Gold Standard for the Global Goals

RULE UPDATE

Accounting of Soil Organic Carbon Loss Risk in Activities Applying Methodology "Methane Emission Reduction by Adjusted Water Management Practice in Rice Cultivation"

PUBLICATION DATE: **22/12/2025**

VERSION: **1.0**

SUMMARY

This Rule Update addresses the potential for Soil Organic Carbon (SOC) loss in rice cultivation when shifting from continuously flooded practices to adjusted water management. It establishes requirements to account for this risk, ensuring a conservative approach to emission reduction estimations.

Applicable to all activities using the "Methane Emission Reduction by Adjusted Water Management Practice in Rice Cultivation" methodology. This Update must be applied alongside existing requirements.

Effective immediately upon publication, these changes are to be introduced in the project design and monitoring plan. Design certified projects shall update the monitoring plan to ensure full compliance with the rule update for any monitoring periods that fall on or after 01 July 2026. Voluntary updates are encouraged at an earlier date. For any labelling, e.g. Core Carbon Principles (CCP) labelling, the activity will need to be fully compliant with this rule update from the date from which CCP labelling is requested, or 01 July 2026, whichever is earlier. No retroactive adjustments apply to monitoring periods concluded before 01 July 2026 or the date of voluntary update, whichever is early. It is clarified that while non-alignment does not inherently render a project ineligible for pre-01 July 2026 period, it will preclude the assignment of CCP labelling. Consequently, developers aiming for CCP labelling must ensure full compliance with the rule updates immediately, irrespective of the general deadline for Monitoring Period alignment. This Rule Update will be included in the methodology text at the time of the next methodology revision.

1| SCOPE, APPLICABILITY AND ENTRY INTO FORCE

1.1 | Scope

1.1.1 | This Rule Update addresses the potential Soil Organic Carbon (SOC) loss when rice cultivation shifts from continuously flooded methods to adjusted water management practices. This Rule Update establishes requirements to account for this risk, i.e., SOC losses, ensuring a conservative approach and alignment with best practice.

1.1.2 | The Rule Update is effective immediately upon publication. All activity documents shall introduce these changes in the activity design and monitoring plan from 01 July 2026. Activities under design or performance certification are allowed to voluntarily reflect this Rule Update before 01 July 2026. In case of design-certified activities, revised documents that reflect the rule update may be submitted for activities at the time of the next performance review. This rule update is applicable to any monitoring period falling on or after 01 July 2026. However, project developers are encouraged to adopt these updates voluntarily prior to this date.

1.1.3 | Performance certification submissions made for monitoring periods that fall on or after 01 July 2026 will require consideration of SOC management. Developers are encouraged to voluntarily adopt this Rule Update, should the performance review be underway.

1.1.4 | No retroactive adjustments will be applied to activities. This Rule Update will be reviewed during the next methodology revision and included in the methodology text.

1.2 | Applicability

1.2.1 | This Rule Update applies to all activities- standalone activity, Programme of Activity (PoA), real or regular case VPAs including VPAs/CPAs regardless of their current certification status i.e., listed, certified design, certified project that apply:

a. GS4GG methodology: Methane Emission Reduction by adjusted Water management practice in rice cultivation,
b. Any other Gold Standard approved methodologies on shifting to adjusted water management systems in rice cultivation,
c. GS4GG certification of issuance of GSVERs or labelling of issued credits (i.e., CDM).

1.3 | Entry into force

1.3.1 | The Rule Update comes into effect upon publication.

2| REQUIREMENTS UPDATES

2.1 | Background

2.1.1 | The impact of adjusted water management in rice cultivation (such as AWD) on SOC levels is not yet consistently established.

2.1.2 | While some studies mention potential SOC losses, quantitative data from large field studies often do not show these losses to be statistically significant. When losses do occur, they are typically context-dependent, and may be linked to adverse conditions (e.g., severe drying, low-C inputs etc.).

2.1.3 | Conversely, significant SOC gains have been reported under AWD, when combined with soil amendments or integrated management practices.

2.1.4 | The Gold Standard methodology doesn't allow for consideration of SOC gains. Losses are expected to be deemed insignificant owing to the existing safeguards that are in place in the Methane Emission Reduction by Adjusted Water Management Practice in Rice Cultivation, Land-use & Forests Activity Requirements and Safeguarding Principles & Requirements. However, to ensure utmost conservativeness, align with best practice and prevent any potential risk of over-estimation of emission reductions, particularly given the variable nature of SOC dynamics, a methodology mandate has been introduced to explicitly address and account for any potential SOC losses.

2.2 | Requirements

2.2.1 | A methodology mandate is introduced via this Rule Update to ensure all projects implement best practices that result in no losses of SOC from project fields. Any instances where appropriate measures to conserve and/or enhance SOC in project fields are not sufficient, a conservative approach shall be considered to account for potential loss in SOC.

2.3 | Management Practices to Conserve and/or Increase SOC

2.3.1 | Each Gold Standard activity shall ensure that scientifically established management practices are applied as appropriate for its agro-ecological zone to conserve and potentially improve the SOC in rice fields.

2.3.2 | Management practices that conserve and/or improve SOC in rice fields may include, but are not limited to:

i. Management of crop residue (incorporation of rice straw and stubble back into the fields).

ii. Optimised Alternate Wetting and Drying (AWD) water management to ensure there is no overexposure or excess drying of the fields. This includes setting a safe threshold for re-flooding based on water table levels by ensuring water depth does not fall below 5–15 cm depending on agro-ecological conditions; and adjusting the duration of dry periods according to the crop growth stages.

iii. Use of green manures, organic amendments (including biochar) and cover crops.

iv. Implementing integrated nutrient management.

2.3.3 | At the time of design certification, the VVB shall assess whether the proposed management practices are appropriate for the specific project area, taking into account local soil conditions and weather patterns, and ensuring that these practices are supported by scientific evidence such as the number and timing of dry days and maximum water depth. This assessment shall also be revisited during the verification stage to confirm continued relevance and accuracy.

2.3.4 | The project developer shall monitor and report all the implemented management practices and yield from the fields during each monitoring period. Management practice and yield shall be reported using the tables provided in Appendix A of this Rule Update.

2.4 | Adjustment in cases of insufficient management practices

2.4.1 | If the management practices intended to conserve or improve SOC in project rice fields are not reported, or are deemed insufficient by VVB during verification, a 100% deduction factor shall be applied to Emission Reductions. The resulting deduction factor shall be proportional to the project fields within the project area found to have inadequate management practices.

2.4.2 | The requirement to apply deductions as explained in paragraphs 2.4.1 shall be suspended if it can be demonstrated during verification that there has been no significant loss of SOC stocks in relevant fields during the monitoring period compared to the baseline levels.

2.4.3 | A loss of SOC stock is considered significant if it exceeds 5% of baseline stocks. If such significant loss is confirmed in project fields compared to baseline stocks, deductions as mandated in paragraph 2.4.1, above shall be applied.

2.4.4 | SOC stock change in project rice fields should be estimated using initial and latest SOC stock values from Project fields. In the absence of initial SOC stock values from Project fields, SOC stock values from the baseline reference fields may be applied. In such cases, it shall be demonstrated that the reference fields reasonably represent the pre-project conditions. Estimation of SOC stock shall follow Approach 1 (direct measurement) and sampling protocols as per GS SOC Framework Methodology. Modelling is not permitted for SOC stock estimation in this scenario.

2.4.5 | VVB shall provide a formal statement in their report on the SOC management practices in the project fields. This statement shall be based on VVB’s regional and sectoral expertise, with a specific focus on how it could affect SOC stocks in the project fields.

2.4.6 | VVB shall confirm that all SOC estimates are conservative, including a thorough review of the applied uncertainty approaches and the sampling design.

2.4.7 | In cases where deductions are applied, VVBs shall provide a statement on the appropriateness of the Emission Reduction that has been deducted, and how it has been ascertained that this is proportionate to the project fields where the management practices are found to be inadequate.

APPENDIX A

Data and Parameters Monitored

Parameter ID	AWD.25
Data/Parameter:	Management practices to conserve and/or improve SOC
Data unit:	--
Description:	Scientifically established management practices for conserving and/or improving SOC in rice fields shall be monitored and reported. These may include various interventions, such as, but not limited to: i. Management of crop residue (e.g., incorporating rice straw and stubble). ii. Optimized Alternate Wetting and Drying (AWD) to avoid over-exposure or excessive drying. iii. Use of green manures, organic amendments (including biochar), and cover crops. iv. Integrated nutrient management.
Source of data:	Monitoring Survey, farm logbooks, and a compiled report on management practices across the project's rice fields.
Monitoring frequency:	At every cropping cycle, and at least once every year
QA/QC procedures:	Management practices should be scientifically proven practices which conserve and improve SOC in rice fields, and shall be applicable to the agro-ecological zone or the agricultural regime in place. The developer shall • Establish the appropriateness of the chosen management practices through credible scientific references. • Demonstrate farmers' training(s) to ensure implementation of the prescribed management practices.
Any comment:	Scientific monitoring of SOC through sensors or lab testing periodically establishes the effectiveness of management practices, and can be considered as an optional QA/QC. Addition of green manure should be measured and should not lead to higher CH_4 emissions in AWD fields.

Parameter ID	AWD.26
Data/Parameter:	Yield per ha
Data unit:	tonnes/ha
Description:	Rice yield per hectare per crop

Source of data:	Monitoring Survey, Farm logbooks, interviews, sale or order receipts
Monitoring frequency:	Every cropping cycle
QA/QC procedures:	Slight variations in yield can happen over years. However, a decrease in yield is not allowed as per the methodology. Further, a sustained decrease in yield over multiple cropping cycles could be an indication of decreasing soil health, or other underlying reasons. In such a scenario, the developer shall apply default adjustment to account for the risk of SOC loss.
Any comment:	Yield will be compared with third party publications e.g., industry report.

Document Information

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