Draft amendment to the consolidated afforestation and reforestation baseline and monitoring methodology AR-ACM0001

"Afforestation and reforestation of degraded land"

(Version 05.1.0)

I. SOURCE, DEFINITIONS AND APPLICABILITY

1. Source

This methodology is based on elements from the following methodologies:

- AR-AM0003 "Afforestation and reforestation of degraded land through tree planting, assisted natural regeneration and control of animal grazing." The baseline study, monitoring and verification plan and project design document were prepared by the General Directorate for Forests and Pastures and the International Bank for Reconstruction and Development as Trustee of the BioCarbon Fund;
- AR-NM0032-rev "San Carlos" Grassland Restoration through Afforestation." The baseline study, monitoring and verification plan and project design document were prepared by Factor CO_2 Integral Services;
- AR-AM0006-rev "Afforestation/Reforestation with Trees Supported by Shrubs on Degraded Land." The baseline study, monitoring and verification plan and project design document were prepared by the Institute of Forest Ecology and Environment, the Chinese Academy of Forestry, China; University of Tuscia, Italy; and others.

For more information regarding the source methodologies and their consideration by the CDM Executive Board (the Board) please refer to <http://cdm.unfccc.int/goto/ARappmeth>.

This methodology also refers to the latest approved versions of the following tools, procedures, guidelines and guidances:

- Procedures to demonstrate the eligibility of lands for afforestation and reforestation CDM project activities;
- Guidance on application of the definition of the project boundary to A/R CDM project activities;
- Guidelines on conservative choice and application of default data in estimation of the net anthropogenic GHG removals by sinks;
- Tool for the identification of degraded or degrading lands for consideration in implementing A/R CDM project activities;
- Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities;
- Tool for testing significance of GHG emissions in A/R CDM project activities;
- Estimation of non-CO_2 GHG emissions resulting from burning of biomass attributable to an A/R CDM project activity;

- Estimation of the increase in GHG emissions attributable to displacement of pre-project agricultural activities in A/R CDM project activity;
- Tool for estimation of change in soil organic carbon stocks due to the implementation of A/R CDM project activities;
- Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities;
- Estimation of carbon stocks and change in carbon stocks in dead wood and litter in A/R CDM project activities.

All the above-mentioned tools, procedures, guidelines and guidances are available at: <http://cdm.unfccc.int/Reference/tools> and <http://cdm.unfccc.int/Reference/Procedures/index.html>.

2. Selected baseline approach from paragraph 22 of the A/R CDM modalities and procedures

The project participants (PPs) shall select from among the following approaches the one deemed most appropriate for the project activity:

(a) "Existing or historical, as applicable, changes in carbon stocks in the carbon pools within the project boundary;"

(b) "Changes in carbon stocks in the carbon pools within the project boundary from a land use that represents an economically attractive course of action, taking into account barriers to investment;"

(c) "Changes in carbon stocks in the pools within the project boundary from the most likely land use at the time the project starts."

3. Definitions

This methodology does not use any methodology specific definitions.

4. Applicability

This methodology is applicable to afforestation and reforestation CDM project activities that are implemented on degraded lands.

The conditions under which the methodology is applicable are:

(a) The A/R CDM project activity is implemented on degraded lands, which are expected to remain degraded or to continue to degrade in the absence of the project, hence the land cannot be expected to revert to a non-degraded state without human intervention;

(b) If at least a part of the project activity is implemented on organic soils, drainage of these soils is not allowed and not more than 10% of their area may be disturbed as result of soil preparation for planting;

(c) The land does not fall into wetland[1] category.

[1] "Wetlands", "settlements", "cropland" and "grassland" are land categories as defined in the *Good Practice Guidance for Land Use, Land-use Change and Forestry* (IPCC, 2003).

If the PPs choose to account for changes in carbon stock in soil organic carbon (SOC) pool in the project scenario, then in addition to the above the following conditions apply:

(d) Litter shall remain on site and not be removed in the A/R CDM project activity; and

(e) Ploughing/ripping/scarification attributable to the A/R CDM project activity, if any, is:

(i) Done in accordance with appropriate soil conservation practices, e.g. follows the land contour; and

(ii) Limited to the first five years from the year of initial site preparation; and

(iii) Not repeated, if at all, within a period of 20 years.

The latest version of the tool "Tool for the identification of degraded or degrading lands for consideration in implementing A/R CDM project activities" shall be applied for demonstrating that lands are degraded or degrading.

II. BASELINE METHODOLOGY PROCEDURE

1. Project boundary and eligibility of land

The "project boundary" geographically delineates the afforestation or reforestation project activity under the control of the PPs. The A/R CDM project activity may contain more than one discrete area of land. Each discrete area of land shall have a unique geographical identification.

It shall be demonstrated that each discrete area of land to be included in the boundary is eligible for an A/R CDM project activity. PPs shall apply the "Procedures to demonstrate the eligibility of lands for afforestation and reforestation CDM project activities" as approved by the Board.

The latest version of the "Guidance on application of the definition of the project boundary to A/R CDM project activities" may be applied in identification of areas of land planned for an A/R CDM project activity.

The carbon pools included in or excluded from accounting are shown in Table 1.

Table 1: Carbon pools accounted for in the project boundary

Carbon pools	Accounted for	Justification/Explanation
Above-ground biomass	Yes	Major carbon pool subjected to project activity
Below-ground biomass	Yes	Below-ground biomass stock is expected to increase due to the implementation of the A/R CDM project activity

Carbon pools	Accounted for	Justification/Explanation
Dead wood	Yes (alternatively No)	This stock may change (when compared to baseline) due to implementation of the project activity. The methodology provides an approach for accounting for this pool, but it also allows for exclusion of the dead wood carbon pool if transparent and verifiable information can be provided that carbon stocks in dead wood in the baseline scenario can be expected to decrease more or increase less, relative to the project scenario
Litter	Yes (alternatively No)	This stock may change (when compared to baseline) due to implementation of the project activity. The methodology provides an approach for accounting for this pool, but it also allows for exclusion of the litter carbon pool if transparent and verifiable information can be provided that carbon stocks in litter in the baseline scenario can be expected to decrease more or increase less, relative to the project scenario
Soil organic carbon (SOC)	Yes (alternatively No, if project is implemented on organic soils or if ploughing/ripping/scarification attributable to the A/R CDM project activity continues beyond the initial five-year period)	Under the applicability conditions of this methodology, carbon stock in this pool is likely to increase in project compared to the baseline. However, the methodology also provides the conservative choice of not accounting for changes in carbon stock in the pool

The emission sources and associated GHGs included in or excluded from accounting are shown in Table 2. Any one of these sources can be neglected, i.e. accounted as zero, if the application of the most recent version of the tool "Tool for testing significance of GHG emissions in A/R CDM project activities" leads to the conclusion that the emission source is insignificant.

Table 2: Emission sources and GHGs included in or excluded from accounting

Sources	Gas	Included/ excluded	Justification/Explanation
Burning of woody biomass	CO_2	Excluded	Carbon stock decreases due to burning are accounted as a change in carbon stock
	CH_4	Included	Burning of woody biomass for the purpose of site preparation or as part of forest management can lead to significant levels of emissions of methane
	N_2O	Included	Burning of woody biomass for the purpose of site preparation or as part of forest management can lead to significant levels of emissions of nitrous oxide

2. Identification of the baseline scenario and demonstration of additionality

PPs shall use the most recent version of the tool "Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities".

3. Stratification

If the project activity area is not homogeneous, stratification should be carried out to improve the accuracy and precision of biomass estimates. Different stratifications may be required for the baseline and project scenarios in order to achieve optimal accuracy of the estimates of net GHG removal by sinks. For estimation of baseline net GHG removals by sinks, or estimation of actual net GHG removals by sinks, strata should be defined on the basis of parameters that are key entry variables in any method (e.g. growth models or yield curves/tables) used to estimate changes in biomass stocks. Thus:

- **For baseline net GHG removals by sinks.** It will usually be sufficient to stratify according to area of major vegetation types because baseline removals for degraded (or degrading) land are expected to be small in comparison to project removals;

- **For actual net GHG removals by sinks.** The stratification for *ex ante* estimations shall be based on the project planting/management plan. The stratification for *ex post* estimations shall be based on the actual implementation of the project planting/management plan. If natural or anthropogenic impacts (e.g. local fires) or other factors (e.g. soil type) add variability to the growth pattern of the biomass in the project area, then the *ex post* stratification shall be revised accordingly.

PPs may use remotely sensed data acquired close to the time of project commencement and/or the occurrence of natural or anthropogenic impacts for *ex ante* and *ex post* stratification.

PPs should treat the part of the project area which contains organic soils, if any, as a separate stratum and ensure that applicability condition 4 (b) of this methodology is met in this stratum.

4. Baseline net GHG removals by sinks

The baseline net GHG removals by sinks is the sum of the changes in carbon stocks in the selected carbon pools within the project boundary that would have occurred in the absence of the A/R CDM project activity.

Under the applicability conditions of this methodology:

- Changes in carbon stock of above-ground and below-ground biomass of non-tree vegetation may be conservatively assumed to be zero for all strata in the baseline scenario;

- It is expected that the baseline dead wood and litter carbon pools will not show a permanent net increase. It is therefore conservative to assume that the sum of the changes in the carbon stocks of dead wood and litter carbon pools is zero for all strata in the baseline scenario;

- Since carbon stock in SOC is unlikely to increase in the baseline, the change in carbon stock in SOC may be conservatively assumed to be zero for all strata in the baseline scenario.

Therefore the baseline net GHG removals by sinks will be determined as:

$$\Delta C_{BSL} = \sum_{t=1}^{t^*} \Delta C_{TREE\_BSL,t} \quad \textbf{(1)}$$

where:

ΔC_{BSL}	Baseline net GHG removals by sinks; t CO_2-e
$\Delta C_{TREE\_BSL,t}$	Change in carbon stock in tree biomass in baseline within the project boundary in year *t*, as estimated in the tool "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities"; t CO_2-e
t	*1, 2, 3, ... t** years elapsed since the start of the A/R CDM project activity

4.1 Carbon stock in living trees at the start of the project activity

Carbon stock in living trees at the start of the project activity, C_{TREE_BSL}, is estimated as provided in the tool "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities."

4.2 Steady state under the baseline conditions

The baseline net GHG removals by sinks, if greater than zero, shall be estimated using the approach provided in Section 4.1 until steady state is reached under the baseline conditions. Under steady state:

$$\Delta C_{BSL} = 0 \quad \textbf{(2)}$$

PPs may, on a project specific basis, assess when a steady state is reached during the crediting period. This shall be estimated on the basis of transparent and verifiable information originating as appropriate from available literature, data from comparable areas, from field measurements in the planned project area, or from other sources relevant to the baseline circumstances. If no data is available, a default period of 20 years since the commencement of the CDM project activity will be applied.

5. Actual net GHG removals by sinks

Under the applicability conditions of this methodology:

- Changes in carbon stock of above-ground and below-ground biomass of non-tree vegetation may be conservatively assumed to be zero for all strata in the project scenario.

The actual net GHG removals by sinks shall be estimated using the equations in this section. When applying these equations for the *ex ante* calculation of actual net GHG removals by sinks, PPs shall provide estimates of the values of those parameters that are not available before the start of the project. PPs should retain a conservative approach in making these estimates.

The actual net GHG removals by sinks shall be calculated as:

$$\Delta C_{ACTUAL} = \Delta C_P - GHG_E \quad \textbf{(3)}$$

where:

ΔC_{ACTUAL}	Actual net GHG removals by sinks; t CO_2-e
ΔC_P	Sum of the changes the carbon stock in the selected carbon pools within the project boundary; t CO_2-e
GHG_E	Increase in non-CO_2 GHG emissions within the project boundary as a result of the implementation of the A/R CDM project activity; t CO_2-e

5.1 Estimation of changes in the carbon stocks

The verifiable changes in the carbon stock in the selected carbon pools within the project boundary are estimated using the following equation:[2]

$$\Delta C_P = \sum_{t=1}^{t^*} \Delta C_t \quad \textbf{(4)}$$

where:

ΔC_P	Sum of the changes in carbon stock in all selected carbon pools in stratum *i,* since the start of the project; t CO_2-e
ΔC_t	Change in carbon stock in all selected carbon pools, in year *t*; t CO_2-e
t	*1, 2, 3, ... t** years elapsed since the start of the A/R project activity; yr
44/12	Ratio of molecular weights of CO_2 and carbon; dimensionless

Change in carbon stock in all selected carbon pools, in year *t*, is calculated as:

$$\Delta C_t = \Delta C_{TREE\_PROJ,t} + \Delta C_{DW\_PROJ,t} + \Delta C_{LI\_PROJ,t} + \Delta C_{SOC\_AL,t} \quad \textbf{(5)}$$

where:

ΔC_t	Change in carbon stock in all selected carbon pools in the project scenario, in year *t*; t CO_2-e
$\Delta C_{TREE\_PROJ,t}$	Change in carbon stock in tree biomass in project, in year *t*, as estimated in the tool "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities"; t CO_2-e
$\Delta C_{DW\_PROJ,t}$	Change in carbon stock in dead wood biomass in project, in year *t*, as estimated in the tool "Estimation of carbon stocks and change in carbon stocks in dead wood and litter in A/R CDM project activities"; t CO_2-e
$\Delta C_{LI\_PROJ,t}$	Change in carbon stock in litter biomass in project, in year *t*, as estimated in the tool "Estimation of carbon stocks and change in carbon stocks in dead wood and litter in A/R CDM project activities"; t CO_2-e

[2] IPCC GPG-LULUCF 2003, Equation 3.2.3.

$\Delta C_{SOC\_AL,t}$	Change in carbon stock in SOC in project, in year *t*, in areas of land meeting the applicability conditions of the tool "Tool for estimation of change in soil organic carbon stocks due to the implementation of A/R CDM project activities", as estimated in the same tool; t CO_2-e
t	*1, 2, 3, ... t** years elapsed since the start of the A/R CDM project activity

5.2 Estimation of GHG emissions within the project boundary

The increase in GHG emissions as a result of the implementation of the proposed A/R CDM project activity within the project boundary can be estimated as:

$$GHG_E = \sum_{t=1}^{t^*} GHG_{E,t} \quad (6)$$

where:

GHG_E	Increase in GHG emissions as a result of the implementation of the proposed A/R CDM project activity within the project boundary; t CO_2-e
$GHG_{E,t}$	Increase in non-CO_2 emissions due to burning of biomass of existing vegetation as part of site preparation in year *t*, as estimated in the tool "Estimation of non-CO_2 GHG emissions resulting from burning of biomass attributable to an A/R CDM project activity"; t CO_2-e
t	*1, 2, 3, ... t** years elapsed since the start of the A/R CDM project activity

6. Leakage

Under applicability conditions of this methodology the following types of leakage emissions can occur: GHG emissions due to activity displacement, the activity displaced being agricultural activities. Therefore, leakage is estimated as follows:

$$LK = \sum_{t=1}^{t^*} LK_{AGRIC,t} \quad (7)$$

where:

LK	Total GHG emissions due to leakage; t CO_2-e
$LK_{AGRIC,t}$	Leakage due to the displacement of agricultural activities in year *t*, as calculated in the tool "Estimation of the increase in GHG emissions attributable to displacement of pre-project agricultural activities in A/R CDM project activity"; t CO_2-e

7. Net anthropogenic GHG removals by sinks

The net anthropogenic GHG removals by sinks is the actual net GHG removals by sinks minus the baseline net GHG removals by sinks minus leakage, therefore, the following general formula can be used to calculate the net anthropogenic GHG removals by sinks of an A/R CDM project activity (C_{AR-CDM}), in t CO_2-e.

$$C_{AR-CDM} = \Delta C_{ACTUAL} - \Delta C_{BSL} - LK \quad (8)$$

where:

C_{AR-CDM}	Net anthropogenic GHG removals by sinks; t CO_2-e
ΔC_{ACTUAL}	Actual net GHG removals by sinks; t CO_2-e
ΔC_{BSL}	Baseline net GHG removals by sinks; t CO_2-e
LK	Total GHG emissions due to leakage; t CO_2-e

7.1 Calculation of tCERs and lCERs

To estimate the CERs at time $t^* = t_2$ (the date of verification) for the monitoring period $T = t_2 - t_1$, this methodology uses the most recent version of the equations approved by the Board,[3] which produces the same estimates as the following:

$$tCERs = C_{AR-CDM,t_2} \quad \textbf{(9)}$$

$$lCERs = C_{AR-CDM,t_2} - C_{AR-CDM,t_1} \quad \textbf{(10)}$$

where:

$tCERs$	Number of units of temporary Certified Emission Reductions
$lCERs$	Number of units of long-term Certified Emission Reductions
C_{AR-CDM,t_2}	Net anthropogenic GHG removals by sinks, as estimated for $t^* = t_2$; t CO_2-e
C_{AR-CDM,t_1}	Net anthropogenic GHG removals by sinks, as estimated for $t^* = t_1$; t CO_2-e

III. MONITORING METHODOLOGY

All data collected as part of monitoring should be archived electronically and be kept at least for two years after the end of the last crediting period. One hundred percent of the data should be monitored if not indicated otherwise in the tables below. All measurements should be conducted according to relevant standards. In addition, the monitoring provisions in the tools referred to in this methodology apply.

1. Monitoring of project implementation

Information shall be provided, and recorded in the project design document (PDD), to establish that commonly accepted principles of forest inventory and management in the host country are implemented. In the absence of these, standard operating procedures (SOPs) and quality control/quality assurance (QA/QC) procedures for inventory operations, including field data collection and data management, shall be identified, recorded and applied. Use or adaptation of SOPs available from published handbooks, or from the *IPCC GPG LULUCF 2003*, is recommended.

[3] See <http://cdm.unfccc.int/Reference/Guidclarif/>.

2. Sampling design and stratification

Stratification of the project area into relatively homogeneous units can either increase the measuring precision without increasing the cost unduly, or reduce the cost without reducing measuring precision because of the lower variance within each homogeneous unit. PPs should present in the AR-CDM-PDD an *ex ante* stratification of the project area or justify the lack of it. The number and boundaries of the strata defined *ex ante* may change during the crediting period (*ex post*).

2.1 Updating of strata

The *ex post* stratification shall be updated because of the following reasons:

- Unexpected disturbances occurring during the crediting period (e.g. due to fire, pests or disease outbreaks), affecting differently various parts of an originally homogeneous stratum;
- Forest management activities (cleaning, planting, thinning, harvesting, coppicing, re-replanting) that are implemented in a way that affects the existing stratification.

Established strata may be merged if reasons for their establishing have disappeared.

2.2 Precision requirements

Maximum allowable relative margin of error of the mean for estimation of tree biomass is ± 10% at 90% confidence level.

2.3 Data requirements under the methodology

Table 3 provides a list of the data and parameters that are required in order to apply this methodology. PPs should refer to the tools used in this methodology for full description of the data and parameters. For *ex ante* calculation of net anthropogenic GHG removals by sinks, PPs shall provide transparent estimations for the parameters that are monitored during the crediting period. These estimations shall be based on existing published data where possible, using a conservative approach.

Table 3: Data and parameters required under the methodology

Data/Parameter	Description	Unit
A. Data and parameters to be obtained from existing sources		
$BEF_{2,j}$	Biomass expansion factor for conversion of stem biomass to above-ground biomass for tree species or group of species *j*	Dimensionless
BDR_{SF}	Ratio of biomass per unit area in land having a shrub crown cover of 1.0 and default above-ground biomass content in forest in the region/country where the A/R CDM project is located	Dimensionless

Data/Parameter	Description	Unit
B_{FOREST}	Default above-ground biomass content in forest in the region/country where the A/R CDM project is located	t d.m. ha^{-1}
ΔB_{FOREST}	Default average annual increment in above-ground biomass in forest in the region/country where the A/R CDM project is located	t d.m. ha^{-1} yr^{-1}
D_j	Basic wood density for species or group of species *j*	t d.m. m^{-3}
R_j	Root-shoot ratio for species or group of species *j*	Dimensionless
R_S	Root-shoot ratio for shrubs	Dimensionless
$f_j(DBH, H)$	Allometric function for species or group of species *j* linking a tree diameter (e.g. diameter at breast height), and possibly tree height (*H*), to above-ground biomass of living trees	t d.m. $tree^{-1}$
$V_{TREE,j}$	Stem volume of trees of species or group of species *j* for trees of given age/diameter/height	m^3
B. Data and parameters to be obtained from measurement		
A_i	(a) Area of tree biomass stratum *i*; (b) Area of SOC stratum *i* of the land meeting the applicability conditions of the SOC tool	ha
$A_{SHRUB,i}$	Area of shrub crown cover stratum *i*	ha
$A_{p,i}$	Total area of sample plots in tree biomass stratum *i*	ha
$CC_{SHRUB,i}$	Crown cover of shrubs in lands within the project boundary	fraction
$CC_{TREE\_BSL,i}$	Crown cover of trees in the baseline, in baseline stratum *i*, expressed as a fraction	Dimensionless
DBH	Tree diameter	cm
H	Tree height	m

Data/Parameter	Description	Unit
$B_{LI\_WET,p,i}$	Wet weight of the composite litter sample collected from plot *p* of stratum *i*	kg
D_n	Diameter of the n^{th} piece of lying dead wood intersecting a transect line	cm

All the data and parameters obtained from measurement shall be monitored every five years from the date of the initial verification.

3. Conservative approach and uncertainties

While applying this methodology the PPs shall ensure that "Guidelines on conservative choice and application of default data in estimation of the net anthropogenic GHG removals by sinks" are followed for addressing uncertainty.

In choosing key parameters or making important assumptions based on information that is not specific to the project circumstances, such as in use of default data, PPs should select values that will lead to an accurate estimation of net GHG removals by sinks, taking into account uncertainties. If uncertainty is significant, PPs should choose data such that it tends to under-estimate, rather than over-estimate, net GHG removals by sinks.

IV. REFERENCES AND ANY OTHER INFORMATION

IPCC, 2006. *2006 IPCC Guidelines for National Greenhouse Gas Inventories,* Prepared by the National Greenhouse Gas Inventories Programme, Eggleston H.S., Buendia L., Miwa K., Ngara T. and Tanabe K. (eds). Published: IGES, Japan.
URL: http://www.ipcc-nggip.iges.or.jp/public/2006gl/index.html

IPCC, 2003. *Good Practice Guidance for Land Use, Land-Use Change and Forestry*, Prepared by the National Greenhouse Gas Inventories Programme, Jim Penman, Michael Gytarsky, Taka Hiraishi, Thelma Krug, Dina Kruger, Riitta Pipatti, Leandro Buendia, Kyoko Miwa, Todd Ngara (eds). Published: IGES, Japan.
URL: http://www.ipcc-nggip.iges.or.jp/public/gpglulucf/gpglulucf.html

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History of the document

Version	Date	Nature of revision(s)
05.1.0	EB 60, Annex # 15 April 2010	The amendment includes the following main changes: (i) Applicability conditions of the methodology have been re-written so that the restriction on ploughing of land applies only if the project participants wish to opt for credits from carbon stock changes in the SOC pool; (ii) The methodology now uses the tools "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities" and "Estimation of carbon stocks and change in carbon stocks in dead wood and litter in A/R CDM project activities", so that the corresponding text dealing with estimation of changes in these pools has been deleted; (iii) All three approaches to baseline under para 22 of annex to decision 5/CMP.1 are now included under the methodology; and (iv) Emission of nitrous oxide is accounted for when biomass is burnt. Due to the overall modification of the document, no highlights of the changes are provided.
05	EB 56, Annex 12 17 September 2010	The revision: (i) Broadens the applicability of the methodology by allowing more than 10% of project area to be ploughed in the project scenario; (ii) Allows use of the "Tool for estimation of change in soil organic carbon stocks due to the implementation of CDM A/R project activities"; (iii) Introduces simplified methods for estimation of initial biomass in living trees in the baseline; (iv) Inserts a note at the end of the section 5.1.1 explicitly stating how the biomass in baseline is to be accounted; and (v) Streamlines the general presentation of the methodology with the recently approved methodologies. Due to the overall modification of the document, no highlights of the changes are provided.
04	EB 53, Annex 12 26 March 2010	To correct editorial misprints in text and equations and improve the language. To delete a variable (Soil organic carbon of the sample in plot *p* in stratum *i*, time *t*) that is no longer used in the methodology.
03	EB 46, Annex 14 25 March 2009	To apply the guidance provided in para 37, EB 44 meeting report regarding accounting of GHG emissions in A/R CDM project activities, from the following sources: (i) fossil fuel combustion in A/R CDM project activities, (ii) collection of wood from non-renewable sources to be used for fencing of the project area, and (iii) nitrous oxide (N_2O) emissions from decomposition of litter and fine roots from N-fixing trees. The Board agreed that emissions from these sources may be considered as insignificant. An approach allowing for estimation of default changes in soil organic carbon was added.
02	EB 42, para 35 26 September 2008	Revisions mainly in the following sections: *5.2 Estimation of GHG emissions within the project boundary,* *6.1 Leakage* To apply the guidance provided in para 35, EB 42 meeting report regarding accounting of GHG emissions in A/R CDM project activities, from the following sources (i) fertilizer application, (ii) removal of herbaceous vegetation, and (iii) transportation. The Board agreed that emissions from these sources may be considered as insignificant.
01	EB 38, Annex 7 14 March 2008	Initial adoption.
Decision Class: Regulatory **Document Type**: Standard **Business Function**: Methodology		