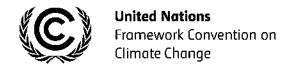CLEAN DEVELOPMENT MECHANISM

**CDM-EB70-A10-GUID**

# Guideline

# Establishment of standardized baselines for afforestation and reforestation project activities under the CDM

Version 01.0

**United Nations**
Framework Convention on
Climate Change

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# 1.  Introduction

1.  The present guideline provides a framework for development of standardized baselines, including demonstration of additionality and demonstration of land eligibility, for afforestation and reforestation (A/R) clean development mechanism (CDM) project activities.

# 2.  Scope, applicability, and entry into force

## 2.1.  Scope

2.  This guideline is not exhaustive. Project participants and other stakeholders may propose revisions that further expand the applicability of this guideline (e.g. by proposing the inclusion of additional criteria in the appendix), or propose other approaches.

## 2.2.  Applicability

3.  This guideline is applicable to A/R CDM project activities only.

## 2.3.  Entry into force

4.  This guideline shall enter into force with effect from their publication.

# 3.  Normative references

5.  This guideline require the application of the following approved CDM documents:

    (a)  "Guidelines for quality assurance and quality control of data used in the establishment of standardized baselines";

    (b)  "Procedure for submission and consideration of standardized baselines".

# 4.  Definitions

6.  The definitions contained in the "Glossary of CDM terms" shall apply.

7.  For the purpose of this guideline, a standardized baseline for A/R CDM project activities:

    (a)  Is established for a geographic region entirely located within a host Party country or extending across a group of host Party countries;

    (b)  Provides one or more approaches for determination of the baseline scenario;

    (c)  Provides one or more approaches for demonstration of additionality of proposed A/R project activities;

    (d)  Optionally, provides one or more approaches for: (i) estimation of baseline carbon stocks and baseline net greenhouse gas (GHG) removals by sinks in the above-ground carbon pool; and/or (ii) demonstration of eligibility of land.

## 5. Developing standardized baselines for A/R CDM project activities

### 5.1. Criteria for identification of land types and/or land uses

8. Criteria are selected for identification of land types and/or land uses and socio-economic conditions in which afforestation or reforestation project activities are unlikely to be implemented without the financial incentives of the CDM. Developers of proposed standardized baselines may:

    (a) Use the default criteria contained in the appendix of these guidelines; or

    (b) Propose different criteria along with justification based on transparent and verifiable information.

### 5.2. Identification of areas of land

9. Areas of land in which the proposed standardized baselines are to be applied are identified and delineated as lands meeting one or more of the criteria selected under paragraph 7. Such delineation includes lists of geo-coordinates (e.g. latitudes and longitudes) allowing unique identification of the areas. Developers of proposed standardized baselines should demonstrate, on the basis of transparent and verifiable information, that the criteria selected apply to the identified areas of land.

    (a) Example: existing precipitation maps may be used for delineation of areas of land as dryland areas to which criterion A.1 (ii) of the appendix applies.

### 5.3. Identification of the baseline land-use scenario

10. The baseline land-use scenario of an A/R project activity implemented in areas of land in which the proposed standardized baselines are to be applied is deemed to be the same as the pre-project land-use scenario, provided that:

    (a) The pre-project land-use scenario is in accordance with the mandatory applicable legal and regulatory land-use requirements, in effect in the host Party country, for tree planting or establishment of tree/shrub vegetation in the lands contained within the boundary of the A/R CDM project activity, or an examination of the current practice in the region in which mandatory laws or regulations requiring tree planting or establishment of tree/shrub vegetation apply reveals that those applicable mandatory legal or regulatory requirements are systematically not enforced and that non-compliance of those requirements is widespread;

    (b) No more than 20 per cent of the areas of lands in the geographic region for which the proposed standardized baselines are established have been afforested or reforested during the 20 years preceding the date of submission of the standardized baselines for approval by the Board. If the geographic region for which standardised baseline is established is a part of the host country (and not entire country), the developers of proposed standardized baselines shall provide justification, based on transparent and verifiable information, on why the area is sufficient for the purpose of analysing the practice of afforesting or reforesting identified areas of land over or below the extent of 20 per cent.

11. The standardized baselines shall not apply to an A/R project activity implemented in areas of land not meeting the requirements specified under paragraph 10.

## 5.4. Demonstration of additionality

12. An A/R project activity implemented in areas of land identified for approved standardized baselines is deemed to be additional.

## 5.5. Standardized estimation of baseline carbon stocks and GHG removals

13. Proposed standardized baselines may, depending upon availability of data, include estimated values of baseline carbon stocks and baseline net GHG removals by sinks in the above-ground and below-ground carbon pools, on a per hectare basis. Proposed values may be reported by strata within the identified areas of land. Where the values are based on sample-based estimation, the associated uncertainty estimated at a 90 per cent confidence level should not be more than 10 per cent. Where the uncertainty is larger than 10 per cent, the values must be demonstrated to be conservative estimates.

14. Tree planting or the establishment of tree/shrub vegetation to the extent required by mandatory applicable legal and regulatory requirements should be reflected in the estimated values of baseline carbon stocks and baseline net GHG removals by sinks in the above-ground and below-ground carbon pools.

## 5.6. Demonstration of land eligibility

15. Proposed standardized baselines may, depending upon the availability of data:

(a) Provide one or more approaches for demonstrating that the identified areas of land are eligible for afforestation or reforestation project activities under the CDM according to the criteria defined under paragraph 1 of the annex to decision 16/CMP.1; or

(b) Provide confirmation that the areas of lands are eligible for afforestation or reforestation project activities under the CDM according to the criteria defined under paragraph 1 of the annex to decision 16/CMP.1.

# 6. Submitting proposals for standardized baselines

16. Proposals for standardized baselines under these guidelines should be submitted through the designated national authorities (DNAs) of host Party countries within which the identified areas of land are located.

17. While developing proposals for standardized baselines under these guidelines, the developers should follow, mutatis mutandis, the latest version of the "Guidelines for quality assurance and quality control of data used in the establishment of standardized baselines".

18. While submitting proposals for standardized baselines under these guidelines, the DNAs should follow, mutatis mutandis, the latest version of the "Procedure for submission and consideration of standardized baselines".

# Appendix. Land types and/or land uses and socio-economic conditions in which afforestation/reforestation project activities are not likely to be implemented without the financial incentives of the CDM

## 1. Lands with limited productivity

1. The land types listed in table 1 are characterized by their biophysical limitations of productivity, and afforestation/reforestation activities implemented on these lands are not likely to generate sufficient financial returns to make these activities financially viable. Therefore, the financial incentive of the clean development mechanism (CDM) is required for implementation of afforestation and reforestation (A/R) activities on these lands.

**Table 1.     Lands with limited productivity**

| Land type | Objective criteria/evidence |
|---|---|
| A.1 Drylands | Lands meet any one of the following criteria:<br>(i)   Lands are identified as drylands, arid lands, or lands affected by desertification, in a public document that was: (a) submitted to the secretariat of the United Nations Convention to Combat Desertification (UNCCD) along with the National Action Programme of the host Party country; or (b) published prior to 31 December 2011;<br>(ii)  Lands receive an annual average precipitation of 600 mm or less;[a]<br>(iii) The ratio of annual precipitation to potential evapotranspiration (P/PET) for the lands is 0.65 or less. |
| A.2 Lands containing low productivity and/or degraded soils | Lands meet any one of the following criteria:<br>(i)   Soil pH is less than 4.0;<br>(ii)  Soil salinity is greater than 7.5 dS/m;<br>(iii) Soil sodium absorption ratio (SAR) is greater than 8.0;<br>(iv)  Soils are calcareous soils with calcium carbonate equivalent of 20 per cent or more;<br>(v)   Soils are shallow with a mean soil depth of 30 cm or less. |
| A.3 Lands containing contaminated soils including soils with toxicity, closed/abandoned municipal landfill areas and mine tailings areas | Lands meet any one of the following criteria:<br>(i)   In the case of lands affected by industrial pollution or agricultural activities (e.g. over-use of chemical fertilizers, irrigation, or pesticides), appropriate data should be provided to demonstrate that the productive capacity of the lands has been impaired;<br>(ii)  In the case of closed/abandoned municipal landfill areas and mine tailings areas, the lands should have been officially designated for these purposes, or demonstrated to have actually been used for these purposes. |

[a] Average of annual precipitation is calculated over the past 10 years or more.

## 2. Lands with restricted land-use rights

2. The land types listed in table 2 are characterized by their legal status that allows afforestation and reforestation (A/R) activities but does not allow intermediate or final harvesting, although removal of trees for management operations (e.g. salvage of fallen or dead trees, over-mature trees) is permitted. Afforestation and reforestation activities implemented on these lands are not likely to generate sufficient financial returns to make these activities financially viable because no intermediate or final harvest is allowed. Therefore, the financial incentive of the CDM is required for implementation of A/R activities on these lands.

**Table 2.     Lands with restricted land-use rights**

| Land type | Objective criteria/evidence |
|---|---|
| B.1 Protected watersheds, protected forest lands, and reserved forest lands | Lands are legally classified under one of these categories under the applicable legal provisions in the host Party country and the applicable legal provisions do not permit intermediate or final harvesting of tree plantations in these lands. |
| B.2 Biodiversity conservation areas | |
| B.3 National parks, wildlife sanctuaries/refuges | |
| B.4 Lands along roads, highways, railways, canals, and waterways | |
| B.5 Lands along riverbanks, lands with steep slopes, gullied and ravined lands | |

## 3. Lands located in specified geographic regions

3. The lands listed in table 3 are characterized by their location in geographic regions where there is no experience or precedent of A/R activities. Afforestation and reforestation activities implemented on these lands are not likely to generate sufficient financial returns to make these activities financially viable because no prior experience or precedent of such activities exists. Therefore, the financial incentive of the CDM is required for implementation of A/R activities on these lands.

**Table 3.      Lands located in specified geographic regions**

| Land type | Objective criteria/evidence |
|---|---|
| C.1 Lands located in specified host Party countries lacking experience/capacity. | Lands meet one of the following criteria:<br>(i)    Lands are located in least developed countries (LDCs) or small island developing States (SIDS) that have no precedent of raising commercial forestry plantations, and have no registered A/R CDM project activities as of 31 December 2010;<br>(ii)   Lands are located in countries that have fewer than 10 registered CDM project activities as of 31 December 2010, none of which is an A/R CDM project activity, and have no precedent of raising commercial forestry plantations. |

## 4.      References

(a)    IPCC, 2003. Published: IGES, Japan. *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).* URL: http://www.ipcc-nggip.iges.or.jp/public/gpglulucf/gpglulucf.html;

*(b)*    Alberta Agriculture, Food and Rural Development. 2004. *Soil quality criteria relative to disturbance and reclamation (Revised);*

(c)    FAO. 1989. *Arid Zone Forestry: A Guide for Field Technicians (FAO Conservation Guide, 20);*

(d)    AgResearch Ltd, Hamilton, New Zealand. *Land Use Capability Survey Handbook, 3rd edition;.*

(e)    United Nations Environment Management Group. 2011. *Global Drylands: A UN System-wide Response;*

(f)    Rural Industries Research and Development Corporation, Australia. 2002. *Improved Species Climatic Profiles.*

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### Document information