



**Verified Carbon
Standard**

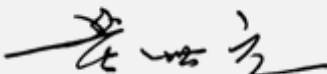
VERIFICATION REPORT FOR ADJUSTED WATER MANAGEMENT IN RICE CULTIVATION IN SOUTHERN LUJIANG COUNTY



Document Prepared by China Classification Society Certification Co.,
Ltd. (CCSC)

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Summary:

China Classification Society Certification Co., Ltd. (hereafter referred to as "CCSC") has been commissioned by Shanghai Libra Investment & Management Co., Ltd to perform the 2nd periodical verification of greenhouse gas emission reductions of the project activity "Adjusted Water Management in Rice Cultivation in Southern Lujiang County" (VCS Ref. No. 2507, hereafter referred to as "the project activity") reported in the monitoring report during monitoring period 01-Jan-2021 to 31-Dec-2021.

The project is to change the water regime during the rice cultivation period conducted in South of Lujiang County, Hefei City, Anhui Province. It changes continuously flooded to intermittent flooded condition during rice cultivation so that to result in reduced anaerobic decomposition of organic matter in rice cropping soils and thus reduced generation of methane. The Project involves a total acreage of 14,096ha for double-cropping rice. It's estimated that the project could achieve average annual GHG emission reductions of 59,043 tCO₂e during the 1st renewable crediting period from 14-Mar-2018 to 13-Mar-2025.

The verification scope is defined as a periodic independent and objective review and ex-post determination by the VVB of the monitored reductions in GHG emissions during defined verification period, and consisted of the following three phases: i) desk review of the project design and the baseline and monitoring plan; ii) follow-up on-site visit and interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification report and opinion. The overall verification, from Contract Review to Verification Report & Opinion, was conducted using CCSC internal procedures refer to VCS Standard Version 4.2.

A risk-based approach has been followed to perform this verification activity. CCSC appointed a qualified team in accordance with internal procedures to perform the verification. During the verification, 1 Clarification Request (CL), 3 Corrective Action Requests (CARs) and no forward action request (FAR) were raised.

In conclusion, it is CCSC's opinion that the project "Adjusted Water Management in Rice Cultivation in Southern Lujiang County", in the MR (version 03 dated 15-Sep-2022) meets all relevant requirements for VCS activities and all relevant host Party criteria and correctly applies CDM approved methodology "AMS-III.AU. Methane Emission Reduction by Adjusted Water Management Practice in Rice Cultivation" (Version 4.0). And, CCSC is able to certify that the emission reductions from the project during the 2nd monitoring period from 01-Jan-2021 to 31-Dec-2021 amount to 65,680 tCO₂e, while by considering the net GHG emission reductions generated during this monitoring period have exceeded the threshold required in the small-scale methodology applied, which is the 60,000 tCO₂e per year, then the GHG emission reductions amount to 60,000 tCO₂e requests issuance of the equivalent VCUs.

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1 INTRODUCTION

1.1 Objective

- Shanghai Libra Investment & Management Co., Ltd. has commissioned CCSC to performed the verification of the project of Adjusted Water Management in Rice Cultivation in Southern Lujiang County (hereafter referred to as “the project”) covering the monitoring period from 01-Jan-2021 to 31-Dec-2021, on the basis of requirements of Verified Carbon Standard (VCS) Version 4.2/4/.
- CCSC as the validation/verification body (VVB) of the project has been accredited as a DOE by UNFCCC and meets the competence requirements as set out in ISO 14065:2020.
- The Verification is the periodic independent review and ex-post determination by a VVB of the monitored reductions in GHG emissions during defined verification period. In carrying out its verification work, the VVB shall ensure that the project complies the applicable CDM and VCS requirements. The verification shall:
 - Ensure that the project has been implemented and operated as per the MR, and that all physical features (technology, project equipment, and monitoring and metering equipment) of the Project are in place;
 - Ensure that the MR and other supporting documents provided are complete in accordance with latest applicable version of the completeness checklist for requests for issuance of VCUs and verifiable and in accordance with applicable VCS requirements;
 - Ensure that actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan or any revised approved monitoring plan, and the approved methodologies including applicable tool(s);
 - Evaluate the data recorded and stored as per the monitoring methodologies including applicable tool(s).

1.2 Scope and Criteria

- The verification scope encompasses an independent and objective review and ex-post determination of the monitored reductions in GHG emissions by the CCSC. The verification scope covers the relevant documents (e.g. the MR /1//3/, the monitoring plan, the emission reduction calculation spreadsheet/2/, supporting documents available to the verifier and information collected through performing interviews and during the on-site inspection, VERRA’s requirements publicly available, relevant rules, including the host country legislation, etc.) to be independently reviewed, the project geographical locations to be visited on-site, the related project stakeholders to be interviewed with, and processes that

are necessary to acquire objective evidence for the evaluation of the project compliance to the VCS requirements and associated interpretations. The verification activities are conducted according to the VERRA's requirements. In doing so, the principles of accuracy and completeness, relevance, reliability and credibility were followed. The verification is not meant to provide any consulting service towards the PPs. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the project.

1.3 Level of Assurance

- CCSC has undertaken a reasonable assurance engagement in accordance with VCS Standard (version 4.2)/4/. The verification conclusions are based on the MR/3/ and supporting evidences made available to the VVB and information collected through performing interviews and during the on-site inspection.

1.4 Summary Description of the Project

- The project is owned and implemented by Hefei Luyu Agricultural Technology Co., Ltd. The project is to change the water regime during the rice cultivation period. It changes continuously flooded to intermittent flooded condition during rice cultivation so that to result in reduced anaerobic decomposition of organic matter in rice cropping soils and thus reduced generation of methane. The Project involves a total acreage of 14,096 ha for double-cropping rice conducted in South of Lujiang County, Hefei City, Anhui Province, China. With the implementation of project to construct the high-standard rice fields, which including the cement ditches and reservoirs constructed to conduct the intermittent flooded water regime during rice cultivation so that to replace the continuously flooded method by intermittent flooded method, the project solves the problems of excessive water used during rice cultivation and decrease CH₄ emission. The geographical coordinates for the project site are 117°5.83' to 117°31.73'E and 30°50.19' to 31°14.90'N.
- The project started construction of high-standard rice fields on 06-Nov-2017 and started land preparation on 14-Mar-2018. The project constructed the high-standard rice fields of 14,096 ha for double-cropping rice and expected to generates average annual GHG emission reductions by changes continuously flooded to intermittent flooded condition during rice cultivation, and produces related financial, social and environmental benefit to the area where project located in
- During the 2nd monitoring period from 01-Jan-2021 to 31-Dec-2021, the project has been operated normally, the total GHG emission reductions generated by the project are 65,680 tCO₂e, while by considering the net GHG emission reductions generated during this monitoring period have exceeded the threshold required in the small-scale methodology applied, which is the 60,000 tCO₂e per year, then the GHG emission reductions amount to 60,000 tCO₂e requests issuance of the equivalent VCUs.

2 VERIFICATION PROCESS

2.1 Method and Criteria

- The overall verification, from Contract Review to Verification Report and opinion, was conducted using CCSC internal procedures. The process includes three phases:
- 1) Desk review of documents;
- 2) On-site inspection and follow-up interviews;
- 3) Issuance of the final Verification Report and opinion.
- CCSC verified the project against the requirements set in VCS/4/,/5/,/6/,/7/, and other relevant VCS requirements.
-
- The sampling methods were utilized by PP for complete the MR/3/ and used by CCSC during the on-site inspection as well as verification for project activity.
-
- PP sampling approach – ex post determination of $A_{s,g}$
- PP has applied a sampling method for monitoring of farmers' compliance with project cultivation practice (determination of $A_{s,g}$) during the 2nd monitoring period, details are stated as below,
- The Roster of households/25/ with all 3,447 participated rice households including name, ID No. and address of the households, size of the field involved in the project area and additional farm specific information, PP has set up a database that allow an unambiguous identification of participated rice fields, and as per the AMS-III.AU. (version 4.0)/9/, a cultivation logbook shall be maintained for all project fields, thus all the households are required by PP to complete the logbooks. But the reporting and verification shall be done on the basis of samples of the logbooks from the households. Then the Roster of households/25/ has been used as the basis for PP to conduct the sampling method as stated below.
- As per the requests from AMS-III.AU. (version 4.0)/9/, the reporting and verification shall be done on the basis of samples of the logbooks from the households, according to the latest version of the “Standard for sampling and surveys for CDM project activities and programme of activities” (version 09.0)/12/, PP has established a sampling method following the standard and the sampling size is verified as correct and PP has used 90/10 confidence/precision as the criteria for the reliability of sampling efforts for small-scale

project activity is deemed as in line with the requirement of the sampling standard/12/.

- 308 samples have been selected according to stratified sampling method in 6 towns based on the numbers determined for each town calculated by the weight of total households' numbers of each town in project area which is verified as in line with the numbers determined in MR/3/ and in line with the requirement of the sampling standard/12/. And then for sample selection of each town, a random sampling method has been used for determine the households sample in each town and finally the randomly selected 308 samples has been defined. Due to this monitoring period covered year 2021, project proponents randomly selected 308 samples at the beginning of 2021 during this monitoring period, that means total 308 samples were selected for this monitoring period to determine whether the project fields were cultivated according to the project cultivation practice as defined by the project activity.
- The selected sampled farmers' logbooks/36/ including all parameters that are part of the project cultivation practice during cultivation season have been checked, CCSC confirmed that 308 samples are randomly selected from the 3,447 households list by the simple random sampling (SRS) method. The excel function "randbetween" is employed to choose the farmers sample group. It is able to confirm that the sampling approach was consistent with the related requirements in the AMS-III.AU. (version 4.0)/9/.
- VVB sampling approach
- The sampling plan during on-site audit is determined considering the accessibility and similitude of the areas and the guideline and standard for sampling was referred by VVB for the joint verification.
- CCSC reviewed the 308 copies of farmers' logbooks/36/ and cross-checked with the on-site inspection, including random households' interview and related cultivation area visit and verified whether the sampling plan is reasonably to conduct and if the results of the sampling survey can be accepted.
- CCSC has applied acceptance sampling to verify the monitoring results of farmers' compliance with project cultivation practice (determination of $A_{s,g}$) based on 308 copies of farmers' logbooks/36/ following the Standard for Sampling and Surveys for CDM Project Activities and Programme of Activities, Version 09.0/12/.
- For the households included in the project area, through checking the cooperation agreements/24/ signed between the project proponents and all the households which ensure the development of the project, there are 3,447 households were determined who are involved in the project due to rice paddies in the project area belong to these households. All the households are located in South of Lujiang County, Hefei City, Anhui Province, which is a limited area. Due to the number of households who were selected with the logbooks

involved was too large and scattered to carry out a census during the site inspection, hence based on the principle of cost-effectiveness, based on previous sampling experience of CCSC, the acceptance sampling approach can be selected for this project due to relatively homogenous population being studied, given the similar soil condition and similar cultivation habit.

- Using own professional judgement of CCSC, it is assumed that the Acceptable Quality Level (AQL) is 1% and the Unacceptable Quality Level (UQL) is 15% for this project. The maximum error of producer's risk is assumed at 10% and consumer's risk is assumed at 10%, in compliance with the sampling standard/12/. Based on these assumptions, following the sampling standard/12/ and sampling guideline/13/, the sample size should be not less than 26 and acceptance number is 1. And this sample size is confirmed as the moderate quantity in the table 2 of the standard/12/, thus is confirmed as appropriate number.
- 30 households were selected to interview to confirm the information of the $A_{s,g}$ during site visit and if acceptance number is higher than 1, then the sampling number will be adjusted to higher.
- During the desk review before site visit, CCSC determined 30 as the sample size for conservativeness and randomly selected 30 by using the Excel's RAND() function from the 308 copies of farmers' logbooks/36/.
- During on-site visit, 30 randomly selected sampled households were visited to check the correctness of data of logbook by interview them together with site cultivation practice inspection so that $A_{s,g}$ can be verified.
- The 30 selected households from 308 samples were interviewed, site and cultivation practice inspected by CCSC. All the samples confirmed that they have required by PP to complete the logbooks which the template was provided by PP since the project started. Via comparing the information collected during site interview and inspection of the cultivation practice with the PP's data in the 308 sampled logbooks/36/, all information is consistent between each other can be verified. No discrepancy is found between the 308 sampled logbooks/36/ and the VVB's sample results.
- As there are no discrepant records, i.e. the discrepant record is less than the acceptance number of 1, the monitored value of $A_{s,g}$ is accepted as per "Sampling and Surveys for CDM Project Activities and Programme of Activities"/12/.
- The following sections outline each step in more detail.

2.2 Document Review

- A desk review of the MR/1/ and supporting documents was conducted by the assessment team. The aim of the desk review of the documentation was to verify correctness, credibility, interpretation and completeness of presented data and information, and to cross check

between information provided in the updated MR and information from sources other than that used, if available. Review of the appropriateness of formulae and correctness of calculations was also carried out during this stage based on the approved methodology being applied. And particular attention was given to the quality of the metering equipment including calibration requirements, the monitored data and its evidence, and the emission reduction calculation. The evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions and VCUs was also conducted.

- Appendix B of this report contains a complete list of all documents and proofs reviewed by the assessment team.

2.3 Interviews

- From 18-Apr-2022 to 19-Apr-2022, CCSC performed an on-site inspection at the physical site of the project.
- During the on-site inspection, the team has interviewed with key personnel from the project owner (the project participant), local officers, experts from Anhui Academy of Social Sciences, technicians from local agrotechnical stations, sampled households and consultant.
- The assessment content and topics/the persons interviewed at the on-site inspection were provided in the below table.

Date: 18-Apr-2022 to 19-Apr-2022	
Interview topics	Interviewed Organizations and persons
–The status of VCS project. –The project on-site inspection. –The evidences of construction status and operation of key equipment, parameters monitoring and data processing activities, monitor equipment and calibration. –Monitoring data. –Quality Management; organizational structure, responsibilities and competencies; Internal QA/QC Management procedures and document control. –Compliance with National Laws and Regulations. –Status of project area. –Operation of the project in cultivation seasons. –The process and participation of the stakeholder consultation. –The impact of the project activity.	Hefei Luyu Agricultural Technology Co., Ltd. (Project Owner) Hu Yanmei, Staff

Date: 18-Apr-2022 to 19-Apr-2022																					
Interview topics	Interviewed Organizations and persons																				
–The complaint by local stakeholders and the implementation of the mitigation measures.																					
–Agricultural aspects –Cultivation Seasons –Project Area size –Local rice characteristics –Environmental aspects –Water regime during the rice cultivation period	Agricultural Bureau of Lujiang County (local government) Zhang Xiao, Section Staff Village committee (local committee) Chen Li officer of local village committee																				
–Monitoring devices –Monitoring method –Monitoring results for this monitoring period –Authorization and Certificate	Anhui Academy of Social Sciences (third lab) Guo Xiaoying Expert																				
–Agricultural aspects –Local Agricultural characteristics - Local Rice cultivation type - Local field condition - Local rice yield - Local flooding condition - Fertilizer utilization –Technical Training	Local agrotechnical stations Qian Meijuan, Jin Qiurong Technician																				
–Information of logbook –General information of farmer –Field area –Rice type –Cultivation type –Baseline Scenario –Flooding type in baseline –Fertilizer utilization in both baseline and project –Flooding type in project scenario –Rice yield comparison –Technical Training –Field record in Logbook –Income level	30 randomly selected sampled households (check the correctness of data of logbook and size, location of fields) <table border="1"> <thead> <tr> <th>Last Name</th><th>First Name</th></tr> </thead> <tbody> <tr><td>Qian</td><td>Yan</td></tr> <tr><td>Shui</td><td>Nanlian</td></tr> <tr><td>Xin</td><td>Jiahao</td></tr> <tr><td>Zhang</td><td>Jia</td></tr> <tr><td>Wei</td><td>Youju</td></tr> <tr><td>Shi</td><td>Yi</td></tr> <tr><td>Zhen</td><td>Haojing</td></tr> <tr><td>Wei</td><td>Shengzhen</td></tr> <tr><td>You</td><td>Shan</td></tr> </tbody> </table>	Last Name	First Name	Qian	Yan	Shui	Nanlian	Xin	Jiahao	Zhang	Jia	Wei	Youju	Shi	Yi	Zhen	Haojing	Wei	Shengzhen	You	Shan
Last Name	First Name																				
Qian	Yan																				
Shui	Nanlian																				
Xin	Jiahao																				
Zhang	Jia																				
Wei	Youju																				
Shi	Yi																				
Zhen	Haojing																				
Wei	Shengzhen																				
You	Shan																				

Date: 18-Apr-2022 to 19-Apr-2022		
Interview topics	Interviewed Organizations and persons	
–Job opportunities	Lv	Kaifeng
	Yan	Yiyao
	Jin	Wwenyun
	Tao	Lanlan
	Kong	Shiyi
	Kong	Xiufang
	Qi	Yufeng
	Tiao	Guoqing
	Qing	Zhilin
	Yan	Zhen
	Jin	Weiqi
	Shun	Fang
	Tao	Chunwang
	Shi	Yitong
	Lv	Mingjie
	Chen	Meili
	Zhang	Li
	Xu	Huan
	Wei	Shutong
	Cao	Zihan
	Tao	Qing
– Applicability of selected methodology – Emission factors – Preparation of MR. –Compliance of the monitoring plan with the monitoring methodology –Compliance of monitoring with the monitoring plan –Assessment of data and calculation of GHG emission reductions	Shanghai Libra Investment & Management Co., Ltd. (Consultancy) Wang Dong Project manager	

2.4 Site Inspections

- The on-site inspection involved following activities,
- An assessment of the implementation and operation of the project as per the MR/1/;
- A review of information flows for generating, aggregating and reporting the monitoring parameters;
- Interviews with relevant personnel to confirm that the operational and data collection procedures are implemented in accordance with the approved monitoring plan and sampling

plan;

- A site visit including baseline and project reference fields as provided in the MR/1/ were visited and inspected as following table,

Site Visit time	Area	Coordinates		VVB assessment
Baseline Scenario Reference fields				
20-Apr-2022	Zhuyuan Village, Nihe Town, Lujiang County	117.311842°E	31.124840°N	The baseline reference fields were selected that they represent baseline scenario where double-cropping rice was planted by continuously flooded method without any organic amendments which is in line with the requirement of applied methodology. The geographical coordinates of three fields were verified as consistent with the MR by GPS device used during site visit.
		117.311952°E	31.125223°N	
		117.310877°E	31.125253°N	
Project Scenario Reference fields				
20-Apr-2022	Zhuyuan Village, Nihe Town, Lujiang County	117.314722°E	31.108056°N	The measurements on project and baseline reference fields were carried out in an equal manner and simultaneously. The project reference fields were selected that they represent project scenario where double-cropping rice was planted by intermittent flooded method without any organic amendments which is in line with the requirement of applied methodology. The geographical coordinates of three fields were verified as consistent with the MR by GPS device used during site visit.
		117.3125°E	31.105278°N	
		117.313056°E	31.105000°N	

- Furthermore, during the site inspection, CCSC also visited 30 households' (the samples selected for determine the $A_{s,g}$) cultivation area within the project area and interviewed with them about the information in logbooks. Each area is verified as located in the project boundary and the area size is consistent with the Roster and location is correct by checking the geographical coordinates and KML file. Hence during the site inspection, the 30 sampled areas are determined by CCSC via checking the map of the project location, the cultivation and flooding approach are consistent with project design and implementation, details as following table,

Geo-Coordinates			
117.24677460°E	31.17859282°N	117.35851254°E	31.14247177°N
117.24948592°E	31.17846266°N	117.36143674°E	31.14595643°N

117.24961299°E	31.17727425°N	117.35614059°E	31.14515037°N
117.24883397°E	31.17673458°N	117.35838726°E	31.14503988°N
117.24223941°E	31.17692629°N	117.35617490°E	31.14013527°N
117.24126250°E	31.17675943°N	117.17171127°E	31.20974389°N
117.24403397°E	31.17564916°N	117.17325446°E	31.21013144°N
117.24134976°E	31.17605284°N	117.17301749°E	31.20759627°N
117.24924233°E	31.18165360°N	117.17630486°E	31.21114024°N
117.25059479°E	31.18196569°N	117.17773479°E	31.20735362°N
117.36170582°E	31.15054708°N	117.16651183°E	31.21770756°N
117.36629209°E	31.14900493°N	117.16863528°E	31.21750401°N
117.37046996°E	31.14968710°N	117.16423832°E	31.21666874°N
117.36314575°E	31.15399008°N	117.16071904°E	31.21431319°N
117.36862206°E	31.15161515°N	117.16496809°E	31.21340235°N

- A cross-check between information provided in the MR/1/ and data from other sources such as operational records or similar data sources;
- A check of the monitoring equipment including calibration performance and observations of monitoring practices against the requirements of the MR/1/ and the selected methodology/9/;
- A review of calculations and assumptions made in determining the GHG data, emission reductions and claimed VCUs;
- An identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters.

2.5 Resolution of Findings

- During the verification of a project activity, to identify issues that need to be further elaborated upon, researched or added to in order to confirm that the project meets the VERRA's requirements and can achieve credible emission reductions, CCSC will issue a Corrective Action Request (CAR), a Clarification Request (CL) or a Forward Action Request (FAR) depending on different situations.
- The objective of this phase of is to resolve issues related to the monitoring, implementation and operations of the project activity that could impair the capacity of the project activity to achieve emission reductions or influence the monitoring and reporting of emission reductions prior to CCSC's positive conclusion on the GHG emission reduction calculation.
- Findings established during the verification can either be seen as a non-fulfilment of criteria ensuring the proper implementation of a project or where a risk to deliver high quality emission reductions is identified.
- A Corrective Action Request (CAR) will be raised if one of the following occurs:
 - a) Non-compliance with the monitoring plan or methodology are found in monitoring and reporting and has not been sufficiently documented by the project participants, or if the

evidence provided to prove conformity is insufficient;

- b) Modifications to the implementation, operation and monitoring of the project activity has not been sufficiently documented by the project participants;
- c) Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impact the quantity of emission reductions;
- d) Issues identified in a FAR during validation to be verified during verification or previous verification(s) have not been resolved by the project participants.
- A Clarification Request (CL) will be raised if information is insufficient or not clear enough to determine whether the applicable VCS requirements have been met.
- A Forward Action Request (FAR) will be raised, for actions if the monitoring and reporting require attention and/or adjustment for the next verification period.
- There are 3 CARs and 1 CL that have been raised during the verification process.
-

2.5.1 Forward Action Requests

- No FAR was raised during the 2nd verification process. Also there are no remaining from former verification and validation.

2.6 Eligibility for Validation Activities

- Not applicable as China Classification Society Certification Co., Ltd. holds the accreditation for the verification for projects under scope 14.

3 VALIDATION FINDINGS

3.1 Participation under Other GHG Programs

- Projects registered (or seeking registration) under other GHG program(s)
- The project has neither been registered nor seeking registration under any other GHG programs. The project is seeking registration only in VCS program. A declaration from PP/39/ has been provided and checked by CCSC, PP has confirmed that the project is not registered under any other GHG programs and the Verified Carbon Units (VCUs) generated from this monitoring period is not double counted.
- Also, the assessment team checked the registries of CDM EB and Gold Standard through website <http://cdm.unfccc.int/> and <http://www.goldstandard.org/> to confirm the same.
- The net GHG emission reductions during this monitoring period from the project was not 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, GS, VCS and other GHG schemes' website, it is verified that the implementation of the project is consistent with the description in the MR and the monitoring system is fully functional to generate Verified Carbon Units (VCUs) without any double counting for this monitoring period from 01-Jan-2021 to 31-Dec-2021.
- Besides, based on VVB's local expertise, China has a national emissions trading scheme only cover the high-emission industries, such as power generation sector that emitted at least 26,000 tons of CO₂e/year which has been verified in the public website/16/, and it is confirmed that the project activity 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 in public information/17/. Hence, it is confirmed that the emission reductions will not be double counted.

3.2 Methodology Deviations

- Not applicable as not deviation for methodology.

3.3 Project Description Deviations

- Not applicable as not deviation for project description.

3.4 Grouped Project

- Not applicable.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

- By site inspection and interview with local stakeholders, the assessment team is able to confirm that the project was implemented to change the water regime during the rice cultivation period/21/,/22/. It changes continuously flooded to intermittent flooded condition during rice cultivation so that to result in reduced anaerobic decomposition of organic matter in rice cropping soils and thus reduced generation of methane. The Project involves a total acreage of 14,096 ha for double-cropping rice.
- As per the Appendix 1 Eligible AFOLU project categories in VCS standard version 4.2/4/ and the validation report/19/, the assessment team is able to confirmed that the project belongs to one type of AFOLU categories, i.e. Agricultural Land Management (ALM), the project is applicable to one of eligible ALM activities, i.e. Improved Cropland Management (ICM).
- By site inspection with rice lands and interview with farmer representatives, the assessment team is able to confirm that before the project implementation, the paddy fields are regarded as an isolate unit and the rice was continuously flooded, and with the project, the cement ditches and reservoirs were constructed to conduct the intermittent flooded water regime during rice cultivation. With the replacing of the continuously flooded method by intermittent flooded method, the project solves the problems of excessive water used during rice cultivation and expected to decrease CH₄ emission.
- By site visit the assessment team is able to confirm the project cement ditches and reservoirs as well as the monitoring and metering equipment, the project has been implemented and operated as applied methodology and monitoring plan described in the MR/3/.
- The verification covers the period from 01-Jan-2021 to 31-Dec-2021 (including both days). The Project involves a total acreage of 14,096 ha for double-cropping rice, with the implementation of the project in this period, it amounts to 65,680 tCO_{2e}, while by considering the net GHG emission reductions generated during this monitoring period have exceeded the threshold required in the small-scale methodology applied, which is the 60,000 tCO_{2e} per year, then the GHG emission reductions amount to 60,000 tCO_{2e} requests issuance of the equivalent VCUs.
- By checking the Construction Contract/27/ of the project, the assessment team confirmed that the project started construction of high-standard rice fields on 06-Nov-2017, and started land preparation on 14-Mar-2018 via checking the record in Roster of households/25/.
- CCSC confirmed that the activities commenced before the monitoring period and during this

monitoring period have been stated in the MR/3/. By site inspection of the project site and interview with the sampled farmers, the assessment team confirmed that the trainings were provided to technicians and farmers continuously during this monitoring period to achieve the project to be implemented in line with the applied methodology and monitoring plan described in the MR/3/. Hence, CCSC confirmed that activities commenced before the monitoring period continue to be implemented have been demonstrated clearly in the MR/3/.

- There are no any material discrepancies between project implementation and the project description observed by CCSC during the verification process, the project implementation is in accordance with the project description contained in the PD/18/.
- The project was registered as a VCS project activity with the VCS Ref. No. 2507 on 14-Sep-2021, with 21 years renewable crediting period started from 14-Mar-2018 to 13-Mar-2039 under VCS Program.
- The project has neither been registered and rejected nor seeking registration under any other GHG programs and has not received or sought any other form of environmental credit, and the GHG emission reductions or removals generated by the project have not been included in an emissions trading program or any other mechanism that includes GHG allowance trading, which has been assessed in above section 3.1. Hence, the assessment team is able to confirm that the emission reductions during this monitoring period will not be double counted.
- This monitoring period (01-Jan-2021 to 31-Dec-2021) is the 2nd monitoring period belongs to first 7-year crediting period from 14-Mar-2018 to 13-Mar-2025 (both days included).
- Details of the project location are given in table 3-1 below:
- Table 3-1: Project Location

No.	Project Location
Host Country	China
Region:	Anhui Province
Project location address:	South of Lujiang County in Hefei City
Latitude:	30° 50.19'N to 31° 14.90'N
Longitude:	117° 5.83'E to 117° 31.73'E

- The location of the project site is verified with on-site investigation by GPS devices and checking the google earth map/50/.
- KML file with project boundary is checked as provided/26/, and is verified as consistent with the MR and on-site investigation by GPS devices and checking the google earth map/50/.
- The approved consolidated methodology applied in the project activity is AMS-III.AU–

“Methane Emission Reduction by Adjusted Water Management Practice in Rice Cultivation” (version 04.0)/9/. Also refers to the latest approved version of the following tools and guidelines:

- “Standard for Sampling and Surveys for CDM Project Activities and Programme of Activities” (version 9.0)/12/
- “Guideline for Sampling and Surveys for CDM Project Activities and Programme of Activities”, version 4.0/13/.
- By inspection and interview with the project implementer, the assessment team is able to verify that the project contributes the sustainable development through the following aspects:
 - China is one of the countries that support the 17 UN Sustainable Development Goals (SDGs) and has carried out voluntary national reviews (VNRs) of its implementation of the 2030 Agenda in 2021. The project would provide many benefits that will help to achieving China’s Sustainable Development Goals in following aspects confirmed by on-site inspection:
 - SDG target 2.4: rice production increased of 11% approximately during this monitoring period and increase of 11.5% since the project implemented, the assessment confirmed the value by interview with farmers and experts, and checking the farmers’ log books/36/ comparing with the Ex-ante investigation report of Rice Cultivation/23/.
 - SDG target 4.1: a part of carbon profit from this project were used to donate about 9,800 sets of stationary packs, including books, pencils, pencil-case, etc., for the local children, which increased the reading accessibility of children during this monitoring period, and total of 19,600 school supplied and books to 19,600 children in project area, the assessment confirmed the value by interview with local officers and checking the Records and photo evidence related to the book donation activity in Southern Lujiang County by the project owner/46/.
 - SDG target 5.5: no more female employments hired during this monitoring period comparing with the 1st monitoring period, and 17 female farmers (73.9% of total) are employed by the project as long-term technicians and paid with salary of CNY 100 per month since the project implemented, the assessment confirmed the value by interview with technicians, and checking the labor contracts/44/ with the technicians and related payrolls/45/.
 - SDG target 8.5: no more employments hired during this monitoring period comparing with the 1st monitoring period, and 23 farmers are employed by the project as long-term technicians and paid with salary of CNY 100 per month since the project implemented, the assessment confirmed the value by interview with technicians, and checking the labor contracts/44/ with the technicians and related payrolls/45/.
 - SDG target 13.0: During the 2nd monitoring period from 01-Jan-2021 to 31-Dec-2021, the

project has been operated normally, the total GHG emission reductions generated by the project are 65,680 tCO₂e. The total amount of emission reductions generated since project implemented was 265,794 tCO₂e, the assessment confirmed the value by checking the Emission Reduction Calculation sheet/2/ and previous verification report/20/.

- The project belongs to AFOLU type and this is the 2nd periodical monitoring period, by checking the 1st periodical verification report/20/, the assessment team was able to confirm the implementation status of project activity that lead to the intended GHG benefit that commenced prior to this monitoring period has been verified during the 1st periodical verification, the implementation status of project activity is confirmed in accordance with the project description contained in the PD/18/.
- In conclusion, the assessment team was able to confirm that the project implementation in this monitoring period is in accordance with the project description contained in the registered PD/18/.
- CAR-1, CAR-2 and CAR-3 were raised and successfully closed. Refer to Appendix 4 for detail assessment.
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4.2 Safeguards

4.2.1 No Net Harm

- The analysis of the potential negative environmental and socio-economic impacts of the project activity is sufficiently described in MR/3/. The assessment team confirm all environmental and socio-economic impacts during this monitoring period has been analysed, project owner will take measures to minimize adverse environmental and socio-economic impacts and no net harm was detected.
- Environmental impacts have been comprehensively described in Section 2.1 of MR/3/ including the excessive use of fertilizer and pesticide could cause pollution to soil and surface water if farmers do not control the amount of fertilizer and pesticide well during cultivation in the operation period, which will impact on the ecosystem and environment of local area in project area according to the project operation situation and interview with local experts, technicians and farmers.
- Mitigation actions have been carried out by technicians are patrolled the rice paddies every week and instructed the farmers how to use the optimal amount of fertilizer according to the technical guidelines confirmed by interview with local experts, technicians and farmers and checking the Technical Guidelines for Intermittently Flooded Rice Cultivation Method/28/. Hence the assessment is able to confirm that there were no excessive use of fertilizer and pesticide and no any negative impacts found in the project location during this monitoring period.

- Socio-economic impacts have been comprehensively described in Section 2.1 of MR/3/ including economic pressure to farmers caused by cement ditches and reservoirs would be badly damaged without long-term maintenance in the operation period which are confirmed by interview with local experts, technicians and farmers.
- Mitigation actions have been carried out by PP is technicians patrolled the rice paddies every week and farmers could immediately call the technician if a ditch broke down in their fields and the technicians can solve the problem within one hour and appeal to local agricultural bureau to activate the emergency mechanism if can't solve by themselves. The assessment team confirmed the proper mitigation actions by checking the farmer's logbooks/36/and interviewed by local farmers and technicians. And no any negative socio-economic impacts have been observed during the 2nd monitoring period by site inspection.
- Furthermore, through on-site interview, it is confirmed by the assessment team the implementation of the project improves local socio-economic development and contributes to the sustainable development as described in section 4.1 of this report above.
- In conclusion, the assessment team is able to confirm that the project has no negative impacts on local environment and socio-economy. And no net harm on local environment and social community has been detected for the project in this monitoring period.

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4.2.2 Local Stakeholder Consultation

- During this monitoring period with the project implementation, by checking the suggestion book and the contact information published on the notice board of villages which has been confirmed during site visit, the assessment team confirmed that communications with local stakeholders was being carried out continuously by the project owner during this monitoring period. There are no negative comments received for the project during this monitoring period.
- In addition, a stakeholder consultations survey including questionnaires and stakeholder meetings was carried out by the project developer during this monitoring period to present local stakeholders' opinions on the implementation of project and their willingness to participate.
- Prior to the verification, the notice of meeting has been posted on the bulletin board in each village which has been verified by checking the photo of posted notice/47/ and this is also checked during site inspection. And via checking the local stakeholder consultation (LSC) records/30/, the assessment team is able to confirm that 38 villagers, the representatives of village committee, agricultural bureau and government representatives attended the stakeholders' meeting which was organized by the project proponent and the agricultural bureau at the Lujiang Agricultural Bureau on 18-Feb-2022.
- Besides, a questionnaire survey was conducted to collect the views of stakeholders before

the project verification from Dec. 2021 to Feb. 2022, questionnaires were distributed to relevant personnel of village representatives, relevant governmental officials and local farmers, totally 73 copies of questionnaires were issued to relevant personnel with 73 pieces of reply received. The stakeholders' background information and comments from questionnaires were summarized and recorded in the MR, Section 2.2.

- By checking the 73 filled questionnaires/31/, the assessment is able to verify that all respondents knew about the Project. Most of them have enjoyed benefits during the project operation, and thought the project bring benefit including 1) create jobs; 2) get more benefits from selling carbon credits; 3) reduce methane emissions, save water resource and increase the rice productivity; and 4) improve the social status of women by hiring them to be technicians and 5) made a positive contribution to local education by donating stationary sets. Most of the respondents are willing to participate in the operation and training of the project and they have no negative opinions on the project implementation during this monitoring period.
- Finally, the assessment team is able to verify that there was no one thinks that the project has a negative impact on the local life and environment, local stakeholders are supportive of the project operation by checking the questionnaires/31/.
- Furthermore, via interviewing with local stakeholders during the on-site inspection, it is confirmed by the assessment team that during the implementation stage of this monitoring period, the technicians have conducted follow-up interviews and ongoing communication with local stakeholders to collect any comments or inputs to the project implementation.
- It is confirmed by the assessment team that there were no negative comments and issues from the local stakeholders during this monitoring period by interview with the local officer and farmers during site visit.
- Therefore, the assessment team was able to confirm that the stakeholder meeting was adequate and appropriate and there is no need to change the project design based on the stakeholder inputs.
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- AFOLU Specific
- According to the MR template/8/, for the AFOLU project, below should be assessed about how the project has communicated the following with local stakeholders,
- The results of project implementation, including the results of monitoring.
 - Prior the verification, the notice of LSC meeting and results of project implementation, including the results of monitoring has been communicated with the local stakeholders during the stakeholder consultation meeting and the villager's meetings, technicians and bulletin boards, the assessment team confirmed this by interview with local stakeholders

and checking the meeting records/30/ and questionnaires/31/.

- In addition, due to the VCUs of 1st monitoring period have been issued, the 50% of the carbon of profits of the project have been distributed to the households who owned the rice paddies that implemented with intermittent flooded water regime in project area. By checking the receipts from the households/42/, the assessment team is able to verify that the involved households have received the payment from the PP according to the cooperation agreements/24/ signed between the project proponents and all the households, and all the households agreed with the share and continuously support PP to implement the project.
- Any changes to risks, costs and benefits the project may bring to local stakeholders
 - By checking villagers' meetings and questionnaires survey confirmed by interview with local farmers and checking the Local Stakeholder Consultation records/30/ and questionnaires/31/, the assessment team confirmed that the risks, costs and benefits the project may bring to local stakeholders have been explained continuously. During this monitoring period, there were not any changes to all the risks and costs, but the benefits have been changed which has been communicated with the stakeholders.
 - Due to the VCUs of 1st monitoring period have been issued, during this monitoring period, the 50% of the carbon of profits of the project have been distributed to the households who owned the rice paddies that implemented with intermittent flooded water regime in project area. By checking the receipts from the households/42/, the assessment team is able to verify that the involved households have received the payment from the PP according to the cooperation agreements/24/ signed between the project proponents and all the households, and all the households agreed with the share and continuously support PP to implement the project.
- Any changes to relevant laws and regulations covering workers' rights in the host country
 - PP has informed farmers of all relevant laws and regulations covering workers' rights in the host country confirmed by interview with local officers and farmers, and there were no changes to the relevant laws and regulations during this monitoring period.
- The process of VCS Program verification and the validation/verification body's site visit
 - By checking the posted notice/47/ during site visit and interview with local farmers, the assessment team confirmed that PP has informed local stakeholders by publishing notification on each 58 village's notice boards and door-to-door announcements about the process of VCS Program verification and the validation/verification body's site visit.
 - The description of process of VCS Program verification and the validation/verification body's site visit has been clearly stated in the section 2.2 of the MR which is verified as correct and actual by assessment team, refer to section 2.3 and 2.4 of this report for detail information of the site visit.

- In conclusion, there were no negative opinions received from local stakeholders on the project implementation during this monitoring period, therefore, the assessment team is able to verify that the project continues to communicate the necessary relevant information about the project implementation and the process of VCS Program verification during this monitoring period.
- CL-1 was raised and successfully closed. Refer to Appendix 4 for detail assessment.
-

4.3 AFOLU-Specific Safeguards

- AFOLU-Specific safeguards related to the project has been stated by PP and assessed as below,
- Activities implemented by the project proponent to mitigate risks local stakeholders due to project implementation.
 - The local stakeholders have been identified in the registered PD/18/. By on-site inspection of the project implementation and interview with stakeholder representatives from involved farmer, local officers from agricultural bureaus, representatives from village committees and technicians, the assessment is able to confirm that risks to local stakeholders and related mitigation measures have been provided in MR/3/, the assessment team confirmed that the no risks occurred during this monitoring period, thus the mitigation activities were not utilized.
- Any updates to the property and land use rights of the local stakeholders
 - By checking the validation report/19/, carbon reduction project cooperation agreements/24/ and interviewed with local farmers, the assessment team confirmed that the rice paddies and agricultural fields involved in the project was owned by the farmers and PP has got all the agreements from involved farmer before the project implementation, hence the project has obtained the free, prior and informed consent of the affected parties and the project does not encroach on private property, community property or government property.
 - For this monitoring period, by site interview with farmers and local officer, the assessment team is able to confirm that there were no any updates to the property and land use rights of the local stakeholders that the project has not negatively impacted such rights of farmers.
 - Furthermore, considering the project type and implementation method, the assessment team is able to verify that the land use type is not changed due to the implementation of the project and no land occupation involved thus no need of compensation or return as per the registered PD. However, due to the VCUs of 1st monitoring period have been issued, during this monitoring period, the 50% of the carbon of profits of the project have been distributed to the households who owned the rice paddies that implemented with intermittent flooded

water regime in project area. By checking the receipts from the households/42/, the assessment team is able to verify that the involved households have received the payment from the PP according to the cooperation agreements/24/ signed between the project proponents and all the households, and all the households agreed with the share and continuously support PP to implement the project.

- The processes used by the project proponent to communicate and consult with local stakeholders

- The registered PD/18/ describes a feedback and grievance redress process; a specific staff in charge of recording and collecting conflicts and grievances of local communities and individual villagers was nominated who is the first responsible for responding to requests from the community which has been confirmed during on-site interview with the project owner. In addition, by interview with the residents, they confirm that they can either appeal through village representatives or directly to the local agricultural bureau for their comments to the project. PP promised that grievances will be addressed in a reasonable amount of time. The PP declares to be available to adjust the grievance mechanism according the recorded dynamics and evaluation of effectiveness of the process in place.
- For the continuous communication mechanism, by site inspection checking the Suggestion Book published on the notice board of villages/47/, the assessment team is able to confirm that there was no comments or suggestions in the book during this monitoring period, and by interview with PP, the assessment team is able to verify that they have checked the book regularly and collect all the comments received if any.
- By interview with the technicians and farmers during site visit, the assessment team is able to verify that there were no comments from the local villagers issued to the technicians who are responsible for the communication during this monitoring period. While, local stakeholders have also been communicated on some benefits during this monitoring period as listed in the MR and assessed in above section 4.3.
- Therefore, the feedback and grievance procedure is properly addressed and no any conflicts were raised during this monitoring period via the established grievance redress procedure.
- In conclusion, the feedback and grievance procedure are properly addressed.
-

4.4 Accuracy of GHG Emission Reduction and Removal Calculations

4.4.1 Data and parameters fixed ex ante

- The data and parameters fixed ex-ante are reported in the MR/3/, which have been checked against the monitoring plan and applied methodology/9/ by the assessment team.
- Parameters determined ex-ante

Data / Parameter	A _y
Data unit	Ha
Description	Area of project fields in year y
Source of data	Derived from GPS results measured by Lujiang Agricultural Bureau and the areas for sampled farmers have been verified by site interview with farmers and measuring by GPS device during site inspection which has been verified during the validation process/19/.
Value applied	The total area is 14,096 ha.

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Data / Parameter	GWP _{CH4}
Data unit	t CO ₂ e/t CH ₄
Description	Global warming potential of CH ₄
Source of data	The number of GWP _{CH4} is derived from IPCC's Fifth Assessment report, GHG Protocol which are appropriate/14/ and VCS standard (version 4.2)/4/
Value applied	28 used for this monitoring period (25 tCO ₂ e/tCH ₄ from IPCC's Fourth Assessment report, GHG Protocol/15/ is an ex-ante value as listed in the PD/18/)

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Data / Parameter	EF _{BL, c}
Data unit	kg CH ₄ /ha/day or kg CH ₄ /ha/season
Description	Seasonal baseline emission factor for continuously flooded fields without organic amendments
Source of data	The value is derived from Report of Measuring Methane Emission Rate of Paddy Fields with Continuously Flooded Method by Closed Chamber in Southern Lujiang County in 2017/40/ which has been verified during the validation process/19/.
Value applied	(1) 179.01kg CH ₄ /ha/season for early season rice; (2) 170.04kg CH ₄ /ha/season for later season rice; This value is used for ex ante emission reduction calculation thus not used for the ex-post emission reduction calculation during this monitoring period.

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Data / Parameter	SF _{BL,w}
Data unit	N/A
Description	Baseline scale factor used to explain the difference in water regime during cultivation.
Source of data	The value is derived from 2006 IPCC Guidelines for National Greenhouse Gas Inventories/11/ as listed in the applied methodology which has been verified during the validation process/19/.
Value applied	1 This value is used for ex ante emission reduction calculation thus not used for the ex-post emission reduction calculation during this monitoring period.

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Data / Parameter	SF _{P,w}
Data unit	N/A
Description	Project scale factor used to explain the difference in water regime during cultivation.
Source of data	The value is derived from 2006 IPCC Guidelines for National Greenhouse Gas Inventories/11/ as listed in the applied methodology which has been verified during the validation process/19/.
Value applied	0.52 This value is used for ex ante emission reduction calculation thus not used for the ex-post emission reduction calculation during this monitoring period.

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Data / Parameter	SF _{BL,p}
Data unit	N/A
Description	Baseline scaling factors to account for the differences in water regime in the pre-season before the cultivation period.
Source of data	The value is derived from 2006 IPCC Guidelines for National Greenhouse Gas Inventories/15/ as listed in the applied methodology which has been verified during the validation process/19/.

Value applied	1 This value is used for ex ante emission reduction calculation thus not used for the ex-post emission reduction calculation during this monitoring period.
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Data / Parameter	SF _{P,p}
Data unit	N/A
Description	Project scaling factors to account for the differences in water regime in the pre-season before the cultivation period
Source of data	The value is derived from 2006 IPCC Guidelines for National Greenhouse Gas Inventories/11/ as listed in the applied methodology which has been verified during the validation process/19/.
Value applied	1 This value is used for ex ante emission reduction calculation thus not used for the ex-post emission reduction calculation during this monitoring period.

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Data / Parameter	SF _{BL,o}
Data unit	N/A
Description	Baseline scaling factors should vary for both type and amount of organic amendment applied
Source of data	The value is derived from 2006 IPCC Guidelines for National Greenhouse Gas Inventories/11/ as listed in the applied methodology which has been verified during the validation process/19/.
Value applied	1 This value is used for ex ante emission reduction calculation thus not used for the ex-post emission reduction calculation during this monitoring period.

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Data / Parameter	SF _{P,o}
Data unit	N/A
Description	Project scaling factors should vary for both type and amount of organic amendment applied

Source of data	The value is derived from 2006 IPCC Guidelines for National Greenhouse Gas Inventories/15/ as listed in the applied methodology which has been verified during the validation process/19/.
Value applied	1 This value is used for ex ante emission reduction calculation thus not used for the ex-post emission reduction calculation during this monitoring period.

- In conclusion, the assessment team confirms that the data and parameters fixed ex-ante have been correctly listed. The parameters fixed ex-ante have been verified by checking the information flow and in compliance with the registered PD/18/.

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4.2.2 Data and parameters monitored

- According to VCS criteria, the assessment team has performed the following activities to determine whether the monitoring of parameters related to the GHG emission reductions has been implemented in accordance with the monitoring plan.
- Through the inspection of the monitoring system, interview with the monitoring team representatives, document review including relevant records, procedures and technical specifications, the assessment team has assessed the implementation of the monitoring plan followed by the PP;
- The parameters stated in the monitoring plan have been checked by means above;
- The assessment team has checked the installation of the closed chambers, GPS devices used by field measurement and laboratory's certificate/37/;
- The farmers' logbooks/36/ and Methane measurement and calculation reports in both baseline and project reference fields for two seasons (two cultivation season in year 2021)/41/ were checked by the team to confirm the monitoring results;
- Based on the interview with the local officers, technicians, farmers and the review of the Monitoring Manual/32/, the assessment team has assessed the quality assurance and quality control procedures applied by the PP.

Data / Parameter	As,g
Data unit	Ha
Description	Aggregated project area in a given season s
Value applied	14,096 in the project area during this monitoring period

Findings

As verified, the value is monitored by collecting the project field sizes in Roster of households/25/, and the size of each household's rice field in the roster is determined by using GPS by Lujiang Agricultural Bureau which has been confirmed by interview with the related officers.

The compliant farms are determined by checking the farmers' logbooks/36/. And every week, the technicians checked whether the project fields recorded in the roster are cultivated by intermittent flooded method with the help of the logbooks/36/. At the end of each cropping season, the technicians submitted the Fact Sheets on Rice Cultivation/35/ in terms of the information got from sampled logbooks.

The assessment team has checked the data included in the MR/3/and ER spreadsheet version/2/ against the Roster of households/25/, farmers' logbooks in 2021/36/ and Fact Sheets on Rice Cultivation in 2021/35/ to determine the final compliant household's rice fields for this monitoring period and verified that the value in the MR/3/and ER spreadsheet version/2/ is correct and consistent with the supporting evidence.

Through on-site observation and checking measuring device, the assessment team confirmed that, during this monitoring period, the model, precision and calibration information of the equipment used has been provided, the compass was calibrated by placing the equipment horizontally and vertically before use, and the automatic calibration of the barometer was turned on before use, which has been verified as actual by checking the instruction of GPS Measuring Equipment/43/, thus it is confirmed that the calibration for this equipment was valid for this monitoring period.. The information of GSP device has been consistently reported in the MR, as below:

Monitoring equipment	GSP device
Model	GNSS handheld GPS measuring equipment of G1BD series
Precision	Real-time display of the estimation accuracy of the current horizontal position in meters.
Calibration	The compass is calibrated by placing the device horizontally and vertically before use. The automatic calibration of the barometer is turned on before use.

Data / Parameter

EF_{BL,s,g}

Data unit	kg CH ₄ /ha per season
Description	Baseline emission factor of group g in given season s
Value applied	2021 early season: 182.02 2021 later season: 164.35
Findings	As verified, the value is monitored by field measurements in baseline reference fields and analyzed in the laboratory. During the field measurements in baseline reference fields, as per instructions in the appendix (Guidelines for measuring methane emissions from rice fields) and IPCC 2006, volume 4, chapter 5.5/11/, the gas samples were taken from closed chambers, regular measurements in three baseline reference fields, three closed chambers were placed in each field and samples were measured three times a week from each closed chamber, then all gas samples were stored in evacuated vial and sent to laboratory for analysis. And the final result of EF_{BL,s,g} for each season is calculated by the analysis results as per the method in MR/3/ and applied methodology/9/. The final value is obtained from the calculation of the emission rate for baseline reference fields according to the requirements in the Appendix of methodology, and the C_{CH₄,t} (CH₄ concentration in chamber at time t) of weekly gas samplings is derived from the laboratory analysis report/41/. The assessment team has checked the data included in the MR/3/ and ER spreadsheet version/2/ against the methane measurement and calculation reports in both baseline and project reference fields for 2 seasons (two cultivation season per year) issued by laboratory of Institution of Agricultural Engineering, Anhui Academy of Agricultural Sciences/41/ to determine the C_{CH₄,t} value for this monitoring period and verified that the value in the MR/3/and ER spreadsheet version/2/ is correct and consistent with the supporting evidence. Through on-site observation of closed chambers and checking measuring device photo of FID (gas chromatography with flame ionization detector) in laboratory, the assessment team confirmed that, during this monitoring period, the chambers are installed in line with the requirement in methodology as assessed in table 4-1, and by considering this type of the equipment, there is no accuracy and calibration requested, while the model and calibration information of the FID used in Lab has been provided, the assessment team is able to confirmed that the calibration for this equipment was valid for this monitoring period. The information of FID has been consistently reported in the MR, as below:

	Monitoring equipment	FID
	Model	Agilent 7890B GS System
	Injection	Direct
	Column	Packed (Filling: 60/80,13X)
	Calibration	With certified standard gas each day of analysis before and after the analyses are done (the concentration of the certified standard gas: 5.11ppm)
The FID was calibrated with certified standard gas each day of analysis before and after the analyses, by checking the methane measurement and calculation reports/41/ for this monitoring period and site interview with expert, the assessment team is able to confirm that the calibration is conducted in line with certified standard gas each day of analysis before and after the analyses as per request of the methodology in laboratory analysis. The implementation of methane measurement in rice fields was conducted by technicians trained by experts and the laboratory was checked getting valid ISO/IEC 17025 certificate/37/. All the data were cross-checked by technicians and experts. Therefore, QA/QC procedure is verified as appropriate and in line with the requirement of Appendix in methodology.		

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Data / Parameter	EF _{P,s,g}
Data unit	kg CH ₄ /ha per season
Description	Project emission factor of group g in given season s
Value applied	2021 early season: 94.45 2021 later season: 85.51
Findings	As verified, the value is monitored by field measurements in project reference fields and analyzed in the laboratory. During the field measurements in project reference fields, as per instructions in the appendix (Guidelines for measuring methane emissions from rice fields) and IPCC 2006, volume 4, chapter 5.5/11/, the gas samples were taken from closed chambers, regular measurements in three project reference fields, three closed chambers were placed in each field and samples were measured three times a week from each closed chamber, then all gas samples were stored in evacuated vial and sent to laboratory for analysis. And the final result of EF_{P,s,g} for each season is calculated by the analysis results as per the method in MR/3/ and applied methodology/9/.

The final value is obtained from the calculation of the emission rate for project reference fields according to the requirements in the Appendix of methodology, and the $C_{CH_4,t}$ (CH_4 concentration in chamber at time t) of weekly gas samplings is derived from the laboratory analysis report/41/.

The assessment team has checked the data included in the MR/3/and ER spreadsheet version/2/ against the methane measurement and calculation reports in both project and project reference fields for 2 seasons (two cultivation season per year) issued by laboratory of Institution of Agricultural Engineering, Anhui Academy of Agricultural Sciences/41/ to determine the $C_{CH_4,t}$ value for this monitoring period and verified that the value in the MR/3/and ER spreadsheet version/2/ is correct and consistent with the supporting evidence.

Through on-site observation of closed chambers and checking measuring device photo of FID (gas chromatography with flame ionization detector) in laboratory, the assessment team confirmed that, during this monitoring period, the chambers are installed in line with the requirement in methodology as assessed in table 4-1, and by considering this type of the equipment, there is no accuracy and calibration requested, while the model and calibration information of the FID used in Lab has been provided, the assessment team is able to confirmed that the calibration for this equipment was valid for this monitoring period. The information of FID has been consistently reported in the MR, as below:

Monitoring equipment	FID
Model	Agilent 7890B GS System
Injection	Direct
Column	Packed (Filling: 60/80,13X)
Calibration	With certified standard gas each day of analysis before and after the analyses are done (the concentration of the certified standard gas: 5.11ppm)

The FID was calibrated with certified standard gas each day of analysis before and after the analyses, by checking the methane measurement and calculation reports/41/ for this monitoring period and site interview with expert, the assessment team is able to confirm that the calibration is conducted in line with certified standard gas each day of analysis before and after the analyses as per request of the methodology in laboratory analysis.

he implementation of methane measurement in rice fields was conducted by technicians trained by experts and the laboratory was checked getting valid ISO/IEC 17025 certificate/37/. All the data were cross-checked by technicians and experts. Therefore,

QA/QC procedure is verified as appropriate and in line with the requirement of Appendix in methodology.

- In conclusion, CCSC confirms that:
- The data and parameters fixed ex-ante have been correctly listed. Parameters fixed ex-ante for required parameters have been verified by checking the information flow and in compliance with the registered PD/18/.
- The monitoring has been carried out in accordance with the monitoring plan contained in registered PD/18/.
- All parameters required by the monitoring plan have been sufficiently monitored and correctly listed. The monitored data for required parameters have been verified by checking the whole information flow.
- The calibration is conducted at the frequency as specified by the methodologies and the monitoring plan contained in the MR.

4.4.3 Compliance with monitoring plan

- CCSC assessment team confirms that the monitoring plan contains all necessary parameters which have been clearly described in MR and that the means of monitoring described in the monitoring plan complies with the requirements of the methodology.
- Monitoring team
- By site interview with representatives from monitoring team, the assessment team is able to confirm that monitoring team will take the overall monitoring responsibility in the whole monitoring process as defined roles and responsibilities in the monitoring plan and monitoring manual/32/. By site inspection, the assessment team is able to confirm that the monitoring system was well implemented by monitoring team to ensure the monitoring results are correct and accurate.
- Monitoring Approaches
- Determination of $A_{s,g}$

The sampling plan designed in the PD and MR for monitoring of farmers' compliance with project cultivation practice is checked, the assessment team is able to confirm that the description is in line with the applied methodology.

By checking the Roster of households/25/, the assessment team is able to confirm that the PP has set up a database that allow an unambiguous identification of participating rice farm, and this database will be used as the basis for PP to conduct the sampling method as stated below.

As per the requirement in the applied methodology, a cultivation logbook shall be maintained for all project fields, hence all the participated rice farmer households will fill the logbooks as per the requirement in the methodology.

By checking the applied methodology, “the reporting and verification shall be done on the basis of samples of the log-books from the farmers”, according to the latest version of the “Standard for sampling and surveys for CDM project activities and programme of activities” (version 09.0) /12/, PP has established a sampling method following this standard and the sampling size is verified as correct and PP has used 90/10 confidence/precision as the criteria for the reliability of sampling efforts for small-scale project activity is deemed as in line with the requirement of the sampling standard/12/.

308 samples will be selected according to stratified sampling method in 6 towns based on the numbers determined for each town calculated by the weight of total farmers numbers of each town in project area. And then for sample selection of each town, a random sampling method will be used for determine the famers sample in each town and finally the randomly selected 308 samples will be defined.

Furthermore, as per the clarification from PP, CCSC is able to confirmed that in January 2021, the technicians gave out the blank cultivation logbooks to all the 3,447 households within the project areas. During the entire cropping season, all households in the project area recorded the information required in the logbooks. And then at the end of 2021, PP used Excel software to randomly select 308 households from 3,447 households for inspection and collected 308 sampled logbooks to determine the final value of $A_{s,g}$ for corresponding year. Therefore, CCSC is able to confirm that 308 households were randomly selected from 3,447 households every year, then the 308 households in this monitoring period is verified as not the same group as the sampling group in the first monitoring period. The 1st verification was not conducted by same CCSC, to verify this issue, CCSC asked PP to provide the name of sampling group in last monitoring period for check, by comparing the sampling group names in the two different monitoring periods, CCSC is able to confirm that 308 households in the project proponent’s sampling group in this monitoring period is not the same group as the sampling group in the first monitoring period.

Then during cultivation season, the selected farmers’ logbooks including all parameters that are part of the project cultivation practice at least covering as follow in accordance with the applied methodology,

- (a) Sowing (date),
 - (b) Fertilizer, organic amendments, and crop protection application (date and amount);
 - (c) Water regime on the field (e.g. “dry/moist/flooded”) and dates where the water regime is changed from one status to another,
 - (d) Yield
 - (e) Whether they have followed fertilization recommendations provided with the introduction of the adjusted water management practice
- For this monitoring period, CCSC has applied sampling method to verify the results of farmer’s logbooks which has been provided in section 2.1 of this report. By checking the results listed in sampled farmers’ logbooks/36/, the assessment team is able to confirm that the monitoring of farmers’ compliance with project cultivation practice is in line with the monitoring plan no farmers relevantly deviate from the defined project cultivation practice and thus all the farmer’s fields can be deemed to be represented by the reference fields,

and all the farmer's fields can be taken into account for the determination of the aggregated project area of that season $A_{s,g}$.

- Determination of $EF_{BL,s,g}$ and $EF_{p,s,g}$

By checking the monitoring plan, the assessment team is able to confirm that the plan is in line with the requirement of the Appendix (Guidelines for measuring methane emissions from rice fields) of the applied methodology. All the requirements in Appendix have been considered by PP in the monitoring plan and CCSC confirmed that the monitored parameters of $EF_{BL,s,g}$ and $EF_{p,s,g}$ will be measured correctly and conservatively.

For this monitoring period, the two monitoring parameters are monitored and assessed as below,

The monitored parameters of $EF_{BL,s,g}$ and $EF_{p,s,g}$ have been measured as per the instructions in the Appendix (Guidelines for measuring methane emissions from rice fields) of the applied methodology and IPCC 2006, volume 4, chapter 5.5.

Before monitoring started, PP has prepared a detailed plan for the seasonal methane measurements before the start of each season, by checking the plan/33/, the assessment team is able to confirm that the plan was prepared in compliance with the requirements in the applied methodology.

During the monitoring period, PP has ensured that the measurements on project and baseline reference fields are carried out in an equal manner and simultaneously which has been confirmed by site inspection of the related reference fields. As only one group with the same cultivation pattern was determined for this project during this monitoring period, there were three reference fields with the same pattern have been determined in the project area for baseline and project reference fields respectively which is confirmed in line with the applied methodology. 3 baseline reference fields and 3 project reference fields were set in the project area, respectively, which are fixed rice paddies with area of around 0.35 ha. The determination of the reference fields is confirmed as reasonable by site interview with the expert and site inspection.

The implementation of methane measurement in rice fields was conducted during this monitoring period by technicians trained by expert from Anhui Academy of Agricultural Sciences in these fields using the closed chamber method in both baseline and project rice fields, by checking the methane measurement and calculation reports in both baseline and project reference fields for 2 seasons in 2021/41/, the assessment team is able to confirm that the measurements have been conducted accordingly.

During the site visit, the technicians showed how to take gas samples on the field from closed chambers, the assessment team is able to confirm that the installation of chambers and gas exposure process is in line with the plan/33/ and applied methodology. After the gas samples sent to the laboratory, the analysis was conducted by the qualified expert with calibrated devices.

For the certificate of laboratory and calibration information of equipment, refer to above in each monitoring parameter table for detail assessment.

Refer to below tables for detail assessment of the monitoring methods.

Table 4-1. On the field - technical options for the chamber design

Feature	Conditions	Justification
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Chamber material	Option 1: Non-transparent - Commercially available PVC containers or manufactured chambers (e.g. using galvanized iron); - Painted white or covered with reflective material (to prevent increasing inside temperature); - Only suitable for short-term exposure (typically 30 min) followed by immediate removal from the field	By on-site inspection of the six chambers, the assessment team is able to confirm that the chambers used in this project is made of PVC materials covered with reflective material to prevent the increasing inside temperature. And as confirmed by expert who conducted the measurement, the assessment team is able to confirm that the chambers only put just before the sampling and then removed after 30 mins of sampling which fulfilled with the material request listed in the PD/18/ and applied methodology/9/.
Placement in soil	Option 1: Fixed base - Base made of non-corrosive material and remains in the field for the whole season; - Base should allow tight sealing of the chamber; - Base should have bores in the submerged section to allow water exchange between inside and outside; - Base should be installed at least 24 hours before the first sampling	By on-site inspection of the six chambers, the assessment team is able to confirm that the chambers' base used in this project is fixed made of non-corrosive PVC material and was embedded before transplantation, remaining in the field for the whole season. Base allows tight sealing of the chamber and has bores in the submerged section to allow water exchange. And as confirmed by expert who conducted the measurement, the assessment team is able to confirm that the first sampling was taken 24 hours after the base installation which fulfill with the placement in soil request listed in the applied methodology/9/.
Auxiliaries of chamber	- Thermometer for measuring the temperature inside the chamber; - Fan (battery operated) inside the chamber for mix the inside air during sampling; - Sampling port (rubber stopper placed in a bore of the chamber)	By on-site inspection of the six chambers, the assessment team is able to confirm that the auxiliaries of chambers used in this project is a thermometer and a fan inside the chamber and the sampling port is set on the top of the chamber which fulfill with the request listed in the PD/18/ and applied methodology/9/.
Basal area	Rectangular or rounded, but has to cover minimum of four rice hills (ca. 0.1 m² minimum)	By on-site inspection of the six chambers, the assessment team is able to confirm that the shape and size of base used in this project rectangular and installed covering four rice hills (0.25 m²) which

		fulfill with the request listed in the PD/18/ and applied methodology/9/.
Height	Option 1: Fixed height Total height (protruding base + chamber) should exceed plant height	By on-site inspection of the six chambers, the assessment team is able to confirm that the total height of chamber and base is 1.5 meters which is higher than the largest plant height of 1.2m as confirmed by expert thus is fulfill with the request listed in the PD/18/ and applied methodology/9/.

Table 4-2. On the field – air sampling

Feature	Conditions	Justification
Replicate chambers per plot	Minimum requirement: Three replicate chambers per plot	By on-site inspection of the six chambers, the assessment team is able to confirm that the three replicate chambers were placed in one plot (only one group) for both baseline and project reference fields that fulfill with the request listed in the PD/18/ and applied methodology/9/.
Number of air samples per exposure / data points per measurement	Minimum requirement: Three samples per exposure	By checking the methane measurement and calculation reports/41/ for this monitoring period and site interview with expert, the assessment team is able to confirm that there were three samples for every exposure analyzed that fulfill with the minimum request listed in the PD/18/ and applied methodology/9/.
Exposure time	30 minutes	By checking the methane measurement and calculation reports/41/ for this monitoring period and site interview with expert, the assessment team is able to confirm that exposure time is 30 minutes that fulfill with the request listed in the PD/18/ and applied methodology/9/.
Daytime of measurement	Morning	By checking the methane measurement and calculation reports/41/ for this monitoring period and site interview with expert, the assessment team is able to confirm that measuring time was at morning in daytime is 30 minutes that fulfill with the request listed in the PD/18/ and applied methodology/9/.
Measurement interval	Minimum requirement: once per week	By checking the methane measurement and calculation reports/41/ for this monitoring period and site interview with expert, the assessment team is able

		to confirm that measurement interval period is once per week that is fulfill with the minimum request listed in the applied methodology.
Syringe	Suitability test (leak proof) before measurement Preferably equipped with a lock for ease of handling	By checking the methane measurement and calculation reports/41/ for this monitoring period and site interview with expert and on-site checked the six chambers, the assessment team is able to confirm that the syringe with a lock was used in chamber and it is checked for leak proof before every measurement that fulfill with the request listed in the PD/18/ and applied methodology/9/.
Sample storage until analysis	- Storage < 24 h: air samples can remain in syringe; - Storage > 24 h: transfer air samples into evacuated vial, store with slight overpressure	By checking the methane measurement and calculation reports/41/ for this monitoring period and site interview with expert, the assessment team is able to confirm that the three samples were taken before a laboratory analysis was performed, so the samples were stored in the evacuated vials that fulfill with the request listed in the PD/18/ and applied methodology/9/.

During the site visit, the expert showed how to take gas samples on the field, also the closed chambers have been checked, the assessment team is able to verify that the installation of chambers and gas exposure process is in line with the plan/33/ and applied methodology/9/. In conclusion, the assessment team is able to confirm that the chambers were installed correctly and air samplings were taken correctly.

Laboratory analysis

After the gas samples sent to the laboratory, the analysis was conducted by the qualified expert with calibrated devices. Refer to below tables for detail assessment of the Laboratory analysis methods.

Table 4-3. Laboratory analysis

Feature	Conditions	Justification
Method	Gas Chromatograph with flame ionization detector (FID)	By checking the methane measurement and calculation reports/41/ for this monitoring period and site interview with expert, the assessment team is able to confirm that the FID is used in laboratory analysis.
Injection	Direct injection or with multi-port valve and sample loop	By checking the methane measurement and calculation reports/41/ for this monitoring period and site interview with expert, the assessment team is able to confirm that the direct injection method is used in laboratory analysis.

Column	Packed (e.g. molecular sieve) or capillary column	By checking the methane measurement and calculation reports/41/ for this monitoring period and site interview with expert, the assessment team is able to confirm that the packed column is used in laboratory analysis
Calibration	With certified standard gas each day of analysis before and after the analyses are done	By checking the methane measurement and calculation reports/41/ for this monitoring period and site interview with expert, the assessment team is able to confirm that the calibration is conducted in line with certified standard gas each day of analysis before and after the analyses as per request of the methodology in laboratory analysis

By checking the methane measurement and calculation reports/41/ for this monitoring period, the assessment team is able to confirm that the measurements in fields and analysis in laboratory were all carried out in line with the requirement in PD/18/ and applied methodology/9/. And after this step, the concentration of methane in the gas samples $C_{CH_4,t}$ were obtained.

And the mass of CH_4 emissions for a plot (reference field) is calculated by formulars listed in the PD/18/ and methodology/9/. And finally the integrated results of with the $EF_{BL,s,g}$ and $EF_{p,s,g}$ ($kgCH_4/season/ha$) in the three reference fields for both baseline and project is calculated.

The assessment team is able to confirm that the calculation results of $EF_{BL,s,g}$ and $EF_{p,s,g}$ ($kgCH_4/season/ha$) is consistent with the methane measurement and calculation reports/41/ listed in the 2 methane measurements and calculation reports for 2 different seasons in this monitoring period.

- Data Management and Quality Control
- Quality assurance and quality control procedures for recording, maintaining and data archiving etc. will be ensured according to VERRA rules. the monitoring results have been conducted or cross-checked by agricultural bureau experts. The monitoring equipment will be updated if there are new versions or more efficient monitoring tools available to keep the data more accurate. Data management and quality control system are quoted in the MR.
- All the data collected for this monitoring period were archived electronically which has been confirmed by checking the electronical evidence and will be archived at least two years after the end of the last crediting period of the project activity.
- Emergency procedure
- Monitoring team will take actions to deal with missing data due to negligence and improper operation and maintain or will displace the broken chamber if any malfunction, also pay close attention to weather forecasts during rice planting, and the monitoring data will be calculated conservatively for emission calculations during the troubleshooting period.
- By site interview with monitoring staff and experts and checking the related evidence for data/41/,/37/, the assessment team is able to confirm that no emergency situations have

been occurred. Thus no emergency procedure was applied for this monitoring period.

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- In conclusion, based on document review, on-site inspection and stakeholder interview, together based on CCSC's local and sectoral expertise, CCSC confirms that:
 - The monitoring plan is in compliance with the requirements of the methodology.
 - Monitoring arrangements described in the monitoring plan are feasible within the project design.
 - The PP's ability to implement the monitoring plan can be guaranteed.
-

4.4.4 Assessment of data and calculation of emission reductions

Baseline emissions

Baseline emissions are calculated on a seasonal basis using the following formula:

$$BE_y = \sum_s BE_s \quad (1)$$

$$BE_s = \sum_{g=1}^G EF_{BL,s,g} \times A_{s,g} \times 10^{-3} \times GWP_{CH_4} \quad (2)$$

Where:

BE_y	=	Baseline emissions in year y (tCO ₂ e)
BE_s	=	Baseline emissions from project fields in season s (tCO ₂ e)
$EF_{BL,s,g}$	=	Baseline emissions factor of group g in season s (kgCH ₄ /ha per season)
$A_{s,g}$	=	Area of project fields of group g in season s (ha)
GWP_{CH_4}	=	Global warming potential of CH ₄ (tCO ₂ e/tCH ₄)
g	=	Group g, covers all project fields with the same cultivation pattern (G = total number of groups)

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- During this monitoring period covered 1 year of 2021, there are total 2 cultivation seasons, by assess the farmers' logbooks/36/, the assessment team is able to confirm that there was only one group defined. And based on the above assessment in section 4.2, the assessment team is able to confirm that the parameters $A_{s,g}$ and $EF_{BL,s,g}$ were monitored in line with the monitoring plan and applied methodology/9/.
- By checking the results in the methane measurement and calculation reports/41/, the assessment team is able to confirm that via the measurement results of C_{CH4}, based on the

formulars listed in the registered PD and MR, the Average emission rate of a plot RE_{plot} was calculated and final integrated results of RE_{plot} with the unit of (kg/season/ha) in the three reference fields is equal to $EF_{BL,s,g}$ (kgCH₄/season/ha) which are summarized in Table below,

Category	2021 Early Season			2021 Later Season		
	RE_{plot} (mg/h x m ²)	Hours over the season	RE_{plot} (kg/season /ha)	RE_{plot} (mg/h x m ²)	Hours over the season	RE_{plot} (kg/season /ha)
Plot 1	6.34	2,880 hours (120 days)	182.59	6.40	2,568 hours (107 days)	164.
Plot 2	6.29		181.15	6.37		163.58
Plot 3	6.33		182.30	6.43		165.12
Average	6.32		182.02	6.40		164.35

- Therefore, the baseline emission factors of group g in season s $EF_{BL,s,g}$ are summarized as follow table:

Year	2021	
Season	Early Season	Later Season
$EF_{BL,s,g}$ (kgCH ₄ /season/ha)	182.02	164.35

- Based on the above values of $EF_{BL,s,g}$ and formular (1) and (2) listed above, the baseline emissions BE_s (tCO₂e) during the period in year 2021 is calculated in below table,

Year	2021	
Season	Early Season	Later Season
$EF_{BL,s,g}$ (kgCH ₄ /season/ha)	182.02	164.35
GWP_{CH_4} (t CO ₂ e/t CH ₄)	28	28
$A_{s,g}$ (ha)	14,096	14,096
BE_s (tCO ₂ e)	71,841.11	64,866.97
Total BE_y (tCO₂e)	136,708	

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Project emissions

- Project emissions are calculated on a seasonal basis using the following formula:

$$PE_y = \sum_s PE_s \quad (3)$$

$$PE_s = \sum_{g=1}^G EF_{P,s,g} \times A_{s,g} \times 10^{-3} \times GWP_{CH_4} \quad (4)$$

- Where:

PE_y = Project emissions in year y (tCO₂e)

PE_s = Project emissions from project fields in season s (tCO₂e)

$EF_{P,s,g}$ = Project emission factor of group g in season s (kgCH₄/ha per season)

- During this monitoring period covered 1 year of 2021, there are total 2 cultivation seasons, by assess the farmers' logbooks/36/, the assessment team is able to confirm that there was only one group defined. And based on the above assessment in section 4.2, the assessment team is able to confirm that the parameters $A_{s,g}$ and $EF_{P,s,g}$ were monitored in line with the monitoring plan and applied methodology/9/.
- By checking the results in the methane measurement and calculation reports/41/, the assessment team is able to confirm that via the measurement results of C_{CH₄}, based on the formulars listed in the registered PD and MR, the Average emission rate of a plot RE_{plot} was calculated and final integrated results of RE_{plot} with the unit of (kg/season/ha) in the three reference fields is equal to $EF_{P,s,g}$ (kgCH₄/season/ha) which are summarized in Table below,

Category	2021 Early Season			2021 Later Season		
	RE_{plot} (mg/h x m ²)	Hours over the season	RE_{plot} (kg/season /ha)	RE_{plot} (mg/h x m ²)	Hours over the season	RE_{plot} (kg/season /ha)
Plot 1	3.28	2,880 hours (120 days)	94.44	3.34	2,568 hours (107 days)	85.77
Plot 2	3.26		93.82	3.33		85.51
Plot 3	3.30		95.09	3.32		85.26
Average	3.28		94.45	3.33		85.51

- Therefore, the project emission factors of group g in season s $EF_{P,s,g}$ are summarized as follow table:

Year	2021	
Season	Early Season	Later Season
$EF_{BL,s,g}$ (kgCH ₄ /season/ha)	94.45	85.51

- Based on the above values of $EF_{P,s,g}$ and formular (1) and (2) listed above, the project emissions PE_s (tCO₂e) during the period in year 2021 is calculated in below table,

Year	2021	
Season	Early Season	Later Season
$EF_{P,s,g}$ (kgCH ₄ /season/ha)	94.45	85.51
GWP_{CH_4} (t CO ₂ e/t CH ₄)	28	28
$A_{s,g}$ (ha)	14,096	14,096
PE_s (tCO ₂ e)	37,278.28	33,749.77
Total PE_y (tCO₂e)	71,028	

Leakage

- According to AMS-III.AU. (Version 4.0), no leakage needs to be considered.
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Net GHG Emission Reductions and Removals

- The emission reductions during the monitoring period are calculated as:

$$ER_s = BE_s - PE_s \quad (5)$$

- Where:

ER_s = Emission reductions in season s (t CO₂e)

BE_s = Baseline emissions from baseline fields in season s (tCO₂e)

PE_s = Project emissions from project fields in season s (tCO₂e)

- Hence, the GHG emission reduction during this monitoring period in 2021 are summarized in the table below

Season	BE _s (tCO ₂ e)	PE _s (tCO ₂ e)	ER _s (tCO ₂ e)
Early Season	71,841.11	37,278.28	34,562.83
Later Season	64,866.97	33,749.77	31,117.20
Total	136,708	71,028	65,680

- Furthermore, based on the assessment of applicability conditions in applied methodology, it is confirmed that the aggregate annual emission reductions of all fields included under this project activity shall be less than or equal to 60 kt CO₂ equivalent that should not exceed the threshold required in the small-scale methodology. Via checking the MR, ER sheet comparing with the registered PD/18/, it is confirmed that the reason for exceeding is due to the update of GWP_{CH₄} from ex-ante determined value of 25 tCO₂e/CH₄ to 28 tCO₂e/CH₄ which in compliance with the VCS standard, version 4.2/4/. Hence, as per the request of the applied small-scale methodology, the PP shall only claim the ER value equal to 60 kt CO₂ equivalent at most which has been listed as below table,

Parameters Period	Net GHG emission reductions or removals ER claimed as VCU
	(tCO ₂ e)
01-Jan-2021~31-Dec-2021	60,000
Total	60,000

- Therefore, for the total 2nd Monitoring period from 01-Jan-2021 to 31-Dec-2021, 60,000 tCO₂e equivalent of credits eligible for issuance as VCUs.

- Corresponding to the VCS criteria, CCSC verification team confirms that:

- A complete set of data for the monitoring period is available.
- Information provided in the MR has been cross-checked with other sources;

- Calculations of baseline emissions, project emissions and leakage, as appropriate, been carried out in accordance with the formulae and methods described in the monitoring plan and the applied methodology.
- There are no assumptions in emission reductions calculation.
- Appropriate parameters fixed ex ante of the project has been correctly applied.
- The actual credits eligible for issuance as VCUs has been correctly calculated by considering the claimed value not exceed the threshold required in the small-scale methodology.

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4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

- As a result of verification of the ER calculation process, the assessment team confirmed that all the parameters required for the determination of the emission reductions have been included in the MR/3/ and ER Calculation Spreadsheet/2/ of this monitoring period are consistent with the applied methodology and the monitoring plan contained in the PD/18/. The parameters are complete in this monitoring period.
- After verifying the reported figures with the raw data sources, it's confirmed that the values of the parameters from the raw data sources are consistent with those quoted in the ER Calculation Spreadsheet of this monitoring period and MR. the verification process for the same has been clearly described above in the report.
- All necessary documentations are collected, referenced and aggregated, which is easily accessible in hard-copy or electronic format. Measurements are performed by calibrated equipment, and the key data can also be cross-checked via other sources, such as roster, logbooks and laboratory test data. No assumptions are used that have any material influence on reported emission reductions.
- CCSC concludes that during this monitoring period, the evidences for determination of emission reductions are sufficient and reasonable, and the calculation of emission reductions is reliable.

4.6 Non-Permanence Risk Analysis

- Not applicable.

5 VERIFICATION CONCLUSION

- China Classification Society Certification Co., Ltd. (CCSC) has performed the 2nd verification of the project “Adjusted Water Management in Rice Cultivation in Southern Lujiang County” covering the monitoring period from 01-Jan-2021 to 31-Dec-2021 within the 1st 7 years crediting period 14-Mar-2018 to 13-Mar-2025 (both days included), on the basis of requirements of Verified Carbon Standard (VCS) Version 4.2.
- The review of the project design documentation and the subsequent follow-up interviews have provided CCSC with sufficient evidence to determine the fulfilment of stated criteria.
- In the course of the verification, 1 Clarification Request (CL), 3 Corrective Action Requests (CARs) and 0 Forward Action Request (FAR) were raised for the project activity (MR Version 1.0, dated 16-Mar-2022) in relation to all relevant VCS requirements. Until issuance of this version of report, the raised CLs and CARs were successfully closed.
- The verification is based on the baseline and monitoring methodology AMS-III.AU. (Version 4.0), and the MR (version 03 dated 15-Sep-2022). The project proponents are responsible for the collection, calculation and determination of the GHG data in accordance with the monitoring plan and the reporting of GHG emission reductions on the basis set out within the MR. Our verification approach was based on the requirements as defined under the applicable VCS Standard Version 4.2. Our approach is risk-based, drawing on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate these. The verification can confirm that:
 - The monitoring plan in MR is as per the applied methodology;
 - The monitoring complies with the monitoring plan in the PD;
 - The MR and other supporting documents provided are complete and verifiable and in accordance with the applicable VCS Standard Version 4.2;
 - The monitoring equipment being essential for monitoring and determination of emission reduction runs reliably and is calibrated appropriately;
 - The monitoring system is in place and generates GHG emission reductions data;
 - The GHG emission reductions are calculated without material misstatements.
- It is CCSC’s responsibility to provide an independent verification statement on the reported GHG emission reductions for the project. Based on an understanding of the risks associated with reporting of GHG emission data and the controls in place to mitigate these, CCSC planned and performed our work to obtain the information and explanations that we considered necessary to provide reasonable assurance that reported GHG emission reductions are fairly stated.

- CCSC does not assume any responsibility towards the issuance and utilization of the VCUs hereby verified and certified. Request for issuance of VCUs shall be made by the project proponent to an approved VCS Program Registry based on the requirements set out under the most recent version of the VCS Program Guidelines clause on VCS Registration.
- The verification of reported emission reductions is based on the information made available to CCSC and the engagement conditions detailed in this report. CCSC cannot be held liable by any party for decisions made or not made based on this report.
- In conclusion, it is CCSC's opinion that the project "Adjusted Water Management in Rice Cultivation in Southern Lujiang County", in the MR (version 03 dated 15-Sep-2022) meets all relevant requirements for VCS activities and all relevant host Party criteria and correctly applies methodologies AMS-III.AU. (Version 4.0). And, CCSC confirms the following statement:
- Verification period: From 01-Jan-2021 to 31-Dec-2021
- Verified GHG emission reductions and removals in the above verification period:

Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)
01-Jan-2021~ 31-Dec-2021	136,708	71,028	0	65,680
Total	136,708	71,028	0	65,680

- During this monitoring period, the project generated 65,680 tCO₂e, which is a 11% increase above the estimated annual average net GHG ERRs. As per the Section 3.14.4 in the updated version of VCS-Standard, since this project completed the validation before 31-July-2021, by checking the registered PD, VVB is able to confirm that the value of 25 t CO₂e/t CH₄ was use for ex-ante estimation of ER values and 28 t CO₂e/t CH₄ was used for ex-post calculation in this monitoring period which is verified in line with the above requirement from the VCS standard. So by considering the GWP value of 25 t CO₂e/t CH₄ for CH₄ is used for estimate the ER value corresponding to this monitoring period, the GHG emissions reduction is calculated as 58,643 tCO₂e, which is verified as 1% lower than the estimated annual average net GHG ERRs of 59,043 tCO₂e in PD, therefore within a reasonable range.
- Based on the assessment of applicability conditions in applied methodology, it is confirmed that the aggregate annual emission reductions of all fields included under this project activity shall be less than or equal to 60 kt CO₂ equivalent that should not exceed the threshold required in the small-scale methodology. Hence, as per the request of the applied small-scale methodology, the PP shall only claim the ER value equal to 60 kt CO₂ equivalent at most.

- Therefore, for the total 2nd Monitoring period from 01-Jan-2021 to 31-Dec-2021, 60,000 tCO₂e equivalent of credits eligible for issuance as VCUs.

APPENDIX A: ABBREVIATIONS

AFOLU	Agriculture, Forestry and Other Land Use
ALM	Agricultural Land Management
CAR	Corrective Action Request
CCER	China Certified Emission Reduction
CCSC	China Classification Society Certification Co., Ltd.
CDM	Clean Development Mechanism
CER	Certified Emission Reduction(s)
CH ₄	Methane
CL	Clarification request
CO ₂	Carbon Dioxide
CO _{2e}	Carbon Dioxide Equivalent
DOE	Designated Operational Entity
DNA	Designated National Authority
ER	Emission Reduction
ETS	Emission Trading Scheme
FAR	Forward Action Request
FID	Gas chromatography with flame ionization detector
GHG	Greenhouse Gas(es)
GS	Gold Standard
MR	Joint Project Description & Monitoring Report
ICM	Improved Cropland Management
IPCC	Intergovernmental Panel on Climate Change
MP	Monitoring Plan
MR	Monitoring Report
PA	Project Activity
PD	Project Description
PP	Project Proponent
UNFCCC	United Nations Framework Convention on Climate Change
VCS	Verified Carbon Standard
VCU	Verified Carbon Unit
VVB	Validation/Verification Body
VVS	Verification Standard for project activities

APPENDIX B: COMPETENCE OF TEAM MEMBERS AND TECHNICAL REVIEWERS

CCS 认证公司
Appendix 9

CERTIFICATE OF COMPETENCE
Date of issue: 20/01/2022

Mr. Wang Guan

Has been qualified in accordance with *CDM Personnel Competence Requirements and Professional Competence Evaluation Instructions (CDMI0301)* as

☐ CDM validator for Technical Area(s): _____

☐ CDM verifier for Technical Area(s): _____

☒ Technical expert for Technical Area(s): TA1.2/14.1


Li Honglin
CCSC General Manager

CCS 认证公司
Appendix 9

CERTIFICATE OF COMPETENCE
Date of issue: 20/01/2022

Ms. Liu Ruyun

Has been qualified in accordance with *CDM Personnel Competence Requirements and Professional Competence Evaluation Instructions (CDMI0301)* as

☒ CDM validator for Technical Area(s): TA1.2/TA13.2

☒ CDM verifier for Technical Area(s): TA1.2/TA13.2

☐ Technical expert for Technical Area(s): _____


Li Honglin
CCSC General Manager

CCS 认证公司
Appendix 9

CERTIFICATE OF COMPETENCE
Date of issue: 20/01/2022

Mr. Li Xingtong

Has been qualified in accordance with *CDM Personnel Competence Requirements and Professional Competence Evaluation Instructions (CDMI0301)* as

☒ CDM validator for Technical Area(s): TA1.1/TA1.2/TA3.1/TA9.2/TA13.1/TA14.1

☒ CDM verifier for Technical Area(s): TA1.1/TA1.2/TA3.1/TA9.2/TA13.1/TA14.1

☐ Technical expert for Technical Area(s): _____


Li Honglin
CCSC General Manager

APPENDIX C: DOCUMENTS REVIEWED OR REFERENCED

Ref no.	Reference Document
/1/	Shanghai Libra Investment & Management Co., Ltd. Monitoring report, Version 01 dated 16-Mar-2022
/2/	Shanghai Libra Investment & Management Co., Ltd. ER calculation spreadsheet Version 1.0 dated 15-Mar-2022 related to the 2 nd monitoring period
/3/	Shanghai Libra Investment & Management Co., Ltd. Monitoring report, Version 02 dated 25-May-2022 Shanghai Libra Investment & Management Co., Ltd. Monitoring report, Version 03 dated 15-Sep-2022
/4/	VERRA, VCS Standard, version 4.2
/5/	VERRA, VCS Program Definitions Version 4.1
/6/	VERRA, VCS Program Guide Version 4.1
/7/	VERRA, Registration & Issuance Process Version 4.1
/8/	VERRA, VCS-Monitoring-Report-Template-v4.1
/9/	CDM Executive Board, AMS-III.AU. "Methane Emission Reduction by Adjusted Water Management Practice in Rice Cultivation", version 04.0
/10/	CDM Executive Board, General guidelines for SSC CDM methodologies, version 23.1
/11/	2006 IPCC Guidelines for National Greenhouse Gas Inventories: work book www.ipcc-nggip.iges.or.jp
/12/	CDM Executive Board, CDM Standard for Sampling and Surveys for CDM Project Activities and Programme of Activities, V09.0
/13/	CDM Executive Board, CDM Guideline for Sampling and Surveys for CDM Project Activities and Programme of Activities, V04.0
/14/	IPCC's Fifth Assessment report, GHG Protocol

/15/	IPCC's Forth Assessment report, GHG Protocol
/16/	Ministry of Ecology and Environment of China, China cap & trade scheme http://www.mee.gov.cn/xxgk2018/xxgk/xxgk02/202101/t20210105_816131.html
/17/	Ministry of Ecology and Environment of China, Enforced company list http://mee.gov.cn/xxgk2018/xxgk/xxgk03/202012/W020201230736907682380.pdf
/18/	VCS registered PD for the project, version 03, 23-Aug-2021
/19/	VCS Validation report for the project, version 2.0, dated 23-Aug-2021
/20/	1 st periodical VCS verification report for the project, version 2.0, dated 17-Dec-2021
/21/	Hefei City Agriculture Commission, Inspection and Acceptance Report of the project dated 09-Mar-2018
/22/	Hefei City Agriculture Commission, Approval of the project, dated 17-Oct-2017
/23/	Anhui Provincial Academy of Social Sciences, Ex-ante investigation report, issued on 12-Jun-2017
/24/	PP and all the involved households, cooperation agreements signed which ensure the proper development of the project and carbon emission reduction rights transfer commitment
/25/	Roster of all the involved households including field location village Name, area of the cultivation fields involved, name and ID No. of households, construction completed date and project land preparation date
/26/	KML file of the project area
/27/	Lujiang County Agriculture Committee and Anhui Lujiang County Huanyu Construction Engineering Co., Ltd., Construction Contract for South of Lujiang County, signed on 30-Oct-2017
/28/	Institution of Agricultural Engineering, Anhui Academy of Agricultural Sciences, Technical Guidelines for Intermittently Flooded Rice Cultivation Method in Anhui Province issued in Sep. 2020
/29/	Technical Training Records to Farmers and Technicians in 2021

/30/	Local stakeholder consultation records during this monitoring period Meeting record of the stakeholder meeting held on 18-Feb-2022
/31/	73 filled questionnaires distributed to relevant personnel of village representatives, relevant governmental officials, local farmers from Dec. 2021 to Feb. 2022
/32/	Search Co2(Shanghai) Environmental Science & Technology Co. Ltd, VCS Monitoring Manual, dated in Sep. 2017
/33/	Hefei Luyu Agricultural Technology Co., Ltd., Plan for the seasonal methane measurements
/34/	Business License of Hefei Luyu Agricultural Technology Co., Ltd.
/35/	Technicians, Fact Sheets on Rice Cultivation in project area in 2021
/36/	Farmers' logbooks of 308 sampled farmers selected for monitoring $A_{s,g}$ during this monitoring period in 2021
/37/	China National Accreditation Service (CNAS), Certificate of laboratory named Institution of Agricultural Engineering, Anhui Academy of Agricultural Sciences with ISO/IEC 17025 certificate dated on 04-Feb-2016 valid to 03-Feb-2022
/38/	Hefei Luyu Agricultural Technology Co., Ltd. and Institute of Agricultural Engineering, Anhui Academy of Agricultural Sciences, Methane measurement commission contract, dated on 20-Mar-2018
/39/	Hefei Luyu Agricultural Technology Co., Ltd., Declaration of no double counting of the project, dated on 23-May-2022
/40/	Institute of Agricultural Engineering, Anhui Academy of Agricultural Sciences - Laboratory, Report of Measuring Methane Emission Rate of Double-cropping Rice Paddies with Continuously Flooded Method by Closed Chamber in South of Lujiang County in Aug. 2017 and Nov. 2017
/41/	Institute of Agricultural Engineering, Anhui Academy of Agricultural Sciences, 2 seasons' measurement and calculation reports in year 2021 2021 early season issued in Aug. 2021 2021 later season issued in Nov. 2021
/42/	Carbon Profits allocation receipts to farmers
/43/	Instruction of GPS Measuring Equipment
/44/	Technicians and project owner, Labor Contracts

/45/	Payrolls to technicians during this monitoring period
/46/	Records and photo evidence related to the book donation activity in South of Lujiang County by the project owner
/47/	Photo of posted notice of meeting, monitoring results and Suggestion Book on the bulletin board in each village
/48/	Photographs of project area, reference fields, rice, ditches, reservoirs, chambers, bases etc. taken by verification team during the on-site verification
/49/	Laws and regulations PRC Constitution, PRC Agricultural Law, Law of the PRC on Land Administration, Implementing Regulations of the Law of the PRC on Land Administration, Law of the PRC on Rural Land Contracting, PRC Production Safety Law, and PRC Labour Law. National Master Plan for High Standard Farmland Construction National Plan for the Construction of High Standard Farmland for Comprehensive Agricultural Development Guidance on the National Demonstration Project of High Standard Farmland Construction Comprehensive Agricultural Development Construction Standard of National Agricultural Comprehensive Development of High Standard Farmland Construction Demonstration Project (Trial) Design Specification for Irrigation and Drainage Engineering (GB50288-1999) Technical Specification for Water-saving Irrigation Engineering (GB/T50363-2006)
/50/	Google Earth Map, earth.google.com

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APPENDIX D: RESOLUTION OF CORRECTIVE ACTION REQUESTS AND CLARIFICATION REQUESTS

Table 1. FAR from validation and previous verification

FAR ID	N/A	Section no.	N/A	Date: N/A
Description of FAR				
N/A				
Project participant response				Date: N/A
N/A				
Documentation provided by project participant				
N/A				
VVB assessment				Date: N/A
N/A				

Table 2. CL from this verification

CL ID	CL-1	Section no.	2.2	Date: 23-Apr-2022
Description of CL				
In section 2.2				
1. How the results of project implementation, including the results of monitoring is communicated with local stakeholders for this monitoring period is not clarified.				
2. The changes of the benefits the project brings to local stakeholders in this monitoring period is not clarified.				
Project participant response				Date: 20-May-2022
1. The results of project implementation, including the results of monitoring is communicated with local stakeholders for this monitoring has been clarified as follows in updated MR. The progress of project implementation has also been informed to all stakeholders through village meetings, technicians and bulletin boards, which can be summarized as follows. a) the registration of the project was completed on 14 September 2021; 2) the carbon credit of the first monitoring period was issued in 2022 and 3) the				

actual quantity of issuance in the first monitoring period is 180,000 tCO₂e, among which 50% carbon profit has been distributed with all households involved in this project as signed in Rice Emission Reduction Project Cooperation Agreement between the farmers and Hefei Luyu. Since this project has brought job opportunities, carbon profits, gender equality, educational improvement and emission reductions as introduced at the start of the project, farmers are satisfied with this project and they are willing to support the implementation of this project.

2. The changes of the benefits the project brought to local stakeholders in this monitoring period has been clarified as follows in updated MR. According to the Rice Emission Reduction Project Cooperation Agreement, 50% of carbon profit gained from the first-phase issuance has been distributed to all households involved in this project, which can be proved by the receipt from households. A proportion of benefit will be used to afford the costs of management and operation of ditches and reservoirs. After the project proponent gained the first-phase benefit, the project proponent can continuously manage and operate the project.

Documentation provided by project participant

MR (Version 2.0)/3/

/30/

/47/

/42/

/24/

VVB assessment

Date: 25-May-2022

1. CCSC has validated the revised MR and can confirm that the description of how the results of project implementation, including the results of monitoring is communicated with local stakeholders for this monitoring period has been clarified clearly, by checking the Meeting record of the stakeholder meeting/30/ and photo of bulletin boards/47/, the assessment team is able to confirm the information is correct.

2. CCSC has validated the revised MR and can confirm that the changes of the benefits the project brought to local stakeholders in this monitoring period has been clarified clearly.

Due to the VCU's of 1st monitoring period have been issued, during this monitoring period, the 50% of the carbon of profits of the project have been distributed to the households who owned the rice paddies that implemented with intermittent flooded water regime in project area. By checking the receipts from the households/42/, the assessment team is able to verify that the involved households have received the payment from the PP according to the cooperation agreements/24/ signed between the project proponents and all the households, and all the households agreed with the share and continuously support PP to implement the project.

CL-1 is closed out.

Table 3. CAR from this verification

CAR ID	CAR-1	Section no.	1.1	Date: 23-Apr-2022
Description of CAR				
The information provided in section 1.1 is not based on the actual status of this monitoring period and the summary description of the project technology is not provided.				
Project participant response				Date: 20-May-2022
The information has been provided in Section 1.1 of updated MR as follows. The project changing from continuously flooded to intermittent flooded condition during rice cultivation is conducted in Southern Lujiang. The living standard of farmers in Southern Lujiang is relatively low, and most of it is used to maintain the survival. In this case, they lacked funds to build ditches for applying intermittently flooded method. So, continuously flooded method was used in rice paddies, which means fields have standing water throughout the rice growing season and may only dry out for harvest. However, the organic matter in rice soil under flooded condition can emit a large amount of methane (CH₄) because of anaerobic decomposition. In contrast, there are at least once aeration period of more than three days, except for end-season drainage, during the cropping season by conducting intermittently flooded method after the cement ditches is built in this project activity. Since the CH₄ in rice paddies is produced by the anaerobic decomposition of organic matter after the flooding, allowing the field to drain halts CH₄ production, which happens in anaerobic condition, reducing the total quantity of CH₄ released during the cropping season. Moreover, the intermittently flooded method is more beneficial to water conservation, production increase and methane emission removal than the continuously flooded. 14,096 ha of rice paddies are changed to apply intermittently flooded method in Southern Lujiang, where the rice used to be cultivated under continuously flooded condition.				
Documentation provided by project participant				
MR (Version 2.0)/3/				
VVB assessment				Date: 25-May-2022
CCSC has validated the revised MR and can confirm that the information provided in section 1.1 is correct and actual based on the situation of this monitoring period which has been verified by site inspection and interview with stakeholders and checking the registered PD/18/. CAR-1 is closed out.				

CAR ID	CAR-2	Section no.	1.10	Date: 23-Apr-2022
Description of CAR				

The description listed in section 1.10 is not based on supporting evidence, and the declaration of not participation other GHG programs and other forms of credit and no double counting for this monitoring period is not provided.

Project participant response

Date: 20-May-2022

The description listed in Section 1.10 has been proved by the Declaration of no double counting of this project from project proponent.

Documentation provided by project participant

MR (Version 2.0)/3/
/39/

VVB assessment

Date: 25-May-2022

CCSC has validated the revised MR and can confirm that the updated description listed in section 1.10 is based on supporting evidence of declaration from project owner/39/.

Refer to section 3.1 of this report for detail assessment.

CAR-2 is closed out.

CAR ID	CAR-3	Section no.	1.11	Date: 23-Apr-2022	
Description of CAR					
In section 1.11. the information provided in column Current Project Contributions and Contributions Over Project Lifetime is not in line with the MR template requests. Revision is requested.					
Project participant response				Date: 20-May-2022	
The relevant information has been revised in Section 1.11 of updated MR as follows.					
Row number	SDG Target	SDG Indicator	Net Impact on SDG Indicator	Current Project Contributions	Contributions Over Project Lifetime

1)	1.4	The number of community members who have been provided extra job opportunities and gain higher income	Implemented activities to increase	In this monitoring period, 23 farmers were hired as technicians with a salary of CNY 100 per month, which is the same as the previous monitoring period and has no change.	During the project lifetime, the project owner will provide 23 long-term technician positions and pay a monthly salary of CNY100.
2)	2.4	The percentage of increase in rice yield	Implemented activities to increase	In this monitoring period, by replacing continuously flooded method with intermittent flooded method, rice yield has been increased by an average of 11% since project start.	Increase the rice yield in the project area.
3)	4.1	The number of stationary packs donated by this project.	Implemented activities to increase	During this monitoring period, a part of carbon profit from this project were used to donate about 9,800 sets of stationary packs, including books, pencils, pencil-case, etc., for the local children, which provides them with quality education.	Part of the carbon benefits from the project will also be continuously used to improve the local education quality.

4)	5.5	The percentage of women hired in this project.	Implemented activities to increase	In this monitoring period, 23 new job opportunities for technicians were created to do methane monitoring, maintenance of ditches and reservoirs, among which including 17 female workers, accounting for 73.9%. The salary of female technicians is the same as that of males, which is CNY 100 per month.	This project provides equal job opportunities for women, and 17 of the technicians hired in this project are women, which improves their social status, contributing to gender equality.
	8.5	The number of job opportunities provided by this project to local farmers	Implemented activities to increase	In this monitoring period, 23 new job opportunities for technicians with a salary of CNY 100 per month were created to do methane monitoring, maintenance of ditches and reservoirs.	This project provides extra job opportunities and increases the income for local farmers through hiring these 23 farmers as technicians.
	13.0	Tons of greenhouse gas emissions avoided or removed	Implemented activities to decrease	In this monitoring period the emissions reduce is 65,680 tCO _{2e} from 01-January-2021 to 31-December-2021.	This project is expected to reduce about 59,043 tCO _{2e} emissions annually as and a total of 1,239,903 tCO _{2e} emissions during the 21-year crediting period claimed in the registered project description. During the first and the second monitoring periods (from 14-March-2018 to 31 December-2021), the project actually reduced a total of 265,794 tCO _{2e} emissions.

Documentation provided by project participant	
MR (Version 2.0)/3/ /2/ /44/ /45/ /36/ /23/ /46/	
VWB assessment	Date: 25-May-2022
CCSC has validated the revised MR and can confirm that the information is updated and correct. Refer to section 4.1 of this report for detail assessment of each SDG. CAR-3 is closed out.	

Table 4. FAR from this verification

FAR ID	N/A	Section no.	N/A	Date: N/A
Description of FAR				
N/A				
Project participant response				Date: N/A
N/A				
Documentation provided by project participant				
N/A				
VWB assessment				Date: N/A
N/A				

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