

 <p style="text-align: center;"><b>CDM: Proposed New A/R Methodology Expert Form – Lead Review (version 03)</b> (To be used by A/R methodology lead reviewer providing a desk review for a proposed new A/R methodology)</p>	
Name of expert responsible for completing and submitting this form	
Related F-CDM-AR-NM document ID number	
Title of the proposed new AR baseline and monitoring methodology	
<p><b>History of submission</b> (to be communicated to reviewers by UNFCCC Secretariat): (Note to reviewers: if the methodology is a resubmission, please read the previous version and associated AR WG recommendations). &gt;&gt;</p>	
<p>Note to reviewers: Please provide recommendations on the proposed new A/R baseline and monitoring methodologies based on an assessment of CDM-AR-NM and of its application in the draft CDM-AR-PDD and public inputs. Please ensure that the form is entirely filled and that arguments and expert judgments are substantiated.</p>	
<b>Evaluation of the proposed new A/R methodology by the Lead Reviewer:</b>	
<b>A. Changes needed to improve the new A/R methodology</b>	
<p>Outline the changes needed to improve the A/R baseline and monitoring methodology:  <b>Major required changes:</b>  &gt;&gt;  <b>Other required changes:</b>  &gt;&gt;</p>	
<b>B. General information on the submitted proposed new A/R methodology</b>	
<p><b>(1) Purpose of the new A/R baseline methodology (in one or few sentences).</b>  &gt;&gt; This methodology is designated for projects that ...</p>	
<p><b>(2) State whether the selected baseline approach is appropriate and if not why?</b>  &gt;&gt;</p>	
<p><b>(3) Suggested applicability conditions</b>  a) Please provide your assessment of the applicability conditions of the proposed new A/R methodology (e.g. project type, national and regional circumstances / policies, data and resource availability, environmental conditions, past land-use and land use changes, purpose of the activity and practices). If necessary, explain any changes that should be made to the applicability conditions.  &gt;&gt;  b) Please specify whether this methodology can be applied to other potential CDM A/R project</p>	

activities).

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c) Indicate whether an approved methodology exists for the same applicability conditions.

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#### **(4) Selected carbon pools and emission sources**

State whether the selection of carbon pools is appropriate in the context of the applicability conditions and the determination of actual net GHG removals by sinks and baseline net GHG removals by sinks. If not, explain the shortcomings and required changes. Note that the same carbon pools should be considered for the actual net GHG removals by sinks and baseline net GHG removals by sinks.

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State whether the selection of emissions by sources is appropriate taking into account the applicability conditions of the proposed AR methodology.

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#### **(5) Summary description of the main A/R baseline and monitoring methodological steps.**

Note to desk reviewers: this section should provide your stand-alone step-by-step summary description of the proposed new methodology. If relevant, note how the methodology builds on, complements, and / or provides an alternative to approved methodologies. The detailed explanation of the methodology is to be provided in the sections below. Suggested length: 1 page.

a) Baseline methodology. Short statements on how the proposed baseline A/R methodology: defines the project boundary, addresses ex-ante stratification, chooses the baseline scenario, demonstrates additionality, calculates ex-ante baseline net GHG removals by sinks, calculates ex-ante actual net GHG removal by sinks and calculates ex-ante leakage emissions.

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b) Monitoring methodology. Short statements on how the proposed methodology: monitors the implementation of the project activity, chooses the sampling design and conducts ex-post stratification, determines ex-post baseline net GHG removals by sinks (if required), calculates ex-post actual net GHG removals by sinks and calculates ex-post leakage emissions.

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#### **(6) Relationship with approved or pending A/R methodologies (if applicable).**

a) Does the proposed new A/R methodology include part(s) of an already-approved A/R methodology or an A/R methodology pending approval (see recent EB reports)? If so, please briefly note the relevant methodology reference numbers (AR-AMXXXX, AR-ACMXXXX or AR-NMXXXX), titles, and parts included.

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b) In particular, is the proposed new A/R methodology largely an amendment or extension of an approved A/R methodology? (i.e. the methodology largely consists of expanding an approved methodology to cover additional project contexts, applicability conditions, etc., and is thus largely comprised of text from an existing methodology).

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c) Please briefly note any significant differences or inconsistencies (baseline net GHG removals by sink calculations, leakage methods, and boundary definitions, etc.) between the proposed new A/R methodology and already-approved A/R methodology of similar scope.

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d) To avoid potential repetition, feel free to provide one comprehensive answer here that covers

question a) through c).

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## C. Details of the evaluation of the proposed new A/R methodology:

### I. Detailed recommendations on the proposed new A/R baseline methodology

*In respect of the proposed new A/R baseline methodology, evaluate each section of CDM-AR-NM. Please provide your comments section by section.*

#### (1) Project Boundary

Assess the methodological procedure to identify the physical delineation of the land areas included in the project boundary. Explain the shortcomings and list the required changes (if any).

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#### (2) Procedure for selection of the most plausible baseline scenario

a) State whether the methodology provides an appropriate stepwise approach for identifying various possible candidate baseline scenarios and a procedure for determining the most likely baseline scenario (taking into account paragraph 20 and 21 of the A/R modalities and procedures). Explain the shortcomings and list the required changes.

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b) State whether national and / or sectoral policies and circumstances are appropriately taken into account in the stepwise approach for selecting the baseline scenario. If not, explain the shortcomings and list the required changes.

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c) State whether the determination of baseline scenario is consistent with the applicability conditions of the methodology and if not, why?

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#### (3) Demonstration of additionality

a) Explain whether the methodology provides for an appropriate step-wise procedure for demonstration that the proposed A/R project activity is additional and therefore not the baseline scenario. Assess the appropriateness of this procedure, including the appropriateness of information to be presented in the resulting CDM-AR-PDD. Explain any shortcomings and list the required changes.

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b) State whether and how national and/or sectoral policies and circumstances are taken into account and whether this is appropriate. Explain any shortcomings and list the required changes.

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c) State whether the procedure to demonstrate additionality is consistent with the procedure to identify the most plausible baseline scenario. If not, explain the inconsistencies.

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#### (4) Estimation of baseline net GHG removals by sinks

a) State whether the methodology provides an ex-ante estimation of baseline net GHG removal by sinks. Explain whether the approach is appropriate and, if not, explain the shortcomings and list required changes.

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b) Provide an assessment of the appropriateness and correctness of the methodological

procedure to calculate baseline net GHG removals by sinks, including an assessment of:

(i) The choice of algorithms/formulae and/or models used and correctness of their application (e.g. mathematical deficiencies, inconsistencies in calculus of dimensions)

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(ii) The appropriateness (adequacy, consistency, accuracy and reliability) of the parameters provided by the methodology

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(iii) The appropriateness of procedures how project participants should select any parameters in cases where these are not provided in the methodology (e.g. from official statistics, expert judgment, proprietary data, IPCC Good Practice Guidance for LULUCF, commercial data and scientific literature)

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(iv) Any data gaps

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(v) **State** whether the procedure results in a conservative estimation of the sum of the changes in carbon stocks in the carbon pools within the project boundary that would have occurred in the absence of the proposed CDM A/R project activity, taking into account the **uncertainties** associated with **data** and parameters used. Assess whether the procedure can be carried out in an unambiguous way, replicated, and subjected to a validation and/or verification study. Explain the shortcomings and list the required changes.

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c) **State** whether the potential baseline scenarios derived through the procedure for selection of the most plausible baseline scenario are consistent with the procedures and formulae used to calculate the baseline net GHG removals by sinks. If not, explain the shortcomings and list the required changes.

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#### **(5) Ex-ante actual net anthropogenic GHG removals by sinks**

Provide an assessment of the appropriateness and mathematical correctness of the methodological procedure to calculate ex-ante actual net anthropogenic GHG removals by sinks. Explain any shortcomings and list the required changes.

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#### **(6) Leakage**

a) State and explain whether the choice which leakage emission sources are considered is appropriate. Indicate any important leakage emissions sources that have been neglected **in the context of the applicability conditions**.

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b) Provide an assessment of the appropriateness and mathematical correctness of the methodological procedure to calculate ex-ante leakage emissions. Explain any shortcomings and list the required changes.

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(Please note that even if the calculation of the leakage is to be performed ex post, the methodology should include the ex ante **leakage** estimate).

#### **(7) Ex ante net anthropogenic GHG removal by sinks**

Provide an assessment of the appropriateness and mathematical correctness of the methodological procedure to calculate ex-ante actual net anthropogenic GHG removals by sinks. Explain any shortcomings and list the required changes.

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State whether the methodology ensures that the net anthropogenic GHG removals by sinks are estimated in conservative manner, taking into account the uncertainties associated with the data and parameters used. If not explain the shortcomings and list the required changes.

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#### (8) Data needed for ex-ante estimations

State whether the compilation of data needed for ex-ante estimations of net anthropogenic GHG removals by sinks is complete, appropriate, and justified. Explain any shortcomings and list the required changes.

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#### (9) Other information

Assessment of the description and consistency of the methodology and its appropriateness for the proposed project activity

State whether the A/R baseline methodology has been described in an adequate and transparent manner. If not, explain the shortcomings and list the required changes.

&gt;&gt;

Any other comments:

a) State whether any other source of information (i.e. other than documentation on this proposed A/R baseline methodology available on the UNFCCC CDM web site) has been used by you in evaluating this A/R baseline methodology. If so, please provide specific references:

&gt;&gt;

b) Indicate any further comments:

&gt;&gt;

## II. Detailed recommendations on the proposed new A/R monitoring methodology

Evaluate each section of CDM-AR-NM. Please provide your comments section by section.

#### (1) Monitoring project implementation

Assess the appropriateness of the procedure to monitor and document the implementation of the project on land areas within project boundary. Explain any shortcomings and list the required changes.

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#### (2) Sampling design

Assess the appropriateness and correctness of the sampling design procedures for the ex-post calculation of actual net GHG removals by sinks and determination of the ex-post baseline net GHG removals by sinks (if required). The sampling design may, include determination of number of plots, and plot distribution, etc. Explain any shortcomings and list the required changes.

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#### (3) Determination of ex post baseline net GHG removals by sinks, if required

State, whether determination of ex post baseline net GHG removals by sinks is required.

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a) Provide an assessment of the appropriateness and correctness of the methodological procedure to calculate ex-post baseline net GHG removals by sinks, including an assessment of:

(i) The choice of algorithms/formulae used and correctness of their application (e.g. mathematical deficiencies, inconsistencies in calculus of dimensions)

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(ii) The appropriateness (adequacy, consistency, accuracy and reliability) of the parameters provided by the methodology

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(iii) The appropriateness of procedures how project participants should select any parameters in cases where these are not provided in the methodology (e.g. from official statistics, expert judgment, proprietary data, IPCC Good Practice Guidance for LULUCF, commercial data and scientific literature),

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(iv) Any data gaps

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(v) State whether the procedure results in a conservative estimation of the sum of the changes in carbon stocks in the carbon pools within the project boundary that would have occurred in the absence of the proposed CDM A/R project activity, taking into account the uncertainties associated with the data and parameters used. Assess whether the procedure can be carried out in an unambiguous way, replicated, and subjected to a validation and/or verification study. Explain any shortcomings and list the required changes.

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b) Assess the completeness and appropriateness of data compiled in the table (provided in the paragraph 4 in the Section III of the CDM-AR-NM form), including the appropriateness of the indicated data sources, monitoring frequency, measurements procedures, etc. Assess whether the frequency of recording reflects the dynamics of the processes that would determine the changes in carbon stocks within the project boundary in the absence of the project activity. Explain any shortcomings and list the required changes.

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#### (4) Calculation of ex post actual net GHG removal by sinks

a) Provide an assessment of the appropriateness and correctness of the methodological procedure to calculate ex-post actual net GHG removal by sinks, including an assessment of:

(i) The choice of algorithms/formulae used and correctness of their application (e.g. mathematical deficiencies, inconsistencies in calculus of dimensions).

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(ii) The appropriateness (adequacy, consistency, accuracy and reliability) of the parameters provided by the methodology

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(iii) The appropriateness of procedures how project participants should select any parameters in cases where these are not provided in the methodology (e.g. from official statistics, expert judgment, proprietary data, IPCC Good Practice Guidance for LULUCF, commercial data and scientific literature),

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(iv) Any data gaps

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(v) Assess whether the procedure does not increase the net anthropogenic GHG removals by sinks. Explain any shortcomings and list the required changes.

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b) Assess the completeness and appropriateness of data compiled in the table (provided in the

paragraph 6 in the Section III of the CDM-AR-NM form), including the appropriateness of the indicated data sources, monitoring frequency, measurements procedures, etc. Assess whether the frequency of recording reflect the dynamics of the processes that determine the emissions of GHG or the changes in carbon stocks within the project boundary. Explain any shortcomings and list the required changes.

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#### (5) Leakage

a) Provide an assessment of the appropriateness and correctness of the methodological procedure to calculate ex-post leakage, including an assessment of:

(i) The choice of algorithms/formulae used and correctness of their application (e.g. mathematical deficiencies, inconsistencies in calculus of dimensions).

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(ii) The appropriateness (adequacy, consistency, accuracy and reliability) of any parameters provided by the methodology

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(iii) The appropriateness of procedures how project participants should select any parameters in cases where these are not provided in the methodology (e.g. from official statistics, expert judgment, proprietary data, IPCC Good Practice Guidance for LULUCF, commercial data and scientific literature),

>>

(iv) Any data gaps

>>

(v) State, whether the procedure results in a conservative estimation of leakage effects. Assess whether the procedure can be carried out in an unambiguous way, replicated, and subjected to a validation and/or verification study. Explain any shortcomings and list the required changes.

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b) Assess the completeness and appropriateness of data compiled in the table (provided in the paragraph 8 in the Section III of the CDM-AR-NM form), including the appropriateness of the indicated data sources, monitoring frequency, measurements procedures, etc. Explain any shortcomings and list the required changes.

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#### (6) Ex post net anthropogenic GHG removal by sinks

State, whether the formulae provided to calculate ex-post net anthropogenic GHG removals by sinks for the project activities using ICERs or tCERs are consistent with the latest guidance provided by the CDM Executive Board, and if not evaluate the validity of the formulae.

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#### (7) Conservative approach and uncertainties

State, whether the methodology takes into account uncertainties by appropriate choice of monitoring methods, such as number of samples, to achieve reliable estimates of net anthropogenic greenhouse gas removals by sinks. State whether the methodology ensures that the net anthropogenic GHG removals by sinks are estimated in conservative manner, taking into account the uncertainties of the methodology. If not explain the shortcomings and list the required changes.

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**(8) Other information:**

*Assessment of the description and consistency of the methodology*

a) *State whether this proposed A/R monitoring methodology is compatible and consistent with the proposed A/R baseline methodology and if not what are the inconsistencies?*

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b) *State whether the A/R monitoring methodology has been described in an adequate and transparent manner. If not, explain the shortcomings and list the required changes.*

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c) *State whether any other source of information (i.e. other than documentation on this proposed A/R methodology available on the UNFCCC CDM web site) has been used by you in evaluating this methodology. If so, please provide specific references:*

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d) *Indicate any further comments:*

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Signature of desk reviewer: .....

Date: / /

**Information to be completed by the secretariat**

F-CDM-AR-Nmex_3d doc id number	
Date when the form was received at UNFCCC secretariat	
Date of transmission to the A/R Working Group and EB	
Date of posting in the UNFCCC CDM web site	