ASSESSMENT REPORT

Standardized Baseline for Methane Emissions from Rice Cultivation in the Republic of the Philippines

(Proposed standardized baseline submission form CDM-PSB-FORM version 01.0 dated 08/05/2014)

Sector	Sectoral Scope 15.1 Agriculture
Name of DNA	Philippines
Validation Team	Team Leader: Sudeep Kodialbail Local Assessor Philippines: Lisa Magtagnob Expert (TA 15.1: Agriculture): Asish Chakraborty
Name of Reviewer	Technical Reviewer: Shivaji Chakraborty Approver: Siddharth Yadav, Global Technical Manager, SGS United Kingdom Limited
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Dates Reviewed	17/01/2014 to 09/05/2014
Authorized Signatory	Siddharth

Criterion	Definition	Yes/No	Explanation
System Availability	Is a 'standardized' data system currently in place?	Yes	The proposed standardized baseline has been developed using a methodological approach contained in an approved baseline and monitoring methodology (AMS III.AU Version 03.0). Hence a standardized data system is in place.
	Has a procedure for reporting activities conducted as part of the QC system been developed and implemented?	Not applicable	The proposed standardized baseline has been developed using a methodological approach contained in an approved baseline and monitoring methodology (AMS III.AU Version 03.0). Hence the QA/QC procedures and systems are in accordance with the methodology.
Conformity	Did the QA/QC system/procedures meet the data quality objectives of the QA/QC Guidelines?	Not applicable	The proposed standardized baseline has been developed using a methodological approach contained in an approved baseline and monitoring methodology (AMS III.AU Version 03.0). Hence the QA/QC procedures and systems are in accordance with the methodology.
	Did the QA/QC system/procedures meet the general provisions of the QA/QC guidelines?	Not applicable	Same explanation as above

	Were the approaches taken by the DNAs conservative? Were the conservative approaches applied consistently?	Yes	Most of the data used to develop this standardized baseline have been sourced from the IPCC guidelines which are a reliable and publically available data source. Some data will be sourced from the Second National Communication (yet to be published) to the UNFCCC, and hence appropriate and credible.
Traceability	Were all data and information relating to the datasets and procedures clearly documented?	Yes	Most of the data used to develop this standardized baseline have been sourced from the IPCC guidelines. Some data will be sourced from the Second National Communication (yet to be published) to the UNFCCC. These data sources have been clearly documented in the standardized baseline form. The other sources of information referred in the form has also been clearly documented under the "Reference and other information" section of the form.
	Was the QC report clearly documented in accordance with the QA/QC guidelines?	Not applicable	The proposed standardized baseline has been developed using a methodological approach contained in an approved baseline and monitoring methodology (AMS III.AU Version 03.0). Hence the QA/QC procedures and systems are in accordance with the methodology.
	Were all required documents available for assessment?	Yes	All documents referenced and weblinks were provided for assessment.
Responsiveness	Did the data delivery protocol meet the provisions of the QA/QC guidelines?	Not applicable	Most of the data used to develop this standardized baseline have been sourced from the IPCC guidelines which are a reliable and publically available data source. Some data will be sourced from the Second National Communication (yet to be published) to the UNFCCC, and hence appropriate and credible.
	Was the communication of the DNA with the data providers timely and efficient?	Not applicable	Same as above explanation

Adaptability	Was the system through its procedures modified in order to address major issues identified?	No	The proposed standardized baseline has been developed using a methodological approach contained in an approved baseline and monitoring methodology (AMS III.AU Version 03.0). Hence the QA/QC procedures and systems are in accordance with the methodology.
	Did the modified system meet the data quality objectives and the provisions of the QA/QC guidelines?	Not Applicable	Same as above explanation
Security	Is a security system for data management in place and has it operated effectively?	Not applicable	Same as above explanation
	Have any issues related to security occurred?	No	Same as above explanation
Error Tolerance	Were there established procedures to minimize errors proactively? Were these procedures implemented effectively?	Not applicable	Same as above explanation

Summary of Findings	Please see the discussion of findings attached with this assessment report.
Responses and Corrective Actions of DNA	Please see the discussion of findings attached with this assessment report.
Submission date to DNA	

Annex 1- Findings Overview

Findings Overview Summary

	CARs	CLs
Total Number raised	2	1

Findings Overview Details

Date:	12/02/2014		Raised by:	Assessment Team	
Type:	CAR	Number:	#1	Reference:	SB form

Lead Assessor Comment: **Date:** 12/02/2014

Traceability related points

1. Weblink in footnote 6 is not accessible.
2. The complete traceability of the information referred in footnotes 4 to 8 is not found transparent.(Example: please refer footnotes 11, 12 for complete traceability).
3. On page 9 of the form under the heading "**Establishment of the Values of the Baseline Emission Factor for field *g* in season *s***" it is mentioned "The emission factors are calculated using the following formula adapted from IPCC 2006:" The exact source of the information is not completely traceable. Please state the specific source of the formula out of IPCC 2006. (While doing so, please refer the referencing pattern adopted for footnotes 11, 12.)
4. The reference in footnote 13 is not traceable. (Example: please refer footnotes 11, 12 for complete traceability)
5. Page 13 of the Standardized Baseline form states "Based on the IPCC 2006 guidance for calculation of SF_o". The specific reference to the IPCC guideline has not been mentioned.

Proponent Response: **Date:** 19/02/2014

1) The web-link is now updated and accessible.
2) The footnotes are edited for traceability with full reference provided.
3) The footnote is corrected and the information is completely traceable now.
4) Exact reference of the formula used is added now.
5) A footnote has been added to clarify this point.

Documentation Provided as Evidence by Proponent:

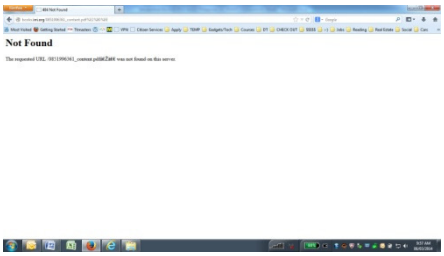
Revised SB form

Information Verified by Lead Assessor:

The revised SB form has been checked for the revision made. It is noted that the version number and the date of the revised SB form has not been changed. It retains Version 1.0 dated 27/01/2014.

Reasoning for not Acceptance or Acceptance and Close Out:

1. The weblink in footnote 6 is still not accessible (Screenshot of the error message is show below for your reference.). Hence open.



2. The descriptions of the footnotes 4, 5, 7 and 8 have been revised. The information in the footnotes 4, 7 and 5 is traceable. With reference to footnote 7; the value of 67% is obtained from the tab "PHILS" using the values of area harvested in the year 2012 for all farms and irrigated lands. For footnotes 6 and 8 the specific reference of the page no. / section no. / etc. (as mentioned in footnotes 12 and 13) where the information can be traced has not been mentioned in the descriptions of the footnotes. Hence open.
3. The specific source of the formula from IPCC 2006 has now been correctly stated under footnote 10. Thus the formula is traceable. However the scaling factor "$SF_{s,r}$" mentioned in the formula from IPCC 2006 has not been considered in formula on page 10 of the SB form. Please clarify.
4. With the insertion of footnote 10 in the revised SB form, the footnote 13 in the original SB form is footnote 14 in the revised SB form. The reference in footnote 14 is not traceable. (Example: please refer footnotes 11, 12 for complete traceability). Hence open.
5. The specific source to the IPCC 2006 guidance has now been correctly stated under footnote 15. Hence closed out.

CAR #1 is open

Acceptance and Close out by Lead Assessor: Open	**Date:** 06/03/2014
Proponent Response:	**Date:** 19/03/2014

1) The weblink is repaired and is accessible now. Additionally, IRRI has published a new edition of the Rice Almanac (2013) which does not contain information on agroecological zones anymore. Therefore, a clear statement that AEZ are based on the 3rd edition of the Rice Almanac is added.
2) A clear statement is added that the information is based on p.118, second paragraph of the 3rd edition of the Rice Almanac.
3) IPCC 2006 states that these are used if available.(See IPCCC 2006, volume 4, p. 5.48) As no such scaling factors are available, $SF_{s,r}$ is not included in the formula.
4) A clear reference to Volume 4: Agriculture, Forestry and Other Land Use, Section 5.5.2, p.5.51 is now added.

Documentation Provided as Evidence by Proponent:

Revised SB form

Information Verified by Lead Assessor:

The revised SB form (Version 1.0 dated 19/03/2014) has been checked for the revision made. It is noted that the version number of the SB form has been retained and the date has been revised to 19/03/2014.

Reasoning for not Acceptance or Acceptance and Close Out:	
1. Footnote 6 in the comment raised by the assessment team is now footnote 12 in the last submitted SB form. The weblink in footnote 12 is working. A statement mentioning that the AEZ is based on the 3rd edition of the Rice Almanac has been mentioned in foot note 12. The assessment team also confirms that the 4th edition of the Rice Almanac does not mention AEZ. Hence accepted and closed out. 2. Footnotes 6 and 8 in the comment raised by the assessment team is now footnotes 12 and 14 in the last submitted SB form. The information in both the footnotes is traceable. Hence accepted and closed out. 3. The PP has clarified that no such scaling factors are available and hence $SF_{s,r}$ is not included in the formula from IPCC 2006 mentioned on page 10 of the SB form. Hence accepted and closed out. 4. Footnote 14 in the comment raised by the assessment team is now footnote 21 in the last submitted SB form. The information in the footnote is traceable. Hence accepted and closed out.	
Acceptance and Close out by Lead Assessor: Closed	**Date:** 28/03/2014

Date:	12/02/2014		Raised by:	Assessment Team	
Type:	CL	Number:	#2	Reference:	SB form
Lead Assessor Comment:			**Date:** 12/02/2014		
1. Footnote 9 refers to information confirmed through interviews. Please clarify on the type of people interviewed, timeline of interview, details of interviewer and confirm if the people interviewed are representative for the whole of Philippines. 2. Except for the methane emission factor (page 10 and 11 of the standardized baseline form) sourced from the 1996 IPCC Guidelines for National Greenhouse Gas Inventories; all other default values used in the development of the Standardized baseline have been sourced from the recent most 2006 IPCC Guidelines for National Greenhouse Gas Inventories. Also, paragraph 2(c) of the methodology AMS III.AU Version 03.0 refers to the 2006 IPCC guidelines. Please clarify the appropriateness of the use of data from the 1996 IPCC guidelines. 3. Footnote 10 states that "*As stated in Yan X. et al. (2005), the IPCC (1996) emission factors did not distinguish the effects of preseason water statuses. Therefore, the scaling factors in Table 5.13 of IPCC 2006 are not applied*". Please elaborate further and clarify this statement. 4. The project emission factor calculations on page 14 of the standardized baseline form does not consider the scaling factor "SFp". Please clarify					

Proponent Response:	**Date:** 19/02/2014
1. The following clarification has been added to the draft standardized baseline: "Interviews were conducted with the Dr. Rainer Wassmann and Dr. Bjoern Sander from the International Rice Research Institute, Mr. Mario Padrinao from the Bureau of Agricultural Statistics, Eng. Envangeline Sibayan from PhilRice, Dr. Nadine Ledesma from De La Salle University and Bayer Philippines trainers. These are leading experts for rice cultivation in the Philippines and in consultation with the DNA were identified as the most relevant to provide inputs." 2. Both IPCC 1996 and IPCC 2006 approaches are equally valid as suggested by Yan et al. While IPCC 2006 establishes daily emission factors, IPCC 1996 uses seasonal factors. It is further noted that AMS-II.AU refers to both approaches, as the default emission factors already incorporated in AMS-III.AU. are based on IPCC 2006, while the rest of the methodology is developed based on the approach of IPCC 1996. It is emphasized that the proposed standardized baseline follows the approach in paragraphs 8 – 13 of AMS – III.AU. which is built on the IPCC 1996 approach. Therefore, default factors from IPCC 1996 (i.e. seasonal emission factors) are used. At the same time, IPCC 1996 does not provide scaling factors, and following the guidance for Tier 2 in IPCC 2006 (Vol. 4, p.5.51), the default scaling factors are used. 3. It is clarified that the statement refers to the scaling factor SF_p. The emission factors developed by Yan X et al. (2005) considered the effects of the pre-season water statuses. The default emission factors in IPCC 2006 are also developed taking that into consideration. At the same time, IPCC 1996 did not consider the effect of pre-season water status. In view of that, applying a scaling factor SF_p to the IPCC 1996 default factor which does not consider the prewater status would result in incorrect estimates, therefore, scaling is not applied. 4. See the response to 3 above.	
Documentation Provided as Evidence by Proponent:	
Revised SB form	
Information Verified by Lead Assessor:	
The revised SB form has been checked for the revision made. It is noted that the version number and the date of the revised SB form has not been changed. It retains Version 1.0 dated 27/01/2014.	
Reasoning for not Acceptance or Acceptance and Close Out:	
1. The above response gives reference to the particular people interviewed and the organization / institution they represent. The people interviewed have been identified as most relevant to provide inputs by the DNA of Philippines. Also, the public profiles of the people listed in the response above have been checked. Hence the assessment team is of the opinion that the people interviewed are appropriate and that it is representative for the whole of Philippines. 2. The above response has been reviewed and the reasoning for the usage of the seasonal emission factor from IPCC 1996 and scaling factors from IPCC 2006 is accepted. Please mention the same reasoning in the SB form for clarity and transparency. 3. The above response has been reviewed and the reasoning for not applying the scaling factor SF_p to the IPCC 1996 default emission factor is accepted. Hence closed out. 4. Closed out based on point 3 above. CL #2 open	
Acceptance and Close out by Lead Assessor: Open	**Date:** 06/03/2014
Proponent Response:	**Date:** 19/03/2014
2. The proponent changed the source of the data for the baseline to more recent available data based on consultations with Leandro Buendia and other stakeholders. Therefore, the required reasoning is not needed anymore.	
Documentation Provided as Evidence by Proponent:	
Revised SB form	

Information Verified by Lead Assessor:	
The revised SB form (Version 1.0 dated 19/03/2014) has been checked for the revision made. It is noted that the version number of the SB form has been retained and the date has been revised to 19/03/2014.	
Reasoning for not Acceptance or Acceptance and Close Out:	
The source for the emission factor EFc has been changed from the IPCC 1996 to the data that will be published in the Second National Communication to the UNFCCC. The data to be published in the SNC would be the latest available country specific credible data. The SB form also reflects that further research on the topic will result in updates to the standardized baseline. The SNC will be an update to data published in the IPCC 1996. Paragraph 31 of the "GUIDELINES FOR QUALITY ASSURANCE AND QUALITY CONTROL OF DATA USED IN THE ESTABLISHMENT OF STANDARDIZED BASELINES" Version 01.0 states that "QA procedures should be based on an approach for assessing the quality of the data management system rather than checking the accuracy of a specific set (or sets) of data. That is, the QA focuses on the system and procedures rather than on the outcomes." Hence the SNC is accepted as the source for the emission factor. In the calculation of project emission factor for the Wet Season, the value of EFc for the dry season has been used. Please check the formula in the cells K16 to K19, in the tab "Calculation Sheet" of the Emission Factor Calculation excel document and clarify if this is correct. In case of revisions in the values in the excel sheet, please make necessary revisions in the SB form in track change mode. CL #2 is open	
Acceptance and Close out by Lead Assessor: Open	**Date:** 28/03/2014
Proponent Response:	**Date:** 29/03/2014
The MS Excel calculation sheet is corrected as per the DOE comment.	
Documentation Provided as Evidence by Proponent:	
Revised SB form and excel sheet	
Information Verified by Lead Assessor:	
The revised SB form (Version 1.0 dated 29/03/2014) has been checked for the revision made. It is noted that the version number of the SB form has been retained and the date has been revised to 29/03/2014. In the submitted revised excel sheet the client has now added the following : Version 01.0 dated 29/03/2014	
Reasoning for not Acceptance or Acceptance and Close Out:	
In the calculation of project emission factor for the Wet Season, the correct value of EFc has now been used. The formula in the cells K16 to K19, in the tab "Calculation Sheet" of the Emission Factor Calculation excel document has been revised. The revised values are also reflected in the SB form. CL #2 closed out	
Acceptance and Close out by Lead Assessor: Closed	**Date:** 31/03/2014

Date:	12/02/2014		Raised by:	Assessment Team	
Type:	CAR	Number:	#3	Reference:	SB form

Lead Assessor Comment:	**Date:** 12/02/2014

Inconsistency / editorial

1. On page 9 of the form the notation used for the baseline emission factor is $EF_{B,s,g}$ which is inconsistent with the notation for the baseline emission factor in table 2 on page 7 of the methodology AMS III.A.U Version 03.0.
2. Please check the comments in the SB form for editorial corrections.

Proponent Response:	**Date:** 19/02/2014

1. It is clarified that $EF_{B,s,g}$ applied is taken from IPCC 2006. For avoidance of doubt, the notation is changed.
2. This has been corrected in the SB submission form.

Documentation Provided as Evidence by Proponent:

Revised SB form

Information Verified by Lead Assessor:

The revised SB form has been checked for the revision made. It is noted that the version number and the date of the revised SB form has not been changed. It retains Version 1.0 dated 27/01/2014.

Reasoning for not Acceptance or Acceptance and Close Out:

1. The notation $EF_{B,s,g}$ has been revised to $EF_{BL,s,g}$ to make it consistent with the methodology AMS III.A.U Version 03.0. The formula is now present on page 10 of the revised SB form. Hence closed.
2. All comments in the SB form for editorial corrections have been addressed. Hence closed.

CAR #3 closed out

Acceptance and Close out by Lead Assessor: Closed	**Date:** 06/03/2014