VCS & CCB 1ST VERIFICATION REPORT FOR ZHANGYE IMPROVED GRASSLAND MANAGEMENT PROJECT

Document Prepared By TÜV NORD CERT GmbH

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Summary

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

  The project activity developed in Gaotai County, Shandan County, Minle County, Su'nan County, Ganzhou district and Shandan Racecourse, Zhangye City, Gansu Province, P. R. China, conducts seeding a variety of species of native grass and building fences (*Elymus nutans, Elymus sibiricus, Poa pratensis, Agropyron cristatum, Festuca rubra and Artemisia sphaerocephala*) and building fence on degraded grassland of 261,059.80 ha which reduces GHG emission by restore the degraded grassland ecosystem 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, enhance the capabilities of local communities and residents and increase local biodiversity. The project started fence building on 25-July-2017 and GHG accounting period was chosen by PP started from 25-July-2017 and it applied by VCS under Project ID 2748 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 25-July-2017 to 31-December-2021.

- **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 4.2, 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 4.2, VCS Program Guide Version 4.1, 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 1.1).

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

  In the course of the verification, 34 Corrective Action Requests (CARs), 3 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, "Zhangye Improved Grassland Management Project" (2748) with regard to the relevant requirements of VCS standard Version 4.2 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 4.2 and CCB Standards version 3.1 and all associated updated as documented in this report, are complete.

  TÜV NORD concludes that the project activity "Zhangye Improved Grassland Management Project" in China, as described in the final Monitoring Report version, meets all relevant requirements for VCS and CCB verification activity and correctly applied the methodology VM0026 version 1.1. Hence TÜV NORD is able to certify that the GHG removals by sink from the project during the monitoring period 25-July-2017 to 31-December-2021 amount to **2,725,950 tCO_2e.**

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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 25-July-2017 to 31-December-2021. The objective of verification is to have an independent review ex-post determination by a VVB 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 4.2 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 0.5% of the total GHG assertions are considered. The project area covers 261,059.80 ha and has generated average of 545,190 tCO_2 GHG sinks per year during this monitoring period, and therefore can be considered as a large project per the VCS rules for this monitoring period, in regards to its scale, subject to a 0.5% 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 Zhangye Improved Grassland Management Project is implemented by Zhangye Academy of Forestry Sciences and it aims to restore the degraded grassland ecosystem by seeding a variety of species of native grass and building fences, which would continue to remain degraded grassland. The total area of the project has an extension of 261,059.80 hectares and it is located inside the Gaotai County, Shandan County, Minle County, Su'nan County, Ganzhou district and Shandan Racecourse, Zhangye City, Gansu Province, China.

The project zone consists of Zhangye City, in project areas, three main restoration measures taken by the project including Rotational grazing, Rest grazing and Reseeding grass which have been confirmed in line with the project design in PD[/PD/]. The fences have been built, grazing time has been controlled and 6 grass species have been seeded for the project: *Elymus nutans, Elymus sibiricus, Poa pratensis, Agropyron cristatum, Festuca rubra and Artemisia sphaerocephala*, 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 to sustainable grassland management which will increase soil organics, mitigate the impact of climate change on the local ecological environment, 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 Gansu Province and more than 15 VCS&CCB AR project validation and/or verification[1], 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, 2301, 2305, 2310, 1896 the team leader has conducted the community validation and verification activities on site for all the listed projects

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

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 /Approver	IR	Alexandra	Nuske	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, v4.2/VCSS/
- VCS Program Guide, v4.1/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 6. X=√6=3
- Stratum 2, number of plots y is 6. X=√6=3
- Stratum 3, number of plots y is 6. X=√6=3
- Stratum 4, number of plots y is 6. X=√6=3
- Stratum 5, number of plots y is 6. X=√6=3
- Stratum 6, number of plots y is 6. X=√6=3
- Stratum 7, number of plots y is 6. X=√6=3
- Stratum 8, number of plots y is 9. X=√9=3
- Stratum 9, number of plots y is 6. X=√6=3
- Stratum 10, number of plots y is 9. X=√9=3
- Stratum 11, number of plots y is 6. X=√6=3
- Stratum 12, number of plots y is 9. X=√9=3
- Stratum 13, number of plots y is 6. X=√6=3
- Stratum 14, number of plots y is 6. X=√6=3
- Stratum 15, number of plots y is 6. X=√6=3
- Stratum 16, number of plots y is 6. X=√6=3
- Stratum 17, number of plots y is 6. X=√6=3
- Stratum 18, number of plots y is 6. X=√6=3

A ground inspection of the project area was conducted during the site visit and members of the verification team visited 54 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, checked the fence building and 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 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.

Via checking the MR during desk review, it is confirmed that the project affects 11,727 stakeholders including 952 permanent jobs and 10,775 temporary jobs. So before the VVB conducted the site visit, VVB asked PP to provide a name list of all the impacted stakeholders and VVB randomly selected samples (see below calculation of sample size) to interview during site visit with the local stakeholder representatives, due to the number of stakeholders involved was large and scattered to carry out a census during the site visit time, hence based on the principle of cost-effectiveness and the impact of COVID-19 which request to avoid large group people gathering, based on experience of local survey of the VVB, the sampling method was used for VVB to conduct the interview.

Based on the “Sampling and Surveys for CDM Project Activities and Programme of Activities” version 09.0 and “Guideline of Sampling and surveys for CDM project activities and programmes of activities” version 04.0. it confirmed that the Sample size calculation by Simple Random Sampling can be done using following formulae:

$$n \geq \frac{1.645^2 N \times p(1-p)}{(N-1) \times 0.1^2 \times p^2 + 1.645^2 p(1-p)}$$

Where

n	Sample size
N	Total number of people
P	Expected proportion, which is defined as 0.95 based on the experience of survey of VVB
1.645	Represents the 90% confidence required
0.1	Represents the 10% relative precision

N is 11,727 as determined of total impacted stakeholders, P is determined as 95% (due to the expected

proportion of participation is 95%), as per the level of confidence, VVB expects that 90% of the samples taken shall comply with the project requirements.

Hence the n is calculated as

$1.645^2*11,727*0.95*(1-0.95)/\{(11,727-1)*0.1^2*0.95^2+1.645^2*0.95*(1-0.95\}=15$.

Hence, during the site interview, VVB interviewed 18 stakeholders (as randomly selected stakeholders from the list, 18 stakeholders including 4 grassland guardians) from impacted 11,727 which is verified as reasonable based on the "Sampling and Surveys for CDM Project Activities and Programme of Activities" version 09.0 and "Guideline of Sampling and surveys for CDM project activities and programmes of activities" version 04.0.

Onsite interviews and information discussions were conducted with project developer/I1/, local government officer/I2/, local residents (including women)/I3/ and Project VCS&CCB development consultant/I4/. The interviews were performed by the verification team on-site (within the project area, in Gaotai County, Shandan County, Minle County, Su'nan County, Ganzhou district and Shandan Racecourse, Zhangye City, Gansu 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.	Quan/I1/	Jinpeng	Zhangye Academy of Forestry Sciences/ Manager	24-Jan-2022~27-Jan-2022	-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.	Du/I2/	Qingchun	Zhangye Forestry and Grassland Bureau/ Vice Bureau Chief	24-Jan-2022	-National legislation to grassland and grazing - Provincial legislation to seeding -Local grassland development and management -local grazing status - Roles & responsibilities of the government	Zhao Xuejiao, Li Guifang
3.	Zhang/I2/	Peng	Zhangye Forestry and Grassland Bureau/ Grass Section Chief	24-Jan-2022		

4.	Ming[I2]	Haiguo	Zhangye Forestry and Grassland Bureau/ Researcher	24-Jan-2022~27-Jan-2022	-local communities situation -local biodiversity situation -local climate -local environment	
5.	Nie[I2]	Weibo	Zhangye Forestry and Grassland Bureau/ Engineer	24-Jan-2022~27-Jan-2022		
6.	Zheng[I2]	Sheng	Zhangye City Natural Resources Bureau/ Engineer	24-Jan-2022		
7.	Wu[I2]	Feng	Zhangye Finance Department/ Engineer	24-Jan-2022		
8.	Liang[I2]	Zhigang	Local Natural Resources Station/ Director	24-Jan-2022		
9.	Wu[I2]	Rui	Local Natural Resources Station/ Staff	24-Jan-2022		
10.	Yang[I2]	Zhi	Local Resident/ herdsman	24-Jan-2022	-job opportunities -living condition -training -local grazing status -local stakeholder consultation -impact to local residents -impact to local environment -impact to local biodiversity	Zhao Xuejiao, Li Guifang
11.	Wang[I3]	Xuelong	Local Resident/ herdsman	24-Jan-2022		
12.	Wang[I3]	Peng	Local Resident/ herdsman	24-Jan-2022		
13.	Yin[I3]	Shizhong	Local Resident/ herdsman/ village secretary	24-Jan-2022		
14.	Li[I3]	Xiaoming	Local Resident/ herdsman/ Work for grassland management	24-Jan-2022		
15.	Wang[I3]	Fengqin	Local Resident/ herdsman/ Women's Federation President	24-Jan-2022		

16.	Du[/I3/]	Rongjun	Local Resident/ herdsman	24-Jan-2022		
17.	Ren[/I3/]	Liping	Local Resident/ herdsman/ Work for grassland management	24-Jan-2022		
18.	Yao[/I3/]	Dong	Local Resident/ herdsman/ Work for grassland management	24-Jan-2022		
19.	Li[/I3/]	Yuhong	Local Resident/ herdsman	24-Jan-2022		
20.	Wang[/I3/]	Yuzhen	Local Resident/ herdsman	24-Jan-2022		
21.	An[/I3/]	Hu	Local Resident/ herdsman	24-Jan-2022		
22.	Zhang[/I3/]	Zhijie	Local Resident/ herdsman	24-Jan-2022		
23.	Wang[/I3/]	Junling	Local Resident/ herdsman	24-Jan-2022		
24.	Cui[/I3/]	Linghua	Local Resident/ herdsman	24-Jan-2022		
25.	An[/I3/]	Xueliang	Local Resident/ herdsman	24-Jan-2022		
26.	Yue[/I3/]	Zhonglin	Local Resident/ herdsman/ Work for grassland management	24-Jan-2022		
27.	Wang[/I3/]	Junjie	Local Resident/ herdsman	24-Jan-2022		
28.	Liu[/I4/]	Mengde	Gansu Heihe Electric Power Sales Co. Ltd./ Vice General Manager	24-Jan-2022~27-Jan-2022	- Editorial issues of the VCS&CCB PD - Calculation of Emission reductions and removals	Zhao Xuejiao, Li Guifang
29.	Dai[/I4/]	Xuemin	Gansu Heihe Electric Power Sales	24-Jan-2022~27-Jan-2022		

			Co. Ltd./Director			

2.5 Site Inspections

The verification site inspection was conducted on 24-January-2022~27-January-2022. A ground inspection of the project area was conducted during the site visit and members of the verification team visited 54 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 54 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
24-January-2022	strata 1, sample 2	99.6025E	39.7076N	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 1, sample 6	99.7744E	39.6750N	
	strata 1, sample 1	99.5138E	39.2974N	
	strata 2, sample 1	99.4631E	39.1672N	
	strata 2, sample 3	99.4622E	39.1797N	
	strata 3, sample 2	99.3944E	39.2374N	
	strata 3, sample 4	99.7485E	39.5016N	
	strata 6, sample 1	99.4152E	39.2332N	
	strata 6, sample 4	99.4982E	39.1697N	
	strata 4, sample 2	99.3345E	39.0808N	
	strata 5, sample 1	99.4142E	39.0998N	
	strata 7, sample 2	99.3355E	39.1407N	
	strata 7, sample 3	99.3579E	39.0958N	
	strata 8, sample 2	99.3999E	39.1247N	
	strata 3, sample 5	99.4233E	39.0586N	
25-January-2022	strata 9, sample 5	99.4189E	38.9576N	
	strata 10, sample 9	99.4126E	38.9907N	
	strata 11, sample 4	99.4946E	39.0026N	
	strata 12, sample 8	99.4800E	39.0616N	
	strata 14, sample 2	99.3207E	38.8274N	
	strata 18, sample 3	99.5234E	38.6386N	
	strata 13, sample 3	99.7576E	38.8161N	
	strata 13, sample 4	99.7097E	38.7894N	
	strata 17, sample 1	99.7589E	38.8530N	
	strata 9, sample 6	99.8869E	38.8970N	

	strata 14, sample 5	99.8926E	38.8125N	
	strata 18, sample 6	99.9046E	38.8172N	
	strata 17, sample 6	99.9430E	38.8135N	
	strata 4, sample 4	100.5266E	38.6836N	
	strata 5, sample 2	100.5816E	38.6805N	
26-January-2022	strata 12, sample 1	100.7358E	38.4309N	
	strata 2, sample 4	100.7782E	39.1034N	
	strata 10, sample 2	100.8324E	38.7273N	
	strata 8, sample 4	100.9756E	38.4692N	
	strata 16, sample 1	100.6183E	38.4322N	
	strata 15, sample 1	100.9362E	38.2207N	
	strata 9, sample 1	100.9739E	38.2301N	
	strata 13, sample 1	101.0452E	38.1824N	
	strata 10, sample 6	101.0575E	38.2422N	
	strata 12, sample 4	101.0562E	38.2393N	
	strata 8, sample 8	101.3071E	38.1458N	
	strata 7, sample 4	101.3809E	38.2192N	
	strata 16, sample 2	101.3403E	38.0766N	
	strata 15, sample 3	101.3766E	38.1565N	
	strata 4, sample 6	101.3329E	38.6754N	
27-January-2022	strata 18, sample 1	101.3966E	38.1474N	
	strata 11, sample 3	101.3935E	38.0465N	
	strata 15, sample 4	101.4847E	37.9584N	
	strata 16, sample 5	101.6726E	37.9888N	
	strata 11, sample 5	101.5610E	38.0569N	
	strata 6, sample 6	102.0023E	37.8391N	
	strata 5, sample 6	101.9389E	37.8768N	
	strata 17, sample 2	101.9036E	37.8590N	
	strata 14, sample 4	101.8173E	37.8572N	

There are total 18 project stratifications for carbon calculation in the 6 main areas, the verification team visited targeted area for each project stratification, total 54 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 4.2 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 34 Corrective Action Requests (CARs), 3 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 GHG emission reductions or removals generated by the project have not counted or used under other GHG Programs[/unfccc/,/gs/,/ccer/], and/or other forms of environmental credit. The project has no desire to or registration in any other GHG program as verified by checking other GHG Programs[/unfccc/,/gs/,/ccer/].

The project is being simultaneously validated through VCS. The issuance of VCUs will ensure the avoidance of double counting as the credits generated from the project will be sold as offsets on VCS registry publicly, the series number of the issued credits can be tracked to avoid any potential double counting. This is promised by PP as per the declaration[/DN/].

In addition, based on validation and verification team's local expertise, China has a national emissions trading scheme[/cets/] only cover the high-emission industries, such as power generation sector that emitted at least 26,000 tons of CO_2e/year which has been verified in the public website, and it is confirmed that the project activity type grassland is not included the mandatory emission control scheme and there is no emission cap enforced for the project owner by checking the enforced company list[/ecl/] in public information. Hence, it is confirmed that the emission reductions will not be double counted.

Furthermore, the project is not part of any emission trading program which has been confirmed via checking the UNFCCC[/unfccc/], GS[/gs/], China CER(CCER)[/ccer/] and other GHG schemes' website. The net GHG emission reductions from the project will not be used for compliance with emission trading programs or to meet binding limits on GHG emissions. The project activity has not participated under any other GHG programs which has been confirmed via checking the UNFCCC[/unfccc/], GS[/gs/], China CER(CCER)[/ccer/] and other GHG schemes' website.

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/VCS/2748) for the public consultation period.

The public comment period was held from 07-January-2022 to 06-February-2022. 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 degraded grassland and building fence to control grazing, which would continue to remain 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 Zhangye City, the mitigation of the local degraded grassland caused by over grazing and increasing soil organics, mitigate the impact of climate change on the local ecological environment, such as slow down the melting of snow-capped mountains, increase local biodiversity by protect and restore wildlife habitat, enhance the capabilities of local communities and improve their income by providing them with relevant technical skills training and employment opportunities, and beneficial to biodiversity conservation and globally Critically Endangered or Endangered species in project zone.

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/].

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.

CL 01 was 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 and fences building area accounts to 261,059.80 ha which have been conducted with three main restoration measures including Rotational grazing, Rest grazing and Grass Reseeding with 6 species native grasses (*Elymus nutans, Elymus sibiricus, Poa pratensis, Agropyron cristatum, Festuca rubra and Artemisia sphaerocephala*) 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 18 which is consistent with the PD. And the total sample plots are determined as 117. 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 54 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 117,

	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 stratums and the area change, the number of sample plots need to be recalculated, the project needs to consider grasses species, patterns and other factors in actual planting, and update stratification to post-stratification. Due to there is no change to the area, boundary, grass species and seeding, fences building, 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, thus confirmed benefits the SDG goal 1, 3, 5, 13 and 15 as clearly defined and analyzed in MR.
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 01, CAR 02, CAR 03, CAR 04 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 and fence building area is mostly degraded grassland 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/I2/ and grassland guardians/I3/.

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/I2/ and grassland guardians/I3/. 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/I2/ and grassland guardians/I3/.

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 controlled after seeding and fence building, and 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[/I2/] and grassland guardians[/I3/].

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[/I2/] and grassland guardians[/I3/].

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.

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 Procurement 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[/I2/]. 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, measures to protect the biodiversity and wild-life 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.

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 were published on VCS and CCB website for public comments. Thus the local communities and other stakeholders can easily download documents from the website.

Within the project area was made a Participatory Rural Appraisal (PRA) survey in November 2016 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 16-September-2021 to 01-October-2021 which has been confirmed by checking the 80 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/2748), 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 24-January-2022 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 main areas from 16-September-2021 to 01-October-2021. 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 Forestry and Grassland 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 05, CAR 06, CAR 07, CAR 08 and CAR 09 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 though 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 which has been confirmed by checking the 80 filled questionnaires/CMQ/ collected during this period and cross verified by on-site interview with the local stakeholders/I2/,/I3/.

The meeting notice was publicized on the village collective bulletin board. Local herders, local residents around project area, local Yugur nationality, local women, grassland guardians outside the project area directly impacted by the project were invited through their most convenient way: the routine villager assembly. The representatives of grassland guardians, village collectives, Zhangye Forestry and Grass Bureau, County Forestry and Grass Bureau, Zhangye Finance department were invited to attend the meeting by telephone/Email. Via site interview with local stakeholders and site inspection of the village collective bulletin board, it is confirmed that the informed ways are reasonable and appropriate for local stakeholders.

During this monitoring period, the survey team came from the Zhangye Forestry and Grassland Bureau who went to the villages where the project located and took the household interviews with local residents to collect the basic information of the villagers and characteristics of local communities from 16-September-2021 to 01-October-2021.

There are totally 8,668 households from 863 village collectives involved in the project, a randomly sampling method was applied to distribute the survey questionnaires. According to Guideline of Sampling and Surveys for CDM project Activities and Programmes of Activities (Ver 04.0), the total sampling size was calculated as 68 (see the following equations for details), and the final number has been adjusted into 80 to make sure the household interview could represent the different community group, such as local Yugur nationality, women, herders and grassland guardians.

$$n \geq \frac{1.645^2 N \times P(1-P)}{(N-1) \times 0.1^2 \times P^2 + 1.645^2 P(1-P)}$$

Where:

n	=	Sample size
N	=	Total number of households
P	=	Expected proportion, which is defined as 0.8 based on the empirical value provided by Zhangye Academy of Forestry Sciences.
1.645	=	Represents the 90% confidence required
0.1	=	Represents the 10% relative precision

As N is 8,668 as determined of total number of households, P is determined as 80% based on the empirical value provided by Zhangye Academy of Forestry Sciences, and taking 90% level of confidence, n is therefore calculated as

1.6452*8,668*0.8*(1-0.8)/{(8,668-1)*0.12*0.82+1.6452*0.8*(1-0.8)}=68.

The questionnaires were distributed to 60 households from surrounding villages, covering different community groups of local herders, local residents around project area, local Yugur nationality, local women, grassland guardians. The other 20 questionnaires were distributed to representatives of village collectives, Zhangye Forestry and Grassland Bureau, County Forestry and Grassland Bureau and local government.

Hence, based on checking the above sampling method used and comparing against the sampling guideline and standard, it is confirmed that the sampling method used by PP is in line with the requirements and sampling size is determined as reasonable, and site interviewed stakeholders' number is sufficient comparing with the sample size.

In addition, during the on-site verification, stakeholder meetings with the villagers, local officers, grassland guardians and stakeholders have been carried out on 24-January-2022. 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 stakeholder meetings. And 80 representatives from local stakeholders filled the questionnaires whom covered different locations, different ages, different occupations and different education levels. Also 26 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 10 and CAR 11 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/I2,I3/ 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/I2,I3/ 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>/IIc/ 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/IIc/ guarantee that no type of discrimination is tolerated at any point of the project implementation.

Furthermore, via checking the labor contracts with local herders for grass seeding, fence building and rodent control and grassland guardians/LC/ and interview with the women stakeholders and grassland guardians, it is verified that about 11,727 local herders (6,039 are women) participated in grass seeding, fence building and rodent control, of which 952 local herders (493 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, three trainings were provided to grassland guardians in June 2018, July 2019 and July 2020 respectively related to subsequent management skills such as grassland fire prevention, rodent and pest control 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 28-July-2021 to 31-July-2021 prior to the monitoring activities for this monitoring period which verified by checking the training records[/TTR/]. 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 11,727 local herders (6,039 are women) participated in grass seeding, fence building, rodent control and fire prevention, 952 local herders (493 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>[/IIc/] 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 12, CAR 13 and CAR 14 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 Zhangye City Forestry and Grassland Bureau, Zhangye Academy of Forestry Sciences. and Gansu Heihe Electric Power Sales Co. Ltd[/LC/,/PP/], it is confirmed that for each individual company, experience, background 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 Zhangye Academy of Forestry Sciences is a privacy and legally registered company. Other involved entities Local Forestry and Grassland Bureau is financially supported by local government,

Heihe Electric Power Sales Co. 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/neci/, 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/neci/, it is confirmed that the statement in MR is actual and credible.

Furthermore, based on the carbon development experience of Heihe Electric Power Sales Co. 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/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/.

CAR 15 and CL 02 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 261,059.80 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 Zhangye City Forest and Grassland Bureau applied to Zhangye City government for the grassland carbon sink project and obtained approval, which is confirmed by checking the Approval of project design report/APDR/ and Proof of land qualification/PLQ/ and confirmed by site interview with local officers/I2/. And in the yearly phase, the Zhangye City 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 Zhangye Academy of Forestry Sciences is in rich experience of maintenance and management of the grassland, thus Zhangye City Forestry and Grassland Bureau authorized Zhangye Academy of Forestry

Sciences as the Project Proponent of the project, the rights grassland management and Carbon credits of the project during the project crediting period which has been confirmed by checking the Carbon sink project entrusted development agreement for this project[/CDA/], and the collective economic organizations and village collectives all agreed with this which is verified by checking the Proof of land qualification[/PLQ/]. 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 Zhangye City 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 Zhangye City 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 Proof of land qualification[/PLQ/] and onsite observations and interview with local residents[/I3/]. However, due to grazing was strictly controlled due to the measures of rotational and rest grazing, grass reseeding taken during this monitoring period, 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. Besides, the impacted herders in the project area can receive corresponding subsidies. The herders have received corresponding subsidies in line with the Implementation Plan of the new round of grassland ecological protection subsidy and reward policy (2016-2020) in Zhangye City[/IPS/], as per the plan, the herders in the project area can receive corresponding subsidies vary from county to county, ranging from 2.17 RMB/mu to 3.35 RMB/mu which is verified as in line with the plan[/IPS/] and confirmed by checking the Subsidy payment record issued by financial department of counties[/SPR/] and also verified through interview with local officers[/I2/] and local herders[/I3/].

Via site interview with local officers[/I2/], it is confirmed that County Forestry and Grassland Bureau and PP have investigated the completion of the grazing prohibition and report it to the local financial department yearly, then the subsidies were distributed to the local herders accordingly.

All the impacted herders agreed with the 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 Subsidy payment record[/SPR/] and site interview with representatives from local herders[/I3/].

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 Proof of land qualification[/PLQ/]. Local governments and the village collective voluntarily use these lands to seeding grasses and building fences confirmed by checking the Proof of land qualification[/PLQ/], and they all agreed to authorize Zhangye Academy of Forestry Sciences the rights of grassland management and carbon credits of the project area, the Proof of land qualification[/PLQ/] 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 areas are mostly degraded 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 building fence and 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[/I2/] and local residents[/I3/]. However, due to grazing was strictly controlled due to the measures of rotational and rest grazing, grass reseeding taken during this monitoring period, 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. Besides, the impacted herders in the project area can receive corresponding subsidies. The herders have received corresponding subsidies in line with the Implementation Plan of the new round of grassland ecological protection subsidy and reward policy (2016-2020) in Zhangye City[/IPS/], as per the plan, the herders in the project area can receive corresponding subsidies vary from county to county, ranging from 2.17 RMB/mu to 3.35 RMB/mu which is verified as in line with the plan[/IPS/] and confirmed by checking the Subsidy payment record issued by financial department of counties[/SPR/] and also verified through interview with local officers[/I2/] and local herders[/I3/].

Via site interview with local officers[/I2/], it is confirmed that County Forestry and Grassland Bureau and PP have investigated the completion of the grazing prohibition and report it to the local financial department yearly, then the subsidies were distributed to the local herders accordingly.

All the impacted herders agreed with the 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 Subsidy payment record[/SPR/] and site interview with representatives from local herders[/I3/].

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 controlled due to the measures of rotational and rest grazing, grass reseeding taken during this monitoring period, 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. Besides, the impacted herders in the project area can receive corresponding subsidies. The herders have received corresponding subsidies in line with the Implementation Plan of the new round of grassland ecological protection subsidy and reward policy (2016-2020) in Zhangye City[/IPS/], as per the plan, the herders in the project area can receive corresponding subsidies vary from county to county, ranging from 2.17 RMB/mu to 3.35 RMB/mu which is verified as in line with the plan[/IPS/] and

confirmed by checking the Subsidy payment record issued by financial department of counties[/SPR/] and also verified through interview with local officers[/I2/] and local herders[/I3/].

Via site interview with local officers[/I2/], it is confirmed that County Forestry and Grassland Bureau and PP have investigated the completion of the grazing prohibition and report it to the local financial department yearly, then the subsidies were distributed to the local herders accordingly.

All the impacted herders agreed with the 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 Subsidy payment record[/SPR/] and site interview with representatives from local herders[/I3/].

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 grassland 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[/I2/] and PP[/I1/] and checking the Proof of land qualification[/PLQ/]. 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 03 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**
1.	GWP_{N2O}	t $CO_2e/t\ N_2O$	Global-warming potential for N_2O	Value of 265 tCO_2e/tN_2O derived from IPCC fifth assessment/AR5/ is used as Global-warming potential for N_2O, which are confirmed as in line with the section 3.14.4 requirement in VCS Standard Version 4.2/VCSS/.
2.	$EF_{4,MD}$	kg N_2O-N/(kg NH_3-N + NO_x-N volatilized)	N_2O emission factor for atmospheric deposition of urine and manure N on soils and water surfaces	IPCC default value 0.005 from 2019 IPCC Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories/IPCC/
3.	GWP_{CH4}	t $CO_2e/t\ CH_4$	Global-warming potential for CH_4	Value of 28 $tCO_2e/t\ CH_4$ derived from IPCC fifth assessment/AR5/, which are confirmed as in line with the section 3.14.4 requirement in VCS Standard Version 4.2/VCSS/.
4.	$P_{l,b}$	Head	Population of grazing livestock type l, in baseline year b	Cattle: 183,540 Sheep: 641,788 The values are derived from the Grazing Displacement Management Plan/GDMP/, which is in line with the requirement of the applied methodology.
5.	EF_l	kg CH_4/(head * year)	Enteric CH_4 emission factor per head of livestock type l per year	Cattle: 56 Sheep: 5 Default values from 2019 IPCC Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories/IPCC/

6.	$EF_{3,PRP,CPP}$	kg N_2O-N/kg N input	N_2O emission factor for cattle (dairy, non-dairy and buffalo), poultry and pigs manure and urine deposited on of applied to grassland	IPCC default value 0.002 from 2019 IPCC Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories/IPCC/
7.	$EF_{3,PRP,SO}$	kg N_2O-N/kg N input	N_2O emission factor for sheep and other animals manure and urine deposited on of applied to grassland	IPCC default value 0.003 from 2019 IPCC Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories/IPCC/
8.	N_{exl}	kg N deposited/(t livestock mass * day)	Nitrogen excretion of livestock type l	Cattle: 0.38 Sheep: 0.32 Default values from 2019 IPCC Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories/IPCC/
9.	$W_{l,b}$	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.
10.	$P_{l,b}$	Head	Population of livestock type l under project in year b	Cattle: 183,540 Sheep: 641,788 The values are derived from Grazing Displacement Management Plan/GDMP/, this is in line with the requirement of the applied methodology.
11.	$Days_{l,b}$	Days	Grazing days for livestock type l in baseline year b	Value of 138 is derived from Grazing Displacement Management Plan/GDMP/, this is in line with the requirement of the applied methodology.
12.	$H_{l,b}$	Hours	Average grazing hours for livestock type l per day during the grazing	Value of 8 is derived from Grazing Displacement Management Plan/GDMP/, this is in line with the

			season in baseline year b	requirement of the applied methodology.
13.	$Frac_{GAS,MD}$	kg N volatilized/kg of N deposited	Fraction of volatilization from manure and urine deposited by grazing animals as NH_3 and NO_x	0.212 Default values from 2019 IPCC Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories/IPCC/
14.	$EF_{l,M}$	kg CH_4/(head * year)	CH_4 emission factor from manure of livestock type l	0.6 Default values from 2019 IPCC Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories/IPCC/
15.	$EF_{CO2,k}$	t CO_2/GJ	CO_2 emission factor by fuel type k	Diesel: 0.0741 Default values from 2006 IPCC Guidelines for National Greenhouse Gas Inventories/IPCC/
16.	NCV_k	GJ/t fuel	Thermal value of fuel type k	Diesel: 43.0 Default values from 2006 IPCC Guidelines for National Greenhouse Gas Inventories/IPCC/
17.	$SOC_{s,Baseline}$	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/LTD/ and the test was conducted from September 16 to September 28, 2016 which is less than two years prior to the project start time, and via checking the Laboratory test data report/LTD/, 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 117 soil samples were measured by Shandong Huasheng Tiantong Standard Technical Service Co., Ltd.. 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.
18.	$DMI_{day,l}$	kg dm/(head*day)	Daily dry matter intake requirement of each type of livestock l	Sheep: 1.8 Cattle: 8.1 Default values from National standards "The notice on standardizing and unifying the statistics of grassland carrying capacity data" which was issued by the Ministry of agriculture of the people's Republic of China/NSU/
19.	$ANPP_{GUI,REF}$	t dm/ha	Aboveground net primary productivity in the reference region that is the likely location of unidentified grasslands to which livestock are relocated	Value of 1.38 derived from Peer-reviewed studies of "Wang jie (2017) The Relationship between Biodiversity and Aboveground Biomass with Soil Properties in North Slope of Qilian Mountains Meadow Steppe. (Master's thesis, Northwest Normal University)"/PRS/
20.	$H_{GUI,l,t}$	Hours	Average grazing hours per day during grazing season for livestock of each type *l* displaced to unidentified grassland in year t	Value of 8 derived from Grazing Displacement Management Plan based on the results of survey of Grazing Displacement (2017-2021) from September to October conducted by the project proponent and county Forestry and Grassland Bureau/GDMP/.

				Via checking the Survey of Grazing Displacement, it is confirmed that the average grazing days of herders under the baseline scenario are counted in Grazing Displacement Management Plan.

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.	$P_{l,t}$	Head	Population of livestock type l 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 conduct the survey of grazing displacement (2017-2021) and investigate the grazing 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 and consistent with the project records for grazing[/PRG/].
2.	$H_{l,t}$	Hours	Average grazing hours per day of livestock type l 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 conduct survey of grazing displacement (2017-2021) and investigate the grazing 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 and consistent with the project records for grazing[/PRG/].
3.	$W_{l,p}$	kg	Average weight of livestock under project	Monitoring value are derived from Local expert judgment which is verified by site interview with experts from local government. Monitoring frequency is the values recorded with each measurement taken. QA/QC procedure is crosschecked with previous records and reconduct the survey if there is a significant change observed. The value in ER sheet is verified as correct and consistent with the value confirmed by experts.
4.	$Days_{l,t}$	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 conduct survey of grazing displacement (2017-2021) and investigate the grazing 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 and consistent with the project records for grazing[/PRG/].
5.	$FC_{p,j,k,t}$	Kg fuel	Fuel consumption by type k, machine type j, parcel grassland p, in year t under project	Monitored values are derived from Diesel Statistics[/DS/]. Trucks and tractors were used in the project, which consumed diesel oil. The county Forestry and Grassland Bureau recorded the diesel consumption of sowing tractors and transport trucks during the implementation of the project. Monitoring frequency is record fuel consumption during the implementation of the project. 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 including trucks and tractors.

				The value in ER sheet is verified as correct.
6.	$PA_{mG,s,i,t}$	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 reasonable. The value in ER sheet is verified as correct.
7.	$SOC_{mG,s,i,t}$	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 greater depth if desired), sampling site i	Monitored values are derived from project records from soil sampling test report/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. 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 electric furnace, test tube, oil bath pot, wire cage and dropper used to collect soil samples. Monitoring frequency is at least once every five years, at the end of growing season in the year measured, until the end of the project crediting period. During this monitoring period, via checking the project records from soil sampling test report/LTR/, it is confirmed that the soil samples were collected from 16-September-2021 to 01-October-2021, and the $SOC_{mG,s,i,t}$ were measured by Shandong Huasheng Tiantong Standard Technical Service Co., Ltd., and the test report was issued on 03-November-2021. 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 that at least once every five years since project started. 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/.
8.	$BD_{mG,s,i,t}$	g soil/cm^3	Soil bulk density in the top 30 cm of soil (or greater depth if required) for management practice mG, stratum s (or greater depth if desired), sampling site i	Monitored values are derived from project records from soil sampling test report/LTR/. Monitoring staff collect 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, electronic scale, rubber hammer, oven and dryer. Monitoring frequency is at least once every five years, at the end of growing season in the year measured, until the end of the project crediting period. During this monitoring period, via checking the project records from soil sampling test report/LTR/, it is confirmed that the soil samples were collected from 16-September-2021 to 01-October-2021, and the $BD_{mG,s,i,t}$ were measured by Shandong Huasheng Tiantong Standard Technical Service Co., Ltd., from 03-October-2021 to 03-November-2021, and the test report was issued on 03-November-2021. 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 that at least once every five years since project started. 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.	$FC_{mG,s,i,t}$	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 soil sampling test report/LTR/. Monitoring staff collect soil samples with soil drill in each sample site and placed in ziplock bag, 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 year measured, until the end of the project crediting period. During this monitoring period, via checking the project records from soil sampling test report/LTR/, it is confirmed that the soil samples were collected from 16-September-2021 to 01-October-2021, and the $BD_{mG,s,i,t}$ were measured by Shandong Huasheng Tiantong Standard Technical Service Co., Ltd., from 03-October-2021 to 03-November-2021, and the test report was issued on 03-November-2021. 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 that at least once every five years since project started. 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.	*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 Soil sampling record[/SSR/]. 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.
11.	$P_{GUI,l,t}$	Head	Total population of livestock of each type relocated to unidentified grasslands in year t	Monitoring value are derived from project records for grazing[/PRG/]. Monitoring frequency is annually. For this monitoring period, the project proponent and the County Forestry and Grassland Bureau visited all the project participants every year to conduct the survey of grazing displacement (2017-2021) and investigate the grazing situation of the project. Based on the project design, it is confirmed that the project does not reduce the number of cattle and sheep grazed by herders, but only manages the time of grazing in the project area. Therefore, during the monitoring period, the same batch of cattle and sheep were actually grazing in the project area and the leakage area, but these cattle and sheep was grazed in the project area for some time, and grazed in

				leakage area (reasonable place planned by the local Forestry and Grassland Bureau, and the specific plot location is not identified) at other times. Hence, the value of $P_{GUI,l,t}$ is same to $P_{l,t}$, which is verified as correct and reasonable. 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.
12.	$Days_{GUI,l,t}$	days	Days that the population of each type of relocated livestock of type l graze in unidentified grassland in year t	Monitoring value are derived from project records for grazing conducted annually during this monitoring period/PRG/. Monitoring frequency is at the end of grazing season in every year. For this monitoring period, the project proponent and the County Forestry and Grassland Bureau visit all the project participants every year to conduct the Survey of Grazing Displacement (2017-2021) and investigate the grazing situation of the project and via checking the project records for grazing /PRG/ results, it is confirmed that the value of $Days_{GUI,l,t}$ is correctly recorded. 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 16, CAR 17, CAR 18, CAR 19, CAR 20, 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 (e.g, 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 manual/GMM/ was provided by PP and validated during the validation process, during this monitoring period, based on this plan, the records of grassland management/PRM/ 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 CH_4 emissions from enteric fermentation, population of livestock type l ($P_{l,t}$) and grazing days of livestock type l ($Days_{l,t}$) were recorded annually during the monitoring period.

For the estimate of annual CH_4 and N_2O emissions from manure deposition during grazing, grazing days of livestock of type l ($Days_{l,t}$), and average grazing hours per day of livestock type l ($H_{l,t}$) during the grazing season were recorded in every grazing season, in each year during the monitoring period.

For the estimate of annual CO_2 emissions due to the use of fossil fuels for SGM, the following parameters must be recorded to monitor $EF_{CO2,k}$ and NCV_k 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 ($SOC_{mG,s,i,t}$);
- Soil bulk density ($BD_{mG,s,i,t}$);
- Percentage of rocks with a diameter larger than 2mm, roots and other dead residues ($FC_{mG,s,i,t}$).

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 Guidelines for sampling and surveys for CDM project activities and programmes of activities (version 04.0)[/GSS/] 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[/PRM/], 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)	Grassland type	Management practice	Soil texture
Strata-1	52,009.90	Desertification Grassland	Rest grazing	Sandy
Strata-2	26,892.34	Desertification Grassland	Rest grazing	Sandy loam
Strata-3	7,443.17	Desertification Grassland	Reseeding grass	Sandy
Strata-4	7,803.22	Desertification Grassland	Reseeding grass	Sandy loam
Strata-5	3,374.91	Desertification Grassland	Rotational grazing	Sandy
Strata-6	4,383.18	Desertification Grassland	Rotational grazing	Sandy loam
Strata-7	11,692.04	Temperate grassland	Rest grazing	Sandy loam
Strata-8	12,576.56	Temperate grassland	Rest grazing	Loam
Strata-9	14,805.05	Temperate grassland	Reseeding grass	Sandy loam
Strata-10	21,153.68	Temperate grassland	Reseeding grass	Loam
Strata-11	21,374.62	Temperate grassland	Rotational grazing	Sandy loam
Strata-12	26,652.60	Temperate grassland	Rotational grazing	Loam
Strata-13	2,083.39	Meadow grassland	Rest grazing	Sandy loam
Strata-14	2,194.31	Meadow grassland	Rest grazing	Loam
Strata-15	3,034.93	Meadow grassland	Reseeding grass	Sandy loam
Strata-16	22,762.37	Meadow grassland	Reseeding grass	Loam
Strata-17	3,118.59	Meadow grassland	Rotational grazing	Sandy loam
Strata-18	17,704.94	Meadow grassland	Rotational grazing	Loam
Total	261,059.80	N/A	N/A	N/A

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)[/GSS/] has been followed by PP to determine the sampling procedure and sample size.

The project stratifications for carbon calculation are ex post determined as 18 which is consistent with the PD. And the total sample plots are determined as 117. 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 is

calculated and total is confirmed as 54 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 117, 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 locations 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 soil sampling test report[/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 54 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 6. X=$\sqrt{6}$=3
- 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 9. X=$\sqrt{9}$=3
- Stratum 9, number of plots y is 6. X=$\sqrt{6}$=3
- Stratum 10, number of plots y is 9. X=$\sqrt{9}$=3
- Stratum 11, number of plots y is 6. X=$\sqrt{6}$=3
- Stratum 12, number of plots y is 9. X=$\sqrt{9}$=3
- Stratum 13, number of plots y is 6. X=$\sqrt{6}$=3
- Stratum 14, number of plots y is 6. X=$\sqrt{6}$=3
- Stratum 15, number of plots y is 6. X=$\sqrt{6}$=3
- Stratum 16, number of plots y is 6. X=$\sqrt{6}$=3
- Stratum 17, number of plots y is 6. X=$\sqrt{6}$=3

- Stratum 18, number of plots y is 6. X=√6=3

Verification team randomly selected 54 sample plots from all strata from the SOC table/SOCT/ and a ground inspection of the project area was conducted during the site visit and members of the verification team visited 54 sample plots from 117 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 grassland type, management practice 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)	Grassland type	Management practice	Soil texture
strata 1, sample 2	99.6025E	39.7076N	Desertification Grassland	Rest grazing	Sandy
strata 1, sample 6	99.7744E	39.6750N	Desertification Grassland	Rest grazing	Sandy
strata 1, sample 1	99.5138E	39.2974N	Desertification Grassland	Rest grazing	Sandy
strata 2, sample 1	99.4631E	39.1672N	Desertification Grassland	Rest grazing	Sandy loam
strata 2, sample 3	99.4622E	39.1797N	Desertification Grassland	Rest grazing	Sandy loam
strata 3, sample 2	99.3944E	39.2374N	Desertification Grassland	Reseeding grass	Sandy
strata 3, sample 4	99.7485E	39.5016N	Desertification Grassland	Reseeding grass	Sandy
strata 6, sample 1	99.4152E	39.2332N	Desertification Grassland	Rotational grazing	Sandy loam
strata 6, sample 4	99.4982E	39.1697N	Desertification Grassland	Rotational grazing	Sandy loam
strata 4, sample 2	99.3345E	39.0808N	Desertification Grassland	Reseeding grass	Sandy loam
strata 5, sample 1	99.4142E	39.0998N	Desertification Grassland	Rotational grazing	Sandy

strata 7, sample 2	99.3355E	39.1407N	Temperate grassland	Rest grazing	Sandy loam
strata 7, sample 3	99.3579E	39.0958N	Temperate grassland	Rest grazing	Sandy loam
strata 8, sample 2	99.3999E	39.1247N	Temperate grassland	Rest grazing	Loam
strata 3, sample 5	99.4233E	39.0586N	Desertification Grassland	Reseeding grass	Sandy
strata 9, sample 5	99.4189E	38.9576N	Temperate grassland	Reseeding grass	Sandy loam
strata 10, sample 9	99.4126E	38.9907N	Temperate grassland	Reseeding grass	Loam
strata 11, sample 4	99.4946E	39.0026N	Temperate grassland	Rotational grazing	Sandy loam
strata 12, sample 8	99.4800E	39.0616N	Temperate grassland	Rotational grazing	Loam
strata 14, sample 2	99.3207E	38.8274N	Meadow grassland	Rest grazing	Loam
strata 18, sample 3	99.5234E	38.6386N	Meadow grassland	Rotational grazing	Loam
strata 13, sample 3	99.7576E	38.8161N	Meadow grassland	Rest grazing	Sandy loam
strata 13, sample 4	99.7097E	38.7894N	Meadow grassland	Rest grazing	Sandy loam
strata 17, sample 1	99.7589E	38.8530N	Meadow grassland	Rotational grazing	Sandy loam
strata 9, sample 6	99.8869E	38.8970N	Temperate grassland	Reseeding grass	Sandy loam
strata 14, sample 5	99.8926E	38.8125N	Meadow grassland	Rest grazing	Loam
strata 18, sample 6	99.9046E	38.8172N	Meadow grassland	Rotational grazing	Loam
strata 17, sample 6	99.9430E	38.8135N	Meadow grassland	Rotational grazing	Sandy loam
strata 4, sample 4	100.5266E	38.6836N	Desertification Grassland	Reseeding grass	Sandy loam
strata 5, sample 2	100.5816E	38.6805N	Desertification Grassland	Rotational grazing	Sandy
strata 12, sample 1	100.7358E	38.4309N	Temperate grassland	Rotational grazing	Loam
strata 2, sample 4	100.7782E	39.1034N	Desertification Grassland	Rest grazing	Sandy loam
strata 10, sample 2	100.8324E	38.7273N	Temperate grassland	Reseeding grass	Loam
strata 8, sample 4	100.9756E	38.4692N	Temperate grassland	Rest grazing	Loam
strata 16, sample 1	100.6183E	38.4322N	Meadow grassland	Reseeding grass	Loam
strata 15, sample 1	100.9362E	38.2207N	Meadow grassland	Reseeding grass	Sandy loam

strata 9, sample 1	100.9739E	38.2301N	Temperate grassland	Reseeding grass	Sandy loam
strata 13, sample 1	101.0452E	38.1824N	Meadow grassland	Rest grazing	Sandy loam
strata 10, sample 6	101.0575E	38.2422N	Temperate grassland	Reseeding grass	Loam
strata 12, sample 4	101.0562E	38.2393N	Temperate grassland	Rotational grazing	Loam
strata 8, sample 8	101.3071E	38.1458N	Temperate grassland	Rest grazing	Loam
strata 7, sample 4	101.3809E	38.2192N	Temperate grassland	Rest grazing	Sandy loam
strata 16, sample 2	101.3403E	38.0766N	Meadow grassland	Reseeding grass	Loam
strata 15, sample 3	101.3766E	38.1565N	Meadow grassland	Reseeding grass	Sandy loam
strata 4, sample 6	101.3329E	38.6754N	Desertification Grassland	Reseeding grass	Sandy loam
strata 18, sample 1	101.3966E	38.1474N	Meadow grassland	Rotational grazing	Loam
strata 11, sample 3	101.3935E	38.0465N	Temperate grassland	Rotational grazing	Sandy loam
strata 15, sample 4	101.4847E	37.9584N	Meadow grassland	Reseeding grass	Sandy loam
strata 16, sample 5	101.6726E	37.9888N	Meadow grassland	Reseeding grass	Loam
strata 11, sample 5	101.5610E	38.0569N	Temperate grassland	Rotational grazing	Sandy loam
strata 6, sample 6	102.0023E	37.8391N	Desertification Grassland	Rotational grazing	Sandy loam
strata 5, sample 6	101.9389E	37.8768N	Desertification Grassland	Rotational grazing	Sandy
strata 17, sample 2	101.9036E	37.8590N	Meadow grassland	Rotational grazing	Sandy loam
strata 14, sample 4	101.8173E	37.8572N	Meadow grassland	Rest grazing	Loam

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 1.1 and validated PD/PD/ as below steps,

Baseline Emissions

Based on the validated PD, it is confirmed that the Baseline Emissions including the below parts, which have been calculated as per the applied methodology,

1) Baseline CH_4 emissions due to enteric fermentation

According the applied methodology, the Baseline CH_4 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_2e/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

2) Baseline N_2O and CH_4 emissions due to manure management

According the applied methodology, the Baseline emissions from manure management include N_2O and CH_4 emissions from manure and urine deposited on grassland soil during the grazing season are calculated as following:

$$BE_{GHG_{MD,b}} = BE_{N_2O_{MD,b}} + BE_{CH_{4MD,b}} \quad (2)$$

Where:

$BE_{N_2O_{MD,b}}$ = Baseline N_2O emissions from manure and urine deposited on grassland soil in baseline year b (t CO_2e)

$BE_{CH_{4MD,b}}$ = Baseline CH_4 emissions from manure and urine deposited on grassland soil in baseline year b (t CO_2e)

1) Baseline N_2O emissions from manure management

Baseline N_2O emissions from manure and urine deposited on grassland soil in baseline year b are the sum of direct and indirect N_2O 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} = Global warming potential for N_2O (t CO_2e/t N_2O)

$BE_{D,N_2O_{MD,b}}$ = Direct N_2O emissions from manure and urine deposited on grassland soil during the grazing season in baseline year b (t N_2O)

$BE_{ID,N_2O_{MD,b}}$ = Indirect N_2O emissions from manure and urine deposited on grassland soil during the grazing season in baseline year b (t N_2O)

a. Baseline direct N_2O emissions from manure and urine deposited on grassland soil

Baseline direct N_2O emissions from manure and urine deposited on grassland soil are calculated as per the applied methodology, Equation 04 calculates direct N_2O emissions from livestock types classified as cattle (dairy, non-dairy and buffalo), poultry and pigs. Equation 05 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.

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

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.

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

Where:

$F_{MD,l1,b}$	=	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 and NO_x (t N)
$F_{MD,l2,b}$	=	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 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
$P_{l,b}$	=	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 N_2O emissions from urine and manure N deposited on grassland soils

According to the methodology (VM0026/Version 1.1) and via checking the Baseline Survey Report/BSR/, it is confirmed that the annual precipitation of the project area is less than annual potential evapotranspiration, so, indirect N_2O emissions from leaching and runoff can be excluded.

The indirect N_2O emissions from the atmospheric deposition of N volatilized as NH_3 and NO_x after urine and manure N is deposited on grassland soils in baseline year b, are calculated using the following equation.

$$BE_{ID,N_2O_{MD},b} = \sum_{l=1}^{L} F_{MD,l,b} \times Frac_{GAS,MD} \times EF_{4,MD} \times 44/28 \quad (7)$$

Where:

$BE_{ID,N_2O_{MD},b}$	=	Indirect N_2O emissions from manure and urine deposited on grassland soil during the grazing season in baseline year b (t N_2O)

$F_{MD,l,b}$	=	Annual amount of manure and urine deposited on grassland soil from livestock type l during the grazing season in baseline year b, 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_2O emission factor for atmospheric deposition of urine and manure N on soils and water surfaces, (kg N_2O-N/(kg NH_3-N + NO_x-N volatilized))
L	=	Index of grazing livestock types

2) Baseline CH_4 emissions from manure management

Baseline CH_4 emissions from manure management are calculated using the following:

$$BE_{CH_{4MD},b} = \frac{GWP_{CH_4} \times \sum_{l=1}^{L} EF_{lM} \times P_{l,b} \times H_{l,b} \times Days_{l,b}}{1000 \times 365 \times 24} \quad (8)$$

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

3) Baseline emissions and removals

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

$$BE_b = BE_{N_2O_{SN},b} + BE_{BB,b} + BE_{CH_{4EF},b} + BE_{GHG_{MD},b} + BE_{FC,b} - BRWP_b \quad (9)$$

Where:

BE_b	=	Baseline emissions and removals in year b (t CO_2e)
$BE_{N_2O_{SN},b}$	=	Baseline N_2O emissions due to fertilizer use in baseline year b (t CO_2e)
$BE_{BB,b}$	=	Baseline GHG emissions from biomass burning in baseline year b (t CO_2e)
$BE_{CH_{4EF},b}$	=	Baseline CH_4 emissions from enteric fermentation in baseline year b (t CO_2e)
$BE_{GHG_{MD},b}$	=	Baseline GHG emissions from manure management in baseline year b (t CO_2e)
$BE_{FC,b}$	=	Baseline CO_2 emissions from farming machine fossil fuel consumption in baseline year b, (t CO_2)

$BRWP_b$ = Baseline removals from existing woody perennials in baseline year b (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

$$BE_b = BE_{CH_{4EF},b} + BE_{GHG_{MD},b} = BE_{CH_{4EF},b} + BE_{N_2O_{MD},b} + BE_{CH_{4MD},b}$$

$$= = \frac{GWP_{CH_4} \times \sum_{l=1}^{L} P_{l,b} \times EF_l \times Days_{l,b}}{1000 \times 365} + GWP_{N_20} \times \left(\sum_{l1=1}^{L1} \frac{P_{l,b} \times W_{l,b} \times Nex_l \times H_{l,b} \times Days_{l,b} \times (1 - Frac_{GAS,MD})}{1000a \times 24 \times 1000b} \times EF_{3,PRP,CPP} \times \frac{44}{28} + \sum_{l2=1}^{L2} \frac{P_{l,b} \times W_{l,b} \times Nex_l \times H_{l,b} \times Days_{l,b} \times (1 - Frac_{GAS,MD})}{1000a \times 24 \times 1000b} \times EF_{3,PRP,SO} \times \frac{44}{28} + \frac{GWP_{CH_4} \times \sum_{l=1}^{L} EF_{lM} \times P_{l,b} \times H_{l,b} \times Days_{l,b}}{1000 \times 24 \times 365} \right) \quad (10)$$

= 648,663 t CO_2e

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 main areas listed in the PD is actual and correct. Hence, it is verified that the baseline emissions and removals calculation result of 648,663 tCO_2e in ER spreadsheet[/XLS/] is correct.

Project Emissions

Based on the validated PD, it is confirmed that the Project Emissions including the below parts, which have been calculated as per the applied methodology,

1) Project CH_4 emissions due to enteric fermentation

According the applied methodology, the Project CH_4 emissions from enteric fermentation are calculated based on an IPCC methodology recommended in the *2019 IPCC Refinement to 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:

$$PE_{CH_{4EF},t} = \frac{GWP_{CH_4} \times \sum_{l=1}^{L} P_{l,t} \times EF_l \times Days_{l,t}}{1000 \times 365} \quad (11)$$

Where:

GWP_{CH_4} = Global-warming potential for CH_4 (t CO_2e/t CH_4)

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

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

1000 = Conversion factor for t CH_4 to kg t CH_4

365 = Conversion factor for years to days

2) Project N_2O and CH_4 emissions due to manure management

According the applied methodology, the project emissions from manure management including N_2O and CH_4 emissions from manure and urine deposited on grassland soil during the grazing season are calculated respectively as following:

$$PE_{GHG_{MD,t}} = PE_{N_2O_{MD,t}} + PE_{CH_{4MD,t}} \quad (12)$$

Where:

$PE_{GHG_{MD,t}}$ = Project GHG emissions from manure management in year t (t CO_2e)

$PE_{N_2O_{MD,t}}$ = Project N_2O emissions from manure and urine deposited on grassland soil in year t (t CO_2e)

$PE_{CH_{4MD,t}}$ = Project CH_4 emissions from manure and urine deposited on grassland soil in year t (t CO_2e)

1) Project N_2O emissions from manure management

The project emissions from manure and urine deposited on grassland soil during the grazing season include direct and indirect N_2O emissions from manure and urine deposited on grassland soil during the grazing season. Project N_2O emissions from manure and urine deposited on grassland soil are calculated as described in the following,

$$PE_{N_2O_{MD,t}} = GWP_{N_2O} \times (PE_{D,N_2O_{MD,t}} + PE_{ID,N_2O_{MD,t}}) \quad (13)$$

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 2019 IPCC Refinement to the 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.

$$PE_{D,N_2O_{MD,t}} = \sum_{l1=1}^{L1} F_{MD,l1,t} \times EF_{3,PRP,CPP} \times 44/28 \quad (14)$$

And/or

$$PE_{D,N_2O_{MD,t}} = \sum_{l2=1}^{L2} F_{MD,l2,t} \times EF_{3,PRP,SO} \times 44/28 \quad (15)$$

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

$$F_{MD,l1,t} = \frac{P_{l,t} \times W_{l,p} \times Nex_l \times H_{l,t} \times Days_{l,t} \times (1 - Frac_{GAS,MD})}{1000_a \times 24 \times 1000_b} \quad (16)$$

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 N_2O emissions from urine and manure N deposited on grassland soils

According to the methodology (VM0026/Version 1.1) and Project Design Report[/PDR/], it is confirmed that the annual precipitation of the project area is less than annual potential evapotranspiration, so, indirect N_2O emissions from leaching and runoff can be excluded.

Indirect N_2O emissions from the atmospheric deposition of N volatilized as NH_3 and NO_x after urine and manure N is deposited on grassland soils under the project, are calculated using the following,

$$PE_{ID,N_2O_{MD},t} = \sum_{l=1}^{L} F_{MD,l,t} \times Frac_{GAS,MD} \times EF_{4,MD} \times 44/28 \quad (17)$$

Where:

$PE_{ID,N_2O_{MD},t}$	=	Project indirect N_2O emissions from manure and urine deposited on grassland soil during the grazing season in year t (t N_2O)

$F_{MD,l,t}$	=	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_2O emission factor for atmospheric deposition of urine and manure N on soils and water surfaces, (kg N_2O-N/(kg NH_3-N + NO_x-N volatilized))
L	=	Index of grazing livestock types

4) CH_4 emissions from manure management

Project CH_4 emissions from manure management are calculated using the following:

$$PE_{CH_{4MD},t} = \frac{GWP_{CH_4} \times \sum_{l=1}^{L} EF_{lM} \times P_{l,t} \times H_{l,t} \times Days_{l,t}}{1000 \times 365 \times 24} \quad (18)$$

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

3) Project CO_2 emissions due to the use of fossil fuels

The following equation is applied to calculate CO_2 emissions from consumption of fossil fuels for management practices implemented as part of the project.

$$PE_{FC,t} = \frac{\sum_{p=1}^{P} \sum_{j=1}^{J} \sum_{k=1}^{K} FC_{p,j,k,t} \times EF_{CO_2,k} \times NCV_k}{1000} \quad (19)$$

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

4) 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:

$$P_{SOC_{mG,s,i,t}} = SOC_{mG,s,i,t} \times BD_{mG,s,i,t} \times Depth \times (1 - FC_{mG,s,i,t}) \times 0.1 \quad (20)$$

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:

$$P_{SOC_{mG,s,t}} = \frac{\sum_{i=1}^{I} P_{SOC_{mG,s,i,t}}}{I} \quad (21)$$

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 m_G, 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 m_G under project in year t, and the carbon stock under the baseline scenario, for all strata.

$$P_{mG,t} = \sum_{s=1}^{S} (P_{SOC_{mG,s,t}} - SOC_{s,Baseline}) \times PA_{mG,s,t} \quad (22)$$

Where:

$P_{mG,t}$	=	Difference in the carbon stock between the project in year t and the baseline scenario (t C)
$PA_{mG,s,t}$	=	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.

$$P_t = \sum_{mG=1}^{M} P_{mG,t} \quad (23)$$

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:

$$PR_t = \frac{(P_t)}{n} \times \frac{44}{12} \quad (24)$$

Where:

PR_t	=	Project removals due to changes in SOC in year t (t CO_2e)
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:

$$PR_t = \frac{(P_t - P_{t-f})}{f} \times \frac{44}{12} \quad (25)$$

Where:

PR_t	=	Project removals due to changes in SOC in year t (t CO_2e)
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)

5) Uncertainty analysis

All parameters are selected according to section 9.1 and 9.2 of the methodology (VM0026, Version 1.1), 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 1.1).

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 117, 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.

6) Project emissions and removals

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

$$PE_t = PE_{CH_{4EF},t} + PE_{N_2O_{MD,}t} + PE_{CH_{4MD,t}} + PE_{FC,t} - PR_t \quad (26)$$

Where:

PE_t = Project net GHG emissions by sources and removals by sinks in year t (t CO_2e)

$PE_{N_2O_{MD,}t}$ = Project N_2O emissions from manure and urine deposited on grassland soil in year t (t CO_2e)

$PE_{CH_{4EF,}t}$ = Project CH_4 emissions from enteric fermentation in year t (t CO_2e)

$PE_{CH4_{MD,}t}$ = Project CH_4 emissions from manure management in year t (t CO_2e)

$PE_{FC,t}$ = 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_2e)

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

$PE_t = PE_{CH_{4EF},t} + PE_{N_2O_{MD,}t} + PE_{CH_{4MD,t}} + PE_{FC,t} - PR_t$ =-2,431,180 tCO_2e

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 -2,431,180 tCO_2e in ER spreadsheet/XLS/ is correct.

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:

$$LE_t = LE_{M,t} + LE_{GD,t} \quad (27)$$

Where:

LE_t	=	Leakage emissions in year t (t CO_2e)
$LE_{M,t}$	=	Leakage emissions due to market leakage in year t (t CO_2e)
$LE_{GD,t}$	=	Leakage emissions due to grazing displacement in year t (t CO_2e)

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, though grazing frequency was strictly managed during the implementation of the project, and the controlled grazing will be allowed depending on the growth situation of the forage, but 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 during this monitoring period, which has been confirmed by interview with local herders and officers.

Besides, via checking the Statistical Yearbook of Zhangye City from 2017 to 2020/SYZ/, it is confirmed that annual output of cattle and sheep in Zhangye City has not decreased since the project started.

Therefore, the project would not lead to a decrease in cattle and sheep, therefore, the market leakage is considered to be 0 tCO_2e, 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 1.1*, 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/I2/ and herders/I3/, it is confirmed that the local herders grazed in the project area under the

baseline scenario, however with the project implemented, grazing frequency will be controlled. Since the grazing demand of herdsmen will not decline in a short time, there is likely to be displacement of grazing activity in the project, then proceed to next step.

Step 2. Survey of Grazing Displacement and Relocation Plans

Via checking the Survey of Grazing in the project area prior to the project start date[/SG/], 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 (01-May-2015 to 19-June-2016) 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.

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 in the project area prior to the project start date[/SG/] for this project, it is confirmed that the survey showed that under the baseline scenario, the project participants stocked 183,540 cattle and 641,788 sheep in the project area, grazing for about 138 days every year and 8 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 in the project area prior to the project start date[/SG/] 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 1,102,293.33 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 the project 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 in the project area prior to the project start date[/SG/], 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 prohibition of grazing, 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. 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 Zhangye City from local government/lg/ comparing with the satellite images/SI/, it is confirmed that Zhangye City covers an area of 4,087,400 square kilometers, and the available grassland area is 2,150,046 ha, accounting for 52.6% of the total area, and the area of forest land and cropland are confirmed as small. Furthermore, via the Survey of Grazing in the project area prior to the project start date/SG/ 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 1,102,293 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:

$$Area_{GUI,t} = \frac{DMI_{GUI,t}}{ANPP_{GUI,REF}} \quad (28)$$

$$DMI_{GUI,t} = \sum_{l=1}^{L} \left(\frac{DMI_{day,l} \times P_{GUI,l,t}}{1000}\right) \times Days_{GUI,l,t} \quad (29)$$

Where:

$Area_{GUI,t}$	=	Area required to sustain the population of livestock displaced to unidentified grasslands in year t (ha)

$DMI_{GUI,t}$	=	Dry matter intake required to sustain the total number of livestock of all types l relocated to unidentified grasslands in year t (t dm)
$ANPP_{GUI,REF}$	=	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 from 2017 to 2021 is 42,255, 110,036, 169,931, 169,931 and 169,931 ha respectively which has been confirmed by checking ER sheet, while the available grassland area is 2.15 million ha in Zhangye City, 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:

$$LE_{GUI,CH_{4EF},t} = \frac{\sum_{l=1}^{L} P_{GUI,l,t} \times EF_l \times Days_{GUI,l,t} \times GWP_{CH_4}}{1000 \times 365} \quad (30)$$

Where:

$LE_{GUI,CH_{4EF},t}$	=	Leakage emissions in year t from enteric fermentation by livestock displaced to unidentified grasslands (t CO_2e)
$P_{GUI,l,t}$	=	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_2e/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 N_2O and CH_4 leakage emissions due to manure deposition on grassland caused by relocating the livestock to unidentified grasslands outside the project area using:

$$LE_{GUI_{MD,t}} = LE_{GUI,N2O_{MD,t}} + LE_{GUI,CH4_{MD,t}} \quad (31)$$

Where:

$LE_{GUI_{MD,t}}$ = Leakage emissions from manure and urine deposited on unidentified grassland in year t (t CO_2e)

$LE_{GUI,N2O_{MD,t}}$ = Leakage N_2O emissions from manure and urine deposited on unidentified grasslands in year t (t CO_2e)

$LE_{GUI,CH4_{MD,t}}$ = Leakage CH_4 emissions from manure and urine deposited on unidentified grasslands in year t (t CO_2e)

$LE_{GUI,N2O_{MD,t}}$ is calculated as the sum of direct N_2O emissions and indirect N_2O emissions using:

$$LE_{GUI,N2O_{MD,t}} = GWP_{N2O} \times (LE_{GUI_D,N2O_{MD,t}} + LE_{GUI_{ID},N2O_{MD,t}}) \quad (32)$$

Where:

$LE_{GUI,N2O_{MD,t}}$ = Leakage N_2O emission from manure and urine deposited on unidentified grasslands in year t (t CO_2e)

GWP_{N2O} = Global-warming potential of N_2O (t CO_2e/t N_2O)

$LE_{GUI_D,N2O_{MD,t}}$ = Leakage direct N_2O emissions from manure and urine deposited on unidentified grasslands in year t (t N_2O)

$LE_{GUI_{ID},N2O_{MD,t}}$ = Leakage indirect N_2O emissions from manure and urine deposited on unidentified grasslands in year t (t N_2O)

Leakage direct N_2O emission from manure and urine deposited on unidentified grasslands ($LE_{GUI_D,N2O_{MD,t}}$) is calculated using:

$$LE_{GUI_D,N2O_{MD,t}} = \sum_{l1=1}^{L1} F_{MD,GUI,t,l1} \times EF_{3,PRP,CPP} \times \frac{44}{28} \quad (33)$$

And/or

$$LE_{GUI_D,N2O_{MD,t}} = \sum_{l2=1}^{L2} F_{MD,GUI,t,l2} \times EF_{3,PRP,SO} \times \frac{44}{28} \quad (34)$$

Where:

$LE_{GUI_D,N2O_{MD,t}}$ = Leakage direct N_2O emissions from manure and urine deposited on unidentified grasslands in year t (t N_2O)

$F_{MD,GUI,t,l1}$ = Annual amount of nitrogen in cattle, poultry and pig manure and urine deposited on unidentified grasslands in year t, adjusted for volatilization as NH_3 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 NH_3 and NO_x (t N)

$EF_{3,PRP,CPP}$ = N_2O emission factor for cattle (dairy, non-dairy and buffalo), poultry and pigs manure and urine deposited on grasslands (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 grasslands (kg N_2O-N/kg N input)

$$F_{MD,GUI,t,l} = \frac{P_{GUI,l,t} \times W_l \times Nex_l \times H_{GUI,l,t} \times Days_{GUI,l,t} \times (1 - Frac_{GAS,MD,l})}{1000_a \times 24 \times 1000_b} \quad (35)$$

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

CH_4 emission from manure management due to displacement of livestock to unidentified grasslands is calculated using:

$$LE_{GUI,CH4_{MD,t}} = \frac{GWP_{CH4} \times \sum_{l=1}^{L} EF_{l,m} \times P_{GUI,l,t} \times H_{GUI,l,t} \times Days_{GUI,l,t}}{24 \times 365 \times 1000} \quad (36)$$

Where:

$LE_{GUI,CH4_{MD,t}}$ = Leakage CH_4 emissions from manure and urine deposited on unidentified grasslands in year t (t CO_2e)

GWP_{CH4} = Global-warming potential of CH_4 (t CO_2e/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:

$$LE_{GUI,t} = LE_{OG,GUI,t} + LE_{GUI,CH4_{EF,t}} + LE_{GUI_{MD,t}} \quad (37)$$

Where:

$LE_{GUI,t}$ = Leakage due to displacement of livestock to unidentified grasslands in year t (t CO_2e)

$LE_{OG,GUI,t}$ = Leakage due to soil carbon loss resulting from overgrazing due to displacement of livestock to unidentified grasslands in year t (t CO_2e)

$LE_{GUI,CH4_{EF,t}}$ = Leakage due to enteric fermentation by livestock displaced to unidentified grasslands in year t (t CO_2e)

$LE_{GUI_{MD,t}}$ = Leakage due to N_2O and CH_4 emissions in manure and urine deposited on grasslands by livestock displaced to unidentified grasslands in year t (t CO_2e)

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 formular for Leakage due to displacement of livestock to unidentified grasslands in year t is

$$LE_t = LE_{GD,t} = LE_{GUI,t} = LE_{GUI,CH_{4EF},t} + LE_{GUI_{MD,t}}$$

$$= LE_{GUI,CH_{4EF},t} + LE_{GUI,N_20_{MD},t} + LE_{GUI,CH_{4MD},t}$$

$$= \frac{\sum_{l=1}^{L} P_{GUI,l,t} \times Days_{GUI,l,t} \times GWP_{CH_4} \times EF_l}{1000 \times 365} + GWP_{N_20} \times \left(\sum_{l1=1}^{L1} \frac{P_{GUI,l,t} \times W_l \times Nex_l \times H_{GUI,t} \times Days_{GUI,l,t} \times (1 - Frac_{GAS,MD})}{1000a \times 24 \times 1000b} \times EF_{3,PRP,CPP} \times \frac{44}{28} + \sum_{l2=1}^{L2} \frac{P_{GUI,l,t} \times W_l \times Nex_l \times H_{GUI,t} \times Days_{GUI,l,t} \times (1 - Frac_{GAS,MD})}{1000a \times 24 \times 1000b} \times EF_{3,PRP,SO} \times \frac{44}{28} + \sum_{l=1}^{L} F_{MD,GUI,t,l} \times Frac_{Gas,MD} \times EF_4 \times \frac{44}{28} \right) + \frac{GWP_{CH_4} \times \sum_{l=1}^{L} EF_{lm} \times P_{GUI,l,t} \times H_{GUI,l,t} \times Days_{GUI,l,t}}{1000 \times 24 \times 365} \quad (38)$$

=353,893 tCO_2e

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.

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:

$$ER_t = BE_b - PE_t - LE_t \quad (39)$$

Where:

ER_t = Emission reductions in year t (t CO_2e)

BE_b = Baseline emissions and removals in year b (t CO_2e)

PE_t = Project emissions and removals in year t (t CO_2e)

LE_t = Leakage emissions in year t (t CO_2e)

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 VCUs for this monitoring period is calculated as below formulas,

$$VCU_t = ER_t - BC_t \quad (40)$$

$$BC_t = RR_t * (PRWP_t + PR_t - PRWP_b) \quad (41)$$

Where:

VCU_t	=	Emission reductions eligible to be issued as VCUs in year t (t CO_2e)
ER_t	=	Emission reductions in year t (t CO_2e)
BC_t	=	AFOLU buffer credits in year tm (t CO_2e)
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_2e)
PR_t	=	Project removals due to changes in SOC in year t (t CO_2e)
$PRWP_b$	=	Baseline removals from existing woody perennials in baseline year b (t CO_2e)

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 tCO_2e.

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

25-July-2017– 31-December-2021

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

Period	GHG Emission reductions (tCO_2e)	Buffer (tCO_2e)	VCUs (tCO_2e)
25-July-2017~31-December-2017	263,122	26,397	236,725
01-January-2018~31-December-2018	614,169	60,218	553,951
01-January-2019~31-December-2019	614,733	60,218	554,515
01-January-2020~31-December-2020	617,988	60,382	557,606
01-January-2021~31-December-2021	615,938	60,218	555,720
25-July-2017~31-December-2021 Total	**2,725,950**	**267,433**	**2,458,517**

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 0.5%.

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 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 mechanism 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/&/PDAO/&/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 Mitigation plan, 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 fence material during the first three years, which has been fully secured by Zhangye City Finance Department 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. The project is implemented in project land which is state-owned lands and village collective property as defined in the Proof of land qualification[/PLQ/] and project approval[/APDR/]. Thus the project does not encroach on any private property, community property, or government property beyond the boundaries of the project land. Local governments and the village collective voluntarily use these lands to seeding grasses confirmed by checking the Proof of land qualification[/PLQ/] and project approval[/APDR/], and they all agreed to authorize Zhangye Academy of Forestry Sciences the rights of grassland management and carbon credits of the project area, the project approval[/APDR/] and PRA report[/PRA/] and filled questionnaires[/QUE/] are confirmed that consent from governments and all the village collective are obtained before the project implementation. And the Proof of land qualification[/PLQ/] and Grassland management Manual[/GMM/] were 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 261,059.80 ha of degraded grassland in project zone have been managed sustainably by fence building and reseeding of local high-quality forage, 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 261,059.80ha 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[/PLQ/]. The local governments and collectives have the right to the use of land, and Zhangye City Forestry and Grassland Bureau applied to Zhangye City 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 yearly phase, the Zhangye City 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 Zhangye Academy of Forestry Sciences is in rich experience of maintenance and management of the grassland, thus Zhangye City Forestry and Grassland Bureau authorized Zhangye Academy of Forestry Sciences as the Project Proponent of the project, the rights grassland management and Carbon credits of the project during the project crediting period[/CDA/]. 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 Zhangye City 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 Zhangye City governments will be responsible to supervise the state and collective's right to the lands. Therefore project longevity is scored as 10.
External risks	
Land tenure and resource access/impact	The ownership of all 261,059.80ha 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[/PLQ/]. The local governments and collectives have the right to the use of land, and Zhangye City Forestry and Grassland Bureau applied to Zhangye City 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 yearly phase, the Zhangye City 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. And for this monitoring period, as assessed above, via checking the questionnaires survey conducted from 16-September-2021 to 01-October-2021 which has been confirmed by checking the 80 filled questionnaires[/CMQ/] collected during this period and cross verified by on-site interview with the local stakeholders[/I2/,/I3/]. 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 -1.56, 0.36, 0.44, -0.23, -0.29 and -0.28, averaged over the most recent five years, so the mean score is -0.38. Governance Score is -0.38 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 grasses 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 outbreaks	Insignificant. 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 Forestry and Grassland Bureau and local herders. Therefore, the mitigation is scored as 0.25.
Extreme Weather	Insignificant The project area is located in the north foot of Qilian Mountain, considering the data based on weather reports collected from historic records, the temperature in project zone is low, but the frost disaster has little impact on the grassland 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 Forestry and Grassland 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 Forestry and Grassland 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 40 and 41 (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 16-September-2021 to 01-October-2021 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 grassland 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 is 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 11,727 job opportunities (952 permanent jobs and 10,775 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, get extra allowance and increase their household income, provide graze skill training and enhance capabilities of local herders 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 31 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/I1/, local residents/I3/ and grassland guardians/I3/ during the interview, and as per the description in section 2.3.16 of MR, it is verified that all the expected impacts for each community identified in the project description are positive, thus no negative community impacts need to be mitigated.

However, as assessed in the above sections, it is confirmed that during the survey conducted for this monitoring period, some of the representatives think that the project does not bring economic benefits and promote local sustainable development to the area. They thought the project would affect their grazing time and their income from selling livestock products were reduced.

But these herders have been provided by job opportunities/LC/ and payment/PP/, which will increase their income in long term. Besides, the impacted herders in the project area can receive corresponding subsidies. The herders have received corresponding subsidies in line with the Implementation Plan of the new round of grassland ecological protection subsidy and reward policy (2016-2020) in Zhangye City/IPS/, as per the plan, the herders in the project area can receive corresponding subsidies vary from county to county, ranging from 2.17 RMB/mu to 3.35 RMB/mu which is verified as in line with the plan/IPS/ and confirmed by

checking the Subsidy payment record issued by financial department of counties/SPR/ and also verified through interview with local officers/I2/ and local herders/I3/.

Via site interview with local officers/I2/, it is confirmed that County Forestry and Grassland Bureau and PP have investigated the completion of the grazing prohibition and report it to the local financial department yearly, then the subsidies were distributed to the local herders accordingly.

All the impacted herders agreed with the 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 Subsidy payment record/SPR/ and site interview with representatives from local herders/I3/.

Besides, no HCVs has been identified based on above assessment. And based on above assessment, it is confirmed that all the negative well-being impacts have been mitigated.

CAR 32 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 create job opportunities 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, get extra allowance and increase their household income, provide graze skill training and enhance capabilities of local herders 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 positive impacts including improve living environment of local residents, maintain gender equality, promote the exchange and collision of traditional culture, promote technical capability of local herders 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)

No HCVs was identified related to community well-being in the project zone based on above assessment and assessed in the validated PD/PD/, thus none of the HCVs related to community well-being will be negatively affected by the project.

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/I2/ and grassland guardians/I3/, 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/I2/ and local stakeholders/I3/.

As per the frequency defined in the PD, the monitoring should be conducted before every verification event, a meeting of stakeholder representatives has held in Forestry and Grass Bureau of Zhangye city on 29-March-2021, and the monitoring team distributed 80 questionnaires to collect the interview results for the representatives of local residents living in project zone from 16-September-2021 to 01-October-2021 and got 80 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 80 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/I1/, /I3/, /I4/ 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 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 Yugur nationality, grassland guardians, local government	Monitoring results in MR for this monitoring period is verified by checking the training records/TTR/, questionnaires/CMQ/ and also confirmed by on-site interview with local villagers/I3/ including women, herders, local Yugur nationality, grassland guardians and local officers/I2/.
Number of female community members who are expected to have improved skills and/or knowledge resulting from training as part of project activities	Training records Questionnaire and interview	Local residents, local herders, local women, local Yugur nationality, grassland guardians, village collectives, local government	Monitoring results in MR for this monitoring period is verified by checking the training records/TTR/, questionnaires/CMQ/ and also confirmed by on-site interview with local villagers/I3/ including women, herders, local Yugur nationality, grassland guardians and local officers/I2/.
Total number of people expected to be employed in project activities, expressed as number of full-time employees	Working contracts and payment records	Local herders, local Yugur nationality, 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 local Yugur nationality, herders 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 Yugur nationality, 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, local Yugur nationality and grassland guardians

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 Yugur nationality, 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, Local Yugur nationality 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, village collectives, local government	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 and local officers/I2/.
The number of herdsmen subsidized by the government due to the implementation of the project and the amount of subsidy.	Questionnaire and interview Government subsidy records	Local women, local herders, local Yugur nationality, grassland guardians	Monitoring results in MR for this monitoring period is verified by checking the Subsidy payment record issued by financial department of counties/SPR/, questionnaires/CMQ/ and also confirmed by on-site interview with local villagers/I3/ including women, herders, Local Yugur nationality and grassland guardians
Number of tourists received in the project area each year	Records of Zhangye Year statistics (2017-2020)	Local residents, Village collectives	Monitoring results in MR for this monitoring period is verified by checking the Statistical Yearbook of Zhangye City from 2017 to 2020/SYZ/
Area of restored grassland from different management practices	Project records from county Forestry and Grassland Bureau	Zhangye Forestry and Grassland Bureau, County Forestry and Grassland Bureau, Local government	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 Yugur nationality benefiting from project activities	Working contracts and payment records Questionnaire and interview	Local residents, local Yugur nationality, Village collectives, local government	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 villagers/I3/ including local Yugur nationality and local officers/I2/.

During the on-site verification, second round of stakeholder meetings with the villagers, local officers, grassland guardians and stakeholders have been carried out on 24-January-2022. 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 33 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 16-September-2021 to 01-October-2021 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,

For Grassland productivity of the project area, the sustainable management activity of the project has been implemented through scientific and reasonable configuration method, seeding grass on the degraded grassland and building fences prevent the grazing have significantly increased the restored 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.

For Grassland coverage of the project area, the sustainable management activity of the project has been implemented through scientific and reasonable configuration method, seeding grass on the degraded grassland and building fences prevent the grazing have significantly increased the restored grassland, furthermore, 6 native grass species have been successfully grew to establish grassland, which has significantly increased the grassland cover in project area during this monitoring period, and this is also verified by on-site inspection to the sample plots and observation of the project area.

For Number of grass species in the project area, 6 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.

For Threats to endangered animals, via checking the biodiversity survey record for this monitoring period recorded by monitoring staffs[/BSRM/], it is verified that project effectively restore grassland vegetation, alleviate grassland degradation, and restore wildlife habitat, thereby reducing the threat of wildlife by reseeding grass and prevented the continued degradation of the local grassland ecosystem and increased

the natural habitats for the endangered animals, 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.

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.

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.

The main measure of the project is rotational grazing and rest grazing through building grassland fences and planted grass seeds on the degraded grassland which is confirmed in PD. Through scientific and sustainable management of grazing, relevant training about technical skills, scientific and effective management plan, alleviate soil desertification and restore grassland vegetation to improve soil carbon storage and local biodiversity. The management team are experienced with sustainable grassland management as assessed above which has been determined in the project design and confirmed by site inspection. And the management team established an integrated management system for implementation of the project, including rodent control, fire prevention and technical training of employees, which will minimize the intensity and periodicity of required interventions which is verified by checking the Grassland Management Manual/GMM/.

Therefore, it is concluded that no negative impacts on biodiversity recorded for this monitoring period, so no measures were necessary to mitigate impacts, beyond the routine operation of the project.

4.6.3 Net Positive Biodiversity Impacts (B2.2)

The local grass species seeding and fence building for prevent over grazing 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 and building fence on the degraded grassland 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 Zhangye City and the implementation of the project has improved the ecological environment of the Eastern Qilian Mountain, increased the biodiversity and provided more habitats for threatened species.

Based on the situation of biodiversity within the project zone at baseline scenario, the project area would continue to be degraded grassland 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 there are 2 species of national level I protected species, 19 species of national level II protected species in the project zone. One species is listed in CITES Appendix I, 18 species is listed in CITES Appendix II. And there are 1 species of endangered animals (birds) and 6 species of vulnerable animals in the IUCN Red List/IUCN/ of Endangered Species in project zone. 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 7 species of endangered animals have benefited from reduced threats as a result of the project activities.

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

4.6.4 High Conservation Values Protected (B2.4)

No HCVs has been identified related to biodiversity based on above assessment and in line with the validated PD.

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 Procurement 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 Procurement Contract[/GSPC/] and onsite observations.

4.6.8 Inputs Justification (B2.8)

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.

The prevention and control methods by using biological control agents 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[/I2/] and grassland guardians[/I3/]. 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[/I2/] and grassland guardians[/I3/].

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 resulting 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, also the expert group from Gansu Province Academy of Qilian Water Resource Conservation Forests Research Institute have performed biodiversity monitoring to record the discovery of any biodiversity including both flora and fauna. Auditing group performs internal verification of the measurement, reviews all the monitoring records and documents, crosschecks evidence and calculates emission removals during each verification period. This has been confirmed by site interview with the monitoring team member/I3/.

As per the frequency defined in the PD, the State Variables of the biodiversity have been monitored in both winter (03-November-2020 to 07-December-2020) and summer (25-May-2021 to 20-June-2021) 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, and the Project Biodiversity Survey Report for this monitoring period complied by Gansu Province Academy of Qilian Water Resource Conservation Forests Research Institute/PBSR/, it is verified that the monitoring approach used for investigation is as per the design defined in the PD/PD/.

For state variables, the monitoring sites for Grassland productivity, Grassland coverage in the project area and Number of grass species will be 54 sample sites (18*3). For the numbers for endangered animals, the 6 monitoring lines (6 geographical units and each of 3km) have been set in each strata (total 108) and the

numbers occurred will be observed at least one day (first monitoring was from 07:00 to 11:00 and repeated monitoring from 15:00 to 18:00) during the monitoring period around the monitoring lines to show the impacts to the animals. For the reduced threats to endangered animals, grassland guardians need to patrol the management and protection area regularly, once every 15 days, supervise the area of vegetation restoration and report the protect situation to the county Forestry and Grassland Bureau. And the monitoring frequency is defined as before every verification is confirmed as reasonable.

For pressure variables, the monitoring data will be recorded by grassland guardians and confirmed by local Forestry and Grassland Bureau once every year which is verified as applicable to the impacts of the identified pressure variables.

For response variables, the monitoring data will be recorded by grassland guardians and confirmed by local Forestry and Grassland Bureau once every year which is verified as applicable to the impacts of the identified response variables.

Via comparing the information in the biodiversity survey record for this monitoring period recorded by monitoring staffs/BSRM/ and Project Biodiversity Survey Report for this monitoring period complied by Gansu Province Academy of Qilian Water Resource Conservation Forests Research Institute/PBSR/, 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, expert group, 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/I3/ and based on the experience of the monitoring team and expert group.

By checking the information in the biodiversity survey record for this monitoring period recorded by monitoring staffs/BSRM/ and Project Biodiversity Survey Report for this monitoring period complied by Gansu Province Academy of Qilian Water Resource Conservation Forests Research Institute/PBSR/, 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) as per the PD.

For the State variables, Grassland productivity, Grassland coverage in the project area, Number of grass species, the numbers for endangered animals and Reduced threats to endangered animals (Reduced grazing days and wildlife theft) have been monitored.

The grassland productivity increased by 10 kg per Mu on average through fence building; Grassland productivity increased by 25 kg per Mu on average through reseeding grass. 261,059.80 ha of degraded grasslands were restored by fence building and reseeding grass, and the grassland vegetation coverage increased by around 6 percentage points on average, *Elymus nutans, Elymus sibiricus, Poa pratensis, Agropyron cristatum, Festuca rubra, Artemisia sphaerocephala* have been seeded and grew successfully in the project area and 7 threatened species has been protected/PBSR/, and via checking the daily working log/WL/ and biodiversity survey record for this monitoring period recorded by monitoring staffs/BSRM/, it is confirmed that the implementation of the project restored 77,002.43 ha of seriously degraded grassland by reseeding grass which increase the wildlife habitat and reduces the threat of biodiversity.

For the Pressure variables, the risk to the project and the harmful impacts to biodiversity, indicators of fire, rodents and pests, overgrazing and Chemical pesticides have been monitored through examined and

recorded by the grassland guardians and confirmed by local Forestry and Grassland 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 no Chemical pesticides applied in this monitoring period via checking the daily working log/WL/ and biodiversity survey record for this monitoring period recorded by monitoring staffs/BSRM/.

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 Forestry and Grassland Bureau. Via site inspection and interview with the officer from Forest and Grass Bureau, it is verified that 261,059.80 ha grassland area are under prevention control from fires, rodents and pests and 261,059.80 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 34 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 16-September-2021 to 01-October-2021 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)

N/A

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

N/A

4.7 Additional Project Implementation Information

No additional project implementation is relevant for reporting here as details on project implementation are in 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 Zhangye Improved Grassland Management Project in China, VCS reference No. 2748, for the period 25-July-2017 to 31-December-2021, 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 standard Version 4.2.
- 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 1.1 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 25-July-2017 to 31-December-2021

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

Year	Baseline emissions or removals (tCO_2e)	Project emissions (tCO_2e)[3]	Leakage emissions (tCO_2e)	Project removals (t CO_2e)	Net GHG emission reductions or removals (tCO_2e)	Buffer (tCO_2e)	VCUs (tCO_2e)
25-July-2017~31-December-2017	64,026	53,659	11,214	263,969	263,122	26,397	236,725
01-January-2018~31-December-2018	146,059	73,234	60,835	602,179	614,169	60,218	553,951

[3] Project emissions here is emissions excluding the project removals

01-January-2019~31-December-2019	146,059	39,557	93,948	602,179	614,733	60,218	554,515
01-January-2020~31-December-2020	146,460	38,352	93,948	603,828	617,988	60,382	557,606
01-January-2021~31-December-2021	146,059	38,352	93,948	602,179	615,938	60,218	555,720
25-July-2017~31-December-2021 Total	**648,663**	**243,154**	**353,893**	**2,674,334**	**2,725,950**	**267,433**	**2,458,517**

For the achievement in climate objective, in this Monitoring period 25-July-2017 to 31-December-2021, the project restored 261,059.80 ha of degraded grassland in Zhangye City and results in **2,725,950** tCO_2e of GHG removals and **2,458,517** tCO_2e equivalent of credits eligible for issuance as VCUs.

For the achievement in community objective, the project improved the interaction within the local community, increased connection between local herders and tourists attracted by the project grassland landscape and indirectly promote the diffusion of traditional culturewhich 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 of the project zone, such as Qilian mountains which has been regarded as ecological security barrier in the project zone during this monitoring period.

Beijing, 28-September-2022

Zhao Xuejiao
TÜV NORD JI/CDM Certification Program
Validation Team Leader

Hannover, 28-September-2022

Alexandra Nuske
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_2e	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.	Zhangye animal husbandry and Veterinary Bureau	/APDR/	Approval of project design report	Approval of project design report approved by Zhangye animal husbandry and Veterinary Bureau [4] on 27-December-2016	PP
2.	IPCC	/AR5/	IPCC fifth assessment	IPCC fifth assessment for GWP value	Public website
3.	Gansu Province Academy of Qilian Water Resource Conservation Forests Research Institute	/BBSR/	Biodiversity baseline survey report	Biodiversity baseline survey report issued by Gansu Province Academy of Qilian Water Resource Conservation Forests Research Institute on 16-November-2016	PP
4.	Local Administration for Industry and Commerce	/BL/	Business License	Business License of all the participants of the project	PP
5.	Dahua Engineering Management (Group) Co., Ltd Lanzhou Branch	/BSR/	Baseline Survey Report	Baseline Survey Report issued by Dahua Engineering Management (Group) Co., Ltd Lanzhou Branch in November 2016	PP
6.	Monitoring staffs	/BSRM/	Biodiversity survey record for this monitoring period	Biodiversity survey record for this monitoring period recorded by monitoring staffs	PP
7.	Zhangye Academy of Forestry Sciences and Gansu Heihe Electric Power Sales Co. Ltd	/CA/	Consultant Agreement	Consultant Agreement signed Zhangye Academy of Forestry Sciences and Gansu Heihe Electric Power Sales Co. Ltd dated in September 2021	PP
8.	Dahua Engineering Management (Group) Co., Ltd Lanzhou Branch	/CBSR/	Community Baseline Survey Report	Community Baseline Survey Report issued by Dahua Engineering Management (Group) Co., Ltd Lanzhou Branch dated in Nov. 2016	PP

[4] Animal Husbandry and Veterinary Bureau has been dismissed in 2019 due to the reform of government function, and some functional departments related to grassland management have been transferred to Zhangye Forestry and Grassland Bureau.

9.	CCBA	/CCBPR/	CCB Program Rules, version 3.1	https://verra.org/project/ccb-program/rules-requirements-and-guidance/	CCB website
10.	CCBA	/CCBS/	CCB Standard, version 3.1	https://verra.org/project/ccb-program/rules-requirements-and-guidance/	CCB website
11.	Zhangye Academy of Forestry Sciences and Local village collectives	/CDA/	Carbon Development Agreement	Carbon sink project entrusted development agreement for this project date on 15-October-2016	PP
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	80 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-2022	PP
15.	Zhangye Academy of Forestry Sciences	/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 20-November-2021	PP
16.	PP	/DS/	Diesel Statistics	Diesel Statistics conducted by PP	PP
17.	Literature	/ESC/	Ex-ante SOC	Ex-ante estimation of SOC changes in project scenario derived from Zhou Xiaoyan. (2019) Impacts of different restoration years of returning grazing land to grassland on community characteristics and soil nutrients of alpine grassland in Maqu County	PP
18.	Project proponent and county Forestry and Grassland Bureau	/GDMP/	Grazing Displacement Management Plan	Grazing Displacement Management Plan issued by Project proponent and county Forestry and Grassland Bureau in September 2017	PP
19.	Google	/GE/	Google Earth	Google Earth Map	Public software

20.	Gansu Grassland Technology Promotion Station	/GMM/	Grassland Management Manual	Grassland Management Manual in July 2009	PP
21.	Local Forestry and Grassland Bureau and related company	/GSPC/	Grass Seed Procurement Contract	Grass Seed Procurement Contract for year 2017, 2018 and 2019	PP
22.	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
23.	County Forestry and Grassland Bureau	/GYMR/	Grass yield measurement results	Annual grass yield measurement results issued by County Forestry and Grassland Bureau	PP
24.	Zhang Chao	/IAB/	Peer-review study	Zhang Chao. (2020). The investigation and analysis of biodiversity and natural ecosystem characteristics in Qilian Mountain National Park. *Forestry science and technology information* (3),12-14.	PP
25.	Zhangye animal husbandry and Veterinary Bureau	/IAR/	Inspection and Acceptance Report	Carbon sink afforestation Inspection and Acceptance Report of Completed Project dated on 07-September-2019	PP
26.	IPCC	/IPCC/	IPCC	2006 IPCC Guidelines and 2019 IPCC Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories	IPCC website
27.	Zhangye Municipal People's Government Office	/IPS/	Implementation Plan	Implementation Plan of the new round of grassland ecological protection subsidy and reward policy (2016-2020) in Zhangye City dated in July 2016	PP
28.	International Union for Conservation of Nature	/IUCN/	International Union for Conservation of Nature	The IUCN Red List Categories and Criteria (version 3.1)	PP
29.	Project Owner	/LC/	Labor Contract	Labor Contract of project staffs and person who conducted grass seeding and rodent control and employed as guardians	PP
30.	National Basic Geographic	/LCD/	land cover data	Land cover data of Zhangye City in year 2010 release by National Basic Geographic Information Center	PP

	Information Center				
31.	Shandong Huasheng Tiantong Standard Technical Service Co., Ltd.	/LTR/	Soil sampling test report	Soil sampling test report issued by Shandong Huasheng Tiantong Standard Technical Service Co., Ltd. issued on 03-November-2021	PP
32.	PP	/LVSM/	Letter of verification site meeting	Letter issued by project owner to the local Forestry and Grassland Bureaus to arrange the auditor verification site meeting and invited local stakeholders representative	PP
33.	Dahua Engineering Management (Group) Co., Ltd Lanzhou Branch 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
34.	National Ministry of Agriculture	/MDS/	NY/T 1121.6-2006	Method for Determination of Soil Organic Matter (NY/T 1121.6-2006)	Public Website
35.	National Ministry of Agriculture	/MDSBD/	NY/T 1121.4-2006	Method for determination of soil bulk density (NY/T 1121.4-2006)	Public Website
36.	VCS	/MEL/	VCS module	VCS module of Estimation of emissions from market leakage (VMD0033, version1.0)	VERRA website
37.	VCS	/MLG/	VCS module	VCS module of Leakage from displacement of grazing activities (VMD0040, version 1.1)	VERRA website
38.	Gansu Grassland Technology Promotion Station	/MM/	Monitoring Manual	Monitoring Manual created by Gansu Grassland Technology Promotion Station in July 2009	PP
39.	Climate Bridge (Shanghai) Ltd.	/MR/	Monitoring report	Draft Monitoring report of "Zhangye Improved Grassland Management Project" (Version No. 1.1, dated 24-December-2021) Monitoring report of "Zhangye Improved Grassland Management Project" (Version No. 02, dated 07-April-2022) Monitoring report of "Zhangye Improved Grassland	Climate Bridge (Shanghai) Ltd.

				Management Project" (Version No. 03, dated 10-May-2022) Final Monitoring report of "Zhangye Improved Grassland Management Project" (Version No. 04, dated 28-September-2022)	
40.	Climate Bridge (Shanghai) Ltd.	/MRS/	Monitoring report Summary in Chinese Version	Draft Monitoring report Summary in Chinese Version of "Zhangye Improved Grassland Management Project" (Version No. 01, dated 26-November-2021) Monitoring report Summary in Chinese Version of "Zhangye Improved Grassland Management Project" (Version No. 02, dated 07-April-2022) Final Monitoring report Summary in Chinese Version of "Zhangye Improved Grassland Management Project" (Version No. 03, dated 25-September-2022)	Climate Bridge (Shanghai) Ltd.
41.	Climate Bridge (Shanghai) Ltd.	/NPRR/	Non-permanence risk report	Non-permanence risk report, version 01.1, dated 11-February-2022 Version No. 02, dated 07-April-2022	Climate Bridge (Shanghai) Ltd.
42.	VCSA	/NPRT/	AFOLU Non-Permanence Risk Tool, Version 4.0	https://verra.org/project/vcs-program/rules-and-requirements/	VCS website
43.	Ministry of agriculture of the people's Republic of China	/NSU/	National standards	The notice on standardizing and unifying the statistics of grassland carrying capacity data, which was issued by the Ministry of agriculture of the people's Republic of China	Public website
44.	Gansu Province Academy of Qilian Water Resource Conservation Forests Research Institute	/PBSR/	Project Biodiversity Survey Report	Project Biodiversity Survey Report for this monitoring period dated in November 2021	PP
45.	Climate Bridge (Shanghai) Ltd.	/PD/	Project Description	Project Description of "Zhangye Improved Grassland Management Project" (Version No. 03, dated 06-May-2022)	Climate Bridge (Shanghai) Ltd.
46.	Dahua Engineering Management	/PDR/	Project Design Report	Project Design Report for project issued by Dahua Engineering Management	PP

	(Group) Co., Ltd Lanzhou Branch			(Group) Co., Ltd Lanzhou Branch in September 2016	
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 validation team including grasses, fence, grasslands, project location, bulletin boards photo, etc.	TUV NORD
49.	Dahua Engineering Management (Group) Co., Ltd Lanzhou Branch	/PL/	Project Lifetime evidence	Project Lifetime evidence issued by Dahua Engineering Management (Group) Co., Ltd Lanzhou Branch	PP
50.	Project Owner	/PP/	Periodical payroll	Periodical payroll to project staffs and person who seeding grass, building fence and work as grassland guardians	PP
51.	Grassland guardian and local forestry and grass bureau	/PR/	Patrol records	Patrol records of grassland guardian and local forestry and grass bureau	PP
52.	Dahua Engineering Management (Group) Co., Ltd Lanzhou Branch	/PRA/	Participatory Rural Appraisal	Participatory Rural Appraisal (PRA) report of the project issued by Dahua Engineering Management (Group) Co., Ltd Lanzhou Branch dated on 15-November-2016	PP
53.	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
54.	County Forestry and Grassland Bureau	/PRM/	Project records for grassland management	Project records for grassland management conducted by County Forestry and Grassland Bureau	PP
55.	Journal	/PRS/	Peer-reviewed studies	"Wang jie (2017) The Relationship between Biodiversity and Aboveground Biomass with Soil Properties in North Slope of Qilian Mountains Meadow Steppe. (Master's thesis, Northwest Normal University)"	Public website
56.	Gaotai County Jindi Construction Engineering	/PSD/	Project Starting Date	Project Starting Date evidence 1. Fence Construction Contract for year 2017 showed that the earliest project start date is 25-	PP

	Co., Ltd. and local Forestry and Grass Bureau			July-2017 based on the date when the fence building started 2. Grass Seed Procurement Contract for year 2017 showed that the earliest project start date is 25-July-2017 based on the date when the grass started seeding	
57.	Villagers	/QUE/	Questionnaires	PRA and CCB questionnaires filled out by villagers	PP
58.	Climate Bridge (Shanghai) Ltd.	/RCS/	Risk Calculation Sheet	Risk Calculation Sheet	Climate Bridge (Shanghai) Ltd.
59.	PP	/RGA/	Record of the grazing agents	Record of the grazing agents (eg, herder households) involved the project	PP
60.	PP	/RGL/	Record of the geographic location	Record of the geographic location of the project area for all areas of grassland	PP
61.	[J]. Soils, 2012,44(1):17-22	/RPDMS/	Research progress	Research progress on determination methods of gravel content in soil	PP
62.	Local communities	/RVAR/	Routine villager assembly record	Routine villager assembly record about the project listing and VCS+CCB verification process	PP
63.	Google Earth	/SI/	Satellite images	Satellite images of project area in baseline before the project start date	PP
64.	PP	/SOC/	SOC table	SOC table which was summarized from the project records from soil sampling test report	PP
65.	Climate Bridge (Shanghai) Ltd.	/SPCS/	Sample plots calculation sheet	Sample plots calculation sheet	Climate Bridge (Shanghai) Ltd.
66.	Financial department of counties	/SPR/	Subsidy payment record	Subsidy payment record issued by financial department of counties	PP
67.	China National Standardization Committee	/SQG/	Soil Quality Guidelines	Soil Quality Guidelines for Soil Sampling Techniques (GB/T 36197-2018)	PP
68.	PP	/SSR/	Soil sampling record	Project records for monitoring for soil sampling for this monitoring period	PP
69.	Statistical Bureau of Zhangye City	/SYZ/	Statistical yearbook of Zhangye City	Statistical Yearbook of Zhangye City from 2017 to 2020	Public website
70.	UNFCCC	/TDAA/	Methodological tool	Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and	UNFCCC website

				Other Land Use (AFOLU) Project Activities, version 3.0	
71.	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
72.	Gansu Provincial Bureau of Quality and Technical Supervision	/TSBST/	(DB63/T603—2006)	Regional standard in Gansu Province Technical specification for artificial vegetation establishment and utilization management of "black soil type" degraded grassland (DB63/T603—2006)	Public website
73.	National Ministry of Agriculture	/TSS/	HJ/T 166-2004	Technical Specification for Soil Environmental Monitoring (HJ/T 166-2004)	Public website
74.	Project Owner	/TTR/	Technical Training Record	Technical Training Record dated in 2017 and 2018 and 2019 and 2020	PP
75.	TUV NORD	/VAL/	Validation report	Validation report of "Zhangye Improved Grassland Management Project" Version No. 01, dated 31-March-2022	N/A
76.	VCSA	/VCSPD/	VCS Program Definitions, Version 4.1	https://verra.org/project/vcs-program/rules-and-requirements/	VCS website
77.	VCSA	/VCSPG/	VCS Program Guide, Version 4.1	https://verra.org/project/vcs-program/rules-and-requirements/	VCS website
78.	VCSA	/VCSS/	VCS Standard, Version 4.2	https://verra.org/project/vcs-program/rules-and-requirements/	VCS website
79.	VCS	/VM/	Afforestation and reforestation Methodology	VM0026 "Sustainable Grassland Management", version 1.1	VERRA website
80.	PP	/VSM/	Verification Site Meeting Records	Verification Site meeting/interview Records including interview minute and questionnaires filled by stakeholders	PP
81.	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
82.	Climate Bridge (Shanghai) Ltd.	/XLS/	Net anthropogenic GHG removals by sinks calculation spreadsheets	ER Calculation spreadsheets of "Zhangye Improved Grassland Management Project" 1. Version No. 01, dated 24-December-2021)	Climate Bridge (Shanghai) Ltd.

				2. Version No. 02, dated 20-March-2022) 3. Version No. 03, dated 18-September-2022)	
83.	China Certified Emission Reduction Exchange Info-platform	/ccer/	China Certified Emission Reduction	http://cdm.ccchina.org.cn/ccer.aspx	Website
84.	China DNA	/cets/	China cap & trade scheme	http://www.mee.gov.cn/xxgk2018/xxgk/xxgk02/202101/t20210105_816131.html	Public Website
85.	China DNA	/ecl/	Enforced company list	http://mee.gov.cn/xxgk2018/xxgk/xxgk03/202012/W020201230736907682380.pdf	Public Website
86.	Gold Standard Organization	/gs/	Gold Standard	http://www.goldstandard.org/	Website
87.	IPCC	/ipcc/	IPCC publications	www.ipcc-nggip.iges.or.jp	Website
88.	PRC Government	/law/	Laws related to forestry	<Grassland Law>	Website
89.	Standing Committee of the National People's Congress of China	/llc/	Labor Law	Labor Law of the People's Republic of China	National public website
90.	State market supervision and administration	/neci/	National Enterprise Credit Information Publicity System	http://www.gsxt.gov.cn/index.html	National public website
91.	PRC Government	/regu/	Administrative regulations related to forestry	<Regulations on Grassland Management of Zhangye City>, <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
92.	UNFCCC	/unfccc/	UNFCCC	http://cdm.unfccc.int	Website
93.	VCS	/vcs/	VCS	http://www.v-c-s.org/	Website
94.	Local government	/whr/	Local Weather	http://gs.cma.gov.cn/qxxw/sxdt/zy/	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 *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☐ The finding is closed			

Table 2. CL from this verification

CL ID	01	**Section no.**	1.2	**Date : 10/02/2022**
Description of CL				
For the Number of globally Critically Endangered or Endangered species benefiting from reduced threats as a result of project activities, PP states that number is 7, however PP is not clarified that the 7 numbers are actually monitored or not.				
Project participant response				**Date :** 20/03/2022
The 7 numbers were globally Critically Endangered or Endangered species that were protected result of the reduced threats. The description has been added in footnote 14.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 1.2		New version No.: 02
☐	Changes in XLS	Worksheet(s):		New version No.:
☐	Other:	/PBSR/		
VVB assessment				**Date:** 25/03/2022
The revised MR is checked, it is confirmed that clarification has been added into the footnote. Via checking the Project Biodiversity Survey Report[/PBSR/], it is confirmed that the 7 numbers were globally Critically Endangered or Endangered species that were protected result of the reduced threats.				
Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CL ID	02	**Section no.**	2.4.4	**Date : 10/02/2022**
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 :** 20/03/2022
The financial statements of the project organization who is running/operating the project has been provided as evidence to prove financial health in Section 2.4.4.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 2.4.4		New version No.: 02
☐	Changes in XLS	Worksheet(s):		New version No.:
☐	Other:			
VVB assessment				**Date:** 25/03/2022
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	03	**Section no.**	2.5.2	**Date : 10/02/2022**

Description of CL

1. For the sustainable management of the project, PP only stated the rotational grazing and rest grazing in this section, seeding grass is not clarified.
2. How the grass yield measured during this monitoring period is not clarified.
3. How the subsidies distributed to herders who impacted by project during this monitoring period is not clarified.

Project participant response — **Date :** 20/03/2022

1. The description of reseeding grass has been added in Section 2.5.2.
2. The way of grass yield measured during this monitoring period has been clarified in Section 2.5.2 as followed:

"In July and August each year, the County Forestry and Grassland Bureau measures the grass yield of the surrounding grasslands in the project area, and calculates the reasonable grazing quantity according to the carrying capacity standard of Gansu Province, and guides herders to graze in a reasonable area, so the project will not reduce the production of the grazing activities."

3. The way of the subsidies distributed to herders who impacted by project during this monitoring period has been clarified in Section 2.5.2 as followed:

"Every year, the project proponent and the County Forestry and Grassland Bureau will visit all project participants to investigate the completion of the grazing prohibition and report it to the financial department, which will issue subsidy funds. All of the stakeholders are satisfied with this subsidy policy and agree to the implementation of the project. During this monitoring period, all herders participating in the project were grazing under the guidance of the County Forestry and Grassland Bureau. They all received subsidies and were satisfied with the subsidy policy."

Documentation provided by project participant

☒	Changes in the MR	Section(s): 2.5.3	New version No.: 02
☐	Changes in XLS	Worksheet(s):	New version No.:
☐	Other:	/GYMR/, /SPR/	

VVB assessment — **Date:** 25/03/2022

1. The revised MR is checked, it is confirmed that the related information of reseeding grass is added into the MR which is consistent with the PD.
2. The revised MR is checked, it is confirmed that the related information of grass yield measurement is added into the MR which is verified as correct by checking the Grass yield measurement results/GYMR/.
3. The revised MR is checked, it is confirmed that the information of subsidies distributed to herders who impacted by project during this monitoring period has been provided which is verified as correct by checking the Subsidy payment record/SPR/ and site interview with representatives from local herders/I3/.

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

Table 2. CAR from this verification

CAR ID	01	**Section no.**	2.1.1	**Date : 10/02/2022**

Description of CAR

1. The description of project is not in line with validated PD.
2. The grass species seeded in the project area are missing in this section.
3. The average annual generated GHG emission removals in this monitoring period is not provided.
4. The meaning of "managed scientifically" is not clear, clarification is requested.

Project participant response — **Date :** 20/03/2022

1. The description of project has been corrected according to the validated PD.
2. The grass species seeded in the project area has been added in Section 2.1.1 of revised MR. They are *Elymus nutans* (Hook head grass), *Elymus sibiricus* (Barley grass), *Poa pratensis* (Bluegrass), *Agropyron cristatum* (Ice grass) and *Festuca rubra* (Pennlawn) respectively.
3. The average annual generated GHG emission removals have been added in Section 2.1.1.
4. The purpose of this description is to explain that the grasslands management by rotational grazing, rest grazing and reseeding grasses are more scientific than the previous scenario management of overgrazing. To make it clear, the word of "scientifically" has been changed to "sustainably" in revised PD.

Documentation provided by project participant			
☒	Changes in the MR	Section(s): 2.1.1	New version No.: 02
☐	Changes in XLS	Worksheet(s):	New version No.:
☐	Other:		

VVB assessment **Date:** 25/03/2022

1. The revised MR is checked, it is confirmed that the description of project is in line with validated PD.
2. The revised MR is checked, it is confirmed that the grass species seeded in the project area has been added which is consistent with PD and verified by site inspection.
3. The revised MR is checked, it is confirmed that the average annual generated GHG emission removals have been added in Section 2.1.1 which is correct by checking the ER sheet.
4. The revised MR has been checked, it is confirmed that the words have been updated accordingly with the reasonable words.

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

CAR ID	02	**Section no.**	2.1.5	**Date : 10/02/2022**

Description of CAR

The determination of project start date is not in line with validated PD in section 2.1.5.

Project participant response **Date :** 20/03/2022

The determination of project start date has been corrected according to the validated PD in section 2.1.5.

Documentation provided by project participant			
☒	Changes in the MR	Section(s): 2.1.5	New version No.: 02
☐	Changes in XLS	Worksheet(s):	New version No.:
☐	Other:		

VVB assessment **Date:** 25/03/2022

The revised MR is checked, it is confirmed that the project start date is in line with PD which has been verified as correct during validation process.

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

CAR ID	03	**Section no.**	2.1.10	**Date : 10/02/2022**

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 :** 20/03/2022

The corresponding sections in the MR related to each achieved sustainable development has been added in Section 2.1.10

Documentation provided by project participant			
☒	Changes in the MR	Section(s): 2.1.10	New version No.: 02
☐	Changes in XLS	Worksheet(s):	New version No.:
☐	Other:		

VVB assessment **Date:** 25/03/2022

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	04	**Section no.**	2.2.1	**Date : 10/02/2022**

Description of CAR

1. The key dates and milestones between the project started and completed grass seeding and fence building are missing.
2. The key dates and milestones after the draft MR finished are not listed in the schedule table.

Project participant response — **Date :** 20/03/2022

1. The purchase contract for grass seeds was signed on 08-May-2017, according to which the grass reseeding and fence building were carried out at the same time which started on 25-July-2017. The description has been updated in Section 2.1.13 in PD and relevant evidence has been provided as well.
2. The key dates and milestones after the draft MR finished has been listed in the schedule table

Documentation provided by project participant

☒	Changes in the MR	Section(s): 2.2.1	New version No.: 02
☐	Changes in XLS	Worksheet(s):	New version No.:
☐	Other:		

VVB assessment — **Date:** 25/03/2022

1. The revised MR is checked, it is confirmed that key dates and milestones between the project started and completed grass seeding and fence building have all been listed and the dates are confirmed as correct and consistent with validated PD.
2. 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.

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

CAR ID	05	**Section no.**	2.3.1	**Date : 10/02/2022**

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 :** 20/03/2022

1. The actual information of full project documentation published on VCS and CCB website has been added in Section 2.3.1 as followed:
   "The full project documentation has been published on VCS and CCB website for public comments from 07-January-2022 to 06-February-2022."
2. The access to monitoring results has been added in Section 2.3.1 as followed:
   "After the monitoring activity completed, the draft monitoring results was also be published in the CCB and VCS website as part of the monitoring report which could be download by anyone who is interested, and any public comments received will be seriously considered during the following verification process."

Documentation provided by project participant

☒	Changes in the MR	Section(s): 2.3.1	New version No.: 02
☐	Changes in XLS	Worksheet(s):	New version No.:
☐	Other:		

VVB assessment — **Date:** 25/03/2022

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

CAR ID	06	**Section no.**	2.3.2	**Date : 10/02/2022**
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 :** 20/03/2022
1. Actual information of dissemination of MR and MR Summary has been provided in Section 2.3.2 as followed: "During the VVB site visit, the project proponent arranged a stakeholder meeting in Zhangye Forestry and Grassland Bureau on 24-January-2022, several representatives of local communities and stakeholders have been invited to attend the meeting. MR and MR Summary of this monitoring period was distributed to local stakeholder representatives during the meeting." 2. The time for summary of monitoring results disseminated is 24-January-2022 as described above.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 2.3.2		New version No.: 02
☐	Changes in XLS	Worksheet(s):		New version No.:
☐	Other:			
VVB assessment				**Date:** 25/03/2022
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 *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	07	**Section no.**	2.3.3	**Date : 10/02/2022**
Description of CAR				
1. When did the project owner distributed questionnaires to stakeholders is not provided. 2. Actual meeting with VVB also need to be specified as an Informational Meetings with Stakeholders.				
Project participant response				**Date :** 20/03/2022
1. The time of the project owner distributed questionnaires to stakeholders has been provided in Section 2.3.3 as followed: "The project owner distributed questionnaires to stakeholders in each local villages to collect their feedback from 16-September-2021 to 01-October-2021." 2. Actual meeting with VVB has been specified as an Informational Meetings with Stakeholders in Section 2.3.3 as followed: "During the VVB site visit, the project proponent arranged a stakeholder meeting in Zhangye Forestry and Grassland Bureau on 24-January-2022, several representatives of local communities and stakeholders have been invited to attend the meeting."				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 2.3.3		New version No.: 02
☐	Changes in XLS	Worksheet(s):		New version No.:
☐	Other:			
VVB assessment				**Date:** 25/03/2022
1. The revised MR is checked, it is confirmed that the date is provided, confirmed as correct and actual. 2. 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 *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	08	**Section no.**	2.3.4	**Date : 10/02/2022**

Description of CAR

1. How the subsidies distributed to herders who impacted by project during this monitoring period and related supporting evidence is not clarified.
2. PP stated that the restored grassland ecological landscape will increase local tourism income, the actual situation for this monitoring period is missing and the evidence of how to prove the income was increased due to the project is missing.

Project participant response **Date :** 20/03/2022

1. The way of the subsidies distributed to herders has been added in Section 2.3.4 as followed:
"According to the subsidy record, in this monitoring period, the herders in project zone all received corresponding subsidies based on implementation area every year recorded from county Forestry and Grassland Bureau." The related supporting evidence about subsidy records were also provided as evidence.
2. The actual situation for this monitoring period that restored grassland ecological landscape increased local tourism income has been added in Section 2.3.4 as followed:
"The implementation of the project has restored the grassland ecological environment and strengthened the communication between different ethnic minorities, which is conducive to promoting rural tourism. Through the annual tourism and Cultural Festival in restored grassland of the project, it has attracted a large number of tourists and spread the local traditional culture of ethnic minorities". The related evidence has been provided as in footnote 22 and 23.

Documentation provided by project participant

☒	Changes in the MR	Section(s): 2.3.4	New version No.: 02
☐	Changes in XLS	Worksheet(s):	New version No.:
☐	Other:	/SPR/	

VVB assessment **Date:** 25/03/2022

1. The revised MR is checked, it is confirmed that the information of subsidies distributed to herders who impacted by project during this monitoring period has been provided which is verified as correct by checking the Subsidy payment record/SPR/ and site interview with representatives from local herders/I3/.
2. The revised MR is checked, it is confirmed that the reason of local tourism income increased has been clarified which is verified as correct by site inspection and interview with local officers and residents.

Refer to section 4.3.4 of this report for details assessment.

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

CAR ID	09	**Section no.**	2.3.6	**Date : 10/02/2022**

Description of CAR

The information of Site Visit and Opportunities to Communicate with Auditor is not specified.

Project participant response **Date :** 20/03/2022

The information of Site Visit and Opportunities to Communicate with Auditor has been added in Section 2.3.6 as followed:
"During the VVB site visit, the project proponent arranged a stakeholder meeting in Zhangye Forestry and Grassland Bureau on 24-January-2022. The project proponent and the local Forestry and Grassland Bureau notified the stakeholders of the meeting time one week in advance, and several representatives of local communities and stakeholders have been invited to attend the meeting. At the meeting, the VVB introduced the purpose and procedures of the on-site audit, the project proponent and Zhangye Forestry and Grassland Bureau introduced the project, and all representatives thought that the project had restored the degraded grassland and improved the ecological environment. And form 24-January-2022 to 27-January-2022, the VVB visited the project area and interviewed herders around the project area, and all herders thought that the project improved their living conditions."

Documentation provided by project participant

☒	Changes in the MR	Section(s): 2.3.6	New version No.: 02
☐	Changes in XLS	Worksheet(s):	New version No.:

☐	Other:	

VVB assessment	**Date:** 25/03/2022
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 24-January-2022. 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.	
Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed

CAR ID	10	**Section no.**	2.3.7	**Date : 10/02/2022**

Description of CAR

1. The percentage of "No effect" to question "How does the project affect family income" is not correct.
2. Detail information of second round stakeholder meeting is missing.

Project participant response — **Date :** 20/03/2022

1. The percentage of "No effect" to question "How does the project affect family income" has been corrected as 5%.
2. The second-round stakeholder meeting, which was held on 24-January-2022 during VVB site visit. The description about it is in section 2.3.9 and has been removed in Section 2.3.7. In fact, the second-round stakeholder meeting here is the meeting of stakeholder representatives held in Forestry and Grass Bureau of Zhangye city on 29-March-2021 in Section 2.3.3. Then the project staff-maintained communicated with the community groups and other stakeholders through in-person meetings and made a questionnaire survey from 16-September-2021 to 01-October-2021 to directly collect relevant feedback. The site photos were provided as Figure 2-5.

Documentation provided by project participant

☒	Changes in the MR	Section(s): 2.3.7	New version No.: 02
☐	Changes in XLS	Worksheet(s):	New version No.:
☐	Other:	/CMQ/	

VVB assessment — **Date:** 25/03/2022

1. The revised MR is checked, it is confirmed that the percentage has been updated to be correct.
2. 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.

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

CAR ID	11	**Section no.**	2.3.9	**Date : 10/02/2022**

Description of CAR

1. The description of second round stakeholder meeting is not provided.
2. The justification that adequate levels of information sharing have occurred is not provided.

Project participant response — **Date :** 20/03/2022

1. The stakeholder representatives have been invited to attend the second round stakeholder meeting stakeholder meeting, which was held on 24-January-2022 during VVB site visit.
2. The description "All of these measures provide justification that adequate levels of information sharing have occurred" has been added in Section 2.3.9.

Documentation provided by project participant

☒	Changes in the MR	Section(s): 2.3.9	New version No.: 02
☐	Changes in XLS	Worksheet(s):	New version No.:
☐	Other:		

VVB assessment — **Date:** 25/03/2022

1. The revised description in section 2.3.9 is checked, it is confirmed that the description of second round stakeholder meeting is provided.
2. 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 *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed

CAR ID	12	**Section no.**	2.3.13	**Date : 10/02/2022**
Description of CAR				
1. The detail information of the training is not consistent with the provided training records. 2. The training records for the special training from 28-July-2021 to 31-July-2021 for the project monitoring are missing.				
Project participant response				**Date :** 20/03/2022
1. The training records of the training has been added as evidence and the detailed training information has been provided every time in Section 2.3.13. 2. The training records for the special training from 28-July-2021 to 31-July-2021 for the project monitoring has been provided as evidence in training records.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 2.3.13		New version No.: 02
☐	Changes in XLS	Worksheet(s):		New version No.:
☒	Other:	/TTR/		
VVB assessment				**Date:** 25/03/2022
1. The revised description in section 2.3.13 is checked, it is confirmed that the detail information of the training is provided. Via checking the training record/TTR/, it is verified that the information is correct. 2. Via checking the training record/TTR/, it is verified that the special training from 28-July-2021 to 31-July-2021 for the project monitoring has been provided.				
Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	13	**Section no.**	2.3.14	**Date : 10/02/2022**
Description of CAR				
In section 2.3.14, the number of local herders and women who hired as guardians are not correct.				
Project participant response				**Date :** 20/03/2022
The number of local herders and women who hired as guardians has been corrected.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 2.3.14		New version No.: 02
☐	Changes in XLS	Worksheet(s):		New version No.:
☒	Other:	/TTR/		
VVB assessment				**Date:** 25/03/2022
The revised description in section 2.3.14 is checked, it is confirmed that the number of local herders and women who hired as guardians are updated to be correct and in line with other parts of the MR.				
Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	14	**Section no.**	2.3.16	**Date : 10/02/2022**
Description of CAR				
1. PP stated that Zhangye Forestry and Grassland Bureau provided skill training for local herders, including fire emergency drills, field emergency rescue, and safe driving training from 2019 to 2021, however, this information is not provided in the worker training parts. 2. 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 :** 20/03/2022
1. The information of Zhangye Forestry and Grassland Bureau provided skill training for local herders has been provided in training parts of Section 2.3.13 and the related evidence were provided in training records. 2. The specific description of activities and/or processes implemented to inform workers of risks and the way to minimize such risks for this monitoring period has been provided in 2.3.16 as followed:				

"After these training, the grassland guardians master relevant skills and patrol the management and protection area regularly, once every 15 days, record and report the grassland fire to the county Forestry and Grass Bureau in daily duties. Then special personnel of Forestry and Grass Bureau will be organized to conduct grassland fire prevention supervision to avoid fire on the grassland according to the report records of grass guardians".			
Documentation provided by project participant			
☒	Changes in the MR	Section(s): 2.3.16	New version No.: 02
☐	Changes in XLS	Worksheet(s):	New version No.:
☒	Other:	/TTR/	
VVB assessment			**Date:** 25/03/2022
1. The revised description in section 2.3.16 is checked, it is confirmed that information of Zhangye Forestry and Grassland Bureau provided skill training for local herders has been provided in training parts of Section 2.3.13 which is verified in line with the training records/TTR/ 2. 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. 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 *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed		

CAR ID	15	**Section no.**	2.4.2	**Date : 10/02/2022**
Description of CAR				
1. The composition of management team is missing. 2. The experience of Gansu Heihe Electric Power Sales Co. Ltd. who is one of the management team is missing.				
Project participant response				**Date :** 20/03/2022
1. The composition of management team has been added in Section 2.4.2. They are project proponent Zhangye Academy of Forestry Sciences, Zhangye Forestry and Grassland Bureau, Gansu Heihe Electric Power Sales Co. Ltd and County Forestry and Grassland Bureau. 2. The experience of Gansu Heihe Electric Power Sales Co. Ltd. who is one of the management team has been added in Section 2.4.2 as followed: "Gansu Heihe Electric Power Sales Co. Ltd. as a state-owned holding enterprise, is in rich experience in carbon credits sales in Gansu Province, has the ability of coordinate various issues in the project development and sales process in the whole project lifetime. Meanwhile, it receives regular training on the development of carbon emission reduction programs from the shareholder Gansu Heihe Hydropower Industrial Investment Co. LTD. who has rich experience in the development of CDM, CCER (Chinese Certified Emission Reduction) and VCS programs."				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 2.4.2		New version No.: 02
☐	Changes in XLS	Worksheet(s):		New version No.:
☐	Other:			
VVB assessment				**Date:** 25/03/2022
1. The revised MR is checked, it is confirmed that the composition of management team is added which is verified as consistent with PD. 2. The revised MR is checked, it is confirmed that the experience of Gansu Heihe Electric Power Sales Co. Ltd. has been added which is verified as correct by site interview and checking the public information of this company.				
Conclusion	☐ Additional action should be taken (finding remains open)			

Tick the appropriate checkbox	☒ The finding is closed

CAR ID	16	**Section no.**	3.1.1	**Date : 10/02/2022**
Description of CAR				
The VCS standard version is not latest version, update is requested.				
Project participant response				**Date :** 20/03/2022
The VCS standard version has been updated as VCS standard 4.2.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 3.1.1		New version No.: 02
☐	Changes in XLS	Worksheet(s):		New version No.:
☐	Other:			
VVB assessment				**Date:** 25/03/2022
The revised MR is checked, it is confirmed that the version of VCS standard has been updated to the latest version 4.2 in the whole MR which is confirmed as correct.				
Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	17	**Section no.**	3.1.1	**Date : 10/02/2022**
Description of CAR				
1. The data and parameters available at validation is missing which is not in line with the validated PD. Revision to some related parameters is requested. 2. The "Purpose of data" for the parameters are not totally correct, not all the parameters are both used to calculation of PE and BE. Revision is requested.				
Project participant response				**Date :** 20/03/2022
1. The data and parameters available at validation has been added according to the validated PD. Some related parameters has been corrected. 2. The "Purpose of data" for the parameters has been corrected and increase the purpose to calculate the Leakage emissions.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 3.1.1		New version No.: 02
☐	Changes in XLS	Worksheet(s):		New version No.:
☐	Other:			
VVB assessment				**Date:** 25/03/2022
1. 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. 2. The revised MR is checked, it is confirmed that the "Purpose of data" for all the parameters have been checked and updated by PP as correct and in line with the applied methodology.				
Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	18	**Section no.**	3.1.1	**Date : 10/02/2022**
Description of CAR				
For parameter $H_{GUI,I,t}$, when did the PP and county Forestry and Grassland Bureau conducted the full census survey for determination of this parameter value is not specified.				
Project participant response				**Date :** 20/03/2022
The full census survey is just the Survey of Grazing Displacement and the description has been corrected throughout the revised MR.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 3.1.1		New version No.: 02
☐	Changes in XLS	Worksheet(s):		New version No.:
☐	Other:			
VVB assessment				**Date:** 25/03/2022

The revised MR is checked, it is confirmed that source is changed to Survey of Grazing Displacement which is verified as correct. 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	19	**Section no.**	3.1.2	**Date : 10/02/2022**
Description of CAR				
For parameters $P_{l,t}$, $H_{l,t}$ and $Days_{l,t}$, 1. The source of data is not accurate, the project records is not exact and not same to the evidence provided. 2. How did the final value in the ER sheet is derived from the project records is not specified. 3. The ex-ante value is not applicable to the monitored result. 4. QA/QC procedure is not specified with detail. How to the data check is not specified and the QA/QC result for this monitoring period is not stated.				
Project participant response				**Date :** 20/03/2022
1. The project records about population of livestock type l under project in year t from county Forestry and Grassland Bureau has been provided as evidence. 2. How the final value in the ER sheet is derived from the project records has been specified in EXCEL evidence. 3. The ex-ante value has been removed and corrected in Section 3.1.2 and ER Tables. 4. The QA/QC procedure and how the data checked has been stated for this monitoring period. QC procedure cross-checked the parameters $P_{l,t}$, $H_{l,t}$ and $Days_{l,t}$, by original data records and previous estimates of them. The results showed that they are reasonable.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 3.1.2		New version No.: 02
☒	Changes in XLS	Worksheet(s): BE, PE		New version No.: 02
☐	Other:			
VVB assessment				**Date:** 25/03/2022
1. The revised MR is checked, it is confirmed that source of data is accurate and confirmed as actual. 2. The revised MR is checked, it is confirmed that the process has been elaborated in the ER sheet which is verified as correct and reasonable. 3. The revised MR is checked, it is confirmed that the ex-ante value has been deleted accordingly. 4. The revised MR is checked, it is confirmed that the QA/QC procedure has been specified with detail. And the cross check results have been elaborated. 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	20	**Section no.**	3.1.2	**Date : 10/02/2022**
Description of CAR				
For parameter $FC_{p,j,k,t}$, 1. The source of data is not accurate, the project records is not exact and not same to the evidence provided. 2. How did the PP record the fuel consumption just after the application of machine is not specified. 3. Which type of the machines used for this project are not stated. 4. Which type of the fuel consumed for this project is not stated. 5. QA/QC procedure is not specified with detail. How to the data check is not specified and the QA/QC result for this monitoring period is not stated.				
Project participant response				**Date :** 20/03/2022
1. The source of $FC_{p,j,k,t}$ has been corrected. See the supplementary evidence of Diesel statistics. 2. The way that the PP record the fuel consumption has been added in Section 3.1.2 as followed: "The county Forestry and Grassland Bureau recorded the diesel consumption of sowing tractors and				

transport trucks during the implementation of the project."

3. The type of the machines used in the project has been stated. They are tractors and trucks.
4. The type of the fuel consumed for this project was diesel and it has been stated in Section 3.1.2.
5. The QA/QC procedure and how the data checked has been stated for this monitoring period in Section 3.1.2. QC procedure cross-checked the parameters $FC_{p,j,k,t}$, by original data records and previous estimates of it. The results showed that it was reasonable.

Documentation provided by project participant

☒	Changes in the MR	Section(s): 3.1.2	New version No.: 02
☐	Changes in XLS	Worksheet(s):	New version No.:
☒	Other:	/DS/	

VVB assessment **Date:** 25/03/2022

1. The revised MR is checked, it is confirmed that the source of data has been changed to Diesel statistics/DS/ which is confirmed as applicable and actual.
2. The revised MR is checked, it is confirmed that the recording method has been updated which is verified as correct and actual by checking the Diesel statistics/DS/.
3. The revised MR is checked, it is confirmed that the type of the machines used for this project are provided which is verified as correct and actual by site inspection.
4. The revised MR is checked, it is confirmed that the type of the fuel consumed for this project is provided which is verified as correct and actual by site inspection and checking the Diesel statistics/DS/.
5. The revised MR is checked, it is confirmed that the QA/QC procedure has been specified with detail. And the cross check results have been elaborated.

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	21	**Section no.**	3.1.2	**Date : 10/02/2022**

Description of CAR

For parameter $PA_{mG,s,i,t}$,

1. There is no this parameter used in the PE calculation in the ER calculation spreadsheet, PP is requested to clarify and update the ER sheet.
2. The source of data is not accurate, the project records is not exact and not same to the evidence provided.
3. QA/QC procedure is not specified with detail. How to the data check is not specified and the QA/QC result for this monitoring period is not stated.

Project participant response **Date :** 20/03/2022

1. The parameter $PA_{mG,s,i,t}$, is used to detect the implementation area of each carbon layer of the project, and the strata are stratified according to the project management practice. See the updated PE calculation in the ER calculation spreadsheet.

2. The source of data has been updated in Section 3.1.2, the project records for grassland management has been corrected and same to the evidence provided.

3. The QA/QC procedure and how the data checked has been stated for this monitoring period in Section 3.1.2 as followed:

• Standard operating procedures (SOPs) from published handbooks, or from the IPCC GPG LULUCF 2003, has been applied.

• The satellite image cross-check shows that the project area is grassland.

• There is no significant difference between the implementation area of the project area and previous estimates.

These procedure showed that the monitoring results are reasonable.

Documentation provided by project participant

☒	Changes in the MR	Section(s): 3.1.2	New version No.: 02
☒	Changes in XLS	Worksheet(s): Project Removals	New version No.:
☒	Other:	/PRM/	

VVB assessment **Date:** 25/03/2022

1. The revised MR is checked, it is confirmed that the related parameter has been used in the PE calculation in the ER calculation spreadsheet. 2. The revised MR is checked, it is confirmed that the source of data is updated to be accurate, which is verified as correct by checking the project records for grassland management/PRM/. 3. The revised MR is checked, it is confirmed that the QA/QC procedure has been specified with detail. And the cross check results have been elaborated. 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 : 10/02/2022**

Description of CAR

For parameter $SOC_{mG,s,i,t}$,

1. There is no this parameter used in the PE calculation in the ER calculation spreadsheet, PP is requested to clarify and update the ER sheet.
2. The source of data is not accurate, the project records is not exact and not same to the evidence provided.
3. When did the samples taken and tested by the laboratory for this monitoring period is not specified clearly.
4. How did the samples taken and sent to the laboratory is not specified clearly.
5. QA/QC procedure is not specified with actual situation for this monitoring period.
6. The certification of the laboratory is not specified.

Project participant response **Date :** 20/03/2022

1. The parameter $SOC_{mG,s,i,t}$ has been added in the PE calculation in the ER calculation spreadsheet. The ER sheet has been updated.
2. The source of data is soil sampling test report and it has been updated in Section 3.1.2, and the project records were same to the evidence provided.
3. The time of samples taken and tested by the laboratory for this monitoring period has been added in section 3.12.
4. The way of samples taken and sent to the laboratory has been added and specified clearly.
5. The QA/QC procedure and how the data checked has been stated for this monitoring period in Section 3.1.2.
6. The certification of the laboratory has been added in Section 3.1.2 as followed:
   "The $SOC_{mG,s,i,t}$ was measured by Shandong Huasheng Tiantong Standard Technical Service Co., Ltd., which has the certification of inspection and testing organization" and the certification of the laboratory has been provided as evidence.

Documentation provided by project participant

☒	Changes in the MR	Section(s): 3.1.2	New version No.: 02
☒	Changes in XLS	Worksheet(s): PE	New version No.: 02
☒	Other:	/LTR/, /COL/	

VVB assessment **Date:** 25/03/2022

1. The revised MR is checked, it is confirmed that the related parameter has been used in the PE calculation in the ER calculation spreadsheet.
2. The revised MR is checked, it is confirmed that the source of data is updated to be accurate, which is verified as correct by checking the soil sampling test report/LTR/.
3. The revised MR is checked, it is confirmed that the information has been added which is verified as correct by checking the soil sampling test report/LTR/.
4. The revised MR is checked, it is confirmed that the information has been added which is verified as correct by checking the soil sampling test report/LTR/.
5. The revised MR is checked, it is confirmed that the QA/QC procedure has been specified with detail.
6. The revised MR is checked, it is confirmed that certification of the laboratory has been specified and is verified as correct by checking the certification of the laboratory/COL/.

Refer to section 4.4.1 of this report for detailed assessment.

Conclusion	☐ Additional action should be taken (finding remains open)

Tick the appropriate checkbox	☒ The finding is closed

CAR ID	23	**Section no.**	3.1.2	**Date : 10/02/2022**

Description of CAR

For parameter $BD_{mG,s,i,t}$,

1. There is no this parameter used in the PE calculation in the ER calculation spreadsheet, PP is requested to clarify and update the ER sheet.
2. When did the samples taken and tested by the laboratory for this monitoring period is not specified clearly.
3. How did the samples taken and sent to the laboratory is not specified clearly.
4. QA/QC procedure is not specified with actual situation for this monitoring period.
5. The certification of the laboratory is not specified.

Project participant response **Date :** 20/03/2022

1. The parameter $BD_{mG,s,i,t}$, has been used in the PE calculation in the ER calculation spreadsheet. Please see the updated ER sheet.
2. The time of samples taken and tested by the laboratory for this monitoring period is from 16-September-2021 to 01-October-2021 and has been specified clearly.
3. The way of samples taken and sent to the laboratory has been specified clearly in "Description of measurement methods and procedures to be applied" of the parameter $BD_{mG,s,i,t}$ table.
4. The QA/QC procedure and how the data checked has been stated for this monitoring period in Section 3.1.2.
5. The certification of the laboratory has been added in Section 3.1.2 as followed:
   "The $BD_{mG,s,i,t}$ was measured by Shandong Huasheng Tiantong Standard Technical Service Co., Ltd., which has the certification of inspection and testing organization" and the certification of the laboratory has been provided as evidence.

Documentation provided by project participant

☒	Changes in the MR	Section(s): 3.1.2	New version No.: 02
☒	Changes in XLS	Worksheet(s): PE	New version No.: 02
☒	Other:	/COL/, /LTR/	

VVB assessment **Date:** 25/03/2022

1. The revised MR is checked, it is confirmed that the related parameter has been used in the PE calculation in the ER calculation spreadsheet.
2. The revised MR is checked, it is confirmed that the source of data is updated to be accurate, which is verified as correct by checking the soil sampling test report/LTR/.
3. The revised MR is checked, it is confirmed that the information has been added which is verified as correct by checking the soil sampling test report/LTR/.
4. The revised MR is checked, it is confirmed that the QA/QC procedure has been specified with detail.
5. The revised MR is checked, it is confirmed that certification of the laboratory has been specified and is verified as correct by checking the certification of the laboratory/COL/.

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 : 10/02/2022**

Description of CAR

For parameter $FC_{mG,s,i,t}$,

1. There is no this parameter used in the PE calculation in the ER calculation spreadsheet, PP is requested to clarify and update the ER sheet.
2. The source of data is not accurate, the project records is not exact and not same to the evidence provided.
3. When did the samples taken and tested by the laboratory for this monitoring period is not specified clearly.
4. How did the samples taken and sent to the laboratory is not specified clearly.
5. QA/QC procedure is not specified with actual situation for this monitoring period.
6. The certification of the laboratory is not specified.

Project participant response	**Date :** 20/03/2022

1. The parameter $FC_{mG,s,i,t}$ has been added in the PE calculation in the ER calculation spreadsheet. Please see the updated ER Table.
2. The source of data is soil sampling test report and it has been updated in Section 3.1.2, and the project records were same to the evidence provided.
3. The time of samples taken and tested by the laboratory for this monitoring period is from 16-September-2021 to 01-October-2021 and has been specified clearly.
4. The way of samples taken and sent to the laboratory has been specified clearly in "Description of measurement methods and procedures to be applied" of the parameter $FC_{mG,s,i,t}$ table.
5. The QA/QC procedure and how the data checked has been stated for this monitoring period in Section 3.1.2.
6. The certification of the laboratory has been added in Section 3.1.2 as followed:
   "The $FC_{mG,s,i,t}$ was measured by Shandong Huasheng Tiantong Standard Technical Service Co., Ltd., which has the certification of inspection and testing organization" and the certification of the laboratory has been provided as evidence

Documentation provided by project participant

☒	Changes in the MR	Section(s): 3.1.2	New version No.: 02
☒	Changes in XLS	Worksheet(s): PE	New version No.: 02
☒	Other:	/COL/, /LTR/	

VVB assessment	**Date:** 25/03/2022

1. The revised MR is checked, it is confirmed that the related parameter has been used in the PE calculation in the ER calculation spreadsheet.
2. The revised MR is checked, it is confirmed that the source of data is updated to be accurate, which is verified as correct by checking the soil sampling test report/LTR/.
3. The revised MR is checked, it is confirmed that the information has been added which is verified as correct by checking the soil sampling test report/LTR/.
4. The revised MR is checked, it is confirmed that the information has been added which is verified as correct by checking the soil sampling test report/LTR/.
5. The revised MR is checked, it is confirmed that the QA/QC procedure has been specified with detail.
6. The revised MR is checked, it is confirmed that certification of the laboratory has been specified and is verified as correct by checking the certification of the laboratory/COL/.

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	25	**Section no.**	3.1.2	**Date : 10/02/2022**
Description of CAR				

For parameter *Depth*,

1. There is no this parameter used in the PE calculation in the ER calculation spreadsheet, PP is requested to clarify and update the ER sheet.
2. The source of data is not accurate, the project records is not exact and the evidence is not provided.
3. The value applied is not corresponding to the monitoring result.
4. How the monitoring equipment used for measure the value is not specified.
5. QA/QC procedure is not specified.

Project participant response	**Date :** 20/03/2022

1. The parameter *Depth* has been used in the PE calculation in the ER calculation spreadsheet. Please see the updated ER Table.
2. The project records of the parameter *Depth* has been updated and the evidence has been provided.
3. The value applied is 30 cm and is corresponding to the monitoring result.
4. The way of the monitoring equipment used for measuring the value is soil drill with scale and it has been specified in parameter *Depth* table of Section 3.1.2.
5. The QA/QC procedure and how the data checked has been stated for this monitoring period in Section 3.1.2.

Documentation provided by project participant

☒	Changes in the MR	Section(s): 3.1.2	New version No.: 02
☒	Changes in XLS	Worksheet(s): PE	New version No.: 02
☐	Other:	/SSR/	

VVB assessment	**Date:** 25/03/2022

1. The revised MR is checked, it is confirmed that the related parameter has been used in the PE calculation in the ER calculation spreadsheet.
2. The revised MR is checked, it is confirmed that the source of data is updated to be accurate, which is verified as correct by checking the Soil sampling record/SSR/.
3. The revised MR is checked, it is confirmed that the value applied is corresponding to the monitoring result.
4. The revised MR is checked, it is confirmed that the monitoring equipment used for measure the value has been specified which is verified as correct by site inspection.
5. The revised MR is checked, it is confirmed that the QA/QC procedure has been specified with detail.

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	26	**Section no.**	3.1.2	**Date : 10/02/2022**

Description of CAR

For parameter $P_{GUI,l,t}$,

1. Via checking the ER sheet, it is observed that the values of $P_{GUI,l,t}$ is same to the values of $P_{l,t}$, clarification is requested.
2. The full census surveys conducted for this monitoring period are missing.
3. QA/QC procedure is not specified with detail. How to the data check is not specified and the QA/QC result for this monitoring period is not stated.

Project participant response	**Date :** 20/03/2022

1. Since the project does not reduce the number of cattle and sheep grazed by herders, but only manages the time of grazing in the project area. Therefore, during the monitoring period, the same batch of cattle and sheep were actually grazing in the project area and the leakage area, but these cattle and sheep was grazed in the project area for some time, and grazed in leakage area (reasonable place planned by the local Forestry and Grassland Bureau, and the specific plot location is not identified) at other times. Therefore, the value of $P_{GUI,l,t}$ is same to the parameter $P_{l,t.}$
2. The full census surveys conducted for this monitoring period is just the Survey of Grazing Displacement (2017-2021) and it has been provided as evidence.
3. The QA/QC procedure and how the data checked has been stated for this monitoring period in Section 3.1.2.

Documentation provided by project participant			
☒	Changes in the MR	Section(s): 3.1.2	New version No.: 02
☐	Changes in XLS	Worksheet(s):	New version No.:
☐	Other:		

VVB assessment **Date:** 25/03/2022

1. The revised MR is checked, it is confirmed that the reason has been specified.
   For this monitoring period, the project proponent and the County Forestry and Grassland Bureau visited all the project participants every year to conduct the survey of grazing displacement (2017-2021) and investigate the grazing situation of the project.
   Based on the project design, it is confirmed that the project does not reduce the number of cattle and sheep grazed by herders, but only manages the time of grazing in the project area. Therefore, during the monitoring period, the same batch of cattle and sheep were actually grazing in the project area and the leakage area, but these cattle and sheep was grazed in the project area for some time, and grazed in leakage area (reasonable place planned by the local Forestry and Grassland Bureau, and the specific plot location is not identified) at other times. Hence, the value of $P_{GUI,l,t}$ is same to $P_{l,t}$, which is verified as correct and reasonable.
2. The revised MR is checked, it is confirmed that the description of full census surveys is update to the Survey of Grazing Displacement (2017-2021) which is verified as correct and actual.
3. The revised MR is checked, it is confirmed that the QA/QC procedure has been specified with detail.

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	27	**Section no.**	3.1.2	**Date : 10/02/2022**

Description of CAR

For parameter $Days_{GUI,l,t}$,

1. "Description of measurement methods and procedures to be applied" is not correct due to not only a full census survey conducted during this monitoring period.
2. It is observed that there is only one day value used in ER sheet for LE calculation, why the days are not listed for each year separately need to be specified.
3. The value applied is not correct.
4. QA/QC procedure is not specified with detail. How to the data check is not specified and the QA/QC result for this monitoring period is not stated.

Project participant response **Date :** 20/03/2022

1. "Description of measurement methods and procedures to be applied" has been corrected and full census surveys (just the survey of grazing Displacement, changed through the full text) conducted during this monitoring period has been provided as evidence.
2. The days of each year in this monitoring period are averaged according to project management measures.
3. The value applied has been corrected.
4. The QA/QC procedure and how the data checked has been stated for this monitoring period in Section 3.1.2.

Documentation provided by project participant			
☒	Changes in the MR	Section(s): 3.1.2	New version No.: 02
☐	Changes in XLS	Worksheet(s):	New version No.:
☐	Other:		

VVB assessment **Date:** 25/03/2022

1. The revised MR is checked, it is confirmed that the source of data is updated to be actual and correct.
2. The revised MR is checked, it is confirmed that the days of each year in this monitoring period are averaged according to project management measures which is verified as correct.
3. The revised MR is checked, it is confirmed that the value applied is clarified.
4. The revised MR is checked, it is confirmed that the QA/QC procedure has been specified with detail.

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	28	**Section no.**	3.1.3	**Date : 10/02/2022**
Description of CAR				
1. The record of the grazing agents is not provided. 2. For the management of the land planted with grass seed, the management method listed in this section is not consistent with other parts. 3. The numbers of local herders and women hired as guardians are not correct. 4. The actual situation of chemical fertilizer is not consistent with validated PD.				
Project participant response				**Date :** 20/03/2022
1. The record of the grazing agents has been provided as evidence. Please see the supplementary evidence. 2. The area of management measures has been corrected and is consistent with other parts. 3. The numbers of local herders and women hired as guardians has been corrected the full MR is consistent. 4. The actual situation of chemical fertilizer has been corrected according to validated PD.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 3.1.3		New version No.: 02
☐	Changes in XLS	Worksheet(s):		New version No.:
☒	Other:	/RGA/		
VVB assessment				**Date:** 25/03/2022
1. The revised MR is checked, it is confirmed that the record of the grazing agents/RGA/ has been provided and the information in the MR is consistent with the record. 2. The revised MR is checked, it is confirmed that the management measures has been corrected. 3. The revised MR is checked, it is confirmed that the numbers of local herders and women hired as guardians are corrected. 4. The revised MR is checked, it is confirmed that the actual situation of chemical fertilizer has been corrected which is verified as consistent with PD. 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	29	**Section no.**	3.1.3	**Date : 10/02/2022**
Description of CAR				
Which monitoring parameters need to be monitored and recorded is not specified clearly for this monitoring period.				
Project participant response				**Date :** 20/03/2022
The monitoring parameters need to be monitored and recorded has been specified clearly for this monitoring period in corresponding parts of Section 3.1.3.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 3.1.3		New version No.: 02
☐	Changes in XLS	Worksheet(s):		New version No.:
☒	Other:			
VVB assessment				**Date:** 25/03/2022
The revised MR is checked, it is confirmed that the name of all the monitoring parameters need to be monitored and recorded is specified clearly for this monitoring period.				
Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	30	**Section no.**	3.1.3	**Date : 10/02/2022**
Description of CAR				
1. PP stated that the carbon stratification of the project has been updated by the special measures of grassland management activities, however, VVB verified that there is no change comparing with the				

PDD, PP is requested to specify this issue. 2. The map of each sample plot's location is not provided. 3. The time for conduct the full census survey is not same to other part.			
Project participant response			**Date :** 20/03/2022
1. The description of carbon stratification in these monitoring periods has been corrected in Section 3.1.3. And there is no change of grassland management activities and unexpected disturbances, the carbon stratification of the project does not need to update. 2. The map of each sample plot's location has been provided as Figure 3-2. 3. The time for conduct the full census survey (just the survey of grazing Displacement, changed through the full text) has been corrected and in line with the other part. That is from September to October.			
Documentation provided by project participant			
☒	Changes in the MR	Section(s): 3.1.3	New version No.: 02
☐	Changes in XLS	Worksheet(s):	New version No.:
☒	Other:		
VVB assessment			**Date:** 25/03/2022
1. The revised MR is checked, it is confirmed that it is a typo and has been updated accordingly. 2. The revised MR is checked, it is confirmed that map of each sample plot's location has been provided which is verified as correct by checking the map and by site inspection of sample plots. 3. The revised MR is checked, it is confirmed that time has been updated consistent in the whole MR. 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	31	**Section no.**	4.1.1	**Date : 10/02/2022**
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 in line with the validated PD.				
Project participant response				**Date :** 20/03/2022
The groups identified in Section 2.1.8 has been updated and the Section 4.1.1 of the monitoring report has been updated according to the validated PD.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 4.1.1		New version No.: 02
☒	Changes in XLS	Worksheet(s): Emission Reduction		New version No.: 02
☐	Other:			
VVB assessment				**Date:** 25/03/2022
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 *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	32	**Section no.**	4.1.2	**Date : 10/02/2022**
Description of CAR				
The description in Section 4.1.2 is not in line with the requirement of the Monitoring Report Template. It is confirmed in community survey showed that herders who think the implementation of project influenced their livelihood result of the controlled grazing, the related mitigation is not specified.				
Project participant response				**Date :** 20/03/2022
For the herders who think the implementation of project influenced their livelihood result of the controlled grazing, the related mitigation has been specified in section 4.1.2 as followed:				

• County Forestry and Grassland Bureau guide them to graze within the acceptable area and ensure the project will not reduce their grazing productivity. • For herders who agreed to restore the degraded grassland and implemented grazing prohibition of project activities, they would receive corresponding subsidies			
Documentation provided by project participant			
☒	Changes in the MR	Section(s): 4.1.2	New version No.: 02
☐	Changes in XLS	Worksheet(s):	New version No.:
☐	Other:		
VVB assessment			**Date:** 25/03/2022
The revised MR is checked, it is confirmed that information has been added. Refer to section 4.5.2 for the detail assessment.			
Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed		

CAR ID	33	**Section no.**	4.3.1	**Date : 10/02/2022**
Description of CAR				
1. PP stated that there was a meeting of stakeholder representatives has held in Forestry and Grass Bureau of Zhangye City on 29-March-2021, however this information is not listed in the stakeholder related section and the supporting evidence is missing. 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. The results of monitoring for some variables are not corresponding to the monitoring methods applied for this monitoring period. Revisions are requested. 4. The picture in figure 4-3 of stakeholder meetings showing 100% men, while more than 50% of stakeholders are supposed to be women is not very conclusive.				
Project participant response				**Date :** 20/03/2022
1. The information about meeting of stakeholder representatives has held in Forestry and Grass Bureau of Zhangye city on 29-March-2021 has been listed Section 2.3.3 in the stakeholder related section and the supporting evidence has been provided as supplementary evidence. 2. The groups identified in Section 2.1.8 has been updated and the key variables have been monitored during this monitoring period in Section 4.3.1 of the Monitoring Report has been matched to all the groups identified in Section 2.1.8 and 2.1.9 of the PD. 3. The results of monitoring for some variables (grassland coverage and numbers for endangered animals) has been corrected and corresponding to the monitoring methods applied for this monitoring period. 4. The pictures of stakeholder meetings including representatives of women have been provided in Figure 4-3.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 4.3.1		New version No.: 02
☐	Changes in XLS	Worksheet(s):		New version No.:
☐	Other:			
VVB assessment				**Date:** 25/03/2022
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 the figure has been updated with women inside. Refer to section 4.5.6 for the detail assessment.				
Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open)			

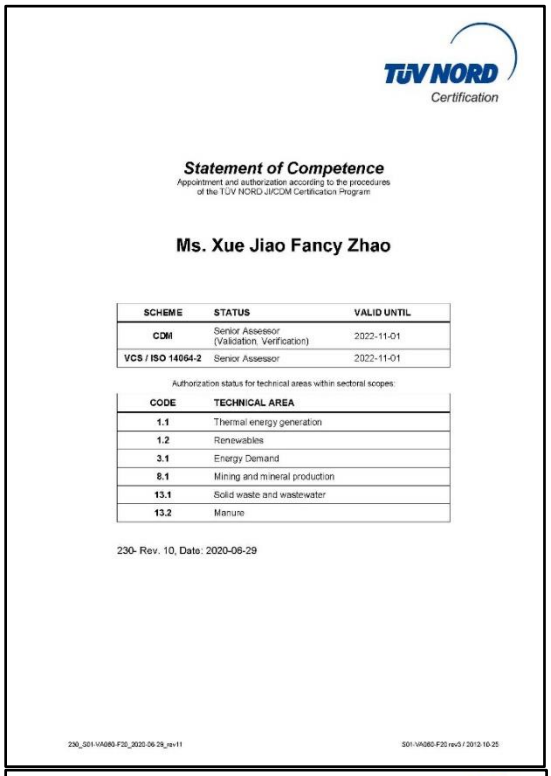
	☒ The finding is closed

CAR ID	34	**Section no.**	5.3.1	**Date : 10/02/2022**
Description of CAR				
1. The monitoring indicators and monitoring method used are not in line with the design in the validated PD. 2. The description of monitoring results for this monitoring period is not correct due to the future tense used. 3. The monitoring results for the parameter "Protected area for endangered animals" are not correct and relevant.				
Project participant response				**Date :** 20/03/2022
1. The monitoring indicators and monitoring method used has been corrected according to the design in the validated PD. 2. The description of monitoring results for this monitoring period has been corrected due to the future tense used. 3. The monitoring results for the parameter "Protected area for endangered animals" has been corrected as "the numbers of endangered animals" in Section 5.3.1.				
Documentation provided by project participant				
☒	Changes in the MR	Section(s): 5.3.1		New version No.: 02
☐	Changes in XLS	Worksheet(s):		New version No.:
☐	Other:			
VVB assessment				**Date:** 25/03/2022
1. The revised MR is checked, it is confirmed that the monitoring indicators and monitoring method used are in line with the design in PD. 2. The revised MR is checked, it is confirmed that the actual monitoring results of have been stated. 3. The revised MR is checked, it is confirmed that the monitoring results for the parameter "Protected area for endangered animals" are updated to be correct and relevant. Refer to section 4.6.11 for the detail assessment.				
Conclusion *Tick the appropriate checkbox*	☐ 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 *Tick the appropriate checkbox*	☐ To be checked during the next periodic verification			

APPENDIX 4 COMPETENCE OF TEAM MEMBERS AND TECHNICAL REVIEWERS



TÜV NORD Certification

Statement of Competence
Appointment and authorization according to the procedures of the TÜV NORD JI/CDM Certification Program

Ms. Xue Jiao Fancy Zhao

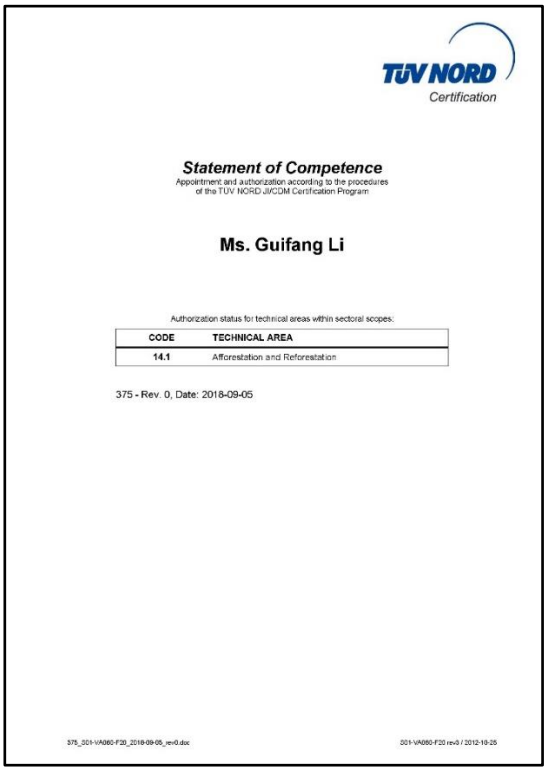
SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor (Validation, Verification)	2022-11-01
VCS / ISO 14064-2	Senior Assessor	2022-11-01

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA
1.1	Thermal energy generation
1.2	Renewables
3.1	Energy Demand
8.1	Mining and mineral production
13.1	Solid waste and wastewater
13.2	Manure

230- Rev. 10, Date: 2020-06-29

230_S01-VA060-F20_2020-06-29_rev11 S01-VA060-F20 rev3 / 2012-10-25



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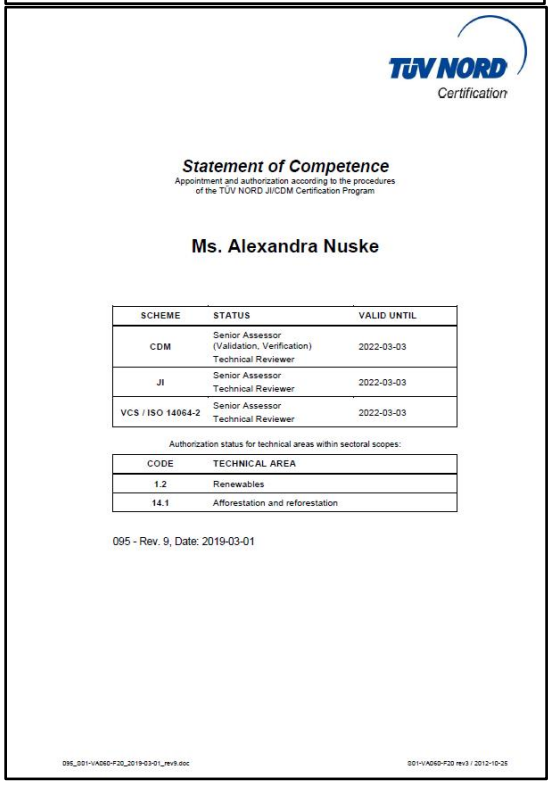
Ms. Guifang Li

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA
14.1	Afforestation and Reforestation

375 - Rev. 0, Date: 2018-09-05

375_S01-VA060-F20_2018-09-05_rev0.doc S01-VA060-F20 rev3 / 2012-10-25



TÜV NORD Certification

Statement of Competence
Appointment and authorization according to the procedures of the TÜV NORD JI/CDM Certification Program

Ms. Alexandra Nuske

SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor (Validation, Verification) Technical Reviewer	2022-03-03
JI	Senior Assessor Technical Reviewer	2022-03-03
VCS / ISO 14064-2	Senior Assessor Technical Reviewer	2022-03-03

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA
1.2	Renewables
14.1	Afforestation and reforestation

095 - Rev. 9, Date: 2019-03-01

095_S01-VA060-F20_2019-03-01_rev9.doc S01-VA060-F20 rev3 / 2012-10-25