

A GUIDE FOR DEVELOPING A CDM PROJECT DESIGN DOCUMENT: LAND ELIGIBILITY & CHOOSING AN APPROPRIATE METHODOLOGY

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A CDM project usually begins with a Project Idea Note (PIN) which, even though not a formally required document, is a precursor to the Project Design Document (PDD) based on which the project is accorded approval by the CDM Executive Board. Below a stepwise approach to the development of a CDM project has been described.

1. The first step in this direction is determination of the goals of the project activities. The primary goal of project can be financial profit or providing income to poor communities or environmental benefits or greenhouse gas reductions.
2. If the project location has already been decided then the project activities must be determined in order to maximize the primary goal. However, if the project location has not been fixed then the project sites may be located so that the primary goal may be achieved at least cost.
3. A mandatory condition for the land chosen for afforestation/reforestation is that it was not a forest as on 31 December 1989, and that at no time since then was it forested and subsequently deforested. This could be proven either through reliable permanent government records or through aerial photographs or satellite imageries supported by ground reference data. If neither is available for the relevant period then a standard rural appraisal methodology could be followed to create a reliable written document for this purpose. Detailed procedure for ascertaining land eligibility for taking up CDM A/R projects are given in Annex 1 to this document.
4. If financial profit is the primary goal then the site chosen should have minimal risk of leakage and low input cost of labor and opportunity cost of land. Large scale timber plantation is likely to fit under this category.
5. If providing income for poor communities is the primary aim then the land must be chosen close to the habitation of the targeted community and the project must be labour intensive and of short gestation and provide income at short intervals. Agro forestry activities and projects involving joint forest management will fall in this category.
6. If the primary goal is environmental impact then the project site must be chosen so that the targeted environmental benefits could be maximized. In such cases the site could be an important watershed that has been subjected to erosion and degradation. Project activities in such cases would involve reforestation enhancing biodiversity and restoration of forests. The project activities in such projects may not bring much direct financial benefits to the local communities.

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7. When the greenhouse gas reductions are the primary aim then the chosen sites must be such as to maximize sequestration and reduce leakages.

Two of the most important components of a Project Design Document (PDD) are the baseline and the monitoring methodologies of which the former is used to prepare a credible scenario of net greenhouse gas emission/reduction within the project boundaries in the absence of the project activities and the latter is meant for ensuring the credibility of greenhouse gas emission reductions caused by the project activities. It is due to the criticality of these two methodologies to the entire process of generating carbon credits that it is mandatory to either use baseline and monitoring methodologies that have already been approved by the CDM Executive Board or obtain their approval if a new methodology is considered more appropriate.

But the creation of new methodology and obtaining their approval is a long drawn process that usually takes several months, the average being 8 to 9 months. So for fast track preparation and approval of PDDs it is advisable to use an already approved methodology. A list of all approved CDM AR baseline and monitoring methodologies are given in Annex 2. Since all methodologies are developed in a given context the approvals for them are granted subject to a number of conditionality and, therefore, an approved methodology can be utilized only under circumstances when the given conditions are met with.

The key to finding the best fit approved baseline methodology lies in the applicability conditions which accompany every approval of methodology by the CDM Executive Board. These applicability conditions usually describe the project land, its condition of degradation, whether it is one single unit or a bundle of discrete units; the nature of project activities, whether reforestation or afforestation or both, activities forbidden, carbon pools to be taken into account, leakages and the manner of accounting for them, use of fertilizer and nitrogen fixing species, interim and end removal of biomass etc. Also the small scale methodology can be used only for projects that have an annual carbon sink size of not more than 16000 tons of CO₂.

Once there is a complete match with the applicability conditions one should look at the baseline approach of the methodology. In the three small scale and ten large scale baseline methodologies approved so far most have the same approach, namely, “the existing or historical, as applicable, changes in carbon stocks in the carbon pools inside the project boundary” while in a few, it is the “changes in carbon stocks in the pools within the project boundary from the most likely land use at the time of project commencement”. The former approach implies that, for legal or policy reasons, the project land would have remained under the same utilization pattern under the baseline scenario. This usually (but not always) happens in reforestation cases where the project lands were forested prior to the cutoff date of 31.12.1989 since in many countries laws (or policies) forbid change in status of forest lands and these lands can be put to forestry use only. The latter baseline approach indicates the possibility of a number of choices different from the past usage and the freedom to choose one of them.

Another important feature for finding the best fit is through the comparison of leakage issue in the proposed project and the approved methodology, the nature and extent of both CO₂ and non-CO₂ leakages, the manner of its assessment and the way it is sought

to be handled in the project, whether by the way of accounting for the losses in carbon credits earned, or by preventing a significant part of the leakage through allowing the pre-project users of biomass resources to continue to obtain the same biomass from within the project boundary.

Once the mandatory aspects of baseline requirements are taken care of in choosing the best fit the cost and ease factors are used for deciding on the methodology to be followed for the proposed project. Thus if it is found that out of the approved methodologies available at present for CDM AR projects three meet the compulsory requirements then further choice is made by assessing which one of the three would be within the abilities of the available manpower to implement and also the most economical.

In making the choice of methodology provisions of seeking clarification on, and revision of, the approved methodologies are also available. If it is felt that a methodology is otherwise fitting but there appear minor deviations that would have no significant consequences in baseline estimation and in monitoring then one should seek clarification from the CDM Executive Board. If the deviations are minor but significant then revision of an approved methodology can also be sought. This would take considerably less time than preparing a new methodology altogether.

Once the methodology is decided the next stage in the preparation of PDD is the proof of additionality and collection of data required for the construction of baseline. This shall be discussed separately.

Annex 1

PROCEDURES TO DEFINE THE ELIGIBILITY OF LANDS FOR AFFORESTATION AND REFORESTATION PROJECT ACTIVITIES (CDM EB Report 22, Annex 16, page 1)

1. Project participants shall provide evidence that the land within the planned project boundary is eligible as an A/R CDM project activity following the steps outlined below.

(a) Demonstrate that the land at the moment the project starts is not a forest by providing information that:

i. The land is below the forest national thresholds (crown cover, tree height and minimum land area) for forest definition under decisions 11/CP.7 and 19/CP.9 as communicated by the respective DNA; and

ii. The land is not temporarily unstocked as a result of human intervention such as harvesting or natural causes or is not covered by young natural stands or plantations which have yet to reach a crown density or tree height in accordance with national thresholds and which have the potential to revert to forest without human intervention.

(b) Demonstrate that the activity is a reforestation or afforestation project activity:

i. For reforestation project activities, demonstrate that on 31 December 1989, the land was below the forest national thresholds (crown cover, tree height and minimum land area) for forest definition under decision 11/CP.7 as communicated by the respective DNA.

ii. For afforestation project activities, demonstrate that the land is below the forest national thresholds (crown cover, tree height and minimum land area) for forest definition under decision 11/CP.7 as communicated by the respective DNA, for a period of at least 50 years.

2. In order to demonstrate steps 1 (a) and 1 (b), project participants shall provide one of the following verifiable information:

(a) Aerial photographs or satellite imagery complemented by ground reference data; or

(b) Ground based surveys (land use permits, land use plans or information from local registers such as cadastre, owners register, land use or land management register); or

(c) If options (a) and (b) are not available/applicable, project participants shall submit a written testimony which was produced by following a participatory rural appraisal methodology¹.

1. Participatory rural appraisal (PRA) is an approach to the analysis of local problems and the formulation of tentative solutions with local stakeholders. It makes use of a wide range of visualisation methods for group-based analysis to deal with spatial and temporal aspects of social and environmental problems.

Annex 2

Approved Afforestation/Reforestation CDM Methodologies

(I) Small Scale Afforestation/Reforestation CDM Methodologies

1. AR-AMS 0001 Simplified baseline and monitoring methodologies for small-scale afforestation and reforestation project activities under the clean development mechanism implemented on **grasslands or croplands**.
2. AR-AMS 0002 - Simplified baseline and monitoring methodologies for small-scale afforestation and reforestation project activities under the CDM implemented on **settlements**
3. AR-AMS 0003 - Simplified baseline and monitoring methodology for small scale CDM afforestation and reforestation project activities implemented on **wetlands**

(Accessible at <http://cdm.unfccc.int/methodologies/SSCAR/index.html>)

(II) Large Scale Afforestation/Reforestation CDM Methodologies

1. AR-AM 0001 - Reforestation of degraded land
2. AR-AM 0002 – Restoration of degraded lands through afforestation/reforestation
3. AR-AM 0003 - Afforestation and reforestation of degraded land through tree planting, assisted natural regeneration and control of animal grazing
4. AR-AM 0004 - Reforestation or afforestation of land currently under agricultural use
5. AR-AM 0005 - Afforestation and reforestation project activities implemented for industrial and/or commercial uses
6. AR-AM 0006 - Afforestation/Reforestation with Trees Supported by Shrubs on Degraded Land
7. AR-AM 0007 - Afforestation and Reforestation of Land Currently Under Agricultural or Pastoral Use
8. AR-AM 0008 - Afforestation or reforestation on degraded land for sustainable wood production
9. AR-AM 0009 - Afforestation or reforestation on degraded land allowing for silvopastoral activities

10. AR-AM 00010 - Afforestation and reforestation project activities implemented on unmanaged grassland in reserve/protected areas

(Accessible at http://cdm.unfccc.int/methodologies/ARmethodologies/approved_ar.html)

(III) Consolidated Methodology

AR-ACM 0001 - Afforestation and reforestation of degraded land

(Accessible at http://cdm.unfccc.int/methodologies/ARmethodologies/approved_ar.html)

Note: Use latest versions of these methodologies.