To Small Scale Working Group
CDM Executive Board

Date: 05 October 2014

Re: Request for Further Input on the PSB0019 Standardized Baseline for Methane Emissions from Rice Cultivation in the Republic of the Philippines

The CDM DNA of the Republic of the Philippines would like to thank the Small-Scale Working Group for reviewing our standardized baseline submission and giving us with the opportunity to provide further input. We are also glad that the Small-Scale Working Group and the CDM EB have initiated a top-down revision of AMS-III.AU. to reflect the approach proposed in our submission.

The SSC-WG has raised two issues that we would like to address below and provide further inputs as follows:

Issue 1: Determination of Emission Factor for Continuously Flooded Rice Fields

- *The results of the measurements shown in page 8 and 9 are not separated for two groups due to different water regime pre-season (i.e. single cropping vs double cropping). Please clarify the conditions under which the measurements have been carried out.*

As stated in Corton *et al*. (2000), p.38, *Field Site*, "The project site is fully irrigated and cropped twice in a year, one in the WS and another in the DS." Therefore, double cropping is practiced at all reference sites for the determination of the baseline emission factor for continuously flooded fields without organic amendment. It is further noticed, that the proposed approach from IPCC 2006, assumes that $EF_{BL,C}$ is based on fields with double cropping as all scaling factors related to the pre-season water regime, i.e. $SF_{BL,p}$ and $SF_{P,p}$ have the value of 1 for double cropping and value less than 1 for single cropping.

- *While it is said that "the measurements were done over nine cultivation seasons", all the results of the measurements are not summarized in the table in page 9. The table only gives the results of 8 seasons.*

In fact, values are reported for seven seasons during which there was at least one group of reference fields under treatment conditions T1-T4 where no organic amendments were used. In 1997, during both DS and WS, organic amendments were used at all reference fields, therefore, this data is not reported. Clarification is added to version 01.2 of the standardized baseline submission.

- *The results of chamber methods are also not shown in the document. Please clarify how many reference fields and how many chambers for each reference field were established;*

Corton et al. (2000) reports describes the measurement methods on p. 39-41 under *Experimental Layout and Treatment* and *Measurements*. The information is reproduced in the draft SB submission, version 1.02. There were three randomly selected reference fields for each group T1 – T4, or a total of twelve fields each season. A gas chamber was installed in each field thus meeting the requirements of AMS-III.AU.

- *The procedure proposed to determine baseline emission factor for continuously flooded transplanted rice fields* ***without organic amendments*** *is based on measurements derived from reference fields in Maligaya and Los Banos (Philippines) over nine seasons. The second table on page 9 of the submission summarizes the data, for the conditions T1, T2, T3 and T4. However, the paper of Corton et al (Methane emission from irrigated and intensively managed rice fields in Central Luzon (Philippines), Nutrient Cycling in Agroecosystems 58: 37–53, 2000), submitted as supporting material, describes the Treatments conditions during the experimental measurements (Table 2) with use of organic bio-organic fertilizers, chicken manure, rice straw compost, etc. as organic amendments. It is not clear whether the data in the second table on page 9 are the result of considering organic amendments or not.*

The data reported on page 9 contains **only** information on rice fields **where no organic amendments** were used. This can be confirmed against Table 2 of Corton et al. (2000).

- *Further, the same paper of Corton et al discuss in its abstract and in the section "mitigation strategies" some additional parameters that have been identified as influencing methane emissions, e.g. inorganic fertilizers. Please clarify how these have been considered when proposing the standardized baseline.*

Corton et al. (2000) discuss various mitigation strategies, including use of various fertilizer and intermittent wetting and drying. Field where intermittent drying and wetting or direct seeding was applying are excluded from the data. At the same time, the use of various combinations of inorganic fertilizers reflect the current practice in the Philippines or combinations that can lead to lower GHG emissions. Therefore, taking the average values of all fields where no organic amendments were used, but different combination of inorganic fertilizers were applied is conservative compared to the case where only the current practice is considered. This approach is also practical as there are currently no scaling factors developed to reflect the effects of the use of various inorganic fertilizers, neither in IPCC 2006, nor in AMS-III.AU.

Issue 2: Additionality

We agree with the proposed approach and have made amendments in PSB0019 (version 1.02) to reflect the recommendations provided.

We would like to thank you once again for the opportunity to provide further clarifications on our submission. We would be glad to address any further concerns and make the necessary amendment to our submission in order to facilitate the approval of the proposed standardized baseline.

I remain sincerely yours,

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