Submission 1

Part of the Document	Sub-section	Page	**Comment**	Proposed change
B. Terms and definitions	-	2	At our project site, we have installed two observation wells within less than a meter of each other in certain fields to compare water levels. Our observations show variations between the wells, with differences ranging from 0.5 cm to 3 cm. Please refer to the 'Water Level' tab for further details. Given that the methodology's definition of drainage for multiple drainage events strictly requires reaching a water level of -15 cm below the soil surface, the placement of observation wells significantly influences the readings obtained. This variability could result in differing measurements depending on well placement. We therefore propose modifying the drainage threshold to account for potential variations in water level measurements due to well placement. A similar carbon crediting methodology in Thailand (T-VER) defines a drainage as 10-15cm of water below soil. Similar, a study by Sander et. al (2020) in the Philippines also used 10-15cm as a threshold for reflooding the field when implementing AWD.	We propose to provide a range as a threshold for defining a drainage event. Proposed revised text: A drainage is considered fully completed when the water level is observed to reach 10-15 cm below the soil surface.
Appendix C	4. Water level monitoring for confirmation of drainage	2	In our project, we have commenced capturing geotagged photos as part of our monitoring activities. Over 30% of these photos, however, show discrepancies in GPS coordinates. To balance cost-effectiveness with data accuracy, we utilized smartphones equipped with a GPS camera app instead of specialized GPS cameras (e.g., Garmin devices), as procuring and delivering such expensive equipment to a lot of local farmers would have difficulties phisically and financially, and unable to establish the sustainable project life cycle. Alongside geotagged photos, we are collecting paper-based logbooks from participating farmers to record water levels. Given the challenges in achieving precise GPS coordinates that GPS accuracy cannot be guaranteed because of weak GPS signals or low internet accessibility in rural area, we respectfully request that geotagged photos be accepted as supplementary evidence to support the logbooks. We have benchmarked the proposed monitoring protocol against similar methodologies and found that the Gold Standard methodology for "Methane Emission Reduction by Adjusted Water Management Practice in Rice Cultivation" requires only logbooks as evidence of drainage practices. This approach highlights the feasibility of utilizing logbooks and limited photographic verification in practice. In a previous public consultation conducted by the ADB Expert Committee, we noted that Appendix C proposed alternative methods for monitoring water levels, including remote sensing. However, we found that no existing technology—apart from geotagged photos or IoT water sensors—can accurately detect the exact water depth. As IoT water sensor kits cost over $200 each, their use would lower the benefit sharing with farmers.	Proposed revised text: "It is necessary for project participants to demonstrate the fulfillment of the eligibility criterion 2 of the methodology by submitting the followings to a Third-Party Entity at the time of verification: photos of the monitored water level with location and time information as well as a handwritten or digital logbook for the water level and/or the number of drained days. The sample number of geotagged photos should be determined using the statistic concept such as confidence interval."
Appendix A	Table A-2. Gas Sampling	3	We note that the methodology requires gas sampling to be conducted in the morning, specifically between 7:00 AM and 10:00 AM. The MIRSA Guidelines by Minamikawa et al. (2015) similarly recommend mid-morning sampling but do not specify an exact time. To allow for logistical flexibility and account for potential delays, we propose extending the sampling window to 7:00 AM–11:00 AM. This adjustment would also enable us to accommodate weather conditions. For example, if it rains between 7:00 AM and 9:00 AM, we may need to skip sampling when limited to a 7:00–10:00 AM window, whereas the extended timeframe would provide room to conduct sampling if conditions improve.	Extend the preferred timing of gas sampling from 7AM-10AM to 7AM-11AM. Proposed revised text: "Morning, especially in the early hours (e.g., 7 am-11 am). If the sampling time must be extended to daytime, the schedule should be designed to prevent the systematic bias since CH4 emissions are emitted more in daytime."

Submission 2

Part of the Document	Sub-section	Page	Input on the page	Proposed change
B. Terms and definitions	-	2	At our project site, we have installed two observation wells within less than a meter of each other in certain fields to compare water levels. Our observations show variations between the wells, with differences ranging from 0.5 cm to 3 cm. Please refer to the 'a. Water Level' tab for further details. Given that the methodology's definition of drainage for multiple drainage events strictly requires reaching a water level of -15 cm below the soil surface, the placement of observation wells significantly influences the readings obtained. This variability could result in differing measurements depending on well placement. We therefore propose modifying the drainage threshold to account for potential variations in water level measurements due to well placement. A similar carbon crediting methodology in Thailand (Premium T-VER) defines a drainage as 10-15cm of water below soil. Similarly, a study by Sander et. al (2020) in the Philippines also used 10-15cm as a threshold for reflooding the field when implementing AWD.	We propose to provide a range as a threshold for defining a drainage event. Proposed revised text: A drainage is considered fully completed when the water level is observed to reach 10-15 cm below the soil surface.
Appendix A Appendix C	Table A-1. Chamber design 10. Transitional measure for the shape of chambers	1, 11	We are using cylinder-shaped chambers in transplanting systems for gas sampling, similar to experimental setups utilized in previous studies. The current methodology allows the use of cylinder-shaped chambers in transplanting systems but only prior to the project. The base of our chamber is 1735 sq.cm. is larger than the area covered by four rice hills, equivalent to 1600 sq.cm. Considering that 90% of emissions in rice paddy fields are from rice plants and that the base area of chamber is larger area covered by four rice hills, our current setup will be able to properly capture the emissions of the fields. To determine the area-based emission factor, we will divide the CH4 emisisons by 1600 sq.cm. when fields are flooded. For dry soil, we will use the the area of the round base for calculating the emission per unit area to account for emissions coming directly from the soil. Similar approach was also observed in previous research studies in the Philippines.	We request the inclusion of cylinder-shaped chambers for use in transplanting systems. We propose the following options: (1) Allow the use of cylinder-shaped chambers in transplanting systems when basal area is larger than the area covered by four rice hills, or at least (2) Allow the use of cylinder-shaped chambers in transplanting systems at least during the first year of the project Proposed revised text: For Appendix A, Table A-1. Chamber design, p. 1: "Cylinder-shaped chambers can be used only for the direct broadcast seeding system and when basal area is larger than the area covered by four rice hills." For Appendix C, 10. Transitional measure for the shape of chambers, p. 11: "In the Philippines, cylinder shaped chambers with round basal area are often used for the transplanting system for research purpose partly due to the limited availability of r ectangular shaped chambers. Therefore, this methodology permits cylinder-shaped chambers to be used, however limited to the direct measurement during the first year of the project or before the project (see Tables C3 and C4)."
Appendix A	Table A-1. Chamber design	2-3	We are hopeful that the Expert Committee and Joint Committee will consider the use of cylinder-shaped chambers in transplanted systems. In case we consider direct broadcast seeding, we would like to request guidance on the recommended seeding rate. It is stated in the methodology that for direct row seeding system, "one side length of the basal area should be a multiple of the row distance". However for direct broadcast seeding, the seeding rate per hectare (kg/ha or no. of seeds/sq.m.) was not indicated. If we change the planting method to direct broadcast seeding, we may not be able to always have an equal number of plants inside the chambers and this will increase variability. As such, kindly advice and provide guidance on the seeding rate. PhilRice recommends a seeding rate of 60-80kg/ha.	In case of direct broadcast seeding systems, kindly provide a recommended seeding rate for fields where gas sampling will be conducted.
Appendix C	4. Water level monitoring for confirmation of drainage	2	In our project, we have commenced capturing geotagged photos as part of our monitoring activities. Over 30% of these photos, however, show discrepancies in GPS coordinates. To balance cost-effectiveness with data accuracy, we utilized smartphones equipped with a GPS camera app instead of specialized GPS cameras (e.g., Garmin devices), as procuring such equipment would significantly increase project expenses. Given that GPS accuracy cannot be guaranteed because of weak GPS signals or internet accessibility in rural area, we respectfully request that geotagged photos be accepted as only a supplementary evidence to support the logbooks. We propose to reduce the number of geotagged photos submitted by applying a statistical methodology based on a desired confidence intervals. In our project, the logbook entries and the photos generally match. Please see ta "b. Photos" for more details. We propose a 90% confidence level for this statistical calculation. We have benchmarked the proposed monitoring protocol against similar methodologies and found that the Gold Standard methodology for "Methane Emission Reduction by Adjusted Water Management Practice in Rice Cultivation" requires only logbooks as evidence of drainage practices. This approach highlights the feasibility of utilizing logbooks and limited photographic verification in practice. In a previous public consultation conducted by the ADB Expert Committee, we noted that Appendix C proposed alternative methods for monitoring water levels, including remote sensing. However, we found that no existing technology—apart from geotagged photos or IoT water sensors—can accurately detect the exact water depth below the surface. As IoT water sensor kits cost over $200 each, their use would not be practical and lower the benefit sharing with farmers.	To demonstrate eligibility of fields to meet definition of drainage, we propose that logbooks of water level be used as a primary evidence and that geotagged photos be used to verify the logbook entries. Specifically, we propose that: a) geotagged photos be only required to be provided for a sample of logbooks, and b) confidence level of a 90% be used for the calculation of determining required number of samples for logbooks Proposed revised text: "It is necessary for project participants to demonstrate the fulfillment of the eligibility criterion 2 of the methodology by submitting the followings to a Third-Party Entity at the time of verification: handwritten or digital logbooks for the water level as the primary data source, along with geotagged photos to confirm a sample of these records. The number of samples for verification shall be calculated based on a 90% confidence level."
Appendix A	Table A-4. Calculation of the seasonal total emission of CH4 or N2O and emission factors	6	In Step 8, which of the following shall be used as "total number of rice growing days"? a) From transplanting to maturity b) From land preparation (first flooding) to maturity	Please provide the reference to the total number of rice growing days.
Appendix A	Table A-2. Gas Sampling	3	We note that the methodology requires gas sampling to be conducted in the morning, specifically between 7:00 AM and 10:00 AM. The MIRSA Guidelines by Minamikawa et al. (2015) similarly recommend mid-morning sampling but do not specify an exact time. To allow for logistical flexibility and account for potential delays, we propose extending the sampling window to 7:00 AM–11:00 AM. This adjustment would also enable us to accommodate weather conditions. For example, if it rains between 7:00 AM and 9:00 AM, we may need to skip sampling when limited to a 7:00–10:00 AM window, whereas the extended timeframe would provide room to conduct sampling if conditions improve.	Extend the preferred timing of gas sampling from 7AM-10AM to 7AM-11AM. Proposed revised text: "Morning, especially between 7 am and 11 am. If the sampling time must be extended to daytime, the schedule should be designed to prevent the systematic bias since CH4 emissions are emitted more in daytime."

Submission 3

Name:	Toshiharu Kusumoto／楠本 敏晴
Affiliated Organization:	KUBOTA Corporation／株式会社クボタ
E-mail:	toshiharu.kusumoto@kubota.com
Country:	Japan

#	Part of the document	Sub-section	Page	Inputs	Proposed change
1	JCM_PH_PM006_PM.pdf	B. Terms and definitions	2	Our recognition is that the water inlets and outlets are generally not independent from plot to plot, and multiple plots share the same irrigation system as "TSAG (Turnout Service Area Group)" in the Philippines. If the threshold for drainage is -15 cm, all the water level of plots in a TSAG must reach -15 cm to be considered to have completed drainage, and re-irrigation cannot be done, so it might affect yield. We assume that setting the threshold between -10 cm and -15 cm will make it easier to manage the supply and drainage of multiple plots in a TSAG and mitigate the impact on yield. Also, T-VER defines a drainage as 10-15cm of water below soil. Similarly, a study by Sander et. al (2020) in the Philippines also used 10-15cm as a threshold for reflooding the field when implementing AWD. 我々の認識では、フィリピンの一般的な水田は給水口と排水口がプロットごとに独立しておらず、複数のプロットが同じ灌漑システムを共有（TSAGというグループ単位で）しています。排水の閾値が-15cmの場合、TSAG内全てのプロットの水位が-15cmに満たなければ排水完了とみなされず再給水ができず、収量にも影響を及ぼすことを想定します。閾値を-10cm～-15cmの幅を設けることで、TSAG内での複数プロットの給/排水管理がしやすくなり、且つ収量への影響も抑制できると想定し、より広域にプロジェクトエリアを拡大できると期待します。 また、T-VER では土壌下 10～15cm を排水と定義しており、同様に、フィリピンの Sander ら（2020）の研究でも、AWD を実施する際の再湛水の閾値として 10-15cm を用いております。	A drainage is considered fully completed when the water level is observed to reach **10-15 cm** below the soil surface.
2	Appendix A	Table A-2. Gas sampling	3	We are concerned that in the event of force majeure events such as bad weather or natural disasters, it may not always be possible to collect gas once per week. 悪天候や自然災害などの不可抗力イベントが発生した際に、ガス採取頻度（週に1回）を遵守できない可能性があることを懸念しております。	At least once per week, **but not limited to this in the case of force majeure events such as bad weather or natural disasters.**To better trace the possible temporary CH4 emission peak during a drainage event and the possible temporary N2O emission peak after nitrogen fertilizer topdressing, additional measurements once or twice are recommended during these events.
3	Appendix C	3. Confirmation of avoidance of significant rice yield reduction	1	A certain number of farmers use combine harvesters in the Philippi. In consideration of the burden on workers, it is hoped that the yield measurement method will not be limited to hand picking, but that machine harvesting will also be possible.Specifically, we would like you to allow to obtain data on total plot yield/plot area based on machine harvested data. コンバインハーベスターを使用する農家が一定数居ります。作業者の負担を考慮し、収量測定方法を手狩りに限定せず、機械収穫も可能としていただきたく。具体的には、機械で刈り取ったデータに基づくプロット合計収量/プロット面積でのデータ取得も認めていただきたく存じます。	For the direct seeding system, 1 m × 2 m area should be selected from each field whereas a rectangle area with 50 rice hills for the transplanting system. **Alternatively, the comparison can be made by the yield of each plot by the calculation of the plot total yield/plot area.**
4	Appendix C	4. Water level monitoring for confirmation of drainage	2	In our project, we have commenced capturing geotagged photos as part of our monitoring activities. Over 30% of these photos, however, show discrepancies in GPS coordinates. To balance cost-effectiveness with data accuracy, we utilized smartphones equipped with a GPS camera app instead of specialized GPS cameras (e.g., Garmin devices), as procuring such equipment would significantly increase project expenses. Alongside geotagged photos, we are collecting paper-based logbooks from participating farmers to record water levels. Given the challenges in achieving precise GPS coordinates that GPS accuracy cannot be guaranteed because of weak GPS signals or internet accessibility in rural area, we respectfully request that geotagged photos be accepted as supplementary evidence to support the logbooks. Specifically, we propose that geotagged photos verify at least 50% of the logbooks. We have benchmarked the proposed monitoring protocol against similar methodologies and found that the Gold Standard methodology for "Methane Emission Reduction by Adjusted Water Management Practice in Rice Cultivation" requires only logbooks as evidence of drainage practices. This approach highlights the feasibility of utilizing logbooks and limited photographic verification in practice. 我々のプロジェクトでは、モニタリング活動の一環として、ジオタグ付き写真の撮影を開始しましたが、これらの写真の30%以上にGPS座標の不一致が見られます。費用対効果とデータの正確性を両立させるため、専用のGPSカメラ（ガーミン社製など）ではなく、GPSカメラアプリを搭載したスマートフォンを活用しました。 ジオタグを付けた写真と並行して、参加農家から紙ベースの日誌を収集し、水位を記録しています。農村部ではGPSの電波が弱かったり、インターネットが利用できなかったりするため、正確なGPS座標を達成する上での課題を考慮し、我々は、オタグ付き写真が航海日誌を裏付ける補足的証拠として受け入れられることを謹んで要請する。具体的には、ジオタグ付きの写真は、ログブックの少なくとも50%を確認することを提案します。 我々は、提案されたモニタリング・プロトコルを類似の方法論と比較検討した結果、「稲作における調整水管理慣行によるメタン排出削減」のゴールドスタンダード方法論では、排水慣行の証拠として日誌のみを要求していることがわかりました。このアプローチは、日誌と限定的な写真による検証の実現可能性を浮き彫りにしております。	It is necessary for project participants to demonstrate the fulfillment of the eligibility criterion 2 of the methodology by submitting the followings to a Third-Party Entity at the time of verification: photos of the monitored water level with location and time information as well as a handwritten or digital logbook for the water level and/or the number of drained days. **If logbooks are utilized as primary evidence, geotagged photos shall be used to verify at least 50% of the logbooks**.
5	Appendix C	4. Water level monitoring for confirmation of drainage	2	Regarding the logging units, it was answered in the Q&A session of the seminar held on June 7 that data would be collected for all plots. However, after inspecting the local fields in the Philippines, it appears that each plot is smaller than anticipated, making it impractical to monitor every single plot. (Please find next page) In the Philippines, AWD is commonly practiced by opening and closing water inlet/outlet, and since water management in the Philippines is controlled by irrigation group (TSAG) unit according to the difference in elevation, not by plot. Therefore, monitoring at one upstream, one midstream, and one downstream location for each irrigation group is considered sufficient. and plots sharing a water gate can be considered to have the same irrigation and drainage conditions. Therefore, we propose that "the logging unit as plots sharing a water gate". ログの取得単位について、6/7に開催されたセミナーでのQAにて全プロットという回答がありましたが、現地圃場を視察したところフィリピンでは想定以上に1圃場が小さく、全ての圃場を観測することは現実的でないと思われます。 (次ページをご確認ください) フィリピンではWater inlet/outletを開け閉めすることでAWDを実施することが一般的であり、フィリピンの水管理はプロット毎ではなく灌漑グループ(TSAG)毎に**<u>高低差に合わせて</u>**入排水のコントロールをしているため、灌漑グループ毎に上流・中流・下流の1ヶ所ずつのモニタリングで十分と思われます。	No Proposed Change as it is not mentioned in the methodology. We would be glad if you could give us your view on this matter as a response to Public inputs, not methodologically. 方法論上には記載がないため、修正案はありません。 本件についても方法論上ではなくパブリックコメントの回答として見解を示していただけると嬉しいです
6	Appendix C	1.Water management in the past 2 years prior to the start of the project	1	Regarding the water management history to be required, is it correct that the 2 year period is for 4 seasons? Or do we need 2 years regardless of the season? E.g. Our understanding is that there is a wet season in the first half of the year and a dry season in the second half in the Philippines. If our new project starting with the 2025 dry season, is it needed for **4 seasons** earlier (2023 dry season to 2025 rainy season) or **2 years** earlier (2023 rainy season to 2025 rainy season)? 必要な水管理履歴についてですが、2年間というのは4シーズン分ということでしょうか？それとも季節に関係なく2年間分必要なのでしょうか？ 例： フィリピンでは1年の前半に雨季、後半に乾季がある認識。 2025年の乾季からPJスタートする場合、4シーズン前（2023年の乾季から2025年の雨季）か、2年前から（2023年の雨季から2025年の雨季）か、どちらが必要でしょうか？	<None due to question>

<Supplement to No. 5>

One plot is clearly less than 1 ha, And we can see that 8-10 plots make up 1 ha.(as of July that we visited the site in)
In short, if 100,000 ha is used as the PJ area, the actual number of plots would be more than 1,000,000
and we assume that this is not a realistic number of plots that can be measured.

According to the LIPA obtained from NIA, most of the plots are less than 1 ha and some plots are 0.01 units

National Irrigation Administration
Pinacanauan River Irrigation System
List of Irrigated and Planted Area (LIPA) for Crop Year: 2024 Crop Season: DRY
As of : August 02, 2024

FID	Lot Code	Lot Number	Land Owner	Declared Area	Irrigated Area	Planted Area	Calculated Area	Crop Year	Crop Season
67765	1187	1187	NARAG, ARELINO	0.1544	0.1544	0.1544	0.1544	2024	DRY
67766	1189	1189	SAQUING, JANET DOMINGO	0.0671	0.0640	0.0640	0.0640	2024	DRY
67767	1199-A	1199-A	BADAJOS, ENCARNACION	0.2439	0.2439	0.2439	0.2439	2024	DRY
67768	1199-B	1199-B	SUYU, RITA	0.2359	0.2359	0.2359	0.2359	2024	DRY
67769	1199-C	1199-C	CAMARAO, JESSIE	0.2390	0.2390	0.2390	0.2390	2024	DRY
67770	1199-D	1199-D	SUYU, ERNESTO	0.1785	0.1785	0.1785	0.1785	2024	DRY
67771	1200	1200	SAQUING, JANET DOMINGO	0.3070	0.3401	0.3401	0.3401	2024	DRY