checking the certificate of the lab^{/COL/}.
11	Depth	cm	Total soil depth, for calculating grassland SOC stock in the top 30 cm of soil (or greater depth if required)	Monitored value are derived from project records for monitoring depth^{/PRD/}. Monitoring frequency is recorded with each measurement taken. During this monitoring period, the monitoring staff recorded with each measurement taken, and collect soil samples with soil drill with 30cm scale. Monitoring equipment is Soil drill with scale. Measured by insert the soil drill into the soil to a scale of 30cm, and then lift it up and transfer the soil to the ziplock bag. Due to full depth of affected soil layers is not known, a minimum depth of 30 cm was applied which is verified as in line with the methodology.
12	P _{GUL,t}	Head	Total population of livestock of each type relocated to unidentified grasslands in year t	Monitoring value are derived from full census survey^{/FCS/}. Monitoring frequency is annually. For this monitoring period, full census survey was conducted by the project proponent and

				county forestry and grassland bureau in every August to September for this monitoring period. QA/QC procedure is provided which is verified as in compliance with Guidance provided in IPCC, 2000 chapter 8 is applied ^{/IPCC/} . The value in ER sheet is verified as correct.
13	Days _{GUI,I,t}	days	Days that the population of each type of relocated livestock of type I graze in unidentified grassland in year t	Monitoring value are derived from full census survey ^{/FCS/} . Monitoring frequency is annually. For this monitoring period, full census survey was conducted by the project proponent and county forestry and grassland bureau in every August to September for this monitoring period and via checking the full census survey ^{/FCS/} results, it is confirmed that the value of Days _{GUI,I,t} is 10 days. QA/QC procedure is provided which is verified as in compliance with Guidance provided in IPCC, 2000 chapter 8 is applied ^{/IPCC/} . The value is verified as correct.

It is confirmed that the validated monitoring plan has been properly implemented and followed by the PPs and all parameters needed for calculate GHG removals have been monitored.

CAR 21, CAR 22, CAR 23, CAR 24, CAR 25, CAR 26 and CAR 27 were raised and successfully closed. Refer to Appendix 3 for details.

Monitoring approach by PP

The monitoring plan was included to the MR and is confirmed as per the validated plan in PD.

The monitoring plan in section 3.1.3 is confirmed as implemented by PP as the monitoring approach for this monitoring period according to the methodology and applicable tool, especially for the monitoring process, post-stratification and sampling approach. Refer to below for details assessments.

1. Operation and management structure

The roles and responsibilities of the involved parties and personnel have been clearly defined in the monitoring plan and via site interview with these parties and interview with monitoring staffs, it is verified that the organization structure of the monitoring team is actual and has been implemented accordingly during this monitoring plan.

2. Monitoring the project boundary and applicability conditions

The applicability conditions request listed in the PD has been checked as in line with the request of the applied methodology and tools. Hence, during this monitoring period, PP has checked the project implementation is in line with the requirement.

According to the PD, all the conditions are applicable at the start of the project activity due to the baseline survey. During the monitoring period, the project proponent also monitored the possible change of the project boundary, if there is a change to the project boundary, the applicability conditions should be re-assessed for the changed project area.

For the project boundary, via checking the KML^{/KML/} and map of the project boundary^{/MAP/}, it is confirmed that the coordinate of the project boundary was measured and managed strictly in accordance with regulations, and saved in GIS files. And it is verified that no change in the boundary occurred during this monitoring period.

For the applicability conditions, due to the validation is combined developed with this verification, hence the demonstration of the applicability conditions is not changed in PD and refer to the assessment in the validation report for the details. Thus it is verified that the project is applicable to the applicability conditions in the methodology for this monitoring period.

3. Monitoring of project implementation

Via checking the record of the grazing agents (eg, herder households) involved the project^{/RGA/}, it is confirmed that

- a. each household involved in the project has been recorded,
- b. the information of each household has been provided including a unique ID, name, location of their land, and date of entering into the agreement and leaving the agreement.

And via site visit and interview with some representatives of the households, it is verified that the information of the household is reasonable and actual.

Besides, the record of the geographic location of the project area for all areas of grassland^{/RGL/} is checked, it is confirmed that the geodetic coordinates of the project area (and any stratification inside the area) were established, recorded and archived. This was achieved by field survey (eg, using GPS) and by using geo-referenced spatial data (eg, maps, GIS datasets). And via site inspection and checking the KML file of the project area^{/KML/}, it is verified that the geodetic coordinates of the project area and all the stratifications are actual and correct.

Finally, the grassland management plan^{/GMP/} was provided by PP and validated during the validation process, during this monitoring period, based on this plan, the records of grassland management^{/RGM/} were conducted and via checking the records, it is confirmed that the actual grassland management has been carried out in compliance with the plan and the grasslands were well managed during this monitoring period by PP, grass guardians, local officers and local herders.

4. Monitoring process for Data and Parameters Monitored

4-1 Recording of Data and Parameters Monitored

Via checking the PD, it is confirmed that for the estimate of annual emissions from the use of synthetic fertilizers, the following parameters were recorded at each application during the monitoring period:

- Mass and type of synthetic N fertilizer applied;
- Nitrogen content of synthetic N fertilizer applied.

For the estimate of annual CH₄ emissions from enteric fermentation, population of livestock type I and grazing days of livestock type I were recorded annually during the monitoring period. For the estimate of annual CH₄ and N₂O emissions from manure deposition during grazing, grazing days of livestock of type I, and average grazing hours per day of livestock type I during the grazing season were recorded in every grazing season, in each year during the monitoring period.

For the estimate of annual CO₂ emissions due to the use of fossil fuels for SGM, the following parameters must be recorded at each time a management practice using machines is adopted and reported annually during the monitoring period:

- Quantity of fuel consumption;
- Fuel type;
- Machine type.

To estimate project removals due to changes in SOC, the following parameters were monitored during the monitoring period. The soil sampling, handling and storage, processing and measurement, and quality control procedures implemented in soil organic carbon analysis that follow a scientific peer-reviewed approved standard.

- SOC content;
- Soil bulk density;
- Percentage of rocks with a diameter larger than 2mm, roots and other dead residues;
- Carbonate content.

Refer to above table 4-3 for detail assessment.

4-2 Sampling Design and Stratification

As assessed in the above table 4-3, the project removals due to changes in SOC are determined by direct measurement approach (Option 2) by using soil sampling procedures as requested in the applied methodology.

PP has adopted a sampling method in the MR according to the validated PD, according to the A/R methodological tool "Calculation of the number of sample plots for measurements within A/R CDM project activities" version 02.1.0 to determine the sample plots number for measurement and monitoring during this monitoring period. The number of sampling plots is calculated as below sub-steps:

I. Post stratification

According to the applied methodology, the ex-post stratification must be updated due to the following reasons:

- Unexpected disturbances occurring during the project crediting period (eg, due to fire, pests or disease outbreaks), affecting differently various parts of an originally homogeneous stratum;
- Grassland management activities (planting) may be implemented in a way that affects the existing stratification.

Via site inspection, interview with local officers and grass guardians, and checking the Non-permanence risk report^{/NPRR/} and records of grassland management^{/RGM/}, it is verified that the post stratification is same to the prior stratification as defined in the approved PD due to there is no changes of grassland management activities and unexpected disturbances, no change the project design and the project is implemented as per the PD, the post stratification during this monitoring period is listed in below table,

Table 4-4 Post-stratification during this monitoring period

Strata	Area (ha)	Area location	Grass species	Soil texture
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Strata-1	50,456.19	Dari	Elymus dahuricus Turcz., Poa annual. and Festuca sinensis Keng	Loam
Strata-2	18,735.08	Dari	Elymus dahuricus Turcz., Poa annual. and Festuca sinensis Keng	Sandy loam
Strata-3	28,380.06	Gande	Elymus dahuricus Turcz., Poa annual. and Festuca sinensis Keng	Loam
Strata-4	3,778.17	Gande	Elymus dahuricus Turcz., Poa annual. and Festuca sinensis Keng	Sandy loam
Strata-5	13,342.96	Maqin	Elymus dahuricus Turcz., Poa annual. and Festuca sinensis Keng	Loam
Strata-6	1,966.06	Maqin	Elymus dahuricus Turcz., Poa annual. and Festuca sinensis Keng	Sandy loam
Strata-7	8,836.47	Jiuzhi County	Elymus dahuricus Turcz., Poa annual. and Festuca sinensis Keng	Loam
Strata-8	2,885.33	Jiuzhi County	Elymus dahuricus Turcz., Poa annual. and Festuca sinensis Keng	Sandy loam
Strata-9	1,780.21	Maduo County	Elymus dahuricus Turcz., Poa annual. and Festuca sinensis Keng	Loam
Strata-10	26,083.43	Maduo County	Elymus dahuricus Turcz., Poa annual. and Festuca sinensis Keng	Sandy loam
Strata-11	3,957.27	Banma County	Elymus dahuricus Turcz., Poa annual. and Festuca sinensis Keng	Loam
Strata-12	347.73	Banma County	Elymus dahuricus Turcz., Poa annual. and Festuca sinensis Keng	Sandy loam
Total	160,548.96	6 counties	3 species	2 types

Thus, it is verified that post stratification has been implemented taking into account of the locations and soil types same to the ex-ante determination in the PD. Via on-site inspection, it is verified that the ex-post stratification is correct and reasonable in line with the actual status of the project implementation.

II. Sampling framework

According to the methodology, Guidelines for sampling and surveys for CDM project activities and programmes of activities (version 4.0) has been followed by PP to determine the sampling procedure and sample size.

The project stratifications for carbon calculation are ex post determined as 12 which is consistent with the PD. And the total sample plots are determined as 78. According to the tool Guidelines for sampling and surveys for CDM project activities and programmes of activities (version 4.0)^{/GSS/}, the number of plots within each stratum is calculated and total is confirmed as 18 by using a precision of 15 percent at the 95 percent confidence level, considering the large area of the project boundary, the actual sample size has been increased into 78, by tripling the individual sample size of each strata with a minimum number of 6. The sample plots calculation sheet^{/SPCS/} is checked and verified by verification team as correct and reasonable.

The location including the geographical coordinates of each sample plots site and map of the sample plots site have been provided in the MR by PP, via site inspection of the sampled plots, it is confirmed that the location of the sites are correct and credible.

Furthermore, PP has provided the description of the monitoring process in the field which has been confirmed as actual and in line with the national standard. Via checking the SOC table^{/SOCT/} which was summarized from the project records from laboratory test^{/LTR/}, it is verified that the sampling results for this monitoring period in reasonable and credible.

Refer to above table 4-3 for detail assessment especially for the SOC and soil bulk density.

4-3 Sampling approach by verification team

During the site visit, the verification team performed sample survey of 37 samples selected by PP. Field sampling and techniques based on the project parameters, scope and best professional judgement of the verification team in order to meet a reasonable level of assurance.

The sampling approach during on-site verification is determined taking into account the accessibility and similitude of the areas and the tool for sampling was referred by verification team for the site verification. The sampling design (number of plot, location) is considered to be in line with the requirements for validation (IAF Guidance on the Application of ISO/IEC Guide 66 - G.5.3.12.: $x=\sqrt{y}$), and it has ensured a representative cross-section of the properties in the areas.

Verification team performed sample calculated as below,

- Stratum 1, number of plots y is 12. $X=\sqrt{12}=4$
- Stratum 2, number of plots y is 6. $X=\sqrt{6}=3$
- Stratum 3, number of plots y is 6. $X=\sqrt{6}=3$
- Stratum 4, number of plots y is 6. $X=\sqrt{6}=3$
- Stratum 5, number of plots y is 6. $X=\sqrt{6}=3$
- Stratum 6, number of plots y is 6. $X=\sqrt{6}=3$
- Stratum 7, number of plots y is 6. $X=\sqrt{6}=3$
- Stratum 8, number of plots y is 6. $X=\sqrt{6}=3$
- Stratum 9, number of plots y is 6. $X=\sqrt{6}=3$
- Stratum 10, number of plots y is 6. $X=\sqrt{6}=3$
- Stratum 11, number of plots y is 6. $X=\sqrt{6}=3$
- Stratum 12, number of plots y is 6. $X=\sqrt{6}=3$

Verification team randomly selected 37 sample plots from all strata from the SOC table/^{SOC/} and a ground inspection of the project area was conducted during the site visit and members of the verification team visited 37 sample plots from 108 PP samples within the project area.

Due to the main monitoring results of N and SOC are all derived from project records or laboratory test data, so it was not possible to measure any results during site visit of the field. So during the site visit, firstly verification team checked the locations of sample plots by GPS devices to confirm the geodetic coordinates of the project area, and verified the locations are correct and actual, then verification team checked the identification and area size of sample plots which is verified as consistent with the PP's determination and selection, next verification team checked the species of grass and soil type of the sample plots which is verified as consistent with the stratification information in the PD and MR, finally verification team observed how the monitoring staff conducted the field samples taken and confirmed that the process is reasonable and depth of the soil is in line with the requirement of applied methodology.

In conclusion, via the site inspection, the verification team confirmed that the information of sample plots provided by PP in MR is correct and actual, and the post-stratification is confirmed as in line with the applied methodology. Furthermore, the monitoring results were confirmed by verification team by checking the supporting evidence during site visit including mainly the project records or laboratory test data^{/LTR/} which has been assessed related to each monitoring parameter in above table 4-3.

The field measurement results carried out by verification team are concluded as below table:

Table 4-5 Measurement results conducted by verification team

Sample No.	Longitudes (E)	Latitudes (N)	Area location	Grass species	Soil texture
S1-4	99.3684E	33.4352N	Maqin county	Elymus dahuricus Turcz., Poa annuaL. and Festuca sinensis Keng	Loam
S1-7	98.9701E	33.8409N			
S1-9	98.9709E	33.7280N			
S1-12	99.9621E	33.5319N			
S2-2	99.0418E	34.1761N	Maqin county	Elymus dahuricus Turcz., Poa annuaL. and Festuca sinensis Keng	Sandy loam
S2-3	98.8242E	33.9221N			
S2-5	98.7925E	33.8719N			
S3-1	99.4984E	33.9865N	Dari county	Elymus dahuricus Turcz., Poa annuaL. and Festuca sinensis Keng	Loam
S3-3	99.6039E	33.9449N			
S3-6	100.2021E	33.7188N			
S4-2	100.6512E	34.2455N	Dari county	Elymus dahuricus Turcz., Poa annuaL. and Festuca sinensis Keng	Sandy loam
S4-4	99.5632E	33.9912N			
S4-6	99.5908E	33.9589N			
S5-2	98.9730E	34.5828N	Gande county	Elymus dahuricus Turcz., Poa annuaL. and Festuca sinensis Keng	Loam
S5-4	99.4677E	33.9417N			
S5-6	100.5489E	34.3435N			
S6-1	99.1494E	34.2103N	Gande county	Elymus dahuricus Turcz., Poa annuaL. and Festuca sinensis Keng	Sandy loam
S6-3	99.2483E	34.2078N			
S6-6	99.6745E	34.1559N			
S7-2	100.4902E	33.5235N	Jiuzhi county	Elymus dahuricus Turcz., Poa annuaL. and Festuca sinensis Keng	Loam
S7-5	100.7444E	33.2973N			
S7-6	100.7900E	33.2135N			
S8-1	100.7900E	33.6154N	Jiuzhi county	Elymus dahuricus Turcz., Poa annuaL. and Festuca sinensis Keng	Sandy loam
S8-3	100.8137E	33.6143N			
S8-5	100.8921E	33.2513N			
S9-1	98.4577E	34.3764N	Maduo county	Elymus dahuricus Turcz., Poa annuaL. and Festuca sinensis Keng	Loam
S9-3	98.9847E	34.3341N			
S9-5	99.0137E	34.3180N			
S10-2	97.5709E	34.9189N			

S10-4	98.0372E	35.0621N	Maduo county	Elymus dahuricus Turcz., Poa annuaL. and Festuca sinensis Keng	Sandy loam
S10-5	98.1511E	34.5613N			
S11-1	99.9232E	33.1040N	Banma county	Elymus dahuricus Turcz., Poa annuaL. and Festuca sinensis Keng	Loam
S11-4	100.2531E	32.9749N			
S11-6	100.4676E	33.1379N			
S12-2	100.3674E	32.9578N	Banma county	Elymus dahuricus Turcz., Poa annuaL. and Festuca sinensis Keng	Sandy loam
S12-4	100.3935E	32.9512N			
S12-6	100.3655E	32.9607N			

Verification team compared the above information they got from the on-site measurement and the raw data from the monitoring survey^{/LTR/}, it can be concluded that the monitoring results in MR are acceptable and accurate.

4-4 Leakage Monitoring

For the estimate of leakage emissions, the monitoring parameters required in the VCS modules VMD0040 Estimation of Leakage Emissions from Displacement of Grazing Activity due to Implementation of Sustainable Grassland Management Activities have been recorded annually during the project crediting period.

Refer to above table 4-3 for detail assessment.

5. Other elements of the monitoring system

The monitoring frequency, data management, quality assurance and quality control procedures and emergency procedures that has been implemented during this monitoring period have been checked and verified by verification team, refer to table 4-3 for each parameter's detail assessment and via site inspection of the project area and interview with local officers and grass guardians, it is verified that there was no any risks to the project occurred, and all the data are well obtained and recorded by checking the monitoring survey results^{/LTR/PR/}, thus there was no emergency occurred for this project during this monitoring period. The PPs follows requirements in the applied methodology therefore ensure the collection of reliable field and laboratory data.

Thus in conclusion, the GHG data monitoring follows project own procedures with regard to management and monitoring. Verification team has assessed the information provided by the PP by reviewing the data and information to verify their completeness, the validated monitoring plan in PD, the applied methodology and methodological tools; evaluating the data management and the quality assurance and quality control of the reported GHG removals.

CAR 28, CAR 29 and CAR 30 were raised and successfully closed. Refer to Appendix 3 for details.

GHG Emission Reduction and Removal Calculations

The GHG removals are calculated according the applied methodology VM0026 version 02, VMD0040 version 1.0 and validated PD^{/PD/} as below steps,

Baseline Emissions

1) Baseline N₂O emissions due to fertilizer use

According the applied methodology, based on validated PD^{/PD/} and validation report^{/VAL/}, it is confirmed that no Baseline N₂O emissions due to fertilizer use need to be considered. Thus BE_{N₂O_{SN,b}} is determined as 0.

2) Baseline emissions due to the use of N-fixing species

According the applied methodology, based on validated PD^{/PD/} and validation report^{/VAL/}, N₂O emissions due to the use of N-fixing species in the baseline are excluded from the project boundary.

3) Baseline emissions due to burning of biomass

According the applied methodology, based on validated PD^{/PD/} and validation report^{/VAL/}, it is confirmed that no baseline emissions due to burning of biomass need to be considered. Thus BE_{BB,b} is determined as 0. For this project activity, via validated PD^{/PD/} and validation report^{/VAL/}, it is confirmed that no nitrogen fertilizer was applied in baseline scenario, hence, no Baseline N₂O emissions due to fertilizer use need to be considered. Thus BE_{N₂O_{SN,b}} is determined as 0.

4) Baseline CH₄ emissions due to enteric fermentation

According the applied methodology, the Baseline CH₄ emissions from enteric fermentation are calculated as following:

$$BE_{CH_4EF,t} = \frac{GWP_{CH_4} \times \sum_{l=1}^L P_{l,b} \times EF_l \times Days_{l,b}}{1000 \times 365} \quad (1)$$

Where:

GWP_{CH_4}	=	Global-warming potential for CH ₄ (t CO ₂ e/t CH ₄)
$P_{l,b}$	=	Population of grazing livestock type l, in baseline year b (head)
l	=	Index of livestock type
EF_l	=	Enteric CH ₄ emission factor per head of livestock type l per year (kg CH ₄ head*year)
$Days_{l,b}$	=	Grazing days inside the project area for each livestock type l in baseline year b (days)
1000	=	Conversion factor for t CH ₄ to kg t CH ₄
365	=	Conversion factor for years to days

5) Baseline N₂O and CH₄ emissions due to manure management

According the applied methodology, the Baseline emissions from manure management include N₂O and CH₄ emissions from manure and urine deposited on grassland soil during the grazing season are calculated as following:

$$BE_{GHG_{MD},b} = BE_{N_2O_{MD},b} + BE_{CH_4_{MD},b} \quad (2)$$

Where:

$BE_{N_2O_{MD},b}$	=	Baseline N ₂ O emissions from manure and urine deposited on grassland soil in baseline year b (t CO ₂ e)
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$$BE_{CH_4MD,b} = \text{Baseline CH}_4 \text{ emissions from manure and urine deposited on grassland soil in baseline year b (t CO}_2\text{e)}$$

1) Baseline N₂O emissions from manure management

Baseline N₂O emissions from manure and urine deposited on grassland soil in baseline year b are the sum of direct and indirect N₂O emissions from manure and urine deposited on grassland soil during the grazing season are calculated as below,

$$BE_{N_2O_{MD},b} = GWP_{N_2O} \times (BE_{D,N_2O_{MD},b} + BE_{ID,N_2O_{MD},b}) \quad (3)$$

Where:

$$GWP_{N_2O} = \text{Global warming potential for N}_2\text{O (t CO}_2\text{e/t N}_2\text{O)}$$

$$BE_{D,N_2O_{MD},b} = \text{Direct N}_2\text{O emissions from manure and urine deposited on grassland soil during the grazing season in baseline year b (t N}_2\text{O)}$$

$$BE_{ID,N_2O_{MD},b} = \text{Indirect N}_2\text{O emissions from manure and urine deposited on grassland soil during the grazing season in baseline year b (t N}_2\text{O)}$$

a. Baseline direct N₂O emissions from manure and urine deposited on grassland soil

Baseline direct N₂O emissions from manure and urine deposited on grassland soil are calculated as per the applied methodology, Equation 04 calculates direct N₂O emissions from livestock types classified as cattle (dairy, non-dairy and buffalo), poultry and pigs. Equation 05 calculates direct N₂O emissions from livestock types classified as sheep and other animals. Where both kinds of livestock are present the following equations must be summed.

$$BE_{D,N_2O_{MD},b} = \sum_{l1=1}^{L1} F_{MD,l1,b} \times EF_{3,PRP,CPP} \times 44/28 \quad (4)$$

And/or

$$BE_{D,N_2O_{MD},b} = \sum_{l2=1}^{L2} F_{MD,l2,b} \times EF_{3,PRP,SO} \times 44/28 \quad (5)$$

$F_{MD,l1,b}$ and $F_{MD,l2,b}$ must be calculated using the following equation for livestock type l.

$$F_{MD,l1,b} = \frac{P_{l,b} \times W_{l,b} \times N_{ex,l} \times H_{l,b} \times Days_{l,b} \times (1 - Frac_{GAS,MD})}{1000_a \times 24 \times 1000_b} \quad (6)$$

Where:

$$F_{MD,l1,b} = \text{Annual amount of nitrogen in cattle, poultry and pigs manure and urine deposited on grassland soil during the grazing season in baseline year b, adjusted for volatilization as NH}_3 \text{ and NO}_x \text{ (t N)}$$

$$F_{MD,l2,b} = \text{Annual amount of nitrogen in sheep and other animals manure and urine deposited on grassland soil during the grazing season in baseline year b, adjusted for volatilization as NH}_3 \text{ and NO}_x \text{ (t N)}$$

$$EF_{3,PRP,CPP} = \text{N}_2\text{O emission factor for cattle, poultry and pigs manure and urine deposited on grassland soil during the grazing season (kg N}_2\text{O-N/kg N input)}$$

$EF_{3,PRP,SO}$	=	N ₂ O emission factor for sheep and other animals manure and urine deposited on grassland soil during the grazing season (kg N ₂ O-N/kg N input)
$l1$	=	Index of livestock cattle, poultry and pigs
$l2$	=	Index of livestock sheep and other animals
$P_{l,b}$	=	Population of livestock type l in baseline year b (head)
$W_{l,b}$	=	Average weight of livestock type l in baseline year b (kg livestock mass/head)
Nex_l	=	Nitrogen excretion of livestock type l (kg N deposited / (t livestock mass*day))
1000_a	=	Conversion factor for t livestock mass to kg livestock mass
$H_{l,b}$	=	Average grazing hours per day for livestock type l in baseline year b (hour)
24	=	Conversion factor for days to hours
$Days_{l,b}$	=	Grazing days for livestock type l inside the project area in baseline year b (days)
1000_b	=	Conversion factor for t N to kg N
$Frac_{GAS,MD}$	=	Fraction of volatilization from manure and urine deposited by grazing animals as NH ₃ and NO _x (kg N volatilized/kg of N deposited)
l	=	Index of grazing livestock types

b. Baseline indirect N₂O emissions from urine and manure N deposited on grassland soils

For the project activity, via checking the validated PD^{/PD/} and validation report^{/VAL/}, it is confirmed that the values of annual precipitation was less than values of evapotranspiration in the six counties of Guoluo Tibetan Autonomous Prefecture for most of the year and leaching is unlikely to occur in the project area. Thus based on the applied methodology, indirect N₂O emissions from leaching and runoff can be excluded which means $BE_{ID,N2OMD,b}$ is zero.

2) CH₄ emissions from manure management

Baseline CH₄ emissions from manure management are calculated using the following:

$$BE_{CH_4MD,b} = \frac{GWP_{CH_4} \times \sum_{l=1}^L EF_{lM} \times P_{l,b} \times H_{l,b} \times Days_{l,b}}{1000 \times 365 \times 24} \quad (7)$$

Where:

$P_{l,b}$	=	Population of grazing livestock type l, in baseline year b, head
EF_{lM}	=	CH ₄ emission factor from manure of livestock type l (kg CH ₄ /(head*year))
$H_{l,b}$	=	Average grazing hours per day for livestock type l in baseline year b (hour)
$Days_{l,b}$	=	Grazing days for livestock type l inside the project area in baseline year b (days)
1000	=	Conversion factor for t CH ₄ to kg CH ₄
365	=	Conversion factor for years to days
24	=	Conversion factor for days to hours

6) Baseline CO₂ emissions due to the use of fossil fuels for grassland management

For this project activity, via checking the validated PD^{/PD/} and validation report^{/VAL/}, it is confirmed that there was no grassland management in the project area in baseline scenario, hence did not involve agricultural machinery. Thus baseline CO₂ emissions due to the use of fossil fuels for grassland management is considered to be 0 tCO₂e. BE_{FC,b} is determined as 0.

7) Baseline emission removals from existing woody perennials

For this project activity, via checking the validated PD^{/PD/} and validation report^{/VAL/}, it is confirmed that there were no perennial woody plants in the project area under the baseline scenario, hence BRWP_b is zero.

8) Baseline emission removals due to changes in soil organic carbon

Via checking the applied methodology, since the applicability conditions limit the project to land that is degraded and is continuing to degrade, it can be conservatively assumed that the changes in SOC in the baseline scenario is zero. Hence, BRS=0.

9) Baseline emissions and removals

The emissions and removals in baseline year *b* are given by:

$$BE_b = BE_{N_2O_{SN},b} + BE_{BB,b} + BE_{CH_4EF,b} + BE_{GHG_{MD},b} + BE_{FC,b} - BRWP_b \quad (8)$$

Where:

BE_b	=	Baseline emissions and removals in year <i>b</i> (t CO ₂ e)
$BE_{N_2O_{SN},b}$	=	Baseline N ₂ O emissions due to fertilizer use in baseline year <i>b</i> (t CO ₂ e)
$BE_{BB,b}$	=	Baseline GHG emissions from biomass burning in baseline year <i>b</i> (t CO ₂ e)
$BE_{CH_4EF,b}$	=	Baseline CH ₄ emissions from enteric fermentation in baseline year <i>b</i> (t CO ₂ e)
$BE_{GHG_{MD},b}$	=	Baseline GHG emissions from manure management in baseline year <i>b</i> (t CO ₂ e)
$BE_{FC,b}$	=	Baseline CO ₂ emissions from farming machine fossil fuel consumption in baseline year <i>b</i> , (t CO ₂)
$BRWP_b$	=	Baseline removals from existing woody perennials in baseline year <i>b</i> (t CO ₂)

Hence, based on the above assessment for the actual situation of the project, it is confirmed that the Baseline emissions and removals in year *b* for this project is calculated as below

$$BE_b = BE_{CH_4EF,b} + BE_{GHG_{MD},b} = BE_{CH_4EF,b} + BE_{N_2O_{MD},b} + BE_{CH_4MD,b} = 48,341 \text{ t CO}_2\text{e}$$

For calculation of BE_b, via checking the Baseline Survey Report^{/BSR/} and Participatory Rural Appraisal (PRA) Report^{/PRA/}, it is confirmed that the information of grazing in 6 counties listed in the PD is actual and correct. Hence, it is verified that the baseline emissions and removals calculation result of 48,341 tCO₂e in ER spreadsheet^{/XLS/} is correct.

CL 05 was raised and successfully closed, Refer to Appendix 3 for details.

Project Emissions

1) Project N₂O emissions due to fertilizer use

According the applied methodology, Project N₂O emissions due to fertilizer use equals the sum of project direct and indirect N₂O emissions, as described using the following,

$$PE_{N_2O_{SN},t} = GWP_{N_2O} \times (PE_{D,N_2O_{SN},t} + PE_{ID,N_2O_{SN},t}) \quad (9)$$

Where:

$$\begin{aligned} PE_{N_2O_{SN},t} &= \text{Project N}_2\text{O emissions due to fertilizer use in year t (t CO}_2\text{e)} \\ PE_{D,N_2O_{SN},t} &= \text{Project direct N}_2\text{O emissions from synthetic nitrogen fertilizer use in year t (t N}_2\text{O)} \\ PE_{ID,N_2O_{SN},t} &= \text{Project indirect N}_2\text{O emissions from synthetic nitrogen fertilizer use in year t (t N}_2\text{O)} \\ GWP_{N_2O} &= \text{Global-warming potential of N}_2\text{O} \end{aligned}$$

(i) Project direct N₂O emissions from synthetic nitrogen fertilizer use

Project direct N₂O emissions from synthetic fertilizer use is calculated using IPCC methodology recommended in the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, as described using the following:

$$PE_{D,N_2O_{SN},t} = F_{SN,t} \times EF_{Nfert} \times 44/28 \quad (10)$$

Where:

$$\begin{aligned} F_{SN,t} &= \text{Annual amount of synthetic fertilizer N applied to grassland soils in year t, adjusted for volatilization as NH}_3 \text{ and NO}_x \text{ (t N)} \\ EF_{Nfert} &= \text{N}_2\text{O emission factor for synthetic N fertilizer use (kg N}_2\text{O-N/kg N applied)} \\ 44/28 &= \text{Conversion of N}_2\text{O-N to N}_2\text{O} \end{aligned}$$

Among this equation,

$$F_{SN,t} = \sum_{i=1}^I M_{SNI,t} \times NC_{SNI,p} \times (1 - Frac_{GAS,F}) \quad (11)$$

where,

$$\begin{aligned} M_{SNI,t} &= \text{Mass of synthetic N fertilizer type i applied in year t (t fertilizer)} \\ NC_{SNI,p} &= \text{Nitrogen content of synthetic N fertilizer type i applied (g-N/g fertilizer)} \\ Frac_{GAS,F} &= \text{Fraction of synthetic N fertilizer that volatilizes as NH}_3 \text{ and NO}_x \text{ (kg N volatilized/kg of N applied)} \end{aligned}$$

(ii) Project indirect N₂O emissions from the synthetic N fertilizer use:

Project indirect N₂O emissions from the synthetic N fertilizer use is calculated using the below equation,

$$PE_{ID,N_2O_{SN},t} = \sum_{i=1}^I (F_{SNI,t} \times Frac_{GAS,F}) \times EF_{A,SN} \times 44/28 \quad (12)$$

where,

$EF_{4,SN}$ = N₂O emission factor for atmospheric deposition of synthetic N on soils and water surfaces (kg N₂O-N/(kg NH₃-N + NO_x-N volatilized)⁻¹)

I = Index of synthetic N fertilizer types

2) Project CH₄ emissions due to enteric fermentation

According the applied methodology, the Project CH₄ emissions from enteric fermentation are calculated based on an IPCC methodology recommended in the *2006 IPCC Guidelines for National Greenhouse Gas Inventories*^[IPCC], with the addition of a parameter to reflect the proportion of the year that livestock are present inside the project area, as following:

$$PE_{CH_4EF,t} = \frac{GWP_{CH_4} \times \sum_{l=1}^L P_{l,t} \times EF_l \times Days_{l,t}}{1000 \times 365} \quad (13)$$

Where:

GWP_{CH_4} = Global-warming potential for CH₄ (t CO₂e/t CH₄)

$P_{l,t}$ = Population of grazing livestock type l in year t under project (head)

l = Index of livestock type

EF_l = Enteric CH₄ emission factor per head of livestock type l per year (kg CH₄ head*year)

$Days_{l,t}$ = Grazing days inside the project area for each livestock type l in the project year t (days)

1000 = Conversion factor for t CH₄ to kg t CH₄

365 = Conversion factor for years to days

3) Project N₂O and CH₄ emissions due to manure management

According the applied methodology, the project emissions from manure management including N₂O and CH₄ emissions from manure and urine deposited on grassland soil during the grazing season are calculated as following:

$$PE_{GHGMD,t} = PE_{N_2O_{MD},t} + PE_{CH_4MD,t} \quad (14)$$

Where:

$PE_{GHGMD,t}$ = Project GHG emissions from manure management in year t (t CO₂e)

$PE_{N_2O_{MD},t}$ = Project N₂O emissions from manure and urine deposited on grassland soil in year t (t CO₂e)

$PE_{CH_4MD,t}$ = Project CH₄ emissions from manure and urine deposited on grassland soil in year t (t CO₂e)

1) Project N₂O emissions from manure management

The project emissions from manure and urine deposited on grassland soil during the grazing season include direct and indirect N₂O emissions from manure and urine deposited on grassland soil during the grazing season. Project N₂O emissions from manure and urine deposited on grassland soil are calculated as described in the following,

$$PE_{N_2O_{MD},t} = GWP_{N_2O} \times (PE_{D,N_2O_{MD},t} + PE_{ID,N_2O_{MD},t}) \quad (15)$$

Where:

- GWP_{N_2O} = Global warming potential for N_2O (t CO_2e/t N_2O)
- $PE_{D,N_2O_{MD},t}$ = Project direct N_2O emissions from manure and urine deposited on grassland soil during the grazing season in year t (t N_2O)
- $PE_{ID,N_2O_{MD},t}$ = Project indirect N_2O emissions from manure and urine deposited on grassland soil during the grazing season in year t (t N_2O)

2) Project direct N_2O emissions from manure and urine deposited on grassland soil

Project direct N_2O emissions from manure and urine deposited on grassland soil are calculated using IPCC methodology recommended by 2006 IPCC Guidelines for National Greenhouse Gas Inventories, as described using the following Equations 16 and 17. Equation 16 calculates direct N_2O emissions from livestock types classified as cattle (dairy, non-dairy and buffalo), poultry and pigs and Equation 17 calculates direct N_2O emissions from livestock types classified as sheep and other animals, where both kinds of livestock are present the following equations must be summed.

$$PE_{D,N_2O_{MD},t} = \sum_{l1=1}^{L1} F_{MD,l1,t} \times EF_{3,PRP,CPP} \times 44/28 \quad (16)$$

And/or

$$PE_{D,N_2O_{MD},t} = \sum_{l2=1}^{L2} F_{MD,l2,t} \times EF_{3,PRP,SO} \times 44/28 \quad (17)$$

$F_{MD,l1,t}$ and $F_{MD,l2,t}$ must be calculated using the following equation for livestock type l.

$$F_{MD,l1,t} = \frac{P_{l,t} \times W_{l,p} \times Nex_l \times H_{l,t} \times Days_{l,t} \times (1 - Frac_{GAS,MD})}{1000_a \times 24 \times 1000_b} \quad (18)$$

Where:

- $F_{MD,l1,t}$ = Annual amount of nitrogen in cattle, poultry and pigs manure and urine deposited on grassland soil during the grazing season in year t, adjusted for volatilization as NH_3 and NO_x (t N)
- $F_{MD,l2,t}$ = Annual amount of nitrogen in sheep and other animals manure and urine deposited on grassland soil during the grazing season in year t, adjusted for volatilization as NH_3 and NO_x (t N)
- $EF_{3,PRP,CPP}$ = N_2O emission factor for cattle, poultry and pigs manure and urine deposited on grassland soil during the grazing season (kg N_2O-N/kg N input)
- $EF_{3,PRP,SO}$ = N_2O emission factor for sheep and other animals manure and urine deposited on grassland soil during the grazing season (kg N_2O-N/kg N input)
- $l1$ = Index of livestock cattle, poultry and pigs
- $l2$ = Index of livestock sheep and other animals
- $P_{l,t}$ = Population of grazing livestock type l in year t (head)
- $W_{l,p}$ = Average weight of livestock l under project (kg livestock mass/head)

Nex_l	=	Nitrogen excretion of livestock type l (kg N deposited /(t livestock mass*day))
1000_a	=	Conversion factor for t livestock mass to kg livestock mass
$H_{l,t}$	=	Average grazing hours per day during grazing season in year t (hours)
24	=	Conversion factor for days to hours
$Days_{l,t}$	=	Grazing days for livestock type l inside the project area in year t (days)
1000_b	=	Conversion factor for t N to kg N
$Frac_{GAS,MD}$	=	Fraction of volatilization from manure and urine deposited by grazing animals as NH ₃ and NO _x (kg N volatilized/kg of N deposited)
l	=	Index of grazing livestock types

3) Project indirect N₂O emissions from urine and manure N deposited on grassland soils

According to the methodology (VM0026/Version 1.0) and via checking the study of Analysis of the change trend of various meteorological elements in Guoluo area in the past 36 years^[ACT], it is confirmed that the annual precipitation of the project area is less than annual potential evapotranspiration, so, indirect N₂O emissions from leaching and runoff can be excluded.

Indirect N₂O emissions from the atmospheric deposition of N volatilized as NH₃ and NO_x after urine and manure N is deposited on grassland soils under the project, are calculated using the following,

$$PE_{ID,N_2O_{MD},t} = \sum_{l=1}^L F_{MD,l,t} \times Frac_{GAS,MD} \times EF_{4,MD} \times 44/28 \quad (19)$$

Where:

$PE_{ID,N_2O_{MD},t}$	=	Project indirect N ₂ O emissions from manure and urine deposited on grassland soil during the grazing season in year t (t N ₂ O)
$F_{MD,l,t}$	=	Annual amount of manure and urine deposited on grassland soil from livestock type l during the grazing season in year t, adjusted for volatilization as NH ₃ and NO _x (t N)
$Frac_{GAS,MD}$	=	Fraction of volatilization from manure and urine deposited by grazing animals as NH ₃ and NO _x (kg N volatilized/kg of N deposited)
$EF_{4,MD}$	=	N ₂ O emission factor for atmospheric deposition of urine and manure N on soils and water surfaces, (kg N ₂ O-N/(kg NH ₃ -N + NO _x -N volatilized))
L	=	Index of grazing livestock types

4) CH₄ emissions from manure management

Project CH₄ emissions from manure management are calculated using the following:

$$PE_{CH_4_{MD},t} = \frac{GWP_{CH_4} \times \sum_{l=1}^L EF_{lM} \times P_{l,t} \times H_{l,t} \times Days_{l,t}}{1000 \times 365 \times 24} \quad (20)$$

Where:

$P_{l,t}$	=	Population of livestock type l in year t (head)
EF_{lM}	=	CH ₄ emission factor from manure of livestock type l (kg CH ₄ /(head*year))

$H_{l,t}$	=	Average grazing hours per day during grazing season in year t (hours)
$Days_{l,t}$	=	Grazing days for livestock type l inside the project area in year t (days)
1000	=	Conversion factor for t CH ₄ to kg CH ₄
365	=	Conversion factor for years to days
24	=	Conversion factor for days to hours

4) Project CO₂ emissions due to the use of fossil fuels

As demonstrated above, BE_{FC,b} is determined as 0. And according to the applied methodology, if project emissions from this source are larger than baseline emissions, the project proponent must account for this source of project emissions. Due to the baseline is 0, hence the following equation is applied to calculate CO₂ emissions from consumption of fossil fuels for management practices implemented as part of the project.

$$PE_{FC,t} = \frac{\sum_{p=1}^P \sum_{j=1}^J \sum_{k=1}^K FC_{p,j,k,t} \times EF_{CO_2,k} \times NCV_k}{1000} \quad (21)$$

Where:

$FC_{p,j,k,t}$	=	Fuel consumption by fuel type k, by machine type j, on grassland parcel p, in year t (kg fuel/year)
$EF_{CO_2,k}$	=	CO ₂ emission factor by fuel type k (t CO ₂ /GJ).
NCV_k	=	Thermal value of fuel type k (GJ/t fuel)
1000	=	Conversion factor for tonnes fuel to kg fuel
K	=	Index of fuel type
J	=	Index of machine type
P	=	Index of grassland parcel

5) Project removals due to changes in soil organic carbon

Via checking the applied methodology, PP has chosen the method of direct measurements of SOC.

As assessed in above monitoring parts, it is confirmed that the method of direct measurements of SOC is in line with the PD/^{PD} and applied methodology.

The SOC stock in stratum s, sampling site i, under project in year t are calculated using the following:

$$P_{SOC_{mG,s,i,t}} = SOC_{mG,s,i,t} \times BD_{mG,s,i,t} \times Depth \times (1 - FC_{mG,s,i,t}) \times 0.1 \quad (22)$$

Where:

$P_{SOC_{mG,s,i,t}}$	=	SOC stock in the top 30 cm (or greater depth if required) of soil for management practice mG , stratum s , sampling site i under project in year t (t C/ha)
$SOC_{mG,s,i,t}$	=	SOC content in the top 30 cm of soil (or greater depth if required) for management practice mG , stratum s , sampling site i , under project in year t (g C/kg soil)
$BD_{mG,s,i,t}$	=	Soil bulk density in the top 30 cm of soil (or greater depth if required) for management practice mG , stratum s , sampling site i , under project in year t (g soil/cm ³)
$Depth$	=	Top soil depth, for calculating grassland SOC stock in the top 30 cm of soil (or greater depth if required) (cm)
$FC_{mG,s,i,t}$	=	Percentage of rocks larger than 2mm, roots, and other dead residues with a diameter in the top 30 cm of soil (or greater depth if required), for management practice mG , stratum s , sampling site i under project in year t (percent)
0.1	=	Conversion factor for SOC to t C/ha
mG	=	Index of management practice
S	=	Index of stratum
i	=	Index of sampling site

Calculate average carbon stock of all monitored sites in management practice mG , stratum s , under project using the following:

$$P_{SOC_{mG,s,t}} = \frac{\sum_{i=1}^I P_{SOC_{mG,s,i,t}}}{I} \quad (23)$$

Where:

$P_{SOC_{mG,s,t}}$	=	Average carbon stock in stratum s under project (t C/ha)
$P_{SOC_{mG,s,i,t}}$	=	SOC stock in the top 30 cm (or greater depth if required) of soil for management practice mG , stratum s , sampling site i under project in year t (t C/ha)
I	=	Monitored sites in stratum s , under project

The following is used to calculate the difference between the carbon stock for management practice mG under project in year t , and the carbon stock under the baseline scenario, for all strata.

$$P_{mG,t} = \sum_{s=1}^S (P_{SOC_{mG,s,t}} - SOC_{s,Baseline}) \times PA_{mG,s,t} \quad (24)$$

Where:

$P_{mG,t}$	=	Difference in the carbon stock between the project in year t and the baseline scenario (t C)
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$PA_{mG,s,t}$	=	Project areas with management practice mG in stratum s in year t (ha)
$P_{SOC_{mG,s,t}}$	=	Average carbon stock in stratum s under project in year t (t C / ha)
$SOC_{s,Baseline}$	=	Baseline SOC stock of stratum s , in the top 30 cm soil layer (or greater depth if required) (t C / ha)
S	=	Strata under project
s	=	Index of stratum

The following is applied to calculate average carbon stock of all management practice, under project in year t .

$$P_t = \sum_{mG=1}^M P_{mG,t} \quad (25)$$

Where:

P_t	=	Carbon stock under project in year t (t C)
M	=	Number of management practice

For the first monitoring of SOC stock, the annual project removals due to changes in SOC stock in year t must be calculated using the following:

$$PR_t = \frac{(P_t)}{n} \times \frac{44}{12} \quad (26)$$

Where:

PR_t	=	Project removals due to changes in SOC in year t (t CO ₂ e)
n	=	Number of years from the project start date to year t (years)

For the second and subsequent monitoring of SOC stock, the annual project removals due to changes in SOC stock in year t must be calculated using the following:

$$PR_t = \frac{(P_t - P_{t-f})}{f} \times \frac{44}{12} \quad (27)$$

Where:

PR_t	=	Project removals due to changes in SOC in year t (t CO ₂ e)
P_t	=	Carbon stock under project in year t (t C)
P_{t-f}	=	Carbon stock under project in year $t-f$ (t C)
f	=	SOC monitoring frequency (years)

6) Uncertainty analysis

All parameters are selected according to section 9.1 and 9.2 of the methodology (VM0026, Version 1.0), and SOC data are obtained by laboratory tests.

As per the PD and applied methodology, for estimate of project emissions by GHG sources, as mentioned before, the project use Option 2 (measurement approach) to estimate project removals due to changes in SOC, the measured SOC changes is derived from sample surveys undertaken within the project area, and the sample size is large, therefore a conservative estimate of carbon sequestration by carbon pools in the project scenario should be given by adopting a value that represents the lower bound of the 95 percent confidence interval (sample mean - 1.96 × standard error) in line with the applied methodology (VM0026, Version 1.0).

Hence, for the ex-post calculation during this monitoring period, the SOC changes in project scenario is based on the sample measurement undertaken within the project area, and the sample size is 78, larger than 30, therefore a conservative estimate of carbon sequestration by carbon pools in the project scenario should be given by adopting a value that represents the lower bound of the 95 percent confidence interval (sample mean - 1.96 × standard error).

The detailed calculation in ER spreadsheet is checked and PE calculation is confirmed as calculated based on the above uncertainty analysis.

7) Project emissions and removals

Project net GHG emissions by sources and removals by sinks are calculated by:

$$PE_t = PE_{N_2O_{SN},t} + PE_{CH_4EF,t} + PE_{GHGMD,t} + PE_{FC,t} - PR_t \quad (28)$$

Where:

PE_t	=	Project net GHG emissions by sources and removals by sinks in year t (t CO ₂ e)
$PE_{N_2O_{SN},t}$	=	Project N ₂ O emissions due to fertilizer use in year t (t CO ₂ e)
$PE_{CH_4EF,t}$	=	Project CH ₄ emissions from enteric fermentation in year t (t CO ₂ e)
$PE_{GHGMD,t}$	=	Project GHG emissions from manure management in year t (t CO ₂ e)
$PE_{FC,t}$	=	Project CO ₂ emissions from farming machine fossil fuel consumption in year t (t CO ₂)
PR_t	=	Project removals due to changes in SOC in year t (t CO ₂ e)

Hence, based on the above assessment for the actual situation of the project, and considering the grazing is forbidden in this monitoring period. So, project CH₄ emissions from enteric fermentation and project GHG emissions from manure management are considered to be 0.

it is confirmed that the Project net GHG emissions by sources and removals by sinks in year t for this project in this monitoring period is calculated as below

$$PE_t = PE_{N_2O_{SN},t} + PE_{FC,t} - PR_t = -2,875,995 \text{ tCO}_2\text{e}$$

For calculation of PE_t , through checking the actual monitoring results of each monitored parameters as assessed in above section, it is confirmed that the calculation result of PE during this monitoring period is correct. Hence, it is verified that the project net GHG emissions calculation result of -2,849,686 tCO₂e in ER spreadsheet^{*/XLS/} is correct.

CL 06 was raised and successfully closed, Refer to Appendix 3 for details.

Leakage

According to the applied methodology, the only potential sources of leakage in this methodology are the following:

- 1) Market leakage due to reduction in the production of livestock products within the project boundary;
- 2) Displacement of grazing beyond the project boundary.

Hence, the leakage is estimated as follows:

$$LE_t = LE_{M,t} + LE_{GD,t} \quad (29)$$

Where:

- | | | |
|-------------|---|---|
| LE_t | = | Leakage emissions in year t (t CO ₂ e) |
| $LE_{M,t}$ | = | Leakage emissions due to market leakage in year t (t CO ₂ e) |
| $LE_{GD,t}$ | = | Leakage emissions due to grazing displacement in year t (t CO ₂ e) |

a. $LE_{M,t}$

According to the methodology, Market leakage must be assessed and quantified using VCS Module “VMD0033 Estimation of Emissions from Market Leakage”^{/MEL/}. The result of applying the module is estimation of the parameter $LE_{M,t}$.

Via checking the project design report^{/PDR/} and via on-site inspection, it is confirmed that the main production in the project area is cattle and sheep. And with the project implemented, the grazing was forbidden in the first five years after seeding and after that the controlled grazing will be allowed depending on the growth situation of the forage, and during this monitoring period, the County Forestry and Grassland Bureau measures the grass yield of the surrounding grasslands in the project area and guides herders to graze in a reasonable area which has been confirmed by interview with local herders and officers. The project would not lead to a decrease in cattle and sheep, therefore, the market leakage is considered to be 0 tCO₂e, thus $LE_{M,t} = 0$.

b. $LE_{GD,t}$

According to the methodology, Leakage from displacement of grazing activities to outside the project boundary must be assessed and quantified using VCS module *VMD0040 Leakage from Displacement of Grazing Activities*. The result of applying that module is estimation of the parameter $LE_{GD,t}$.

Hence, as per the VCS module *VMD0040, version 1.0*, below steps are used for Assessment of Grazing Displacement,

Step 1. Assess whether Grazing Displacement Takes Place

Via checking the Baseline Survey Report^{/BSR/} and Project Design Report^{/PDR/} and on-site interview with the local officers^{/12/} and herders^{/13/}, it is confirmed that the local herders grazed in the project area under the baseline scenario, however with the project implemented, the grazing was forbidden in the first five years after seeding and after that the controlled grazing will be allowed depending on the growth situation of the forage. So it is verified that grazing displacement takes place in the project, then proceed to next step.

Step 2. Survey of Grazing Displacement and Relocation Plans

Via checking the Survey of Grazing Displacement and Relocation Plans^{/SGD/}, it is confirmed that the survey was conducted in line with the requirements of the module as below assessment,

- i. The survey included all grazing agents whose livestock grazed in the project area prior to the project start date,
- ii. The period covered by this survey is consistent with the baseline period used to quantify baseline emissions within the project area, i.e. covering the one year prior to the project start date
- iii. The survey covered a full census or representative sample of project participants and project non-participants whose livestock graze in the project area during the baseline period covered by the survey. Where sample surveys are used, sampling approaches must enable estimation of the sample mean within a 95 percent confidence interval to a precision of 15 percent.
- iv. The survey quantified the number and type of livestock and the duration of each year that these livestock graze in the project area for both types of grazing agent.
- v. The survey collected data on the number and type of livestock, and duration, that livestock under the control of project participants graze outside the project area during the period covered by the survey.
- vi. The survey collected information on intended location of grazing after implementation of the project for both types of grazing agent

Via checking the Survey of Grazing Displacement and Relocation Plans^{/SGD/} for this project, it is confirmed that the survey showed that the project participants stocked 267,585 cattle and 133,794 sheep in the project area, grazing for about 10 days every year and 12 hours every day. And project non-participants would not graze in the project area both under the baseline scenario and the project scenario.

Furthermore, via the Survey of Grazing Displacement and Relocation Plans^{/SGD/} for this project, it is verified that the County Forestry and Grassland Bureau has measured the grass yield of the grassland around the project area, and calculated the reasonable grazing quantity, designated a grazing area of 2,474,533.33 hectares. Via interview with local officers and grassland guardians, it is confirmed that the project participants will only graze in the designated area under the guidance of the County Forestry and Grassland Bureau and grassland guardians after first five years implementation. And during the grazing period, the specific land parcels available for use by project participants may change from year to year, based on the actual situation of grassland, such as grass yield as measured results by survey.

Step 3. Prepare a Grazing Displacement Management Plan

Via checking the Grazing Displacement Management Plan^{/GDMP/}, it is confirmed that the Grazing Displacement Management Plan was prepared in line with the requirements of the module as below assessment,

- a. The plan records planned grazing activities for all livestock that are to be relocated to lands outside the project area and that are under the control of project participants.

- b. The plan records planned grazing activities for livestock under the control of agents who are not project participants but whose livestock grazed inside the project area in the baseline and whose livestock will not graze inside the project area after project implementation begins.
- c. Where grazing plans for project non-participants are not available, the future location of grazing must be listed as unidentified.
- d. The plan has record for the more than 4 years after the project start date including the following data:
 - The identity of each grazing agent;
 - The number and type of livestock to be relocated
 - The number of days each year which they will graze outside the project area (measured in days, or the whole year if appropriate);
 - The location and area in hectares of each land parcel to which grazing will be relocated;
 - A unique identifier code (where applicable) for each land parcel to which grazing will be relocated;
 - The type of land (grassland, forest land, cropland) of each parcel to which grazing will be relocated, and where appropriate note the status (eg, degradation level) of the lands to which grazing will be relocated; and
 - Any planned actions to avoid loss of above- or belowground carbon pools on the land parcels to which grazing will be relocated.

Via checking the annual grass yield measurement results^{/GYMR/}, it is confirmed that County Forestry and Grassland Bureau measured the grass yield of the grassland around the project area and calculated the reasonable grazing quantity once every year. Via interview with local officers and grassland guardians, it is confirmed that the project participants will only graze in the designated area under the guidance of the County Forestry and Grassland Bureau and grassland guardians after first five years implementation. And during the grazing period, the specific land parcels available for use by project participants may change from year to year, based on the actual situation of grassland, such as grass yield as measured results by survey. And via checking the Grazing Displacement Management Plan^{/GDMP/}, it is confirmed that the plan record the number and type of livestock to be relocated and the type of land (grassland, forest land, cropland) to which grazing is planned to be displaced. In this case, the type of land to which grazing may be displaced must be categorized as unidentified grassland.

Via checking the Survey of Grazing Displacement and Relocation Plans^{/SGD/}, it is confirmed that all grazing agents were interviewed, and collected the information of the number and type of livestock to be relocated, and due to grazing was strictly forbidden in the first five years after seeding, some herders maybe affected by the project, but these heders have been provided by job opportunities^{/LC/} and payment^{/PP/}, which will increase their income in long term, thus finally herders in the project area can receive corresponding subsidies. All the impacted herders agree with the method of receiving related subsidies which has been confirmed by site interview with representatives from local herders^{/I3/}.

Step 4. Determine whether Lands to which Livestock are Displaced are Identified or Unidentified

Via checking the Grazing Displacement Management Plan^{/GDMP/}, it is confirmed that the grazing displacement management plan does not record the geographic location to which livestock under the control of project participants were relocated. Besides, the process of identifying the specific land areas to which livestock will be relocated would be not feasible at reasonable cost (because project non-participants

are scattered over wide distances and not contactable at reasonable cost). So, the land to which livestock grazing activity is displaced should be categorized as unidentified.

Hence, for unidentified land, assessment procedures mandate the use of conservative assumptions that do not underestimate the effects of grazing displacement on carbon stocks in unidentified lands, and in the case of land that remains unidentified after monitoring begins, conservative assumptions that do not underestimate leakage emissions caused by grazing displacement must also be used.

Step 5. Define the Type of Land to which Grazing will be Relocated

Via checking the public information of Guoluo Tibetan Autonomous Prefecture from local government^{/lg/} comparing with the satellite images^{/SI/}, it is confirmed that Guoluo Tibetan Autonomous Prefecture covers an area of 76,000 square kilometers, and the available grassland area is 6.2552 million ha, accounting for 82.3% of the total area, and the area of forest land and cropland are confirmed as small. Furthermore, via the Survey of Grazing Displacement and Relocation Plans^{/SGDI/} for this project, it is verified that the County Forestry and Grassland Bureau has measured the grass yield of the grassland around the project area, and calculated the reasonable grazing quantity, designated a grazing area of 2,474,533.33 hectares. Via interview with local officers and grassland guardians, it is confirmed that the project participants will only graze in the designated area under the guidance of the County Forestry and Grassland Bureau and grassland guardians after first five years implementation. And during the grazing period, the specific land parcels available for use by project participants may change from year to year, based on the actual situation of grassland, such as grass yield as measured results by survey

Therefore, the unidentified lands categorized as unidentified grassland is verified as correct.

Calculation of leakage Emissions for this monitoring period

As per the applied Module, for all land parcels that are unidentified grassland, quantification of emissions must follow the procedures outlined in below Section 1.

1. Estimation of Leakage Emissions due to Displacement of Livestock Grazing to Identified Grasslands

Estimation of leakage emissions due to grazing displacement to unidentified grasslands must be made using the procedures outlined below,

Step 1: Estimate the area of grassland needed to sustain the population of livestock relocated to unidentified grasslands

The total area of unidentified grassland required to sustain the population of livestock relocated to unidentified grassland is to be calculated as:

$$Area_{GUI,t} = \frac{DMI_{GUI,t}}{ANPP_{GUI,REF}} \quad (30)$$

$$DMI_{GUI,t} = \sum_{l=1}^L \left(\frac{DMI_{day,l} \times P_{GUI,l,t}}{1000} \right) \times Days_{GUI,l,t} \quad (31)$$

Where:

$$\begin{aligned} Area_{GUI,t} &= \text{Area required to sustain the population of livestock displaced to unidentified grasslands in year t (ha)} \\ DMI_{GUI,t} &= \text{Dry matter intake required to sustain the total number of livestock of all types l relocated to unidentified grasslands in year t (t dm)} \end{aligned}$$

$ANPP_{GUI,REF}$	=	Aboveground net primary productivity in the reference region that is the likely location of unidentified grasslands to which livestock are relocated (t dm/ha)
$DMI_{day,l}$	=	Daily dry matter intake requirement of each type of livestock l (kg dm/(head*day))
$P_{GUI,l,t}$	=	Population of livestock of each type relocated to unidentified grasslands in year t (head)
$Days_{GUI,l,t}$	=	Days that the population of each type of relocated livestock of type l graze in unidentified grassland in year t (days)

Step 2: Assess the risk of soil carbon loss due to overgrazing in unidentified grasslands

Via checking the PD, it is confirmed that based on the above step 1, the calculated result of total area of unidentified grassland required to sustain the population of livestock relocated to unidentified grassland is 11,152 ha, while the available grassland area is 6.2552 million ha in Guoluo Tibetan Autonomous Prefecture, which is much higher than the displacement area, therefore, it is confirmed that the grazing displacement will not lead to consumption exceeding 50 percent of available biomass, thus leakage due to soil carbon loss does not need to be accounted for as per the applied Module.

Step 3: Estimate emissions from livestock displacement to unidentified grasslands

Step 3a: Estimate methane emissions from enteric fermentation by livestock displaced to unidentified grasslands

Calculate the leakage emissions due to enteric fermentation by livestock displaced to all unidentified grasslands outside the project area using:

$$LE_{GUI,CH_4EF,t} = \frac{\sum_{l=1}^L P_{GUI,l,t} \times EF_l \times Days_{GUI,l,t} \times GWP_{CH_4}}{1000 \times 365} \quad (32)$$

Where:

$LE_{GUI,CH_4EF,t}$	=	Leakage emissions in year t from enteric fermentation by livestock displaced to unidentified grasslands (t CO ₂ e)
$P_{GUI,l,t}$	=	Population of grazing livestock type l in year t displaced outside the project area to unidentified grasslands (head)
$Days_{GUI,l,t}$	=	Days in year t that livestock of each type l grazes on unidentified grassland (days)
GWP_{CH_4}	=	Global-warming potential of CH ₄ (t CO ₂ e/t CH ₄)
EF_l	=	Enteric CH ₄ emission factor per head of livestock type l per year (kg CH ₄ /(ha*year))
l	=	Index of grazing livestock types

Step 3b: Estimate GHG emissions from manure management

Calculate the N₂O and CH₄ leakage emissions due to manure deposition on grassland caused by relocating the livestock to unidentified grasslands outside the project area using:

$$LE_{GUI,MD,t} = LE_{GUI,N_2O,MD,t} + LE_{GUI,CH_4,MD,t} \quad (33)$$

Where:

$LE_{GUI,MD,t}$ = Leakage emissions from manure and urine deposited on unidentified grassland in year t (t CO₂e)

$LE_{GUI,N_2O,MD,t}$ = Leakage N₂O emissions from manure and urine deposited on unidentified grasslands in year t (t CO₂e)

$LE_{GUI,CH_4,MD,t}$ = Leakage CH₄ emissions from manure and urine deposited on unidentified grasslands in year t (t CO₂e)

$LE_{GUI,N_2O,MD,t}$ is calculated as the sum of direct N₂O emissions and indirect N₂O emissions using:

$$LE_{GUI,N_2O,MD,t} = GWP_{N_2O} \times (LE_{GUI,D,N_2O,MD,t} + LE_{GUI,I,D,N_2O,MD,t}) \quad (34)$$

Where:

$LE_{GUI,N_2O,MD,t}$ = Leakage N₂O emission from manure and urine deposited on unidentified grasslands in year t (t CO₂e)

GWP_{N_2O} = Global-warming potential of N₂O (t CO₂e/t N₂O)

$LE_{GUI,D,N_2O,MD,t}$ = Leakage direct N₂O emissions from manure and urine deposited on unidentified grasslands in year t (t N₂O)

$LE_{GUI,I,D,N_2O,MD,t}$ = Leakage indirect N₂O emissions from manure and urine deposited on unidentified grasslands in year t (t N₂O)

Leakage direct N₂O emission from manure and urine deposited on unidentified grasslands ($LE_{GUI,D,N_2O,MD,t}$) is calculated using:

$$LE_{GUI,D,N_2O,MD,t} = \sum_{l1=1}^{L1} F_{MD,GUI,t,l1} \times EF_{3,PRP,CP} \times \frac{44}{28} \quad (35)$$

And/or

$$LE_{GUI,D,N_2O,MD,t} = \sum_{l2=1}^{L2} F_{MD,GUI,t,l2} \times EF_{3,PRP,SO} \times \frac{44}{28} \quad (36)$$

Where:

$LE_{GUI,D,N_2O,MD,t}$ = Leakage direct N₂O emissions from manure and urine deposited on unidentified grasslands in year t (t N₂O)

$F_{MD,GUI,t,l1}$ = Annual amount of nitrogen in cattle, poultry and pig manure and urine deposited on unidentified grasslands in year t, adjusted for volatilization as NH₃ and NO_x (t N)

$F_{MD,GUI,t,l2}$ = Annual amount of nitrogen in sheep and other animal manure and urine deposited on unidentified grasslands in year t, adjusted for volatilization as NH₃ and NO_x (t N)

$EF_{3,PRP,CP}$ = N₂O emission factor for cattle (dairy, non-dairy and buffalo), poultry and pigs manure and urine deposited on grasslands (kg N₂O-N/kg N input)

$EF_{3,PRP,SO}$ = N₂O emission factor for sheep and other animals manure and urine deposited on grasslands (kg N₂O-N/kg N input)

$$F_{MD,GUI,t,l} = \frac{P_{GUI,l,t} \times W_l \times Nex_l \times H_{GUI,l,t} \times Days_{GUI,l,t} \times (1 - Frac_{GAS,MD,l})}{1000_a \times 24 \times 1000_b} \quad (37)$$

Where:

$F_{MD,GUI,t,l}$	=	Annual amount of nitrogen in manure and urine deposited on unidentified grasslands by livestock type l, adjusted for volatilization as NH_3 and NO_x (t N)
$P_{GUI,l,t}$	=	Population of grazing livestock type l in year t displaced outside the project area to unidentified grasslands (head)
W_l	=	Average weight of livestock l displaced to unidentified grasslands (kg/head)
Nex_l	=	Nitrogen excretion from livestock type l (kg N/(t animal mass*day))
1000_a	=	Conversion factor for nitrogen excretion (kg/t livestock mass) to nitrogen excretion (kg/kg livestock mass)
$H_{GUI,l,t}$	=	Average grazing hours per day during grazing season for livestock of each type l displaced to unidentified grassland in year t (hours)
24	=	Conversion day to hour
$Days_{GUI,l,t}$	=	Grazing days in year t for livestock type l displaced to unidentified grasslands (days)
1000_b	=	Conversion factor for kg to t
$Frac_{GAS,MD,l}$	=	Fraction of volatilization from manure and urine deposited by grazing animals as NH_3 and NO_x (kg N volatilized/kg of N deposited)
t	=	Year
l	=	Index of grazing livestock types

CH₄ emission from manure management due to displacement of livestock to unidentified grasslands is calculated using:

$$LE_{GUI,CH_4MD,t} = \frac{GWP_{CH_4} \times \sum_{l=1}^L EF_{l,m} \times P_{GUI,l,t} \times H_{GUI,l,t} \times Days_{GUI,l,t}}{24 \times 365 \times 1000} \quad (38)$$

Where:

$LE_{GUI,CH_4MD,t}$	=	Leakage CH ₄ emissions from manure and urine deposited on unidentified grasslands in year t (t CO ₂ e)
GWP_{CH_4}	=	Global-warming potential of CH ₄ (t CO ₂ e/t CH ₄)
$EF_{l,m}$	=	CH ₄ emission factor per head of livestock type l in manure management system m (kg CH ₄ /(head*yr))
$P_{GUI,l,t}$	=	Population of livestock type l in year t displaced to unidentified grasslands (head)
$H_{GUI,l,t}$	=	Average grazing hours per day during grazing season for livestock of each type l displaced to unidentified grassland in year t (hours)
$Days_{GUI,l,t}$	=	Grazing days in year t for livestock type l displaced to unidentified grasslands (days)
1000	=	Conversion factor for kg to t

Step 4: Calculate total leakage emissions from relocation of grazing to unidentified grasslands

Total leakage emissions from relocation of grazing to unidentified grasslands must be calculated as:

$$LE_{GUI,t} = LE_{OG,GUI,t} + LE_{GUI,CH_4EF,t} + LE_{GUIMD,t} \quad (39)$$

Where:

- $LE_{GUI,t}$ = Leakage due to displacement of livestock to unidentified grasslands in year t (t CO₂e)
- $LE_{OG,GUI,t}$ = Leakage due to soil carbon loss resulting from overgrazing due to displacement of livestock to unidentified grasslands in year t (t CO₂e)
- $LE_{GUI,CH_4EF,t}$ = Leakage due to enteric fermentation by livestock displaced to unidentified grasslands in year t (t CO₂e)
- $LE_{GUIMD,t}$ = Leakage due to N₂O and CH₄ emissions in manure and urine deposited on grasslands by livestock displaced to unidentified grasslands in year t (t CO₂e)

For this project, based on the above calculation process of the Leakage, the grazing displacement will not lead to consumption exceeding 50 percent of available biomass, and leakage due to soil carbon loss does not need to be accounted for, thus the formula for Leakage due to displacement of livestock to unidentified grasslands in year t is

$$LE_{GUI,t} = LE_{GUI,CH_4EF,t} + LE_{GUIMD,t} = 42,065 \text{ tCO}_2\text{e}$$

Based on the above calculation formula of the Leakage, based on the data source of Grazing Displacement Management Plan^{/GDMP/}, and monitored parameter assessment in above, via checking the ER spreadsheet^{/XLS/}, it is confirmed that the Leakage calculation result for this monitoring period is correct and reasonable.

CL 07, CL 08 and CL 09 were raised and successfully closed, Refer to Appendix 3 for details

Net GHG Emission Reduction and Removals

According the applied methodology, the amount of net emission reductions and removals achieved by the project in project year t must be calculated as follows:

$$ER_t = BE_b - PE_t - LE_t \quad (40)$$

Where:

- ER_t = Emission reductions in year t (t CO₂e)
- BE_b = Baseline emissions and removals in year b (t CO₂e)
- PE_t = Project emissions and removals in year t (t CO₂e)
- LE_t = Leakage emissions in year t (t CO₂e)

In conclusion, it is confirmed that the calculation of GHG removals by sink has been carried out in accordance with the formulae and methods described in the validated monitoring plan^{/PD/} and applied methodology and tools. For the parameters calculation process and results, Refer to ER sheet^{/XLS/} for details.

Via checking the applied methodology, it is confirmed that the Emission reductions eligible to be issued as VCU for this monitoring period is calculated as below formulas,

$$VCU_t = ER_t - BC_t \quad (41)$$

$$BC_t = RR_t * (PRWP_t + PR_t - PRWP_b) \quad (42)$$

Where:

VCU_t	=	Emission reductions eligible to be issued as VCUs in year t (t CO ₂ e)
ER_t	=	Emission reductions in year t (t CO ₂ e)
BC_t	=	AFOLU buffer credits in year tm (t CO ₂ e)
RR_t	=	Non-permanence risk rating in year t (percent)
$PRWP_t$	=	Project average net change in carbon stocks of existing woody biomass for species j, in year t (t CO ₂ e)
PR_t	=	Project removals due to changes in SOC in year t (t CO ₂ e)
$PRWP_b$	=	Baseline removals from existing woody perennials in baseline year b (t CO ₂ e)

Based on checking the Non-permanence risk report^{/NPRR/} and Risk Calculation Sheet^{/RCS/}, which has been assessed in below section 4.4.3, the RR_t has been calculated as 10%. And based on the design of the project in PD and via site inspection, it is confirmed that there is no woody biomass in this project, so the Project average net change in carbon stocks of existing woody biomass $PRWP_t$ and Baseline removals from existing woody perennials $PRWP_b$ are considered to be 0 tCO₂e.

Therefore, based on above formula and calculations in the ER sheet^{/XLS/}, for this monitoring period, PP claimed the VCUs as below:

20-June-2016– 31-December-2020

The total GHG removals by sink and VCUs being claimed for this monitoring period including vintage as follows:

Period	GHG Emission reductions (tCO ₂ e)	Buffer (tCO ₂ e)	VCUs (tCO ₂ e)
20-June-2016~31-December-2016	335,683	34,319	301,364
01-January-2017~31-December-2017	639,600	64,238	575,362
01-January-2018~31-December-2018	622,821	64,238	558,583
01-January-2019~31-December-2019	642,378	64,238	578,140
01-January-2020~31-December-2020	644,137	64,414	579,723
20-June-2016~31-December-2020	2,884,619	291,446	2,593,172
Total			

CAR 31 was raised and successfully closed. Refer to Appendix 3 for details.

4.4.2 Quality of Evidence to Determine GHG Emission Reductions and Removals

During the verification assessment, the evidence provided by the PPs was sufficient in both quantity and quality to support the determination of GHG removals reported by the project. The threshold for materiality to the total GHG removals reported was met for this project; materiality is a concept that the errors, omissions and misrepresentations could affect the GHG removals assertion and influence the intended users. As defined in section 1.3, the materiality will be 1%.

The source and nature of the evidence (external or internal, oral or documented) for the determination of GHG emission reductions or removals has been assessed and verified in above section 4.4.1 together with each calculation step, thus the reliability of the evidence is confirmed. The evidence provided to determine GHG removals reported in the Monitoring Report included values, notations, units and sources; the evidences has been cross-checked with supplied GHG removals calculation spreadsheet^[XLS].

The procedure for data generation and aggregation, recording, transfer and final transposition into the MR was also verified and found to be in compliance with the monitoring plan in the validated PD.

For the measuring devices, the confirmation of no need to conduct calibration has been verified by considering the type of monitoring equipment for different monitoring parameters, the implemented approach is verified as appropriate and in line with the national regulations.

Therefore it is confirmed through cross-checks that adequate monitoring mechanisms are in place where the required parameters need to be monitored, and the quantity and quality of the evidence used to determine the GHG reductions and removals is concluded as sufficient and appropriate.

4.4.3 Non-Permanence Risk Analysis

The project utilized the VCS Procedural Document “AFOLU Non-Permanence Risk Tool” (version 4.0)^[NPRT] to assess risk according to internal risk, external risk, natural risk and mitigation measures for minimizing risk. At all levels has been evaluated the rationale, appropriateness and justifications of risk rating chosen by PPs.

Each risk category was calculated based on the VCS guidance and the input provided by the PPs. The risk has been reassessed at time of the first verification and with that prior to any issuance of VCUs. The information was verified and cross-checked through document and literature review^[AAPP/PAOP/GMM], onsite visits of the project area and interviews conducted^[I1]. Details of the assessment are provided as follow.

Risk factor	Verification findings
Internal risks	
Project management	The management team includes company who have successfully managed projects through validation of GHG credits under the CDM, GS, CCER, VCS, CCB Program ^[CCER/VCS/CCER/UNFCCC] , therefore this mitigation is scored as -2. There is a specific mitigation plan made by project proponent for potential risks to the project, which includes a process for monitoring progress and documenting lessons learned or corrections that may be needed, and incorporating them into project decision-making in future monitoring periods, which has been verified in the Monitoring Manual ^[MM] , therefore this mitigation is scored as -2.
Financial viability	According to the project design, the only cash in of the project will be the revenue from carbon credits and it will take over 30 years for the cumulative cash flow to break even based on the estimated volume of GHG emission removals generated from the project and the estimated credit price of 10 USD/t.

	The cash out of the project is mainly for the purchase of grass seeding and fertilizing during the first three years, which has been fully secured by Guoluo Tibetan Autonomous Prefecture Finance Bureau according to the Project Design, which has been fully secured by local government according to the Project Approval^{/APDR/}. Therefore this mitigation is scored as 3.
Opportunity cost	Via checking the AFOLU Non-Permanence Risk Tool (Version 4.0)^{/NPRT/}, where the majority of baseline activities over the length of the project crediting period are subsistence-driven, an NPV analysis is not required, but an assessment of the net impacts of the project on the social and economic well-being of the communities who derive livelihoods from the project area shall be undertaken. Via the assessment above, it is confirmed that the baseline scenario of the project is continuation of pre-project use (i.e. lands remain degraded grassland), which is subsistence-drive and no NPV analysis is required, while the project has net positive impacts on social and economic well-being of the communities who derive livelihoods from the project area, therefore this question is scored as zero. And the Grassland management Manual^{/GMM/} was verified to concluded that the project is protected by legally binding commitment to continue management practices that protect the credited carbon stocks over the length of the project crediting period, this mitigation is scored as -2. Therefore total Opportunity Cost is scored as -2.
Project longevity	Since 160,548.96 ha of black soil beaches in Guoluo were planted with Elymus dahuricus Turcz., Poa annual. and Festuca sinensis Keng ex S. L. Lu, and then carry out sustainable grassland management, therefore the project longevity selected 40 years^{/PL/} and the crediting period is selected to be 40 years. Via checking the Land Management Law of China and Grassland Law of People's Republic of China^{/law/}, it is confirmed that prior to the project initiation, the ownership of all 160,548.96ha grassland of the project belongs to the state and collectives, this is also verified by checking the Participatory Rural Appraisal (PRA) Report and Proof of land qualification as defined in the project approval^{/APDR/}. The local governments and collectives have the right to the use of land, and Guoluo Tibetan Autonomous Prefecture Forestry and Grassland Bureau applied to Guoluo Tibetan Autonomous Prefecture government for the grassland carbon sink project and obtained approval, which is confirmed by checking the Approval of project design report^{/APDR/} and confirmed by site interview with local officers^{/I2/}. And in the early phase, the Guoluo Tibetan Autonomous Prefecture Forestry and Grassland Bureau has organized and managed the project implementation including conducting baseline survey, signing consultant agreement for development of carbon credits. Due to Qinghai Guanglv Landscaping Co., Ltd is in rich experience of maintenance and management of the grassland, thus Guoluo Tibetan Autonomous Prefecture Forestry and Grassland Bureau authorized Qinghai Guanglv Landscaping Co., Ltd as the Project Proponent of the project, the rights grassland management and Carbon credits of the project during the project crediting period from 2016 to 2076^{/POA/}, and the collective economic organizations and village collectives all agreed with this which is verified by checking the Proof of land qualification as defined in the project approval^{/APDR/}. Thus it is verified that prior and informed consent has been obtained from state and collectives whose property rights are affected by the project through a transparent and agreed process. The project proponent and Guoluo Tibetan Autonomous Prefecture Forestry and Grassland Bureau are responsible for the comprehensive implementation and management of the project as defined in the land use statement and project approval^{/APDR/}. Via on-site interview with the local officers, it is verified that no entity can encroach the project area as private property and change the land

	usage type without all state and collectives' agreement. And by checking the project approval ^{/APDR/} and stated by local officer, it is confirmed that the Guoluo Tibetan Autonomous Prefecture governments will be responsible to supervise the state and collectives's right to the lands. Therefore project longevity is scored as 10.
External risks	
Land tenure and resource access/impact	The ownership of all 160,548.96ha grassland of the project belongs to the state and collectives, this is also verified by checking the Participatory Rural Appraisal (PRA) Report and Proof of land qualification as defined in the project approval ^{/APDR/} . The local governments and collectives have the right to the use of land, and Guoluo Tibetan Autonomous Prefecture Forestry and Grassland Bureau applied to Guoluo Tibetan Autonomous Prefecture government for the grassland carbon sink project and obtained approval, which is confirmed by checking the Approval of project design report ^{/APDR/} and confirmed by site interview with local officers ^{/I2/} . And in the early phase, the Guoluo Tibetan Autonomous Prefecture Forestry and Grassland Bureau has organized and managed the project implementation including conducting baseline survey, signing consultant agreement for development of carbon credits. Therefore this mitigation is scored as 0.
Community Engagement	The project lands are degraded grassland ecosystem by checking the baseline survey ^{/BSR/} , no residents living within the project area ^{/CBSR/} . And for the households living within 30km of the project boundary outside the project area, nearly all of them have been consulted during the Participatory Rural Appraisal ^{/PRA/} of the project. According to the PRA report ^{/PRA/} , the project generates net positive impacts on the social and economic well-being of the local communities who derive livelihoods from the project area. Therefore this mitigation is scored as -5.
Political Risk	The project is located in China. According to World Bank Institute's WGI, the six indicators of China are respectively -0.30, 0.30, -0.47, -0.25, -0.39 and -1.59, averaged over the most recent five years, so the mean score is -0.45. Governance Score is -0.45 then the final score is 4. China has an established Designated National Authority under the CDM and has at least one registered CDM Afforestation/Reforestation project, therefore this mitigation is scored as -2. Total Score is 2.
Natural risks	
Fire	Insignificant. It is verified that there is a separation zone at a certain distance in the project area, so the fire damage won't be devastating. In addition, after the trees grow to a certain age, the risk of fire may increase, and the project proponent will adopt the necessary measures by routine overseeing for fire preventing. Thus, LS= 2 Furthermore, local government sets the construction of grassland fire prevention facilities as per the Grassland Law of China and no fires occurred in the project areas as confirmed during the on-site visit. Also the fire will be strictly controlled by project proponent who experienced in local natural risk control to minimize the potential effect and established fire prevention procedure in Grassland Management Manual ^{/GMM/} . It is verified that no fires occurred in the project areas for this monitoring period as confirmed during the on-site visit and checking the daily working log ^{WL/} recorded by the grassland guardians. Therefore, the mitigation is scored as 0.25.
Pest and disease	Insignificant.

outbreaks	According to historical records, the pest and disease risk are not common, and the pest was treated by biological control once occurred according to local Pest Control and Prevention Policy upon routine overseeing. Hence the risk is less than every 10 years. LS=2 The grass may would be damaged by insects and disease, but the risk is considered low because it can be prevented by routine overseeing and the PP have in place a full Grassland Management Manual^{/GMM/}. The chemical pesticides are allowed to be used only if there is a serious pest problem erupted in the project area, while improper pesticide application would be harmful to natural environment, but the risk is considered low because pesticide will be strictly managed by well trained staff to minimize the potential effect^{/GMM/}. As the project proponent is experienced in local natural risk control and has established a Grassland Management Manual for the project which includes specific instruction in pest and disease prevention and control, the pesticide application will be limited. During this monitoring period, there was no pest and disease risk occurred which is confirmed by checking the daily working log^{/WL/} recorded by the grassland guardians and interview with the officer from local forest bureau and local herders. Therefore, the mitigation is scored as 0.25.
Extreme Weather	Insignificant Considering the data based on weather reports collected from historic records, the frost damage on grasses was not common in the project area^{/whr/}; LS=5. Moreover, grass species planted in the project are native species, which can adapt to the local climate, after winter with frost, grass can grow smoothly in the second year which is verified as reasonable based on expertise of validation team. During this monitoring period, as confirmed by checking the historic records for this monitoring period from local government^{/whr/} and interview with the officer from local forest bureau and local residents, it is verified that there was no extreme weather in the project area. Therefore, the mitigation is scored as 0.25.
Geological risk	Minor The geological risk such as earthquakes around the project area are mostly low intensity, so the damage will be minor. According to historical records from local government^{/whr/}, there was no earthquakes or volcanoes occurred in historical years around the project area as confirmed during the on-site interview with local officer. LS=1. Furthermore, local government will be responsible for the recovery of the grassland if there is an earthquake occurred as confirmed during the on-site visit. Also the project proponent is experienced in local natural risk control to minimize the potential effect and established specific instruction in geological risk control in Grassland Management Manual^{/GMM/}. During this monitoring period, as confirmed by checking the related records for this monitoring period from local government^{/whr/} and interview with the officer from local forest bureau and local residents, it is verified that there was no earthquakes or volcanoes occurred. Therefore, the mitigation is scored as 0.25.
Other risks	None is observed.

In summary, the PPs have accounted for risk factors in a reasonable manner and have reached an overall risk rating that encompasses all risks of non-permanence; the project is able to effectively manage risks to project benefits during the monitoring period and project lifetime. Risk mitigation strategies were confirmed

to have been implemented as planned in the validated PD and are summarized in the non-permanence risk assessment conducted by the project. During the verification activity no additional risks to project benefits are identified.

The overall risk rating according to the applied tool is 10%. The verification team concludes that this risk rating is purely based on the tool cited above, according to VCS requirements.

The non-permanence risk report^{/NPRR/} and Risk Calculation Sheet^{/RCS/} are provided by PP. The risk analysis is assessed for its appropriateness. The overall risk rating for the specific monitoring period is 10% and it is used to calculate the buffer applied as above formula 41 and 42 (VCUs that must be deposited in the AFOLU pooled buffer).

4.4.4 Dissemination of Monitoring Plan and Results (CL4.2)

The monitoring results, monitoring plan and summary of the monitoring report in local language, have been made publicly available on the VCS and CCB website, which can be confirmed by checking the corresponding webpage.

In addition, hard copies of the monitoring plan and monitoring manual have been distributed among local stakeholders by PP and grassland guardians which is confirmed and verified by interview with the local stakeholders. And a contact person with phone numbers was published in case any stakeholders want to directly contact the project proponent and raise opinions.

Furthermore, the project developer published the monitoring plan and monitoring manual on the local bulletin boards to explain the monitoring process to communities and other stakeholders from 01-September-2020 to 15-September-2020 which has been verified by checking the photo of the communities and stakeholders watching^{/RVAR/} and seen by verification team during site inspection.

Finally, meetings with stakeholders have been carried out during site verification. During the meeting, project developer introduced the monitoring results during this monitoring period and copies of monitoring report is available to anyone requests it. Verification team has participated and the results are also verified by checking the meeting minute and questionnaires filled by stakeholders^{/VSM/}.

In conclusion, the results of climate monitoring were disseminated in accordance with the validated project description.

4.4.5 Optional Gold Level: Climate Change Adaptation Measures (GL1.3)

N/A

4.4.6 Optional Gold Level: Climate Change Adaptation Benefits (GL1.4)

N/A

4.5 Community

4.5.1 Community Impacts (CM2.1)

The analysis of the net benefits to the communities is conducted making comparison with the baseline scenario. The asset which are assessed are the human capital, social capital, physical capital, financial capital, natural capital and no negative well-being impacts have been identified, while it is expected that the

forest will generate benefits on the quality of the environment and on living conditions of the local residents and workers. By the interview with the project developer, grassland guardians and local stakeholders, this was confirmed. Being the monitoring period mostly related to the retro-active period, the analysis and the assessment did at the time of the project validation is not changed.

The MR states that the project will create 11,890 job opportunities (6,023 permanent jobs and 5,867 temporary jobs) which is equally offered to local women and men, enhance capabilities of local residents and improve their household income and living level, empower women and build community capacity in gender equity, improve grazing productivity and improve the local ecological environment, so that to provide actual direct benefits to all the identified community groups especially local village committees and residents in villages including women. The analysis of the net benefits to the community groups is conducted to each category of community group, local residents and workers. Each benefit has been verified by checking the labor contracts^{/LC/}, periodical payroll^{/PP/}, training records^{/TTR/} during this monitoring period and on-site observation and interview with local officers, residents, workers and women.

Hence, it is concluded that all the impacts for each community group identified in the project description were accurate during this monitoring period.

CAR 32 was raised and successfully closed. Refer to Appendix 3 for details.

4.5.2 Negative Community Impact Mitigation (CM2.2)

As per the validated PD^{/PD/} and confirmed by the project developer^{/11/}, local residents^{/13/} and grassland guardians^{/13/} during the interview, and as per the description in section 2.3.16 of MR, potential negative well-being impacts on community groups including fires, emergencies, and dangerous driving. The activities that endanger workers are those related to workplace accidents due to the use of dangerous machinery that requires qualified personnel and basic supplies and uniform to prevent accidents and the workers are also trained providing information and practical exercises to prevent any risk which has been verified by checking the training records^{/TTR/}. During the monitoring period, due to the fire risk, fire emergency drills, field emergency rescue, and safe driving training are provided to the grassland guardians which has been confirmed during site observation and interview with the grassland guardians^{/13/}.

Furthermore, based on validated PD^{/PD/}, two HCVs including Hydrological service and Tibetan Buddhism (Culture Values) were identified related to community well-being in the project zone.

Guoluo Tibetan Autonomous Prefecture is famous as parts of Three River (Yangtze River, Yellow River and Lancang River) Source Region which has been confirmed by interview with local officers and checking the supporting document^{/CBSR/}. Via checking the actual daily working log^{/WL/} recorded by the grassland guardians during this monitoring period and site inspection and interview with local stakeholders, it is confirmed that the implementation of the project has maintained water and soil, purified water sources that played an important role in the water safety of local residents and downstream residents thus benefit to Guoluo Tibetan Autonomous Prefecture and Three River Source Region.

Based on local expertise of the validation team, it is confirmed that Guoluo Tibetan Autonomous Prefecture is a traditional Tibetan area in Qinghai Province, where local residents believe in Buddhism. Hence, it is verified that Tibetan Buddhism is of great significance to local residents and meets the requirements of article 4 of HCV 6^{/hcv/}. Via on-site investigation, it is confirmed that the project generates social and environmental co-benefits as the generation of income and job opportunities for local communities with most of Tibetan population during this monitoring period which is verified by checking the labor contracts^{/LC/} and periodical payroll^{/PP/} and also confirmed by on-site interview with local villagers^{/13/} thus benefit to the

protection and dissemination of Tibetan Buddhism (Culture Values) in Guoluo Tibetan Autonomous Prefecture.

CAR 33 was raised and successfully closed. Refer to Appendix 3 for details.

4.5.3 Net Positive Community Well-being (CM2.3)

As stated in §4.5.1 of this report, the project is designed and implemented to produce net positive well-being impacts on local communities. The MR states that the project is implemented to produce net positive well-being impacts on local communities as designed in the validated PD^{/PD/}.

It states that project generates positive community impacts through overcoming poverty by providing job, creating more local job opportunities and reduce migrant rural workers by providing permanent and temporary job, improving gender equity by providing more jobs to women than men, promoting technical and economic capability of local communities by providing related trainings and skills and enhancing social cohesion by organizing local culture activities, so that to provide actual direct benefits to community group-local villages.

The positive impacts including change to economic indicators of the region, the cultural and economic history of the mentioned communities and the interactions between the communities, also changes on the ecosystem services, the expected changes in the well-being conditions and other characteristics of communities are stated in the MR as per validated PD. Descriptions in MR has been checked, it is verified that the impacts on the community groups in this monitoring period is correct via checking actual labor contracts^{/LC/}, periodical payroll^{/PP/}, training records^{/TTR/} during this monitoring period and by site inspection and interview with local stakeholders and local officers from government.

Via checking the project implementation comparing with the project design, it is verified that the expected changes are reasonable and can be achieved.

Being the monitoring period mostly related to the retro-active period, the analysis and the assessment did at the time of the project validation is not changed. Thus it is concluded that the net impact of project activities on community groups is all positive.

4.5.4 Protection of High Conservation Values (CM2.4)

Two HCVs were identified related to community well-being in the project zone based on above assessment and assessed in the validated PD^{/PD/} including Hydrological service and Tibetan Buddhism (Culture Values) were identified related to community well-being in the project zone.

Guoluo Tibetan Autonomous Prefecture is famous as parts of Three River (Yangtze River, Yellow River and Lancang River) Source Region which has been confirmed by interview with local officers and checking the supporting document^{/CBSR/}. Via checking the actual daily working log^{/WL/} recorded by the grassland guardians during this monitoring period and site inspection and interview with local stakeholders, it is confirmed that the implementation of the project has maintained water and soil, purified water sources that played an important role in the water safety of local residents and downstream residents thus benefit to Guoluo Tibetan Autonomous Prefecture and Three River Source Region.

Also via on-site investigation, it is confirmed that the project generates social and environmental co-benefits as the generation of income and job opportunities for local communities with most of Tibetan population during this monitoring period which is verified by checking the labor contracts^{/LC/} and periodical payroll^{/PP/} and also confirmed by on-site interview with local villagers^{/I3/} thus benefit to the protection and dissemination of Tibetan Buddhism (Culture Values) in Guoluo Tibetan Autonomous Prefecture.

In conclusion, high conservation values have not been negatively affected by the project during this monitoring period.

4.5.5 Other Stakeholder Impacts (CM3.2-CM3.3)

The MR states that no negative offsite effects are expected during this monitoring period same as the validated PD^{/PD/}. Oppositely, the project provides valued experience of grassland management and carbon trading to other stakeholder, which in some way could encourage more followers to engage in similar projects for sustainable development. The local officer^{/12/} and grassland guardians^{/13/}, during the on-site visit and the interview, confirmed that the project did not result in net negative impact on other stakeholders during this monitoring period. Being the monitoring period mostly related to the retro-active period, the analysis and the assessment did at the time of the project validation is not changed.

4.5.6 Community Monitoring Plan (CM4.1, CM4.2, GL2.2, GL2.3, GL2.5)

The PP carried out the community monitoring as per established community monitoring plan in the validated PD^{/PD/}.

To validate the community monitoring results during this monitoring period, the verification team take stepwise verification as following,

a. Check the dates, frequency and method as per PD

As designed in the validated PD^{/PD/}, the monitoring parameters reflect the actual changes in well-being resulting from the project activities for community groups were measured and monitored by interview for each community groups affected by the project and collect all the relevant information through questionnaires.

During this monitoring period, the project developer established a monitoring team including all the grassland guardians conducting interviews with local communities affected by the project, this has been confirmed by site interview with the grassland guardians^{/12/} and local stakeholders^{/13/}.

As per the frequency defined in the PD, the monitoring should be conducted before every verification event, the monitoring team distributed 60 questionnaires to collect the interview results for the representatives of local residents living in project zone from 15-September-2020 to 15-October-2020 and got 60 valid questionnaires back, thus it is verified that the monitoring frequency is in line with the validated PD design^{/PD/}.

b. Check the monitoring results

Via checking the 60 questionnaires^{/CMQ/} collected by monitoring team, it is verified that the questionnaires were distributed to different community groups as defined in the PD including Local villagers, female workers, local officers from Forest and Grass Bureau and governments, representatives from local village committees, and the key variables set in the questionnaire are in line with the plan in validated PD^{/PD/}.

Via comparing the information in the questionnaires, it is verified that monitoring results listed in the MR is correct and actual.

c. Evaluation of monitoring

The monitoring procedures and approaches during this monitoring period were carried out as listed in the PD, via checking the results, CTI verified that PP established a series of procedures including organizing monitoring team, training, preparation and survey. The sub procedures are verified as capable to finish this monitoring, which is confirmed by interview with the monitoring team member^{/11/}, ^{/13/}, ^{/14/} and based on the experience of the monitoring team.

By combining the information in the questionnaires, it is confirmed that during this monitoring period, the monitoring results are assessed as below table,

Variables	Monitoring methods applied	Affected community groups	Assessment of Result of monitoring
Total number of people expected to have improved livelihoods or income generated as a result of project activities	Working contracts and payment records Questionnaire and interview Training records	Local women, local herders, local Tibetans, grassland guardians	Monitoring results in MR for this monitoring period is verified by checking the labor contracts ^{/LC/} , periodical payroll ^{/PP/} , training records ^{/TTR/} , questionnaires ^{/CMQ/} and also confirmed by on-site interview with local villagers ^{/I3/} including women, herders, Tibetans and grassland guardians
Number of women expected to have improved livelihoods or income generated as a result of project activities	Working contracts and payment records Questionnaire and interview Training records	Local women, local herders, local Tibetans, grassland guardians	Monitoring results in MR for this monitoring period is verified by checking the labor contracts ^{/LC/} , periodical payroll ^{/PP/} , training records ^{/TTR/} , questionnaires ^{/CMQ/} and also confirmed by on-site interview with local villagers ^{/I3/} including women, herders, Tibetans and grassland guardians
Total number of people expected to be employed in project activities, expressed as number of full-time employees	Working contracts and payment records	Local women, local herders, local Tibetans, grassland guardians	Monitoring results in MR for this monitoring period is verified by checking the labor contracts ^{/LC/} , periodical payroll ^{/PP/} , and also confirmed by on-site interview with local villagers ^{/I3/} including women, herders, Tibetans and grassland guardians
Number of women expected to be employed as a result of project activities, expressed as number of full-time employees	Working contracts and payment records	Local women, local herders, local Tibetans, grassland guardians	Monitoring results in MR for this monitoring period is verified by checking the labor contracts ^{/LC/} , periodical payroll ^{/PP/} , and also confirmed by on-site interview with local villagers ^{/I3/} including women, herders, Tibetans and grassland guardians
Total number of community members who are expected to have improved skills and/or knowledge resulting from training provided as part of project activities	Training records Questionnaire and interview	Local residents, local herders, local Tibetans, grassland guardians	Monitoring results in MR for this monitoring period is verified by checking the training records ^{/TTR/} , and also confirmed by on-site interview with local villagers ^{/I3/} including women, herders, Tibetans and grassland guardians
Number of female community	Training records Questionnaire and interview	Local residents, local herders, local	Monitoring results in MR for this monitoring period is verified by checking the training records ^{/TTR/} , and

members who are expected to have improved skills and/or knowledge resulting from training as part of project activities		Tibetans, grassland guardians	also confirmed by on-site interview with local villagers ^{/I3/} including women, herders, Tibetans and grassland guardians
Total number of community members whose well-being is expected to improve as a result of project activities	Working contracts and payment records Questionnaire and interview Training records	Local women, local herders, local Tibetans, grassland guardians	Monitoring results in MR for this monitoring period is verified by checking the labor contracts ^{/LC/} , periodical payroll ^{/PP/} , training records ^{/TTR/} , questionnaires ^{/CMQ/} and also confirmed by on-site interview with local villagers ^{/I3/} including women, herders, Tibetans and grassland guardians
Number of women whose well-being is expected to improve as a result of project activities	Working contracts and payment records Questionnaire and interview Training records	Local women, local herders, local Tibetans, grassland guardians	Monitoring results in MR for this monitoring period is verified by checking the labor contracts ^{/LC/} , periodical payroll ^{/PP/} , training records ^{/TTR/} , questionnaires ^{/CMQ/} and also confirmed by on-site interview with local villagers ^{/I3/} including women, herders, Tibetans and grassland guardians
Area of grassland restored from black soil beach	Project records	Local residents, local herders, local Tibetans, grassland guardians	Monitoring results in MR for this monitoring period is verified by checking the project records of the boundary achieved by field survey (eg, using GPS) and by using geo-referenced spatial data (eg, maps, GIS datasets) ^{/MAP/}
Number of Tibetans benefiting from project activities	Working contracts and payment records Questionnaire and interview	Local Tibetans	Monitoring results in MR for this monitoring period is verified by checking the labor contracts ^{/LC/} , periodical payroll ^{/PP/} , questionnaires ^{/CMQ/} and also confirmed by on-site interview with local Tibetans ^{/I3/}

During the on-site verification, second round of stakeholder meetings with the villagers, local officers, grassland guardians and stakeholders have been carried out on 29-March-2021. During the meeting, the affected community group representatives are interviewed separately by verification team, and all the representatives confirmed that the project increase of household income due to the implementation of the project which provided more local job opportunities, improve their capability and technical skills and increase social activities, achieve goals in afforestation and promote grassland management and protection, and improve the local ecological environment and improve people's living level.

Based on above evaluation from the affected communities, it is verified that the monitoring results reflect the actual community impact from each community groups affected by the project.

Thus it is concluded that the community monitoring during this monitoring period was carried out in accordance to the validated project description.

CAR 34 was raised and successfully closed. Refer to Appendix 3 for details.

4.5.7 Community Monitoring Plan Dissemination (CM4.3)

The community monitoring results, community monitoring plan have been made publicly available on the VCS and CCB website, which can be confirmed by checking the corresponding webpage.

In addition, hard copies of the monitoring plan and monitoring manual have been distributed among local stakeholders by PP and grassland guardians which is confirmed and verified by interview with the local stakeholders. And a contact person with phone numbers was published in case any stakeholders want to directly contact the project proponent and raise opinions.

Furthermore, the project developer published the monitoring plan and monitoring manual on the local bulletin boards to explain the monitoring process to communities and other stakeholders from 01-September-2020 to 15-September-2020 which has been verified by checking the photo of the communities and stakeholders watching^{/RVAR/} and seen by verification team during site inspection.

Finally, meetings with stakeholders have been carried out during site verification. During the meeting, project developer introduced the monitoring results during this monitoring period and copies of monitoring report is available to anyone requests it. Verification team has participated and the results are also verified by checking the meeting minute and questionnaires filled by stakeholders^{/VSM/}.

In conclusion, the results of community monitoring were disseminated in accordance with the validated project description.

4.5.8 Optional Gold Level: Short-term and Long-term Community Benefits (GL2.2)

N/A

4.5.9 Optional Gold Level: Smallholder/community member Risks (GL2.3)

N/A

4.5.10 Optional Gold Level: Marginalized and/or Vulnerable Community Groups (GL2.4)

N/A

4.5.11 Optional Gold Level: Net Impacts on Women (GL2.5)

N/A

4.5.12 Optional Gold Level: Benefit Sharing Mechanisms (GL2.6)

N/A

4.5.13 Optional Gold Level: Governance and Implementation Structures (GL2.8)

N/A

4.5.14 Optional Gold Level: Smallholders/Community Members Capacity Development (GL2.9)

N/A

4.6 Biodiversity

4.6.1 Biodiversity Changes (B2.1)

The monitoring report states that the project seeks to change the biodiversity intact through the scientific and rational afforestation of degraded or barren land.

PP evaluated the biodiversity element of species of plants and animals as per the validated PD, it is considered as appropriate to the project to identify and quantify the grassland coverage, endangered species of plants and animals within the project zone.

A list of changes in biodiversity is reported in the monitoring report and the justification used to attribute biodiversity changes to the project's activities was assessed by verification team as following,

1. For grassland coverage in the project area, the sustainable management activity of the project has been implemented through scientific and reasonable configuration method, seeding grass on the black soil beach has significantly increased the coverage of grassland, which can benefit the local environment in a long time by improving the condition of local micro climate in the project area and zone.
2. For grass species in the project area, 3 native grass species have been successfully grew to establish grassland, which has significantly increased the grassland cover in project zone during this monitoring period, and this is also verified by on-site inspection to the sample plots and observation of the project area.
3. For population status of the endangered animals, via checking the biodiversity survey record for this monitoring period recorded by monitoring staffs/^{BSRM/}, it is verified that there are animals' traces were observed and the population status was enhanced due to the better environment of habitat, which could prove the increase of animals population during this monitoring period, and this is also verified by on-site inspection to the monitoring points and sample spots and remote observation of the project area.

In conclusion, the project's assessment of changes in biodiversity resulting from project activities in the project zone during the monitoring period are verified as accurate. There is no reason to believe the project area remains less rich in biodiversity than the project start.

CAR 35 was raised and successfully closed. Refer to Appendix 3 for details.

4.6.2 Mitigation Actions (B2.3)

As verified in the validated PD, it is proved that the project has no negative impacts on biodiversity and thus no special measures need to be taken for maintenance or enhancement of biodiversity.

As per the PD/^{PD/}, two HCVs have been identified related to biodiversity, which includes Protected area: Three River Source Region and Rare, threatened or endangered (RTE) species.

For Protected area, Guoluo Tibetan Autonomous Prefecture is famous as parts of Three River (Yangtze River, Yellow River and Lancang River) Source Region which has been confirmed by interview with local officers and checking the supporting document/^{CBSR/}, based on verification team's local expertise, it is confirmed that Three River Source Region is rich in natural resources, and its biodiversity protection is an important strategic position in the world. Via checking the monitoring results of the biodiversity change

during this monitoring period as assessed in the section 4.6.11 below, it is confirmed that there were no negative impacts on this HCV observed during this monitoring period.

For Threatened species, based on the validated PD^{/PD/}, it is confirmed that there are 35 species of rare, threatened or endangered (RTE) species in project zone at the start of the project. Via checking the monitoring results of the biodiversity change during this monitoring period as assessed in the section 4.6.11 below, it is confirmed that the numbers of these 3 species of endangered animals have been observed and recorded there were no negative impacts on this HCV observed during this monitoring period.

Therefore, it is concluded that no negative impacts on biodiversity or HCV attributes recorded, so no measures were necessary to mitigate impacts, beyond the routine operation of the project.

CAR 36 was raised and successfully closed. Refer to Appendix 3 for details.

4.6.3 Net Positive Biodiversity Impacts (B2.2)

The local grass species seeding has different positive impact on soil, climate and biodiversity, the sustainable management activity of the project has been implemented through scientific and reasonable configuration method, seeding grass on the black soil beach has significantly increased the coverage of grassland, which can benefit the local environment in a long time by improving the condition of local micro climate in the project area and zone. Above assessment have been demonstrated in the section 4.6.1.

Furthermore, via on-site investigation and checking the map^{/MAP/}, it is verified that as the project site is located in Guoluo Tibetan Autonomous Prefecture where is famous as parts of Three River (Yangtze River, Yellow River and Lancang River) Source Region which has been confirmed by interview with local officers and checking the supporting document^{/CBSR/}, based on verification team's local expertise, it is confirmed that Three River Source Region is rich in natural resources, and its biodiversity protection is an important strategic position in the world.

Based on the situation of biodiversity within the project zone at baseline scenario, the project area would continue to be black soil beaches type land and with low biodiversity condition. The main change by the project scenario is to create grassland cover of the project area with local native grass species which has great vitality and adaptation to grass area, this has been verified by site inspection.

Based on validated PD, it is confirmed that there are 10 and 23 species among class I and II nationwide key protected animal, respectively, and 12 species were enlisted as key protected birds of Qinghai Province. In addition, there are 57 species of national "San You" protected animal. Furthermore, there are 3 species of endangered animal and 9 species of vulnerable species in the IUCN Red List of Endangered Species^{/IUCN/}. These species have been and will be protected by the improvement on ecological environment of the surrounding area through the project activity implementation, the improvement on ecological environment of the surrounding area has been confirmed during the site observation. Via checking the monitoring results of the biodiversity change during this monitoring period as assessed in the section 4.6.11 below, it is confirmed that the numbers of these 3 species of endangered animals have been observed and recorded which means the biodiversity was increased.

In conclusion, the net impact of the project's activities on biodiversity are positive.

4.6.4 High Conservation Values Protected (B2.4)

Two HCVs has been identified related to biodiversity based on above assessment and in line with the validated PD.

For Protected area, Guoluo Tibetan Autonomous Prefecture is famous as parts of Three River (Yangtze River, Yellow River and Lancang River) Source Region which has been confirmed by interview with local officers and checking the supporting document^{/CBSR/}, based on verification team's local expertise, it is confirmed that Three River Source Region is rich in natural resources, and its biodiversity protection is an important strategic position in the world. Via checking the monitoring results of the biodiversity change during this monitoring period as assessed in the section 4.6.11 below, it is confirmed that there were no negative impacts on this HCV observed during this monitoring period.

For Threatened species, based on the validated PD^{/PD/}, it is confirmed that there are 35 species of rare, threatened or endangered (RTE) species in project zone at the start of the project. Via checking the monitoring results of the biodiversity change during this monitoring period as assessed in the section 4.6.11 below, it is confirmed that the numbers of these 3 species of endangered animals have been observed and recorded there were no negative impacts on this HCV observed during this monitoring period.

CAR 37 was raised and successfully closed. Refer to Appendix 3 for details.

4.6.5 Invasive Species (B2.5)

The species used is native grass developed in China which is verified by validated PD and onsite observations. These are not considered as invasive species. In conclusion, all the seeded grass are native species and no invasive species have been introduced into any area affected by the project.

4.6.6 Impacts of Non-native Species (B2.6)

Only native species are used in the project activities which is defined in the PD and verified by checking the Grass Seed Purchase Contract^{/GSPC/} and onsite observations, thus there are no adverse effects from non-native species.

4.6.7 GMO Exclusion (B2.7)

The PPs declared and assured that no GMOs has been and will be used in the project to generate GHG emissions reductions or removals which is defined in the PD and verified by checking the Grass Seed Purchase Contract^{/GSPC/} and onsite observations.

4.6.8 Inputs Justification (B2.8)

As assessment in validation report and checking the project records for mass and nitrogen content of fertilizer^{/MNFR/}, it is verified that fertilizers with 5 kg of diammonium phosphate and 6 kg of urea are applied per mu are used in the project due to the low soil fertility of black soil beach before the project, chemical pesticides are allowed to be used only if there is a serious disease problem erupted in the project area, biological control agents are used in the project according to local Pest Control and Prevention Policy^{/GMM/}.

For the fertilizers used, via interview with local officer and project records for mass and nitrogen content of fertilizer^{/MNFR/}, it is confirmed that the amount of fertilization used was small thus has no potential adverse effects on surface water and groundwater by considering the local climate and weather conditions.

The chemical pesticides are allowed to be used only if there is a serious pest problem erupted in the project area, while improper pesticide application would be harmful to natural environment, but the risk is considered low because pesticide is strictly managed by well trained staff to minimize the potential effect^{/GMM/}. As the biological measures to control pests and diseases was mainly adopted, the pesticide application was limited during this monitoring period. Via on-site interview with the project developer and

local officers, it is verified that there was no significant pesticide application occurred as no insects and disease disaster occurred.

Therefore, it is concluded that the use of each input is justified as per the PD and did not pose harm to the region's environment or communities during this monitoring period.

4.6.9 Negative Offsite Biodiversity Impacts (B3.1) and Mitigation Actions (B3.2)

The MR and PD both state that no potential negative impacts on biodiversity outside of the project zone would result from project activities; the project contributes to the conservation of the biodiversity and ecosystem. No actual impacts were observed during the site visit and/or reported during the monitoring period. Refer to 4.6.1 and 4.6.3 of this report for detail assessment.

4.6.10 Net Offsite Biodiversity Benefits (B3.3)

As per the assessment above, there are no potential negative offsite impacts on biodiversity, the net effect of the project on biodiversity is positive.

4.6.11 Biodiversity Monitoring Plan (B4.1, B4.2, GL3.4)

The PP carried out the biodiversity monitoring as per established biodiversity monitoring plan in the validated PD^{/PD/}.

To validate the biodiversity monitoring results during this monitoring period, the verification team take stepwise verification as following,

a. Check the dates, frequency and method as per PD

As designed in the validated PD^{/PD/}, the monitoring parameters reflect the actual changes of biodiversity were measured and monitored by survey variables for biodiversity during this monitoring period as stated in the MR.

During this monitoring period, the project developer established a monitoring team including monitoring staffs conducting biodiversity survey affected by the project, grassland guardians and local Forest and Grass Bureau have performed biodiversity monitoring to record the discovery of any biodiversity including both flora and fauna, population trends of each trigger species and threats to trigger species. This has been confirmed by site interview with the monitoring team member^{/13/}.

As per the frequency defined in the PD, the State Variables of the biodiversity have been monitored in both winter (03-November-2019 to 07-December-2019) and summer (25-May-2020 to 20-June-2020) season, and the Pressure Variables and Response Variables of the biodiversity have been monitored annually, thus it is verified that the monitoring frequency is in line with the validated PD design^{/PD/}.

b. Check the monitoring results

Via checking the biodiversity survey record for this monitoring period recorded by monitoring staffs^{/BSRM/} based on the monitoring results by monitoring team, it is verified that the monitoring approach used for investigation is as per the design defined in the PD^{/PD/}. Randomly sample monitoring plots and monitoring lines have been set to monitor the species of vegetation and animal population, including *Aquila nipalensis*, *Falco cherrug*, and *M. chrysogaster* which are Species defined in HCV.

Via comparing the information in the biodiversity survey record for this monitoring period recorded by monitoring staffs^{/BSRM/}, it is verified that monitoring results listed in the MR is correct and actual.

c. Evaluation of monitoring

The monitoring procedures and approaches during this monitoring period were carried out as listed in the PD, via checking the results, it is verified that PP established a series of procedures including organizing monitoring team, training, preparation, determination of the sample plots and survey. The sub procedures are verified as capable to finish this monitoring, which is confirmed by interview with the monitoring staff^{13/} and based on the experience of the monitoring team.

By checking the information in the biodiversity survey record for this monitoring period recorded by monitoring staffs^{/BSRM/}, it is confirmed that the monitoring indicators are confirmed as consistent with the net positive change which created by the project.

Three indicator types which covering PRS (Pressure, State, and Response) scope and additional monitored data related to Gold Level for exceptional biodiversity benefits including *Aquila nipalensis*, *Falco cherrug*, and *M. chrysogaster* which are Species defined in HCV have been listed.

For the State variables, grassland coverage, species of vegetation, animal population associated and protected area have been monitored. the area of grassland coverage increases 160,548.96 ha which changed protected 160,548.96 ha areas in Three River Source Region, and the species of vegetation are 3 types of grasses.

The species of animals are observed including *Aquila nipalensis*, *Falco cherrug*, and *M. chrysogaster*, total 5 species during this monitoring period.

Via checking the Biodiversity baseline survey report^{/BBSR/}, VVB confirmed that before the start of the project, the 3 trigger species were monitored in the project zone, but the degradation the grassland was a threat to their habitats which would lead to the reduction of the species population, and each of the three trigger species was monitored only once during 05-July-2014 to 10-October-2015 which has been confirmed by checking the Biodiversity baseline survey report^{/BBSR/}.

After the implementation of the project, the *Aquila nipalensis* was monitored once, the *Falco cherrug* and *M. chrysogaster* were monitored twice during 03-November-2019 to 07-December-2019 and 25-May-2020 to 20-June-2020, the numbers have been verified by checking the biodiversity survey record for this monitoring period^{/BSRM/}, hence it is proved that more trigger species were observed than the start of the project, indicating that the implementation of the project could maintain the population status of the trigger species.

For the Pressure variables, the risk to the project and the harmful impacts to biodiversity, indicators of fire, rodents and pests, overgrazing and Fertilizer and Chemical pesticides have been monitored through examined and recorded by the grassland guardians and confirmed by local forest and grass bureau. Via site inspection and interview with the officer from Forest and Grass Bureau, it is verified that no fires and overgrazing occurred, and effected grassland suffered rodents and pests are none^{/BSR/} and 5 kg diammonium phosphate and 6 kg urea per mu were applied for project area and no Chemical pesticides applied in this monitoring period via checking the project records for mass and nitrogen content of fertilizer^{/MNFR/}.

For the Response variables, grassland area under prevention control from fires, grassland area under prevention control from rodents and pests, project area of sustainable grassland management, project area for restoration of degraded grassland have been monitored to reflect the project interventions relevant to biodiversity in this monitoring period. These have been monitored through examined and recorded by the grassland guardians and confirmed by local forest and grass bureau. Via site inspection and interview with the officer from Forest and Grass Bureau, it is verified that 160,548.96 ha grassland area are under

prevention control from fires, rodents and pests and 160,548.96 ha grassland area are under sustainable grassland management and restoration of degraded grassland, which has been verified by checking the biodiversity survey record for this monitoring period recorded by monitoring staffs^{/BSRM/}.

During the on-site verification, the verification team investigated the sample plots and observed the vegetation to confirm the PP monitoring results, it is verified that the values are actual and reasonable.

Based on above evaluation from the biodiversity monitoring, it is verified that the monitoring results reflect the actual biodiversity impact from each species affected by the project.

Thus it is concluded that the biodiversity monitoring during this monitoring period was carried out in accordance to the validated PD.

CAR 38 was raised and successfully closed. Refer to Appendix 3 for details.

4.6.12 Biodiversity Monitoring Plan Dissemination (B4.3)

The biodiversity monitoring results, biodiversity monitoring plan have been made publicly available on the VCS and CCB website, which can be confirmed by checking the corresponding webpage.

In addition, hard copies of the monitoring plan and monitoring manual have been distributed among local stakeholders by PP and grassland guardians which is confirmed and verified by interview with the local stakeholders. And a contact person with phone numbers was published in case any stakeholders want to directly contact the project proponent and raise opinions.

Furthermore, the project developer published the monitoring plan and monitoring manual on the local bulletin boards to explain the monitoring process to communities and other stakeholders from 01-September-2020 to 15-September-2020 which has been verified by checking the photo of the communities and stakeholders watching^{/RVAR/} and seen by verification team during site inspection.

Finally, meetings with stakeholders have been carried out during site verification. During the meeting, project developer introduced the monitoring results during this monitoring period and copies of monitoring report is available to anyone requests it. Verification team has participated and the results are also verified by checking the meeting minute and questionnaires filled by stakeholders^{/VSM/}.

In conclusion, the results of biodiversity monitoring were disseminated in accordance with the validated project description.

4.6.13 Optional Gold Level: Trigger Species Population Trends (GL3.3)

As per the validated PD, the project seeks to be validated to the Gold Level for exceptional biodiversity benefits, hence, below assessment has been provided for information regarding the project's qualification for the Exceptional Biodiversity Benefits Gold Level during this monitoring period.

Two HCVs have been identified related to biodiversity, which includes Protected area: Three River Source Region and Rare, threatened or endangered (RTE) species.

For Protected area, Guoluo Tibetan Autonomous Prefecture is famous as parts of Three River (Yangtze River, Yellow River and Lancang River) Source Region which has been confirmed by interview with local officers and checking the supporting document^{/CBSR/}, based on verification team's local expertise, it is confirmed that Three River Source Region is identified as the sites of global significance for biodiversity conservation selected on the basis of the Key Biodiversity Area (KBA) framework of vulnerability and irreplaceability^{/ibat/}. And based on above assessment of the monitoring results of biodiversity, population trends of each trigger species increased and threats to trigger species decreased in project zone for

this monitoring period, it is confirmed that the project has protected biodiversity at the project zone thus is verified to contribute to meeting country commitments to the Aichi Targets under the Convention on Biological Diversity and with the priorities identified in a National Biodiversity Strategy and Action Plan.

For Threatened species, based on the biodiversity baseline survey report^{/BBSR/}, it is confirmed that there are 35 species of rare, threatened or endangered (RTE) species in project zone at the start of the project. Via checking the monitoring results of the biodiversity change during this monitoring period as assessed in the section 4.6.11 above, it is confirmed that the numbers of these 3 species of endangered animals have been observed, which verified that the population trends of each trigger species were increased and via site inspection of the grassland coverage, it is confirmed that threats to trigger species was reduced.

In conclusion, via actions taken by the project, the population status of each trigger species in the project zone were enhances, and threats to them were reduced.

4.6.14 Optional Gold Level: Effectiveness of Threat Reduction Actions (GL3.4)

For Threatened species, based on the biodiversity baseline survey report^{/BBSR/}, it is confirmed that there are 35 species of rare, threatened or endangered (RTE) species in project zone at the start of the project. Via checking the monitoring results of the biodiversity change during this monitoring period as assessed in the section 4.6.11 above, it is confirmed that the numbers of these 3 species of endangered animals have been observed, which verified that the population trends of each trigger species were increased and via site inspection of the grassland coverage, it is confirmed that threats to trigger species was reduced.

In conclusion, the actions taken by the project are effective at enhancing the population status of trigger species.

CAR 39 was raised and successfully closed. Refer to Appendix 3 for details.

4.7 Additional Project Implementation Information

No additional project implementation is relevant for reporting here as details on project implementation are included in preceding sections.

4.8 Additional Project Impact Information

The project has been able to demonstrate impacts to all CCB indicators as mentioned throughout this report; no further steps to verify additional monitoring were warranted. The reported project impact information was sufficient and suitable for the verification of the project's CCB impacts.

5. VERIFICATION CONCLUSION

Climate Bridge (Shanghai) Ltd. has commissioned the TÜV NORD JI/CDM Certification Program to carry out the Verified Carbon Standard (VCS) joint with Climate, Community & Biodiversity (CCB) 1st periodic verification of the project activity Guoluo Grassland Sustainable Management Project in China, VCS reference No. 2458, for the period 20-June-2016 to 31-December-2020, with regard to the relevant requirements for VCS and CCBs.

Based on the documented evidence and corroborated by an on-site assessment, TÜV NORD can confirm that:

- the project has been implemented and operated as per the validated PD;
- the project description deviation were assessed does not impact the applicability of the methodology, additionality and the appropriateness of the baseline/without-project scenario, and the project remains in compliance with the CCB Version 3.1 and VCS standards 4.1.
- the monitoring report and other supporting documents provided are complete and verifiable and in accordance with the applicable VCS and CCB requirement;
- the monitoring is in place as per the applied baseline and monitoring methodology;
- the monitoring complies with the monitoring plan in the validated PD;
- the monitoring plan in the validated PD is as per the applied baseline and monitoring methodology.
- the project complies with the verification criteria for projects set out in the Third Edition of the CCB Standards.

The GHG removals by sink were calculated correctly on the basis of the approved monitoring methodology VM0026 Sustainable Grassland Management, version 1.0 and the monitoring plan in the validated PD. Hence it is certified that the GHG removals by sink from the project during the monitoring period amount as follows:

Monitoring period: From 20-June-2016 to 31-December-2020

Verified GHG emission reductions and VCUs in the above verification period and vintage:

Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e) ³	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)	Buffer (tCO ₂ e)	VCUs (tCO ₂ e)
20-June-2016~31-December-2016	5,972	332,744	3,033	335,683	34,319	301,364
01-January-2017~31-December-2017	11,179	633,916	5,495	639,600	64,238	575,362
01-January-2018~31-December-2018	11,179	622,821	11,179	622,821	64,238	558,583
01-January-2019~31-December-2019	11,179	642,378	11,179	642,378	64,238	578,140

³ The project generated both project emissions and removals, this column list the value of Project removals minus the project emissions, refer to table in section 3.2.4 of MR for details of the calculation and results.

01-January-2020~31-December-2020	11,179	644,137	11,179	644,137	64,414	579,723
20-June-2016~31-December-2020 Total	50,688	2,875,996	42,065	2,884,619	291,446	2,593,172

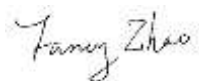
For the achievement in climate objective, in this Monitoring period 20-June-2016 to 31-December-2020, the project restored 160,548.96 ha of degraded grassland of Three River Source Region and results in **2,884,619** tCO₂e of GHG removals and **2,593,172** tCO₂e equivalent of credits eligible for issuance as VCUs.

For the achievement in community objective, the project improved the interaction within the local Tibetan community, increased connection between local Tibetan herders and tourists attracted by the project grassland landscape and indirectly promote the diffusion of traditional culture which would positively influence the livelihoods and well-being of the community during this monitoring period.

For the achievement in biodiversity objective, the project increased biodiversity in the project zone (Three River Source Region) which has been identified as the sites of global significance for biodiversity conservation selected on the basis of the Key Biodiversity Area (KBA) framework of vulnerability and irreplaceability during this monitoring period.

For the achievement in Gold Level - exceptional biodiversity benefit, all the trigger species were observed within the project zone during this monitoring period to prove that all achievements reported are substantiated.

Beijing, 19-November-2021



Zhao Xuejiao

TÜV NORD JI/CDM Certification Program
Validation Team Leader

Essen, 19-November-2021



Christina Stöhr

TÜV NORD JI/CDM Certification Program
Final Approval

APPENDIX 1: ABBREVIATIONS

Abbreviations	Full texts
ARR	Afforestation, Reforestation and Revegetation
AFOLU	Agriculture, Forestry and Other Land Use
BAU	Business as usual
CAR	Corrective Action Request
CCB	Climate, Community & Biodiversity
CCBA	Climate, Community & Biodiversity Association
CDM	Clean Development Mechanism
CL	Clarification Request
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
CP	Certification Program // Crediting Period
DNA	Designated National Authority
EB	CDM Executive Board
ER	Emission Reductions
ETS	Emission Trading Scheme
FAR	Forward Action Request
GHG	Greenhouse gas(es)
GMO	Genetically modified organism
GS	Gold Standard
HCVs	High Conservation Values
IFM	Improved Grassland management
IPCC	Intergovernmental Panel on Climate Change
JNR	Jurisdictional and Nested REDD+
MP	Monitoring plan
MR	Monitoring Report
NDRC	National Development and Reform Commission
NPRA	Non-Permanence Risk Analysis
PD	Project Description
PP	Project Participant
PRA	Participatory Rural Appraisal
QC/QA	Quality control/Quality assurance
REDD	Reduced Emissions from Deforestation and Degradation
UNFCCC	United Nations Framework Convention on Climate Change
VCS	Verified Carbon Standard
VCSA	Verified Carbon Standard Association
VCU	Verified Carbon Unit
VVB	Validation/Verification Body

APPENDIX 2: DOCUMENTS REVIEWED OR REFERENCED

No	Author	Reference	Title	References to the document	Provider
1.	Qinghai Meteorology, 2016, 2: 10-15	/ACT/	Analysis of the change trend	Analysis of the change trend of various meteorological elements in Guoluo area in the past 36 years	PP
2.	Guoluo Tibetan Autonomous Prefecture Agriculture and Animal Husbandry Department	/APDR/	Approval of project design report	Approval of project design report approved by the Guoluo Tibetan Autonomous Prefecture Agriculture and Animal Husbandry Department ⁴ on 02-November-2015 which includes proof of land qualification as defined in the project approval	PP
3.	IPCC	/AR5/	IPCC fifth assessment	IPCC fifth assessment for GWP value	Public website
4.	Qinghai Agriculture and Animal Husbandry Engineering Project Consulting Center	/BBSR/	Biodiversity baseline survey report	Biodiversity baseline survey report issued by Qinghai Agriculture and Animal Husbandry Engineering Project Consulting Center on 20-December-2015	PP
5.	Local Administration for Industry and Commerce	/BL/	Business License	Business License of all the participants of the project	PP
6.	Qinghai Agriculture and Animal Husbandry Engineering Project Consulting Center	/BSR/	Baseline Survey Report	Baseline Survey Report issued by Qinghai Agriculture and Animal Husbandry Engineering Project Consulting Center in Oct. 2015	PP
7.	Monitoring staffs	/BSRM/	Biodiversity survey record for this monitoring period	Biodiversity survey record for this monitoring period recorded by monitoring staffs	PP
8.	Qinghai Guanglv Landscaping Co., Ltd and Climate Bridge (Shanghai) Ltd.	/CA/	Consultant Agreement	Consultant Agreement signed Qinghai Guanglv Landscaping Co., Ltd and Climate Bridge (Shanghai) Ltd. dated 28-September-2020	PP

⁴ Agriculture and Animal Husbandry Department has been dismissed in 2019 due to the reform of government function, and some functional departments related to grassland management have been transferred to Guoluo Tibetan Autonomous Prefecture Forestry and Grassland Bureau which has been confirmed by site interview with local officers and verified as actual based on local expertises of the validation team.

9.	Qinghai Agriculture and Animal Husbandry Engineering Project Consulting Center	/CBSR/	Community Baseline Survey Report	Community Baseline Survey Report issued by Qinghai Agriculture and Animal Husbandry Engineering Project Consulting Center dated in Nov. 2015	PP
10.	CCBA	/CCBPR/	CCB Program Rules, version 3.1	https://verra.org/project/ccb-program/rules-requirements-and-guidance/	CCB website
11.	CCBA	/CCBS/	CCB Standard, version 3.1	https://verra.org/project/ccb-program/rules-requirements-and-guidance/	CCB website
12.	Specific staff	/CGL/	Conflicts and grievances	Conflicts and grievances of local communities and individual villagers	PP
13.	Representatives of community groups	/CMQ/	Community Monitoring Questionnaires	60 valid questionnaires of Community Monitoring	PP
14.	Shandong Provincial Bureau of Quality and Technical Supervision	/COL/	Certificate of the lab	Certificate of the lab issued on 27-January-2016 valid to 26-January-2021	PP
15.	Qinghai Guanglv Landscaping Co., Ltd	/DN/	Declaration of non-participation	Declaration of non-participation in any emission trading or other binding limit program or mechanism and no desire to or receiving of another form of GHG-related environmental credit, including renewable energy certificates dated on 27-March-2021	PP
16.	Literature	/ESC/	Ex-ante SOC	Ex-ante estimation of SOC changes in project scenario derived from Han Fa, Li Yikang, Zhou Huakun, et al. Effect of managerial measures on changes of soil enzyme and soil fertility in "black soil bleach" degraded grassland [J]. Acta Prataculturae Sinica, 2007, 16(3):1-8.	PP
17.	County forestry and grassland bureau	/FCS/	Full census survey	Full census survey conducted every July and August by county forestry and grassland bureau for this monitoring period	PP
18.	Project proponent and county forestry and	/GDMP/	Grazing Displacement Management Plan	Grazing Displacement Management Plan issued by Project proponent and county forestry and grassland bureau in June 2016	PP

	grassland bureau				
19.	Google	/GE/	Google Earth	Google Earth Map	Public software
20.	Guoluo Tibetan Autonomous Prefecture Forestry and Grassland Bureau	/GMM/	Grassland Management Manual	Grassland Management Manual issued by Guoluo Tibetan Autonomous Prefecture Forestry and Grassland Bureau on 06-May-2020	PP
21.	PP	/GMP/	Grassland management plan	Grassland management plan	PP
22.	Local Forestry and Grassland Bureau and Haiyan Senyuan Forest and Grass Ecological Planting Co., Ltd.	/GSPC/	Grass Seed Purchase Contract	Grass Seed Purchase Contract signed between Local Forestry and Grassland Bureau and Haiyan Senyuan Forest and Grass Ecological Planting Co., Ltd. dated in June 2016	PP
23.	UNFCCC	/GSS/	Guidelines for sampling and surveys	Guidelines for sampling and surveys for CDM project activities and programmes of activities (version 04.0)	UNFCCC website
24.	County forestry and grassland bureau	/GYMR/	Grass yield measurement results	Annual grass yield measurement results issued by County forestry and grassland bureau	PP
25.	Guoluo Tibetan Autonomous Prefecture Agriculture and Animal Husbandry Department	/IAR/	Inspection and Acceptance Report	Carbon sink afforestation Inspection and Acceptance Report of Completed Project issued by Guoluo Tibetan Autonomous Prefecture Agriculture and Animal Husbandry Department dated on 28-October-2018	PP
26.	IPCC	/IPCC/	IPCC	2006 IPCC Guidelines for National Greenhouse Gas Inventories	IPCC website
27.	International Union for Conservation of Nature	/IUCN/	International Union for Conservation of Nature	The IUCN Red List Categories and Criteria (version 3.1)	PP
28.	Project Owner	/LC/	Labor Contract	Labor Contract of project staffs and person who conducted grass seeding and rodent control and employed as guardians	PP
29.	National Basic	/LCD/	land cover data	Land cover data of Guoluo Tibetan Autonomous Prefecture	PP

	Geographic Information Center			in year 2010 release by National Basic Geographic Information Center	
30.	Shandong Huasheng Tiantong Standard Technical Service Co., Ltd.	/LTR/	Project records from Laboratory test	Project records from Laboratory test report issued by Shandong Huasheng Tiantong Standard Technical Service Co., Ltd. issued on 10-December-2020	PP
31.	PP	/LVSM/	Letter of verification site meeting	Letter issued by project owner to the local forest bureaus to arrange the auditor verification site meeting and invited local stakeholders representative	PP
32.	Qinghai Agriculture and Animal Husbandry Engineering Project Consulting Center and Climate Bridge (Shanghai) Ltd.	/MAP/	Map of project area	1. Map with land-use types and the boundaries of all the plots for identifying the project location and boundaries of the project 2. Separate KML file shows the correct project boundaries	PP
33.	National Ministry of Agriculture	/MDS/	NY/T 1121.6-2006	Method for Determination of Soil Organic Matter (NY/T 1121.6-2006)	Public Website
34.	National Ministry of Agriculture	/MDSBD/	NY/T 1121.4-2006	Method for determination of soil bulk density (NY/T 1121.4-2006)	Public Website
35.	VCS	/MEL/	VCS module	VCS module of Estimation of emissions from market leakage (VMD0033, version1.0)	VERRA website
36.	VCS	/MLG/	VCS module	VCS module of Leakage from displacement of grazing activities (VMD0040, version 1.0)	VERRA website
37.	Guoluo Tibetan Autonomous Prefecture Forestry and Grassland Bureau	/MM/	Monitoring Manual	Monitoring Manual created by Guoluo Tibetan Autonomous Prefecture Forestry and Grassland Bureau on 06-May-2020	PP
38.	County Forestry and Grassland Bureau	/MNFR/	Project records for mass and nitrogen content of fertilizer	Project records for mass and nitrogen content of fertilizer conducted by County Forestry and Grassland Bureau	PP
39.	Manufacturer of Diammonium	/MPL/	Manufacturer product label	Manufacturer product label for Diammonium phosphate and Urea	PP

	phosphate and Urea				
40.	Climate Bridge (Shanghai) Ltd.	/MR/	Monitoring report	Draft Monitoring report of "Guoluo Grassland Sustainable Management Project" (Version No. 01.1, dated 23-March-2021) Monitoring report of "Guoluo Grassland Sustainable Management Project" (Version No. 03, dated 15-June-2021) Monitoring report of "Guoluo Grassland Sustainable Management Project" (Version No. 04, dated 24-August-2021) after VERRA review I Final Monitoring report of "Guoluo Grassland Sustainable Management Project" (Version No. 05, dated 08-October-2021) after VERRA review II	Climate Bridge (Shanghai) Ltd.
41.	Climate Bridge (Shanghai) Ltd.	/MRS/	Monitoring report Summary in Chinese Version	Draft Project Description Summary in Chinese Version of "Guoluo Grassland Sustainable Management Project" (Version No. 01, dated 09-February-2021) Project Description Summary in Chinese Version of "Guoluo Grassland Sustainable Management Project" (Version No. 3, dated 11-June-2021) Final Project Description of "Guoluo Grassland Sustainable Management Project" (Version No. 04, dated 24-August-2021) after VERRA review	Climate Bridge (Shanghai) Ltd.
42.	Climate Bridge (Shanghai) Ltd.	/NPRR/	Non-permanence risk report	Non-permanence risk report, version 01.1, dated 11-June-2021	Climate Bridge (Shanghai) Ltd.
43.	VCSA	/NPRT/	AFOLU Non-Permanence Risk Tool, Version 4.0	https://verra.org/project/vcs-program/rules-and-requirements/	VCS website
44.	Qinghai Provincial Department of Agriculture and Animal Husbandry	/NSU/	National standards	The notice on standardizing and unifying the statistics of grassland carrying capacity data, which was issued by the Qinghai Provincial Department of Agriculture and Animal Husbandry	Public website
45.	Climate Bridge	/PD/	Project Description	Project Description of "Guoluo Grassland Sustainable Management Project" (Version	Climate Bridge

	(Shanghai) Ltd.			No. 05.1, dated 19-November-2021)	(Shanghai) Ltd.
46.	Qinghai Agriculture and Animal Husbandry Engineering Project Consulting Center	/PDR/	Project Design Report	Project Design Report for project issued by Qinghai Agriculture and Animal Husbandry Engineering Project Consulting Center in October 2015	PP
47.	VCSA&CCBA	/PDP/	Project Development Process	"VCS+CCB Project Development Process" (version 3.0)	VCS website
48.	TUV NORD	/PHT/	On-site photo taken by validation team	On-site photo taken by verification team including grasses, grasslands, project location, bulletin boards photo, etc.	TUV NORD
49.	Qinghai Agriculture and Animal Husbandry Engineering Project Consulting Center	/PL/	Project Lifetime evidence	Project Lifetime evidence issued by Qinghai Agriculture and Animal Husbandry Engineering Project Consulting Center	PP
50.	Guoluo Tibetan Autonomous Prefecture Forestry and Grassland Bureau	/POA/	Power of Attorney	Power of Attorney for Carbon Sink Project Development for this project issued by Guoluo Tibetan Autonomous Prefecture Forestry and Grassland Bureau date on 18-September-2020	PP
51.	Project Owner	/PP/	Periodical payroll	Periodical payroll to project staffs and person who planted trees and work as technicians	PP
52.	Grassland guardian and local forestry and grass bureau	/PR/	Patrol records	Patrol records of grassland guardian and local forestry and grass bureau	PP
53.	Guoluo Tibetan Autonomous Prefecture Forestry and Grassland Bureau	/PRA/	Participatory Rural Appraisal	Participatory Rural Appraisal (PRA) report of the project issued by Qinghai Agriculture and Animal Husbandry Engineering Project Consulting Center dated on 28-November-2015	PP
54.	Monitoring staff	/PRD/	Project records for monitoring depth	Project records for monitoring depth	PP
55.	County Forestry and Grassland Bureau	/PRF/	Project records for fuel consumption	Project records for fuel consumption conducted by County Forestry and Grassland Bureau	PP

56.	Project proponent and the County Forestry and Grassland Bureau	/PRG/	Project records for grazing	Project records for grazing conducted by project proponent and the County Forestry and Grassland Bureau every year during this monitoring period	PP
57.	County Forestry and Grassland Bureau	/PRM/	Project records for grassland management	Project records for grassland management conducted by County Forestry and Grassland Bureau	PP
58.	Journal	/PRS/	Peer-reviewed studies	“Yang Y, Wang J, Liu P, et al. Climatic Changes Dominant Interannual Trend in Net Primary Productivity of Alpine Vulnerable Ecosystems[J]. Journal of Resources and Ecology, 2019, 10(4):379-387”	Public website
59.	Haiyan Senyuan Forest and Grass Ecological Planting Co., Ltd. and local Forestry and Grass Bureau	/PSD/	Project Starting Date	Project Starting Date evidence Seeding Construction Contract issued by Haiyan Senyuan Forest and Grass Ecological Planting Co., Ltd. and local Forestry and Grass Bureau dated 20-June-2016 showed that the earliest project start date is 20-June-2016 based on the date when the seeding started	PP
60.	Villagers	/QUE/	Questionnaires	PRA and CCB questionnaires filled out by villagers	PP
61.	Climate Bridge (Shanghai) Ltd.	/RCS/	Risk Calculation Sheet	Risk Calculation Sheet version 02, dated 15-June-2021	Climate Bridge (Shanghai) Ltd.
62.	PP	/RGA/	Record of the grazing agents	Record of the grazing agents (eg, herder households) involved the project	PP
63.	PP	/RGL/	Record of the geographic location	Record of the geographic location of the project area for all areas of grassland	PP
64.	PP	/RGM/	Records of grassland management	Records of grassland management	PP
65.	[J]. Soils, 2012,44(1):17-22	/RPDMS/	Research progress	Research progress on determination methods of gravel content in soil	PP
66.	Local communities	/RVAR/	Routine villager assembly record	Routine villager assembly record about the project listing and VCS+CCB verification process	PP
67.	Project proponent and county forestry and	/SGD/	Survey	Grazing Displacement and Relocation Plan issued by Project proponent and county	PP

	grassland bureau			forestry and grassland bureau in June 2016	
68.	Google Earth	/SI/	Satellite images	Satellite images of project area in baseline before the project start date	PP
69.	PP	/SOC/	SOC table	SOC table which was summarized from the project records from laboratory test	PP
70.	Climate Bridge (Shanghai) Ltd.	/SPCS/	Sample plots calculation sheet	Sample plots calculation sheet	Climate Bridge (Shanghai) Ltd.
71.	China National Standardization Committee	/SQG/	Soil Quality Guidelines	Soil Quality Guidelines for Soil Sampling Techniques (GB/T 36197-2018)	PP
72.	Herders	/SRR/	Subsidies receiving receipts	Subsidies receiving receipts	PP
73.	UNFCCC	/TDAA/	Methodological tool	Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities, version 3.0	UNFCCC website
74.	UNFCCC	/TDDL/	Methodological tool	Tool for Identification of Degraded or Degrading Lands for Consideration in Implementing CDM AR Project Activities, version 1.0	UNFCCC website
75.	Qinghai Provincial Bureau of Quality and Technical Supervision	/TSBST/	(DB63/T603—2006)	Regional standard in Qinghai Province Technical specification for artificial vegetation establishment and utilization management of "black soil type" degraded grassland (DB63/T603—2006)	Public website
76.	National Ministry of Agriculture	/TSS/	HJ/T 166-2004	Technical Specification for Soil Environmental Monitoring (HJ/T 166-2004)	Public website
77.	Project Owner	/TTR/	Technical Training Record	1. New employee training records including labor Law and worker's right training. 2. Technical Training Record dated in 2016, 2017 and 2018 and 2019 3. Training records of special trainings for the project monitoring by explaining the monitoring plan and measurement method to grassland guardians	PP
78.	TUV NORD	/VAL/	Validation report	Validation report of "Guoluo Grassland Sustainable Management Project"	N/A

				Version No. 01, dated 07-June-2021	
79.	VCSA	/VCSPD/	VCS Program Definitions, Version 4.1	https://verra.org/project/vcs-program/rules-and-requirements/	VCS website
80.	VCSA	/VCSPG/	VCS Program Guide, Version 4.0	https://verra.org/project/vcs-program/rules-and-requirements/	VCS website
81.	VCSA	/VCSS/	VCS Standard, Version 4.1	https://verra.org/project/vcs-program/rules-and-requirements/	VCS website
82.	VCS	/VM/	Afforestation and reforestation Methodology	VM0026 “Sustainable Grassland Management”, version 1.0	VERRA website
83.	PP	/VSM/	Verification Site Meeting Records	Verification Site meeting/interview Records including interview minute and questionnaires filled by stakeholders	PP
84.	Grassland guardians	/WL/	Daily working log	Daily working log recorded by the grassland guardians which including the stakeholder consultation process and results, grasslands patrolling, risks observation, etc.	PP
85.	Climate Bridge (Shanghai) Ltd.	/XLS/	Net anthropogenic GHG removals by sinks calculation spreadsheets	ER Calculation spreadsheets of “Guoluo Grassland Sustainable Management Project” 1. Version No. 01, dated 23-March-2021) 2. Version No. 03, dated 15-June-2021)	Climate Bridge (Shanghai) Ltd.
86.	China Certified Emission Reduction Exchange Info-platform	/ccer/	China Certified Emission Reduction	http://cdm.ccchina.org.cn/ccer.aspx	Website
87.	Gold Standard Organization	/gs/	Gold Standard	http://www.goldstandard.org/	Website
88.	Ibat-alliance	/ibat/	Key Biodiversity Area (KBA) framework of vulnerability and irreplaceability	https://www.ibat-alliance.org/	Website
89.	IPCC	/ipcc/	IPCC publications	www.ipcc-nggip.iges.or.jp	Website
90.	PRC Government	/law/	Laws related to forestry	<Grassland Law>	Website
91.	Standing Committee of the National People's	/llc/	Labor Law	Labor Law of the People's Republic of China	National public website

	Congress of China				
92.	State market supervision and administration	/neci/	National Enterprise Credit Information Publicity System	http://www.gsxt.gov.cn/index.html	National public website
93.	Qinghai Government	/picp/	Public information	Public and accessible information for common practice http://lcj.qinghai.gov.cn/xwdt/snxw/content_838	Public website
94.	PRC Government	/regul/	Administrative regulations related to forestry	<Regulations on Grassland Management of Guoluo Tibetan Autonomous Prefecture>, <Regulations on the Protection of Wild Plants and Animals, the Regulation on Nature Reserve>, <Regulation on Grassland Fire Control>, and <Regulation on Forest Diseases and Pests Control>	National public website
95.	UNFCCC	/unfccc/	UNFCCC	http://cdm.unfccc.int	Website
96.	VCS	/vcs/	VCS	http://www.v-c-s.org/	Website
97.	Local government	/whr/	Local Weather	http://www.guoluo.gov.cn/	Website
98.	HCV Network	/hcv/	HCV Resource	https://hcvnetwork.org/how-it-works/	Website

APPENDIX 3: CLARIFICATION REQUESTS, CORRECTIVE ACTION REQUESTS AND FORWARD ACTION REQUESTS

Table 1. Remaining FAR from validation and/or previous verification

FAR ID	N/A	Section no.	-	Date :	-
Description of FAR					
Project participant response					Date :
Documentation provided by project participant					
☐	Changes in the MR	Section(s):		New version No.:	
☐	Changes in XLS	Worksheet(s):		New version No.:	
☐	Other:				
VVB assessment					Date:
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☐ The finding is closed			

Table 2. CL from this verification

CL ID	01	Section no.	1.1	Date :	16/04/2021
Description of CL					
1. Due to the project has applied Gold level EXCEPTIONAL BIODIVERSITY BENEFITS, related information of Unique Project Benefits is not clarified in section 1.1 for this gold level. 2. Section 1.1: Reference to "Mangrove" projects is not correct here.					
Project participant response					Date :
1. The unique gold level exceptional biodiversity benefits which is achieved by the project have been added in Section 1.1 of the updated MR. 2. It was a typo for "mangrove" which has been revised to "grassland" in Section 1.1 of the updated MR.					
Documentation provided by project participant					
☒	Changes in the MR	Section(s): 1.1		New version No.: 03	
☐	Changes in XLS	Worksheet(s):		New version No.:	
☐	Other:				
VVB assessment					Date:
1. The revised MR is checked, it is confirmed that the unique gold level exceptional biodiversity benefits which is achieved by the project have been added accordingly. 2. The revised MR is checked, it is confirmed that the typo mistake has been revised accordingly. Refer to section 4.6.13 and 4.6.14 of this report for detail assessment of the gold level exceptional biodiversity benefits.					
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CL ID	02	Section no.	2.1.1	Date :	16/04/2021
Description of CL					
1. Any information on events that may impact the GHG emission reductions or removals and monitoring is missing in section 2.1.1. 2. It is observed that the field monitoring activities for this monitoring period has been conducted in September and October of 2020, why this monitoring period ended on 15-June-2020 should be clarified.					
Project participant response					Date :
04/06/2021					

1. No events that may impact the GHG emission reductions or removals and monitoring occurred during this monitoring period which has been stated in section 2.1.1 of the update MR. 2. According to the methodology, the monitoring of SOC stock should be at the end of growing season in the year measured, therefore the field monitoring activities for this monitoring period has been conducted in September and October of 2020, due to the growing season in the year 2020 ended in October, then PP choose to update this monitoring period to 31-December-2020.			
Documentation provided by project participant			
☒	Changes in the MR	Section(s): 2.1.1	New version No.: 03
☐	Changes in XLS	Worksheet(s):	New version No.:
☒	Other:	/LTR/	
VVB assessment			Date: 07/06/2021
1. The revised MR is checked, it is confirmed that no events that may impact the GHG emission reductions or removals and monitoring occurred during this monitoring period. 2. The revised MR is checked, it is confirmed that ending date of this monitoring period has been changed to 31-December-2020. Via checking the applied methodology and SOC measuring results ^{/LTR/} , it is confirmed that the field monitoring activities for this monitoring period has been conducted in September and October of 2020 which in compliance with the request of monitoring of SOC stock should be at the end of growing season in the year in the applied methodology. So it is confirmed that the monitoring result in September and October of 2020 can represent the SOC stock in whole year 2020, thus this monitoring period ended on 31-December-2020 is reasonable.			
Conclusion Tick the appropriate checkbox		☐ Additional action should be taken (finding remains open) ☒ The finding is closed	

CL ID	03	Section no.	2.4.4	Date : 16/04/2021
Description of CL				
Section 2.4.4 does not clarify the financial health of organization who is running/operating the project.				
Project participant response				Date : 04/06/2021
The financial health of the Project Proponent who is running the project has been added in Section 2.4.4 of the update MR.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 2.4.4	New version No.: 03	
☐	Changes in XLS	Worksheet(s):	New version No.:	
☐	Other:			
VVB assessment				Date: 07/06/2021
The revised MR is checked, it is confirmed that the financial health of organization who is running/operating the project has been clarified further. Refer to section 4.3.10 of this report for detail assessment.				
Conclusion Tick the appropriate checkbox		☐ Additional action should be taken (finding remains open) ☒ The finding is closed		

CL ID	04	Section no.	2.5.3	Date : 16/04/2021
Description of CL				
PD has mentioned that "the land owners will be allocated with agreed restitution according to the agreement", however there is no any related information in MR. Clarification is requested.				
Project participant response				Date : 04/06/2021
Due to the prohibition of grazing, herders in the project area can receive corresponding subsidies, the subsidy vary from county to county, ranging from 4.1 RMB/mu to 10.4 RMB/mu. The detailed description has been added in Section 2.5.2 and 2.5.3 of the update MR.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 2.5.3	New version No.: 03	
☐	Changes in XLS	Worksheet(s):	New version No.:	
☐	Other:			
VVB assessment				Date: 07/06/2021

The revised MR is checked, it is confirmed that the related information is added into the MR.
Refer to section 4.3.12 of this report for detail assessment.

Conclusion

Tick the appropriate checkbox

- ☐ Additional action should be taken (finding remains open)
☒ The finding is closed

CL ID	05	Section no.	3.2.1	Date :	16/04/2021
Description of CL					
For the BE _b calculation, 1. The supporting evidence for calculation is BE _b is not clarified. 2. Why the actual value of BE _b for this MP is not same to the value in the PD is not clarified. 3. Some parameters used in the BE _b calculation is not listed in section 3.1.1 as ex ante parameters. 4. The applied unit to convert from t to kg is not correct.					
Project participant response					Date :
1. The supporting evidence for calculation is BE _b has been clarified. 2. The actual value of BE _b is calculated based on the annual value in PD and the actual length of this monitoring period, which has been clarified in the update MR. 3. All the parameters used in the BE _b calculation has been added in section 3.1.1 as ex ante parameters in the updated MR. 4. The unit description has been corrected in the updated MR.					
Documentation provided by project participant					
☒	Changes in the MR	Section(s):	3.2.1	New version No.:	03
☐	Changes in XLS	Worksheet(s):		New version No.:	
☐	Other:				
VVB assessment					Date:
1. The revised MR is checked, it is confirmed that the supporting evidence for calculation is BE _b is clarified. 2. The revised MR is checked, it is confirmed that the actual value of BE _b for this MP is not same to the value in the PD is clarified. The actual value of BE _b is calculated based on the annual value in PD and the actual length of this monitoring period is verified as correct. 3. The revised MR is checked, it is confirmed that the parameters used in the BE _b calculation are all listed in section 3.1.1 as ex ante parameters. 4. The revised MR is checked, it is confirmed that the unit is revised to be correct. Refer to section 4.4.1 of this report for detail assessment.					
Conclusion					
<i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CL ID	06	Section no.	3.2.2	Date :	16/04/2021
Description of CL					
For the PE _t calculation, 1. The description for determination of the calculation PE _t for this monitoring period is not clarified. 2. The final calculation formula of is PE _t not consistent with the previous steps, PE _{CH4,EF,t} and PE _{GHGMD,t} are missing in the formula, clarification is requested. 3. Some parameters used in the PE _t calculation is not listed in section 3.1.1 or 3.1.2 as ex ante or monitored parameters. 4. The applied unit to convert from t to kg is not correct.					
Project participant response					Date :
1. The description for determination of the calculation PE _t for this monitoring period has been clarified in Section 3.2.2 of the updated MR. 2. Since grazing is not allowed in the first five year of the project, the related project emission PE _{CH4,EF,t} and PE _{GHGMD,t} should be 0 during this monitoring period, the clarification has been added in Section 3.2.2 of the updated MR. 3. All the parameters used in the PE _t calculation has been added in Section 3.1.1 and 3.1.2 as ex ante or monitored parameters in the updated MR.					

4. The unit description has been corrected in the updated MR.			
Documentation provided by project participant			
☒	Changes in the MR	Section(s): 3.2.2	New version No.: 03
☐	Changes in XLS	Worksheet(s):	New version No.:
☐	Other:		
VVB assessment			Date: 07/06/2021
1. The revised MR is checked, it is confirmed that the description for determination of the calculation PE_t for this monitoring period is clarified. 2. The revised MR is checked, it is confirmed that the final calculation formula of PE_t is consistent with the previous steps, $PE_{CH4,EF,t}$ and $PE_{GHGMD,t}$ are added in the formula, clarification is provided. 3. The revised MR is checked, it is confirmed that the parameters used in the PE_t calculation are all listed in section 3.1.1 or 3.1.2 as ex ante or monitored parameters. 4. The revised MR is checked, it is confirmed that the unit is corrected. Refer to section 4.4.1 of this report for detail assessment.			
Conclusion Tick the appropriate checkbox		☐ Additional action should be taken (finding remains open) ☒ The finding is closed	

CL ID	07	Section no.	3.2.3	Date : 16/04/2021
Description of CL				
For the LE determination, 1. It stated in both PD and MR that the grazing was strictly forbidden in the first five years after seeding, and then controlled grazing will be allowed depending on the growth situation of the forage, so why the leakage has been generated in this first monitoring period (within five years after seeding) is not clarified. 2. Market leakage is missing. 3. Some parameters used in the Leakage calculation is not listed in section 3.1.1 or 3.1.2 as ex ante or monitored parameters.				
Project participant response				Date : 04/06/2021
1. According to PD, although the project area was black soil bleach prior to the project, there may be some grazing activities casually occurred under baseline scenario, and the related baseline emission has also been taken into account. After the implementation of the project, the grazing was strictly forbidden in the first five years after seeding, and then controlled grazing will be allowed depending on the growth situation of the forage, therefore the leakage from displacement of grazing activities should be calculated during this monitoring period. The relevant description has been added in Section 3.2.3 of the update MR. 2. Assessment of the Market leakage has been added in the update MR. 3. All the parameters used in the Leakage calculation have been added in Section 3.1.1 and 3.1.2 as ex ante or monitored parameters in the updated MR.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 3.2.3	New version No.: 03	
☐	Changes in XLS	Worksheet(s):	New version No.:	
☐	Other:			
VVB assessment				Date: 07/06/2021
1. The revised MR is checked, it is confirmed that the reason of why the leakage has been generated in this first monitoring period (within five years after seeding) has been provided. 2. The revised MR is checked, it is confirmed that the Market leakage is added which is same to the PD. 3. The revised MR is checked, it is confirmed that the parameters used in the Leakage calculation are all listed in section 3.1.1 or 3.1.2 as ex ante or monitored parameters. Refer to section 4.4.1 of this report for detail assessment.				
Conclusion Tick the appropriate checkbox		☐ Additional action should be taken (finding remains open) ☒ The finding is closed		

CL ID	08	Section no.	3.2.3	Date : 16/04/2021
Description of CL				
For the LE determination, the 5 steps listed in the methodology and PD used for Assessment of Grazing Displacement are not clarified for this monitoring period.				
Project participant response				Date : 04/06/2021
The 5 steps listed in the methodology and PD used for Assessment of Grazing Displacement have been added in the update MR.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 3.2.3	New version No.: 03	
☐	Changes in XLS	Worksheet(s):	New version No.:	
☐	Other:			
VVB assessment				Date: 07/06/2021
The revised MR is checked, it is confirmed that 5 steps have been listed as per the PD. Refer to section 4.4.1 of this report for detail assessment.				
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed		

CL ID	09	Section no.	3.2.3	Date : 16/04/2021
Description of CL				
For the LE calculation, the actual result for this monitoring period is not clarified.				
Project participant response				Date : 04/06/2021
The actual results of LE for this monitoring period has been added in the update MR.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 3.2.3	New version No.: 03	
☐	Changes in XLS	Worksheet(s):	New version No.:	
☐	Other:			
VVB assessment				Date: 07/06/2021
The revised MR is checked, it is confirmed that the actual result of leakage for this monitoring period is provided. Refer to section 4.4.1 of this report for detail assessment.				
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed		

CL ID	10	Section no.	5.1.8	Date : 16/04/2021
Description of CL				
If any Biological control agents have been applied is not clarified.				
Project participant response				Date : 04/06/2021
During this monitoring period, eagle's nests were built in the project area for rodent control, the relevant description has been added in Section 5.1.8 of the updated MR.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 3.2.3	New version No.: 03	
☐	Changes in XLS	Worksheet(s):	New version No.:	
☐	Other:			
VVB assessment				Date: 07/06/2021
The revised MR is checked, it is confirmed that Biological control method has been specified and confirmed as actual and reasonable.				
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed		

Table 2. CAR from this verification

CAR ID	01	Section no.	Cover page	Date : 16/04/2021
Description of CAR				
1. The description of project location is not in line with the MR template request in the cover page. 2. Information of VVB is missing. 3. History of CCB status is not provided.				
Project participant response				Date : 04/06/2021
1. The description of project location has been revised in the cover page. 2. Information of VVB has been added. 3. History of CCB status has been provided.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s):	Cover page	New version No.: 03
☐	Changes in XLS	Worksheet(s):		New version No.:
☐	Other:			
VVB assessment				Date: 07/06/2021
1. The revised MR is checked, it is confirmed that the project location is complete. 2. The revised MR is checked, it is confirmed that the information of VVB is provided and correct. 3. The revised MR is checked, it is confirmed that History of CCB status is provided which is applicable to the project by considering the validation was developed together with verification.				
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed		

CAR ID	02	Section no.	2.1.2	Date : 16/04/2021
Description of CAR				
The definition of Project Category and Activity Type is not in line with the VCS standard version 4.1.				
Project participant response				Date : 04/06/2021
The definition of Project Category and Activity Type has been revised in Section 2.1.2 of the update MR.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s):	2.1.2	New version No.: 03
☐	Changes in XLS	Worksheet(s):		New version No.:
☐	Other:			
VVB assessment				Date: 07/06/2021
The revised MR is checked, it is confirmed that the definition of Project Category and Activity Type is in line with the VCS standard version 4.1.				
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed		

CAR ID	03	Section no.	2.1.5&2.1.6	Date : 16/04/2021
Description of CAR				
1. The project start date is not in line with PD in section 2.1.5. 2. The project crediting period is not in line with PD in section 2.1.6.				
Project participant response				Date : 04/06/2021
1. Typo, the project start date has been revised in Section 2.1.5 which is in line with PD. 2. Typo, the project crediting period has been revised in Section 2.1.6 which is in line with PD.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s):	2.1.5&2.1.6	New version No.: 03
☐	Changes in XLS	Worksheet(s):		New version No.:
☐	Other:			
VVB assessment				Date: 07/06/2021
1. The revised MR is checked, it is confirmed that the project start date is in line with PD in section 2.1.5. 2. The revised MR is checked, it is confirmed that the project crediting period is in line with PD in section 2.1.6.				

Conclusion Tick the appropriate checkbox	☐ Additional action should be taken (finding remains open)
	☒ The finding is closed

CAR ID	04	Section no.	2.1.9	Date :	16/04/2021
Description of CAR					
In section 2.1.9, it stated that the project is the first mangrove project applying for VCS program in China which has not been registered which is not actual to this case.					
Project participant response					Date :
Typo, the description has been revised to "the first sustainable grassland management project applying for VCS program in China" in Section 2.1.9 of the update MR.					
Documentation provided by project participant					
☒	Changes in the MR	Section(s):	2.1.9	New version No.:	03
☐	Changes in XLS	Worksheet(s):		New version No.:	
☐	Other:				
VVB assessment					Date:
The revised MR is checked, it is confirmed that the typo has been revised accordingly.					
Conclusion Tick the appropriate checkbox	☐ Additional action should be taken (finding remains open)				
	☒ The finding is closed				

CAR ID	05	Section no.	2.1.10	Date :	16/04/2021
Description of CAR					
In section 2.1.10, the corresponding section in the MR related to each achieved sustainable development is not provided.					
Project participant response					Date :
The description of Section 2.1.10 has been revised by providing each achieved sustainable development benefits of the project.					
Documentation provided by project participant					
☒	Changes in the MR	Section(s):	2.1.10	New version No.:	03
☐	Changes in XLS	Worksheet(s):		New version No.:	
☐	Other:				
VVB assessment					Date:
The revised MR is checked, it is confirmed that the corresponding section in the MR related to each achieved sustainable development is provided.					
Conclusion Tick the appropriate checkbox	☐ Additional action should be taken (finding remains open)				
	☒ The finding is closed				

CAR ID	06	Section no.	2.2.1	Date :	16/04/2021
Description of CAR					
1. The key dates and milestones after the draft MR finished are not listed in the schedule table. 2. No information on any community or biodiversity activities that took place during the monitoring period, clarification is requested.					
Project participant response					Date :
1. The dates of draft MR finished, MR GSC and on site visit have been added to update PD. 2. The date of climate, community and biodiversity impact monitoring have been added to update PD.					
Documentation provided by project participant					
☒	Changes in the MR	Section(s):	2.2.1	New version No.:	03
☐	Changes in XLS	Worksheet(s):		New version No.:	
☐	Other:				
VVB assessment					Date:

1. The revised MR is checked, it is confirmed that key dates and milestones after the registration, like, monitoring survey, MR GSC, site verification, etc. have all been listed and the dates are confirmed as correct. 2. The revised MR is checked, it is confirmed that key dates and milestones of community meetings, survey implementation, and biodiversity monitoring have all been listed and the dates are confirmed as correct.	
Conclusion Tick the appropriate checkbox	☐ Additional action should be taken (finding remains open) ☒ The finding is closed

CAR ID	07	Section no.	2.2.6	Date :	16/04/2021
Description of CAR					
It is observed that actual risk happened during this MP is not specified in section 2.2.6.					
Project participant response					Date :
					04/06/2021
The actual risk happened during this MP has been specified in update MR.					
Documentation provided by project participant					
☒	Changes in the MR	Section(s):	2.2.6	New version No.:	03
☐	Changes in XLS	Worksheet(s):		New version No.:	
☐	Other:				
VVB assessment					Date:
					07/06/2021
The revised MR is checked, it is confirmed that the description of actual risk happened during this monitoring period is added. Refer to section 4.3.2 of this report for detail assessment.					
Conclusion Tick the appropriate checkbox		☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	08	Section no.	2.2.7	Date :	16/04/2021
Description of CAR					
The description of Benefit Performance is not in line with the requirement of the MR template.					
Project participant response					Date :
					04/06/2021
The description of Benefit Performance has been revised according to the requirement of the MR template					
Documentation provided by project participant					
☒	Changes in the MR	Section(s):	2.2.7	New version No.:	03
☐	Changes in XLS	Worksheet(s):		New version No.:	
☒	Other:				
VVB assessment					Date:
					07/06/2021
The revised MR is checked, it is confirmed that the description is revised to the in line with the requirement. Refer to section 4.3.3 of this report for detail assessment.					
Conclusion Tick the appropriate checkbox		☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	09	Section no.	2.3.1	Date :	16/04/2021
Description of CAR					
1. The actual information of full project documentation has been published on VCS and CCB website is missing. 2. The access to monitoring results is missing.					
Project participant response					Date :
					04/06/2021
1. The actual information of full project documentation has been published on VCS and CCB website has been added in Section 2.3.1 of the update MR. 2. The access to monitoring results has been added in Section 2.3.1 of the updated MR.					
Documentation provided by project participant					
☒	Changes in the MR	Section(s):	2.3.1	New version No.:	03

☐	Changes in XLS	Worksheet(s):	New version No.:
☐	Other:		
VVB assessment			Date: 07/06/2021
1. The revised MR is checked, it is confirmed that the actual information of full project documentation has been published on VCS and CCB website is added. 2. The revised MR is checked, it is confirmed that the access to monitoring results is added. Refer to section 4.3.4 of this report for details assessment.			
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed	

CAR ID	07	Section no.	2.3.2	Date : 16/04/2021
Description of CAR				
1. Actual information of dissemination of MR and MR Summary is not provided in 2.3.2. 2. The time for summary of monitoring results disseminated is not provided in 2.3.2.				
Project participant response				Date : 04/06/2021
1. Actual information of dissemination of MR and MR Summary have been added in Section 2.3.2 of the update MR. 2. The time for summary of monitoring results disseminated have been added in Section 2.3.2 of the updated MR.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 2.3.2	New version No.: 03	
☐	Changes in XLS	Worksheet(s):	New version No.:	
☐	Other:			
VVB assessment				Date: 07/06/2021
1. The revised MR is checked, it is confirmed that the actual information of dissemination of MR and MR Summary is provided. 2. The revised MR is checked, it is confirmed that the time for summary of monitoring results disseminated is provided in 2.3.2. Refer to section 4.3.4 of this report for details assessment.				
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed		

CAR ID	11	Section no.	2.3.3	Date : 16/04/2021
Description of CAR				
1. Actual situation of Participatory Rural Appraisal (PRA) is not provided in 2.3.3. 2. The stakeholders' meeting date in 2.3.3 is not provided. 3. Actual meeting with VVB also need to be specified as an Informational Meetings with Stakeholders.				
Project participant response				Date : 04/06/2021
1. Actual situation of Participatory Rural Appraisal (PRA) has been added in Section 2.3.3 of the updated MR. 2. The stakeholders' meeting date been added in Section 2.3.3 of the updated MR. 3. information of actual meeting with VVB has been added in Section 2.3.3 of the updated MR.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 2.3.3	New version No.: 03	
☐	Changes in XLS	Worksheet(s):	New version No.:	
☐	Other:			
VVB assessment				Date: 07/06/2021
1. The revised MR is checked, it is confirmed that the actual situation of Participatory Rural Appraisal (PRA) added into the section 2.3.3. 2. The revised MR is checked, it is confirmed that the date is provided, confirmed as correct and actual. 3. The revised MR is checked, it is confirmed that the actual meeting with VVB has been specified as an Informational Meetings with Stakeholders. Refer to section 4.3.4 of this report for details assessment.				
Conclusion		☐ Additional action should be taken (finding remains open)		

Tick the appropriate checkbox	☒ The finding is closed
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CAR ID	12	Section no.	2.3.4	Date :	16/04/2021
Description of CAR					
Actual information of how the PP explained Community Costs, Risks, and Benefits during this monitoring period is not specified in 2.3.4.					
Project participant response					Date :
The information of how the PP explained Community Costs, Risks, and Benefits during this monitoring period has been specified in 2.3.4.					04/06/2021
Documentation provided by project participant					
☒	Changes in the MR	Section(s):	2.3.4	New version No.:	03
☐	Changes in XLS	Worksheet(s):		New version No.:	
☐	Other:				
VVB assessment					Date:
The revised MR is checked, it is confirmed that the actual information of how the PP explained Community Costs, Risks, and Benefits during this monitoring period. By on-site checking interview with the local stakeholders ^{12,13/} , it is verified that they understand the explanation of the Costs, Risks, and Benefits.					07/06/2021
Refer to section 4.3.4 of this report for details assessment.					
Conclusion		☐ Additional action should be taken (finding remains open)			
Tick the appropriate checkbox		☒ The finding is closed			

CL ID	13	Section no.	2.3.6	Date :	16/04/2021
Description of CAR					
The information of Site Visit and Opportunities to Communicate with Auditor is not specified.					
Project participant response					Date :
The information of Site Visit and Opportunities to Communicate with Auditor has been specified in Section 2.3.6 of the updated MR.					04/06/2021
Documentation provided by project participant					
☒	Changes in the MR	Section(s):	2.3.6	New version No.:	03
☐	Changes in XLS	Worksheet(s):		New version No.:	
☐	Other:				
VVB assessment					Date:
The revised MR is checked, it is confirmed that the actual information to stakeholder on verification process is specified. during the on-site verification, stakeholder meetings with the villagers, local officers, grassland guardians and stakeholders have been carried out on 29-March-2021. During the meeting, project developer introduced the monitoring results during this monitoring period and the comments from all the stakeholders have been documented as meeting minute. Via checking all the documents, it is verified that there is no grievances and negative comments received during this monitoring period, which has been also confirmed during the stakeholder meetings in verification process.					07/06/2021
Conclusion		☐ Additional action should be taken (finding remains open)			
Tick the appropriate checkbox		☒ The finding is closed			

CAR ID	14	Section no.	2.3.7	Date :	16/04/2021
Description of CAR					
1. Time period for questionnaire survey is not consistent. 2. Some questions have been listed in section 2.3.3 however not clarified in this section. 3. Detail information of second round stakeholder meeting is not provided. 4. Indication of if and how project design has been affected by stakeholder input is missing.					
Project participant response					Date :
1. Time period for questionnaire survey has been revised. 2. The questions listed in section 2.3.3 and the relevant responses have been clarified in this section. 3. Detail information of second round stakeholder meeting has been added in the updated MR. 4. Indication of if and how project design has been affected by stakeholder input is missing.					04/06/2021

Documentation provided by project participant			
☒	Changes in the MR	Section(s): 2.3.7	New version No.: 03
☐	Changes in XLS	Worksheet(s):	New version No.:
☐	Other:	/CMQ/	
VVB assessment			Date: 07/06/2021
- The revised MR is checked, it is confirmed that the time period is revised to be consistent in the whole MR. - The revised MR is checked, it is confirmed that the questions have been listed in section 2.3.3 has been clarified in section 2.3.7. - The revised MR is checked, it is confirmed that detail information of second round stakeholder meeting is added which is verified as actual and correct. - The revised MR is checked, it is confirmed that the description of If and how project design has been affected by stakeholder input has been clarified in the updated MR. By checking the filled questionnaires^{CMQ/} and collected information during verification site meeting, it is verified that all of the representatives were satisfied with the implementation of the project and wished to speed up the following verification and issuance process.			
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed	

CAR ID	15	Section no.	2.3.9	Date :	16/04/2021
Description of CAR					
- The description of second round stakeholder meeting is not provided. - The justification that adequate levels of information sharing have occurred is not provided.					
Project participant response					Date : 04/06/2021
- The description of second round stakeholder meeting has been provided. - The justification that adequate levels of information sharing have occurred has been provided.					
Documentation provided by project participant					
☒	Changes in the MR	Section(s): 2.3.9	New version No.: 03		
☐	Changes in XLS	Worksheet(s):	New version No.:		
☐	Other:				
VVB assessment					Date: 07/06/2021
- The revised description in section 2.3.9 is checked, it is confirmed that the description of second round stakeholder meeting is provided. - The revised description in section 2.3.9 is checked, it is confirmed that the justification that adequate levels of information sharing have occurred has been provided.					
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	16	Section no.	2.3.13	Date :	16/04/2021
Description of CAR					
The detail information of the special training is not provided in section 2.3.13.					
Project participant response					Date : 04/06/2021
The detail information of the special training has been added in Section 2.3.13 of the updated MR.					
Documentation provided by project participant					
☒	Changes in the MR	Section(s): 2.3.13	New version No.: 03		
☐	Changes in XLS	Worksheet(s):	New version No.:		
☒	Other:	/TTR/			
VVB assessment					Date: 07/06/2021
The revised description in section 2.3.13 is checked, it is confirmed that the detail information of the special training is provided. Via checking the training record ^{TTR/} , it is verified that the continuous training is confirmed as provided.					
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	17	Section no.	2.3.16	Date	16/04/2021
Description of CAR					
Description of activities and/or processes implemented to inform workers of risks and how to minimize such risks for this monitoring period is not provided in 2.3.16.					
Project participant response					Date
Description of activities and/or processes implemented to inform workers of risks and how to minimize such risks for this monitoring period has been added in 2.3.16 of the updated MR.					04/06/2021
Documentation provided by project participant					
☒	Changes in the MR	Section(s): 2.3.16		New version No.: 03	
☐	Changes in XLS	Worksheet(s):		New version No.:	
☒	Other:	/TTR/			
VVB assessment					Date:
The revised description in section 2.3.16 is checked, it is confirmed that the description of activities and/or processes implemented to inform workers of risks and how to minimize such risks for this monitoring period is provided.					07/06/2021
The activities that endanger workers are those related to workplace accidents due to the use of dangerous machinery that requires qualified personnel and basic supplies and uniform to prevent accidents and the workers are also trained providing information and practical exercises to prevent any risk which has been verified by checking the training records ^{TTR/} . During the monitoring period, due to the fire risk, basic supplies and uniform for evacuation plan is available to the grassland guardians which has been confirmed during site observation and interview with the grassland guardians ^{I3/} .					
Based on above step-wise assessment, it is concluded that the relationship between workers and the project upholds the intent and design presented in the validated project description.					
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	18	Section no.	2.4.2	Date	16/04/2021
Description of CAR					
The composition of management team is missing.					
Project participant response					Date
The composition of management team has been added in Section 2.4.2 of the updated MR.					04/06/2021
Documentation provided by project participant					
☒	Changes in the MR	Section(s): 2.4.2		New version No.: 03	
☐	Changes in XLS	Worksheet(s):		New version No.:	
☐	Other:				
VVB assessment					Date:
The revised MR is checked, it is confirmed that the composition of management team is added which is verified as consistent with PD.					07/06/2021
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	19	Section no.	2.4.5	Date	16/04/2021
Description of CAR					
The description in section 2.4.5 is not in line with the request of the MR template.					
Project participant response					Date
The description in Section 2.4.5 has been revised in the updated MR.					04/06/2021
Documentation provided by project participant					
☒	Changes in the MR	Section(s): 2.4.5		New version No.: 03	
☐	Changes in XLS	Worksheet(s):		New version No.:	
☒	Other:	/BL/			
VVB assessment					Date:
The revised description in section 2.4.5 is checked, it is confirmed that the description in section 2.4.5 is in line with the request of the MR template.					07/06/2021
As legally registered companies according to above assessment, the project proponent and other					

involved entity in project implementation have the obligation to comply with relevant regulations, including anti-corruption law. This is verified by checking the company information in National Enterprise Credit Information Publicity System^{/neci/} and on-site observation with company business license^{/BL/}. Thus it is concluded that the project is not involved or complicit in any form of corruption during this monitoring period.

Therefore, it is verified that the project has the capacity to implement the project in accordance with the validated project description^{/PD/}.

Conclusion

Tick the appropriate checkbox

- ☐ Additional action should be taken (finding remains open)
☒ The finding is closed

CAR ID	20	Section no.	3.1.1	Date :	16/04/2021
Description of CAR					
The data and parameters available at validation is not in line with the validated PD. Revision to some related parameters is requested.					
Project participant response					Date :
The data and parameters available at validation have been revised in Section 3.1.1 of the updated MR which is in line with the PD.					04/06/2021
Documentation provided by project participant					
☒	Changes in the MR	Section(s):	3.1.1	New version No.:	03
☐	Changes in XLS	Worksheet(s):		New version No.:	
☐	Other:				
VVB assessment					Date:
The revised MR is checked, it is confirmed that the data and parameters available at validation is in line with the validated PD. Refer to section 4.4.1 of this report for detailed assessment.					07/06/2021
Conclusion					
Tick the appropriate checkbox		☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	21	Section no.	3.1.2	Date :	16/04/2021
Description of CAR					
For parameter $M_{SNi,t}$					
- Who did the project records need to be specified. - The actual QA/QC procedure is not provided, only list the IPCC is not accurate and understandable. - Calculation method is missing for the value of this monitoring period.					
Project participant response					Date :
- Who did the project records has been specified in Section 3.1.2 of the updated MR. - The detailed actual QA/QC procedure has been provided Section 3.1.2 of the updated MR. - Calculation method has been added in Section 3.1.2 of the updated MR.					04/06/2021
Documentation provided by project participant					
☒	Changes in the MR	Section(s):	3.1.2	New version No.:	03
☐	Changes in XLS	Worksheet(s):		New version No.:	
☐	Other:				
VVB assessment					Date:
- The revised MR is checked, it is confirmed that who did the project records have been specified. - The revised MR is checked, it is confirmed that the actual QA/QC procedure is provided accurately. - The revised MR is checked, it is confirmed that the calculation method is added for the value of this monitoring period.					07/06/2021
Refer to section 4.4.1 of this report for detailed assessment.					
Conclusion					
Tick the appropriate checkbox		☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	22	Section no.	3.1.2	Date :	16/04/2021
Description of CAR					

For parameter $NC_{SNI,p}$			
- Measurement methods and procedures applied is not provided. - How the applied values are derived from the source of Manufacturer product label is not specified. - The actual QA/QC procedure is not provided, only list the IPCC is not accurate and understandable. - Calculation method is missing for the value of this monitoring period.			
Project participant response			Date : 04/06/2021
- Measurement methods and procedures applied have been provided in Section 3.1.2 of the updated MR. - How the applied values are derived from the source of Manufacturer product label has been specified in Section 3.1.2 of the updated MR. - The actual QA/QC procedure has been provided in Section 3.1.2 of the updated MR. - Calculation method has been provided in Section 3.1.2 of the updated MR.			
Documentation provided by project participant			
☒	Changes in the MR	Section(s): 3.1.2	New version No.: 03
☐	Changes in XLS	Worksheet(s):	New version No.:
☐	Other:		
VVB assessment			Date: 07/06/2021
- The revised MR is checked, it is confirmed that the measurement methods and procedures applied have been specified. - The revised MR is checked, it is confirmed that how the applied values are derived from the source of Manufacturer product label is provided. - The revised MR is checked, it is confirmed that the actual QA/QC procedure is provided accurately. - The revised MR is checked, it is confirmed that the calculation method has been provided in Section 3.1.2.			
Refer to section 4.4.1 of this report for detailed assessment.			
Conclusion Tick the appropriate checkbox		☐ Additional action should be taken (finding remains open) ☒ The finding is closed	

CAR ID	23	Section no.	3.1.2	Date : 16/04/2021
Description of CAR				
For parameter $FC_{p,j,k,t}$				
- How many fuels applied during this monitoring period is not clarified. - The actual QA/QC procedure is not provided, only list the IPCC is not accurate and understandable. - Calculation method is missing for the value of this monitoring period.				
Project participant response				Date : 04/06/2021
- How many fuels applied during this monitoring period has been clarified in Section 3.1.2 of the updated MR. - The actual QA/QC procedure has been provided in Section 3.1.2 of the updated MR. - Calculation method has been provided in Section 3.1.2 of the updated MR.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 3.1.2	New version No.: 03	
☐	Changes in XLS	Worksheet(s):	New version No.:	
☐	Other:			
VVB assessment				Date: 07/06/2021
- The revised MR is checked, it is confirmed that the quantities of fuels applied during this monitoring period are provided. - The revised MR is checked, it is confirmed that the actual QA/QC procedure is provided. - The revised MR is checked, it is confirmed that the calculation method is added for the value of this monitoring period.				
Refer to section 4.4.1 of this report for detailed assessment.				
Conclusion Tick the appropriate checkbox		☐ Additional action should be taken (finding remains open) ☒ The finding is closed		

CAR ID	24	Section no.	3.1.2	Date	16/04/2021	
Description of CAR						
For parameter $SOC_{mG,s,i,t}$ - Measurement methods and procedures applied by PP is not in line with the request of applied methodology. - How the monitoring practice for this monitoring period is in line with the frequency request in methodology is not specified. - For the monitoring equipment, related calibration information is missing. - How the monitoring equipment used for measure or monitor the value is not specified. - How to do the field samples taken is not specified. - How to transport the samples from field to laboratory is not specified. - The detail information of laboratory is not specified and the evidence of it adherence to the principles of good laboratory practices, outlined in OECD (1998) is missing.						
Project participant response					Date	04/06/2021
- Measurement methods and procedures applied by PP has been revised which is in line with the request of applied methodology. - How the monitoring practice for this monitoring period has been revised in Section 3.1.2 of the updated MR. - For the monitoring equipment, related calibration information has been added in Section 3.1.2 of the updated MR. - How the monitoring equipment used for measure or monitor the value has been specified in Section 3.1.2 of the updated MR. - How to do the field samples taken has been specified in Section 3.1.2 of the updated MR. - How to transport the samples from field to laboratory has been specified in Section 3.1.2 of the updated MR. - The detail information of laboratory has been specified in Section 3.1.2 of the updated MR and the evidence has been provided.						
Documentation provided by project participant						
☒	Changes in the MR	Section(s):	3.1.2	New version No.:	03	
☐	Changes in XLS	Worksheet(s):		New version No.:		
☒	Other:	/COL/				
VVB assessment					Date:	07/06/2021
- The revised MR is checked, it is confirmed that the measurement methods and procedures applied by PP is provided in line with the request of applied methodology. - The revised MR is checked, it is confirmed that how the monitoring practice for this monitoring period in line with the frequency request of methodology is specified. - The revised MR is checked, it is confirmed that for the monitoring equipment, there is no calibration request which is confirmed as correct and reasonable. - The revised MR is checked, it is confirmed that how the monitoring equipment used for measure or monitor the value is specified. - The revised MR is checked, it is confirmed that how to do the field samples taken is specified. - The revised MR is checked, it is confirmed that how to transport the samples from field to laboratory is specified. - The revised MR is checked, it is confirmed that the detail information of laboratory is specified and the evidence of it adherence to the principles of good laboratory practices, outlined in OECD (1998) is added and provided by PP/COL. Refer to section 4.4.1 of this report for detailed assessment.						
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed				

CAR ID	25	Section no.	3.1.2	Date	16/04/2021
Description of CAR					

For parameter $BD_{mG,s,i,t}$			
1. Measurement methods and procedures applied by PP is not in line with the request of applied methodology. 2. How the monitoring practice for this monitoring period is in line with the frequency request in methodology is not specified. 3. For the monitoring equipment, related calibration information is missing. 4. How the monitoring equipment used for measure or monitor the value is not specified. 5. How to do the field samples taken is not specified. 6. How to transport the samples from field to laboratory is not specified. 7. The detail information of laboratory is not specified and the evidence of it adherence to the principles of good laboratory practices, outlined in OECD (1998) is missing.			
Project participant response			Date : 04/06/2021
1. Measurement methods and procedures applied by PP has been revised which is in line with the request of applied methodology. 2. How the monitoring practice for this monitoring period has been specified in Section 3.1.2 of the updated MR. 3. For the monitoring equipment, related calibration information has been added in Section 3.1.2 of the updated MR. 4. How the monitoring equipment used for measure or monitor the value has been specified in Section 3.1.2 of the updated MR. 5. How to do the field samples taken has been specified in Section 3.1.2 of the updated MR. 6. How to transport the samples from field to laboratory has been specified in Section 3.1.2 of the updated MR. 7. The detail information of laboratory has been specified in Section 3.1.2 of the updated MR and the evidence of it adherence to the principles of good laboratory practices has been provided.			
Documentation provided by project participant			
☒	Changes in the MR	Section(s): 3.1.2	New version No.: 03
☐	Changes in XLS	Worksheet(s):	New version No.:
☒	Other:	/COL/	
VVB assessment			Date: 07/06/2021
1. The revised MR is checked, it is confirmed that the measurement methods and procedures applied by PP is provided in line with the request of applied methodology. 2. The revised MR is checked, it is confirmed that how the monitoring practice for this monitoring period in line with the frequency request of methodology is specified. 3. The revised MR is checked, it is confirmed that for the monitoring equipment, there is no calibration request which is confirmed as correct and reasonable. 4. The revised MR is checked, it is confirmed that how the monitoring equipment used for measure or monitor the value is specified. 5. The revised MR is checked, it is confirmed that how to do the field samples taken is specified. 6. The revised MR is checked, it is confirmed that how to transport the samples from field to laboratory is specified. 7. The revised MR is checked, it is confirmed that the detail information of laboratory is specified and the evidence of it adherence to the principles of good laboratory practices, outlined in OECD (1998) is added and provided by PP/COL/.			
Refer to section 4.4.1 of this report for detailed assessment.			
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed	

CAR ID	26	Section no.	3.1.2	Date : 16/04/2021
Description of CAR				

For parameter $FC_{mG,S,i,t}$			
1. Measurement methods and procedures applied by PP is not in line with the request of applied methodology. 2. How the monitoring practice for this monitoring period is in line with the frequency request in methodology is not specified. 3. For the monitoring equipment, related calibration information is missing. 4. How the monitoring equipment used for measure or monitor the value is not specified. 5. How to do the field samples taken is not specified. 6. How to transport the samples from field to laboratory is not specified. 7. The detail information of laboratory is not specified and the evidence of it adherence to the principles of good laboratory practices, outlined in OECD (1998) is missing.			
Project participant response			Date : 04/06/2021
1. Measurement methods and procedures applied by PP has been revised which is in line with the request of applied methodology. 2. How the monitoring practice for this monitoring period has been specified in Section 3.1.2 of the updated MR. 3. For the monitoring equipment, related calibration information has been added in Section 3.1.2 of the updated MR. 4. How the monitoring equipment used for measure or monitor the value has been specified in Section 3.1.2 of the updated MR. 5. How to do the field samples taken has been specified in Section 3.1.2 of the updated MR. 6. How to transport the samples from field to laboratory has been specified in Section 3.1.2 of the updated MR. 7. The detail information of laboratory has been specified in Section 3.1.2 of the updated MR and the evidence of it adherence to the principles of good laboratory practices has been provided.			
Documentation provided by project participant			
☒	Changes in the MR	Section(s): 3.1.2	New version No.: 03
☐	Changes in XLS	Worksheet(s):	New version No.:
☒	Other:	/COL/	
VVB assessment			Date: 07/06/2021
1. The revised MR is checked, it is confirmed that the measurement methods and procedures applied by PP is provided in line with the request of applied methodology. 2. The revised MR is checked, it is confirmed that how the monitoring practice for this monitoring period in line with the frequency request of methodology is specified. 3. The revised MR is checked, it is confirmed that for the monitoring equipment, there is no calibration request which is confirmed as correct and reasonable. 4. The revised MR is checked, it is confirmed that how the monitoring equipment used for measure or monitor the value is specified. 5. The revised MR is checked, it is confirmed that how to do the field samples taken is specified. 6. The revised MR is checked, it is confirmed that how to transport the samples from field to laboratory is specified. 7. The revised MR is checked, it is confirmed that the detail information of laboratory is specified and the evidence of it adherence to the principles of good laboratory practices, outlined in OECD (1998) is added and provided by PP/COL/.			
Refer to section 4.4.1 of this report for detailed assessment.			
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed	

CAR ID	27	Section no.	3.1.2	Date : 16/04/2021
Description of CAR				

For parameter <i>Depth</i> ,			
- Source of data is not in line with the request of applied methodology. - Description of measurement methods and procedures to be applied is not in line with the request of applied methodology. - Value applied of 30 is not clarified. - How the monitoring equipment used for measure or monitor the value is not specified. - How to do the field samples taken is not specified.			
Project participant response			Date : 04/06/2021
- Source of data has been revised which is in line with the request of applied methodology. - Description of measurement methods and procedures to be applied has been revised in Section 3.1.2 of the updated MR. - Value applied of 30 has been clarified in Section 3.1.2 of the updated MR. - How the monitoring equipment used for measure or monitor the value has been specified in Section 3.1.2 of the updated MR. - How to do the field samples taken has been specified in Section 3.1.2 of the updated MR.			
Documentation provided by project participant			
☒	Changes in the MR	Section(s): 3.1.2	New version No.: 03
☐	Changes in XLS	Worksheet(s):	New version No.:
☐	Other:		
VVB assessment			Date: 07/06/2021
- The revised MR is checked, it is confirmed that the source of data is in line with the request of applied methodology. - The revised MR is checked, it is confirmed that the description of measurement methods and procedures to be applied is in line with the request of applied methodology. - The revised MR is checked, it is confirmed that the value applied of 30 is clarified. - The revised MR is checked, it is confirmed that how the monitoring equipment used for measure or monitor the value is specified. - The revised MR is checked, it is confirmed that how to do the field samples taken is specified. Refer to section 4.4.1 of this report for detailed assessment.			
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed	

CAR ID	28	Section no.	3.1.3	Date : 16/04/2021
Description of CAR				
- For the Monitor the applicability conditions listed in methodology and tools have been met, MR only listed the requirement from the methodology, however the monitoring results during this monitoring period is missing. - For the Monitoring of Project Implementation, the actual record of grassland management is missing, only mentioned the plan is not applicable to actual implementation of this monitoring period.				
Project participant response				Date : 04/06/2021
- For the Monitor the applicability conditions listed in methodology and tools have been met, the monitoring results during this monitoring period has been added. - For the Monitoring of Project Implementation, the actual record of grassland management has been added in Section 3.1.3 of the updated MR.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 3.1.3	New version No.: 03	
☐	Changes in XLS	Worksheet(s): ER results	New version No.: 03	
☐	Other:			
VVB assessment				Date: 07/06/2021
- The revised MR is checked, it is confirmed that the monitoring results for the monitor the applicability conditions listed in methodology and tools during this monitoring period is specified. - The revised MR is checked, it is confirmed that the actual record of grassland management is specified. Refer to section 4.4.1 of this report for detailed assessment.				

Conclusion <i>Tick the appropriate checkbox</i>	☐ Additional action should be taken (finding remains open)
	☒ The finding is closed

CAR ID	29	Section no.	3.1.3	Date : 16/04/2021
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Description of CAR

1. Which monitoring parameters need to be monitored and how to measure is not specified clearly for this monitoring period.
2. The calculation of number of the sample plots is not in line with the request of applied methodology.
3. The detail information of the fixed sample plots including ID number, geographical coordinates, grass species, etc. is missing.
4. A map with sample plots location is missing.
5. What did in the sample plots to measure the related monitoring parameters is not specified detail.

Project participant response

Date : 04/06/2021

1. Which monitoring parameters need to be monitored and how to measure has been specified clearly for this monitoring period in Section 3.1.3 of the updated MR.
2. The description of number of the sample plots has been revised which is in line with the request of applied methodology, the latest version of the Guidelines for sampling and surveys for CDM project activities and programmes of activities (version 4.0) and the detailed calculation spreadsheet has been provided.
3. The detail information of the fixed sample plots including ID number, geographical coordinates, tree species, etc. has been added in Section 3.1.3 of the updated MR.
4. A map with sample plots location has been added in Section 3.1.3 of the updated MR.
5. The detailed information regarding the monitoring process and sample plots has been supplemented in Section 3.1.3 of the updated MR.

Documentation provided by project participant

☒	Changes in the MR	Section(s): 3.1.3	New version No.: 03
☐	Changes in XLS	Worksheet(s):	New version No.:
☒	Other:		

VVB assessment

Date: 07/06/2021

1. The revised MR is checked, it is confirmed that the monitoring parameters need to be monitored and how to measure is specified clearly for this monitoring period.
2. The revised MR is checked, it is confirmed that the calculation of number of the sample plots is in line with the Guidelines for sampling and surveys for CDM project activities and programmes of activities (version 4.0)^{GSSI}.
3. The revised MR is checked, it is confirmed that the detail information of the fixed sample plots including ID number, geographical coordinates, grass species, etc. is added.
4. The revised MR is checked, it is confirmed that map with sample plots location is added.
5. The revised MR is checked, it is confirmed that the measurement of the related monitoring parameters in sample plots is specified detail.

Refer to section 4.4.1 of this report for detailed assessment.

Conclusion <i>Tick the appropriate checkbox</i>	☐ Additional action should be taken (finding remains open)
	☒ The finding is closed

CAR ID	30	Section no.	3.1.3	Date : 16/04/2021
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Description of CAR

How to monitoring the leakage and related parameters for determine the leakage is not specified according to the VMD040.

Project participant response

Date : 04/06/2021

How to monitoring the leakage and related parameters for determine the leakage has been specified according to the VMD040 in Section 3.1.3 of the updated MR.

Documentation provided by project participant

☒	Changes in the MR	Section(s): 3.1.3	New version No.: 03
☐	Changes in XLS	Worksheet(s):	New version No.:
☒	Other:		

VVB assessment		Date: 07/06/2021
The revised MR is checked, it is confirmed that monitoring method of the leakage and related parameters for determine the leakage is specified according to the VMD040. Refer to section 4.4.1 of this report for detailed assessment.		
Conclusion <i>Tick the appropriate checkbox</i>	☐ Additional action should be taken (finding remains open) ☒ The finding is closed	

CAR ID	31	Section no.	3.2.4	Date : 16/04/2021
Description of CAR				
For the Net GHG Emission Reductions and Removals calculation, - The formula for calculation ER_t is missing. - The source for the formula of BC_t calculation is not provided. - It stated that 10% of the net GHG removals of the project during this monitoring period will be deposited into the buffer in the MR, however this is not consistent with the BC_t calculation formula.				
Project participant response				Date : 04/06/2021
- The formula for calculation ER_t has been added in Section 3.2.4 of the updated MR. - The source for the formula of BC_t calculation has been provided in Section 3.2.4 of the updated MR. - The BC_t calculation has been revised in Section 3.2.4 of the updated MR.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 3.2.4	New version No.: 03	
☐	Changes in XLS	Worksheet(s):	New version No.:	
☒	Other:			
VVB assessment				Date: 07/06/2021
- The revised MR is checked, it is confirmed that the formula for calculation ER_t is added. - The revised MR is checked, it is confirmed that the source for the formula of BC_t calculation is provided. - The revised MR is checked, it is confirmed that related statement of 10% of the net GHG removals of the project during this monitoring period will be deposited into the buffer in the MR has been revised accordingly based on the BC_t calculation formula in line with the applied methodology.				
Conclusion <i>Tick the appropriate checkbox</i>	☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	32	Section no.	4.1.1	Date : 16/04/2021
Description of CAR				
The groups monitored in Section 4.1.1 of the Monitoring Report do not match the groups identified in Section 2.1.8 and 2.1.9 of the PD. As the groups identified in the project description should be the community groups monitored, the project proponent is requested to update Section 4.1.1 of the monitoring report.				
Project participant response				Date : 04/06/2021
The groups monitored in Section 4.1.1 of the updated MR has been revised in line with the groups identified in Section 2.1.8 and 2.1.9 of the PD.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 4.1.1	New version No.: 03	
☒	Changes in XLS	Worksheet(s): Emission Reduction	New version No.: 03	
☐	Other:			
VVB assessment				Date: 07/06/2021
The revised MR is checked, it is confirmed that all the identified community groups have been added into the MR which are consistent with the groups identified in Section 2.1.8 and 2.1.9 of the PD. And all the related impacts have been updated in the MR according to PD. Refer to section 4.5.1 for the detail assessment.				
Conclusion <i>Tick the appropriate checkbox</i>	☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	33	Section no.	4.1.2	Date	16/04/2021
Description of CAR					
The description in Section 4.1.2 is not in line with the requirement of the Monitoring Report Template. Information related to HCV is missing.					
Project participant response					Date
The description in Section 4.1.2 of the updated MR has been revised by adding the related description of HCV attributes.					04/06/2021
Documentation provided by project participant					
☒	Changes in the MR	Section(s):	4.1.2	New version No.:	03
☐	Changes in XLS	Worksheet(s):		New version No.:	
☐	Other:				
VVB assessment					Date:
The revised MR is checked, it is confirmed that information related to HCV has been added. Refer to section 4.5.2 for the detail assessment.					07/06/2021
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	34	Section no.	4.3.1	Date	16/04/2021
Description of CAR					
1. The monitoring process is not in line with the steps listed in PD. 2. The key variables have been monitored during this monitoring period in Section 4.3.1 of the Monitoring Report do not match all the impacts to all the groups identified in Section 2.1.8 and 2.1.9 of the PD. 3. HCVs related to community well-being variables are not monitored. 4. Increase of Household income and Job opportunities refer to an "annual daily salary". Correction is requested.					
Project participant response					Date
1. The monitoring process has been revised in line with the steps listed in PD. 2. The key variables have been monitored during this monitoring period in Section 4.3.1 of the updated MR have been revised in line with the impacts to all the groups identified in Section 2.1.8 and 2.1.9 of the PD. 3. HCVs related to community well-being variables have been added in Section 4.3.1 of the updated MR. 4. The description of the salary has been corrected in Section 4.3.1 of the updated MR.					04/06/2021
Documentation provided by project participant					
☒	Changes in the MR	Section(s):	4.3.1	New version No.:	03
☐	Changes in XLS	Worksheet(s):		New version No.:	
☐	Other:				
VVB assessment					Date:
1. The revised MR is checked, it is confirmed that the monitoring process is in line with the steps listed in PD. 2. The revised MR is checked, it is confirmed that key variables monitored during this monitoring period in Section 4.3.1 of the Monitoring Report are consistent with all the impacts to all the groups identified in Section 2.1.8 and 2.1.9 of the PD. 3. The revised MR is checked, it is confirmed that the HCVs related to community well-being variables are monitored. 4. The revised MR is checked, it is confirmed that daily salary is correct and other information has been deleted accordingly. Refer to section 4.5.6 for the detail assessment.					07/06/2021
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	35	Section no.	5.1.1	Date	16/04/2021
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Description of CAR			
1. It stated in section 5.1.1 that the endangered grassland plant will be increased, however, the monitoring results only listed three species of the vegetation seeded by project. 2. It stated that actual impact of the endangered animals are difficult to be monitored in such a short time during this monitoring period, however, the actual numbers have been observed and listed in section 5.4.1.			
Project participant response			Date : 04/06/2021
1. Typo, the monitoring is related to species of plants which has been revised in Section 5.1.1 of the updated MR. 2. The parameter is related to Population status of the endangered animals and relevant description has been revised in section 5.1.1 of the updated MR.			
Documentation provided by project participant			
☒	Changes in the MR	Section(s): 5.1.1	New version No.: 03
☐	Changes in XLS	Worksheet(s):	New version No.:
☐	Other:		
VVB assessment			Date: 07/06/2021
1. The revised table template in section 5.1.1 is checked, it is confirmed that typo mistake has been revised accordingly. 2. The revised table template in section 5.1.1 is checked, it is confirmed that the parameter is related to population status of the endangered animals and relevant description has been revised in section 5.1.1 of the updated MR. Refer to section 4.6.1 for the detail assessment.			
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed	

CAR ID	36	Section no.	5.1.2	Date : 16/04/2021
Description of CAR				
The description in Section 5.1.2 is not in line with the requirement of the Monitoring Report Template. Information related to HCV is missing.				
Project participant response				Date : 04/06/2021
The description in Section 5.1.2 has been revised in the updated MR by adding the information related to HCV attributes.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 5.1.2	New version No.: 03	
☐	Changes in XLS	Worksheet(s):	New version No.:	
☐	Other:			
VVB assessment				Date: 07/06/2021
The revised MR is checked, it is confirmed that information related to HCV has been provided. Refer to section 4.6.2 for the detail assessment.				
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed		

CAR ID	37	Section no.	5.1.4	Date : 16/04/2021
Description of CAR				
The identified HCVs are not justified in Section 5.1.4.				
Project participant response				Date : 04/06/2021
The identified HCVs has been justified in Section 5.1.4 of the updated MR.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 5.1.4	New version No.: 03	
☐	Changes in XLS	Worksheet(s):	New version No.:	
☐	Other:			
VVB assessment				Date: 07/06/2021
The revised MR is checked, it is confirmed that identified HCVs are justified in Section 5.1.4. Refer to section 4.6.4 for the detail assessment.				

Conclusion <i>Tick the appropriate checkbox</i>	☐ Additional action should be taken (finding remains open)
	☒ The finding is closed

CAR ID	38	Section no.	5.3.1	Date : 16/04/2021
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Description of CAR

1. When and how did the sample plots determined and monitored is not specified.
2. The actual monitoring results of Population trends of each trigger species and Threats to trigger species are not provided due to the projects applied to the Gold Level for exceptional biodiversity benefits.
3. The monitoring methods for all the monitoring indicators listed in table 5-2 is not provided.
4. For the animals observed, who and how to observe is not provided.
5. Pressure variables are not complete as per PD.
6. Numbers of observing falcon and *M. chrysogaster* are different in the table 5-3 and Sec 5.4.1.

Project participant response

Date : 04/06/2021

1. When and how did the sample plots determined and monitored has been specified in Section 5.3.1 of the updated MR.
2. The actual monitoring results of Population trends of each trigger species and Threats to trigger species has been added in Section 5.3.1 of the updated MR.
3. The monitoring methods for all the monitoring indicators listed in table 5-2 has been provided in Section 5.3.1 of the updated MR.
4. For the animals observed, who and how to observe has been provided in Section 5.3.1 of the updated MR.
5. Pressure variables have been supplemented in line with PD.
6. *The Falco cherrug and M. chrysogaster have each been observed two times, and the description has been revised in Section 5.4.1 of the updated MR.*

Documentation provided by project participant

☒	Changes in the MR	Section(s): 5.3.1	New version No.: 03
☐	Changes in XLS	Worksheet(s):	New version No.:
☒	Other:	/BSRM/	

VVB assessment

Date: 07/06/2021

1. The revised MR is checked, it is confirmed that the actual information of sample plots determined and monitored is specified.
2. The revised MR is checked, it is confirmed that the actual monitoring results of population trends of each trigger species and threats to trigger species are provided.
3. The revised MR is checked, it is confirmed that the monitoring methods for all the monitoring indicators listed in table 5-2 is provided.
4. The revised MR is checked, it is confirmed that the methods for animals observed is provided.
5. The revised MR is checked, it is confirmed that the pressure variables are completed as per PD.
6. The revised MR is checked, it is confirmed that the descriptions have been revised in section 5.4.1 and consistent in the whole MR which is verified as correct by checking the checking the biodiversity survey record for this monitoring period recorded by monitoring staffs^{/BSRM/}.

Refer to section 4.6.11 for the detail assessment.

Conclusion <i>Tick the appropriate checkbox</i>	☐ Additional action should be taken (finding remains open)
	☒ The finding is closed

CAR ID	39	Section no.	5.4.1	Date : 16/04/2021
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Description of CAR

1. The description of "With-project Scenario" in tables of 5.4.1 is not correct, PP only listed the requirement from MR template, not the justification for this project.
2. Due to the PP has applied the Gold Level for exceptional biodiversity benefits, the evidence for the observation of the trigger species need to be provided in the MR for justification.

Project participant response

Date : 04/06/2021

1. The description of "With-project Scenario" in tables of 5.4.1 has been revised in the updated MR.
2. The evidence for the observation of the trigger species has been provided in Section 5.3.1 and 5.4.1

of the updated MR.			
Documentation provided by project participant			
☒	Changes in the MR	Section(s): 5.4.1	New version No.: 03
☐	Changes in XLS	Worksheet(s):	New version No.:
☒	Other:		
VVB assessment			Date: 07/06/2021
1. The revised MR is checked, it is confirmed that the description of "With-project Scenario" in tables of 5.4.1 is revised accordingly, the actual information of the project has been justified. 2. The revised MR is checked, it is confirmed that the evidence for the observation of the trigger species have been provided in the MR for prove. Refer to section 4.6.14 for the detail assessment.			
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed	

Table 4. FAR from this verification

FAR ID	N/A	Section No.	-	Date:	-
Description of FAR					
Project participant response					Date:
Documentation provided by project participant					
☐	Changes in the PD	Section(s):	New version No.:		
☐	Changes in XLS	Worksheet(s):	New version No.:		
☐	Other:				
VVB assessment					Date:
Conclusion <i>Tick the appropriate checkbox</i>		☐ To be checked during the next periodic verification			

APPENDIX 4 COMPETENCE OF TEAM MEMBERS AND TECHNICAL REVIEWERS



Statement of Competence

Apprenticeship and authorization according to the provisions
of the TUV NORD-VS 2284 Certification Program

Ms. Xue Jiao Fancy Zhao

SCHEME	STATUS	VALID UNTIL
COP	Senior Assessor (Verfahren, Verfahrenen)	2023-11-01
VDS / ISO 14001-2	Senior Assessor	2023-11-01

Authorization status for technical areas within certified ranges

CODE	TECHNICAL AREA
5.5	Thermal energy generation
5.2	Renewables
2.5	Energy Demand
6.1	Wiring and electrical production
13.1	Solid waste and wastewater
13.2	Water

TUV Nord 10, Date: 2025-08-28

2025-08-28 10:00:00

2025-08-28 10:00:00

2025-08-28 10:00:00

2025-08-28 10:00:00



Statement of Competence

Appointment and authorization according to the provisions
of the TUV NORD aD/DA-Licensing Program

Ms. Guifang Li

Authorization status for technical review within national scope

CODE	TECHNICAL AREA
14.1	Automation and Information

3/75 - Rev. 0, Date: 2019-09-05

PL_NI-0000179_20190905_v4-001

201909051721441721219-05



Statement of Competence

Accreditation and authorization according to the procedures
of the TÜV NORD AGDA Certification Program

Ms. Alexandra Nuske

SCHEME	STATUS	VALID UNTIL
CEM	Senior Auditor (Validation, Verification) Technical Reviewer	2023-03-31
.8	Senior Auditor Technical Reviewer	2023-03-31
VCR / ISO 14004-2	Senior Auditor Technical Reviewer	2023-03-31

Authorization (valid for technical areas within sectoral scope):

CODE	TECHNICAL AREA
1.1	Renewables
14.1	Automation and re-automation

005 - Rev. 0, Date: 2019-03-01

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