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|  <p align="center"><b>CDM: Form for submission of queries from DOEs to the Methodologies Panel regarding the application of approved methodologies (version 01)</b><br/> <i>(To be used by DOEs for presenting questions / proposals / amendments related to the applicability of approved methodology)</i></p>   |  |
| Name of the entity (DOE) submitting this form  | Ernst & Young et Associés  |
| Reference number and title of the approved methodologies   | AR-ACM0001 – version 3<br>Approved consolidated afforestation and reforestation baseline and monitoring methodology - "Afforestation and reforestation of degraded land" (Version 03)  |
| Title/Subject (give a short title or specify the subject of your submission, maximum 200 characters):  | <p>Methane emissions of biomass removed during the site preparation and burned outside the project boundary</p> <p>Does the methane emissions of biomass removed during the site preparation and burned outside the project boundary should be taken into account in the emissions "due to biomass burning of existing vegetation as part of site preparation"? Or should be considered as a leakage? Or should not be taken into account.</p> |
| Attach CDM-PDD example of project activity where applicability raises problem:   | <input checked="" type="checkbox"/> Yes, is attached.  |
| Date and signature for the DOE   | 11/01/2010   |
| <p><b>Submitted queries</b></p> <p>Please use the space below to substantiate the queries relating to the application of approved methodologies. If the questions are related to a project activity under development or implementation, please describe the context in which they arose. If you are proposing amendments to existing methodologies, please specify the text you want to change or introduce. If necessary, attach files or refer to sources of relevant information.</p> <p><b>If you have a question relating to the application of an approved methodology, please specify and provide reference to the exact project activity to which it applies.</b></p> <p>&gt;&gt; The project to which this submission refers is a plantation mainly composed by agroforestry stands (<i>Acacia</i> sp., <i>Eucalyptus</i> sp., <i>Pinus</i> sp., local and exotic species intercropped with cassava) (see PDD attached). During site preparation of these stands, ligneous biomass (including stumps) will be removed manually. The ligneous biomass removed will be burn in cassava dryers, used to process the cassava produced on the agroforestry stands.</p> <p>The subject of this query is the emissions of methane due to the existing biomass burned in the cassava dryers.</p> |  |



**If you propose an amendment to an approved methodology, please provide reasons.**

>> Section 5.2.1. of the approved methodology AR-ACM001-version 3 gives the following guidance concerning the estimation of non-CO<sub>2</sub> emissions due to biomass burning of existing vegetation as part of site preparation :

### **5.2.1 Estimation of non-CO<sub>2</sub> emissions due to biomass burning of existing vegetation as part of site preparation**

Considering the limited combustible material in degraded lands, fire is not likely to be a major source of GHG emissions in the site preparation. However, if significant, the non-CO<sub>2</sub> emissions due to biomass burning of existing woody vegetation<sup>12</sup> as part of site preparation ( $E_{BiomassBurn,t}$ ) shall be estimated using the relevant instructions provided by the most recent version of the methodological tool “Tool for estimation of emissions from clearing, burning and decay of existing vegetation due to implementation of a A/R CDM project activity”.

If prescribed burning is included in the forest management cycle, the same tool should be used to account for the non-CO<sub>2</sub> emissions arising from this practice.

The applicability conditions of the tool “Estimation of GHG emissions due to clearing, burning and decay of existing vegetation attributable to a CDM A/R project activity” version 03 includes :

**Step 2:** The tool provides a simplified default approach for estimating the increase in GHG emissions resulting from the clearance, burning and decay of existing vegetation due to site preparation and project implementation practices within the A/R CDM project boundary:

- **Increase in CO<sub>2</sub> emissions.** Project emissions may occur either as a result of clearance of existing live vegetation during site preparation (including by slash-and-burn practices) within the project boundary, and/or from decay of un-cleared existing live vegetation that dies as a result of competition from forest (or other vegetation) planted as part of the A/R project activity;
- **Increase in emissions of non-CO<sub>2</sub> greenhouse gases.** Project emissions will occur when existing live above-ground vegetation<sup>3</sup> within the project boundary is either partially or totally burned as part of site preparation,<sup>4</sup> resulting in emissions of methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O)—although N<sub>2</sub>O emissions are an insignificant proportion of total emissions from biomass burning and may be accounted as zero.

Is burning existing woody vegetation “*part of site preparation*” in the project previously described where the biomass removed during site preparation is burnt outside the project boundary?

**H1a: If yes,** the A/R Methodological Tool “Estimation of GHG emissions from clearing, burning and decay of existing vegetation due to implementation of a CDM A/R project activity” (Version 03) should be applied. The equation 4 shall be used. Which emission ratio (ER<sub>CH<sub>4</sub></sub>) should be used to calculate methane emission from existing biomass removed, since the IPCC default value suggested in the tool applies to open-air and not oven combustion?

**H1b: If no,** shall the methane emissions due to the burning of removed biomass in the cassava dryers be considered as leakage?

Section 6. of the approved methodology AR-AMC001-version 3 gives the following guidance concerning leakage:

## 6. Leakage

Under applicability conditions of this methodology the following types of leakage emissions are allowed: GHG emissions due to activity displacement and GHG emissions due to increase in use of wood posts for fencing.

Leakage shall be estimated as follows:

$$LK = LK_{ActivityDisplacement} \quad (31)$$

where:

$LK$  Total GHG emissions due to leakage; t CO<sub>2</sub>-e

$LK_{ActivityDisplacement}$  Leakage due to activity displacement; t CO<sub>2</sub>-e

Note: In this methodology the equation above is used to estimate leakage for the period of time elapsed between project start ( $t=1$ ) and the year  $t = t^*$ ,  $t^*$  being the year for which actual net greenhouse gas removals by sinks are estimated.

### 6.1 Estimation of leakage due to activity displacement

Leakage due to activity displacement ( $LK_{ActivityDisplacement}$ ) is estimated as follows:

$$LK_{ActivityDisplacement} = LK_{Conversion} \quad (32)$$

where:

$LK_{ActivityDisplacement}$  Leakage due to activity displacement; t CO<sub>2</sub>-e

$LK_{Conversion}$  Leakage due to conversion of land to grazing land; t CO<sub>2</sub>-e

The only types of leakage that are allowed by the methodology are leakage due to activity displacement, and particularly displacement of grazing activities.

Following this methodology, should we consider the methane emissions due to the burning of existing removed biomass in cassava dryers as a leakage?

**H2a. If yes**, which equation should be used?

**H2b. If no**, then it will be considered that methane emissions from existing biomass removed and burned in the cassava dryers should not be taken into account.



**In case you propose the amendment to the approved methodologies, please provide your draft below, if not included in an annex:**

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*Date of submission of contribution:*

**Information to be completed by the secretariat**

Date when the form was received at UNFCCC secretariat

Date of transmission to the Meth Panel and Executive Board