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Simplified modalities and procedures for small-scale afforestation and reforestation project activities under the clean development mechanism

Technical paper

Summary

This technical paper was prepared based on submissions by Parties and on the work by the clean development mechanism (CDM) Executive Board. It presents options on the following issues: further clarifications on definitions of eligible small-scale afforestation and reforestation project activities, including on the calculation of project size; possible categories of projects for which methodologies can be simplified; draft simplified modalities and procedures for small-scale afforestation and reforestation project activities; a simplified project design document; the structure of an indicative simplified baseline and monitoring methodologies for selected types of small-scale afforestation and reforestation project activities under the CDM; and criteria for determining the occurrence of debundling of projects.

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I. Introduction

A. Mandate

1. The Conference of the Parties (COP), by its decision 19/CP.9, adopted modalities and procedures for afforestation and reforestation project activities under the clean development mechanism (CDM) in the first commitment period of the Kyoto Protocol. Paragraph 1 (i) of the annex to this decision defines small-scale afforestation and reforestation project activities under the CDM as those that are expected to result in net anthropogenic greenhouse gas (GHG) removals by sinks of less than 8 kilotonnes (kt) of carbon dioxide (CO_2)[1] per year and are developed or implemented by low-income communities and individuals as determined by the host Party.

2. The COP requested the Subsidiary Body for Scientific and Technological Advice (SBSTA) to recommend for adoption by the COP, at its tenth session, a draft decision on simplified modalities and procedures for small-scale afforestation and reforestation project activities under the CDM, and on measures to facilitate the implementation of these projects. It invited Parties and accredited observers to submit their views[2] on simplified modalities and procedures for small-scale afforestation and reforestation project activities under the CDM and requested the secretariat to prepare a technical paper on this matter taking into account submissions from Parties and relevant work by the CDM Executive Board.

B. Scope of the note

3. This paper is based on 11 submissions by Parties and work by the CDM Executive Board, in particular, annex II to decision 21/CP.8.

4. The issues and options included in the submissions by Parties varied widely. Most Parties saw the need to clarify issues relating to the calculation of the size limit of 8 kt of CO_2, to develop project categories, to elaborate a simplified project design document and to establish criteria for debundling. Parties also proposed options relating to the simplification of baseline and monitoring methodologies, to additionality, and to leakage. Some Parties suggested that small-scale afforestation and reforestation projects could use the same designated operational entity for validation and for verification, and that the registration fees for these projects be low. A few Parties suggested simplifications in addition to those included in annex II to decision 21/CP.8 (see section III.E).

5. Chapter III follows the structure of the annex II to decision 21/CP.8 and includes draft simplified modalities and procedures for small-scale afforestation and reforestation project activities under the CDM. Section III.F contains three appendices which are part of these draft simplified modalities and procedures: appendix A (Project design document for small-scale afforestation and reforestation project activities under the clean development mechanism); appendix B (Indicative simplified baseline and monitoring methodologies for selected types of small-scale afforestation and reforestation project activities under the clean development mechanism); and appendix C (Criteria for determining the occurrence of debundling). It is expected that chapter three, including the appendices in section III.F, will be reformatted to be used for the negotiations on an annex to the draft decision of the COP referred to in paragraph 2 above.

6. The secretariat has tried to reflect all the options proposed by Parties, while maintaining consistency with decisions 19/CP.9 and 21/CP.8. In order to facilitate the consideration of the present

[1] The secretariat assumes that when decision 19/CP.9 referred to CO_2 it meant CO_2 equivalent.
[2] See documents FCCC/SBSTA/2004/MISC.3 and FCCC/SBSTA/2004/MISC.4 for submissions by Parties and FCCC/WEB/2004/1 and FCCC/WEB/2004/2 for submissions by accredited organizations.

document, the following features were included in chapter III below: changes to the annex to decision 19/CP.9 that correspond to simplifications included in annex II of decision 21/CP.8 appear in bold and text proposed in the submissions by Parties appears in italics.

C. Possible action by the Subsidiary Body for Scientific and Technological Advice

7. The SBSTA may wish to take note of the information contained in this document and initiate the development of a draft decision on simplified modalities and procedures for small-scale afforestation and reforestation projects under the CDM to be forwarded for adoption by the COP at its tenth session.

II. Clarifications on definitions of eligible activities

A. Issues relating to the quantitative limitation criterion (8 kilotonnes of CO_2 per year)

8. In accordance with the definition for small-scale afforestation and reforestation project activities under the CDM, referred to in paragraph 1 above, an afforestation or reforestation project activity under the CDM is eligible for simplified modalities and procedures if it is expected to result in net anthropogenic greenhouse gas removals by sinks of less than 8 kt of CO_2 per year.

9. This definition requires projects to demonstrate compliance with the ceiling of 8 kt of CO_2 per year at two stages. First, at the design stage, project participants must demonstrate, ex ante, that the net anthropogenic greenhouse gas removals by sinks to be achieved by the project will not be more than 8 kt of CO_2 per year. Second, during the implementation phase, project participants must demonstrate, ex post, that the net anthropogenic greenhouse gas removals by sinks achieved by the project were less than 8 kt of CO_2 per year. If the net anthropogenic greenhouse gas removals by sinks by the project, as monitored and verified, exceed 8 kt of CO_2 per year, the excess removals will not be eligible for the issuance of temporary certified emission reductions (tCERs) and long-term CERs (lCERs).[3]

10. The modalities and procedures for afforestation and reforestation project activities under the CDM do not specify how compliance with the ceiling of 8 kt of CO_2 per year should be assessed. Two accounting methods are available to estimate the net anthropogenic greenhouse gas removals by sinks achieved by afforestation or reforestation projects:[4] the stock change method and the average storage method. As the two methods generate different results, a clarification by the COP is needed. The annex to this document provides an example of the application of these methods.

11. The SBSTA may wish to take into consideration that, in order to ensure consistency, the same method for assessing compliance with the ceiling of 8 kt of CO_2 per year should be applied at the design and at the implementation stages.

1. Stock change method

12. The stock change method is a direct representation of the removals at any point in time. This method is the one most commonly used for expressing carbon storage and allows calculation of the net anthropogenic greenhouse gas removals for a project activity for every year during the crediting period.

13. Applying the stock change method to small-scale afforestation or reforestation project activities would render the following eligible for simplified modalities and procedures for small-scale afforestation and reforestation project activities under the CDM:

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[3] For the definition of tCERs and lCERs refer to paragraph 1 (g) and (h) of the annex to decision 19/CP.9.

[4] Brown, S., Masera, O., and Sathaye, J. (2000): Project-based activities. In: Watson, R.T., Noble, I.R., Bolin, B., Ravindrananth, N.H., Verardo, D.J. and Dokken, D.J (eds.): *Land use, land-use change, and forestry. A special report of the IPCC*. IPCC, Cambridge University Press, United Kingdom and New York, N.Y., USA, pp. 283–338.

(a) Any project whose net anthropogenic greenhouse gas removals by sinks are expected to be less than the threshold value of 8 kt of CO_2 at any point in time during its crediting period

(b) Any net anthropogenic greenhouse gas removals by sinks below 8 kt of CO_2 in a given year during the period the project activity has been operational.

14. If Parties agree on the adoption of the stock change method, the following wording is proposed: "A proposed afforestation or reforestation project activity shall be eligible for simplified modalities and procedures for small-scale afforestation and reforestation project activities under the CDM if the projected net anthropogenic greenhouse gas removals by sinks do not exceed 8 kt of CO_2 in any year during its chosen crediting period".

2. Average storage method

15. The average storage method[5] makes it possible to calculate the average of the amount of carbon stored, in terms of carbon, in a site over a given period:

$$\textit{Average net carbon storage (t C)} = \frac{\sum_{y=0}^{n} \textit{(carbon stored in project – carbon stored in baseline), in t C}}{n}$$

Where y is the number of years the project has been operational and n is the total number of years of a crediting period.

16. Applying the average storage method would render the following eligible for simplified modalities and procedures for small-scale afforestation and reforestation project activities under the CDM:

(a) Any project whose net anthropogenic greenhouse gas removals by sinks are expected to be, over the total crediting period, less than 8 kt of CO_2 on average

(b) Any net anthropogenic greenhouse gas removals by sinks below 8 kt of CO_2, on average, achieved during the period the project activity has been operational.

17. If Parties agree on the adoption of the stock change method, the following wording is proposed: "A proposed afforestation or reforestation project activity shall be eligible for simplified modalities and procedures for small-scale afforestation and reforestation project activities under the CDM if the average projected net anthropogenic greenhouse gas removals by sinks over the entire crediting period do not exceed 8 kt of CO_2 per year".

B. Parameters and types for small-scale afforestation and reforestation project activities

18. In their submissions, most Parties and accredited observers suggested, on the basis of annex II of decision 21/CP.8, that simplified baseline and monitoring methodologies could be developed for small-scale afforestation and reforestation project activities under the CDM. Many of these submissions proposed that project categories be established to allow corresponding simplified methodologies to be developed. This would follow the practice for projects that reduce emissions where a categorization was needed to facilitate the simplification of methodologies, for example, for renewable energy and energy

[5] Schroeder, P. (1992): Carbon storage potential of short rotation tropical tree plantations. *Forest Ecology and Management*, 50: 31–41.

efficiency improvements projects. There are inherent differences between these activities in terms of the calculations for establishing baselines, estimating and measuring the emissions reductions achieved by the projects, and the methodologies for monitoring.

19. Land use, land-use change and forestry (LULUCF) projects under the CDM are limited to two main types of projects, afforestation and reforestation. The "types" of activity that can be implemented are limited by this fact and by the definition for these activities specified in paragraph 1 of the annex to draft decision -/CMP.1 (*LULUCF*), attached to decision 11/CP.7. According to this paragraph, afforestation and reforestation are the conversion of non-forested land through planting and seeding and/or the human-induced promotion of natural seed sources.

20. Taking into account the submissions and advice from experts consulted,[6] it is suggested that afforestation and reforestation project activities be merged into one single category (afforestation and reforestation). A distinction between types of activity would, however, be made on the basis of the project characteristics (parameters), such as prior land use on the location of the activity and the purpose of the project. Table 1 summarizes possible parameters:

Table 1. Parameters and types of small-scale afforestation and reforestation project activities

Parameters	Suggested types
Project size	Smallholder, small, medium and large
Prior land use	Grassland, cropland, wetland and other land
Management type/purpose	Plantations, agroforestry (incl. silvo-pastoral) and restoration
Forest formation	Dense forest and open forest
Level of fragmentation	High and low

21. Any small-scale afforestation or reforestation project activity would then be characterized by a combination of the parameters listed in table 1 (e.g., a medium-size project on former cropland which is intended to establish an open restoration forest). Specific baseline and monitoring methodologies would apply depending on the combination of these parameters. Once a project has been designed, its proponents may choose the baseline and monitoring methodologies that fit the different parameters of their project (see paragraphs 46 and 47 below).

1. Project size

22. One submission proposed that the size (area) of the project could be relevant for the simplification of methodologies. Suggested types included smallholder (<10 ha), small (10–100 ha), medium (100–1,400 ha) and large (1,400–4,000 ha; only possible for small-scale projects if an open canopy forest is established).

23. This submission did not explain how this parameter is relevant for the simplification of baseline and monitoring methodologies. In the view of the experts, as the simplification of baselines and monitoring methodologies is done through the selection of default data and equations that are applied to projects on a per-hectare basis, size may not be relevant for the simplification of these methodologies. However, the proposal indicated that the treatment of leakage may vary depending on the size of the project activity.

[6] The secretariat expresses its appreciation to the following experts for their valuable inputs: Ms. Carmenza Robledo, Mr. Dieter Schoene, Mr. Markku Kanninen and Mr. Demel Teketay.

2. Prior land use

24. Some submissions suggested that the use previously made of the project area may be relevant for the development of simplified methodologies. Paragraph 22 of the annex to decision 19/CP.9 includes three approaches for choosing the baseline methodology of an afforestation or reforestation project activity. Prior land use may be relevant for the simplification of the baseline methodologies for the approaches specified in paragraph 22 (a) and (c). Paragraph 22 (a) refers to historical or existing emissions, which depend on the current or prior land use, and paragraph 22 (b) refers to the "most likely" land use at the time when the project starts.

25. Consistent with the report of the Intergovernmental Panel on Climate Change (IPCC) entitled *Good Practice Guidance for Land Use, Land-Use Change and Forestry* (hereinafter referred to as the IPCC good practice guidance for LULUCF), the following prior land uses may be relevant for small-scale afforestation and reforestation project activities:[7]

(a) "Grassland", which includes rangelands and pasture land that is not considered as cropland. Grassland also includes systems with vegetation that falls below the threshold used in the definition for forest and is not expected to exceed, without human intervention, this threshold. Grassland also includes grasslands from wild lands to recreational areas as well as agricultural and silvo-pastoral systems, subdivided into managed and unmanaged consistent with national definitions

(b) "Cropland", which includes arable and tillage land, and agroforestry systems where vegetation falls below the thresholds used to define "forest"

(c) "Wetland", which includes land that is covered or saturated by water for all or part of the year (e.g., peatland) and that does not fall into the cropland or grassland categories defined above

(d) "Other land", which includes bare soil, rock, ice, and all unmanaged land areas that do not fall into any of the other three land-use categories described above.

26. Grassland, cropland, wetland and other land (here assumed to be bare land without biomass) differ in terms of the carbon content in the different pools (with grassland having a much higher carbon content than cropland). In addition, prior land uses differ between a continuous presence of biomass in grassland, wetland and other land, and a partial biomass cover throughout the year in cropland. These differences will require different simplified methodologies if default equations or values are used as methodologies for the quantification of baseline removals (see section II.C).

3. Management type

27. Some submissions included the purpose of the project activity as an important parameter that may require the development of different simplified methodologies. "Management types" include the establishment of forests for the production of goods (e.g., timber) and for restoration of degraded lands. Three "management types" are proposed on the basis of submissions by Parties:

(a) "Plantations", which are forests established mainly for the production of timber

(b) "Agroforestry" (including silvo-pastoral systems), which are forests established for the production of timber and agricultural goods

[7] As forest land is not eligible for afforestation and reforestation activities, it is not included here. The definitions cited here have been extracted from page 2.6 of the IPCC good practice guidance for LULUCF.

(c) "Restoration forests", which are forests established to recover degraded areas; restoration forests do not produce timber or agricultural goods.

28. Under each management type, the dynamics of the changes in carbon stocks differ as a consequence of the management activities. The different dynamics may require different simplified methodologies for the quantification of the removals achieved by the project, as well as the emissions resulting from its implementation. For example, plantations involve the periodic removal of biomass from the project; agroforestry may involve agricultural practices that disturb soils and may also include the removal of biomass; and restoration forests are intended to recover degraded areas and, thus, no periodic removals of biomass or anthropogenic disturbances in the soil are expected to be part of the activity.

4. Forest formation

29. Forest formation refers to the density of the forest cover. Differences in carbon content and in the dynamics of the carbon pools in open and dense forests may require different simplified methodologies for the quantification of project removals if standardized or default equations or values are applied.

30. A threshold value needs to be defined to differentiate between "sparse" and "dense" forests. The Food and Agriculture Organization of the United Nations (FAO) suggests defining "dense" forest as forest with a tree cover equal to or greater than 70 per cent.[8]

5. Level of fragmentation

31. The level of fragmentation of a project area refers to the "connectedness" of the non-discrete fragments of land into which the area of the project is divided. A project that consists of many small fragments that are far apart has a higher degree of fragmentation than a project area that consists of two sub-areas that are close to each other.

32. In the opinion of some experts, this parameter may be relevant for the development of simplified methodologies. The level of fragmentation may not per se require the development of specific methodologies but it may affect, for example, activities such as sampling and monitoring. Therefore, the level of fragmentation should not be taken as a parameter, but the development of simplified methodologies may take it into account and provide specific technical guidance if the degree of fragmentation of a project is high.

C. Simplified baseline and monitoring methodologies

33. The present section provides a brief description of the elements that baseline and monitoring methodologies shall cover in order for afforestation and reforestation projects to estimate and monitor the net anthropogenic greenhouse gas removals by sinks achieved by a project activity (see table 2).

34. As stated in the previous section, the identification of specific parameters for afforestation and reforestation project activities is only relevant if these parameters require the development of different baseline and monitoring methodologies. Section II.B illustrated how the parameters have an effect on different methodologies (for example, prior land use is relevant for methodologies relating to the baseline, whereas management type is relevant for methodologies relating to monitoring). Table 3 summarizes which proposed parameters may require the development of differentiated simplified methodologies.

[8] Source: FAO, Global Forest Resource Assessment 2000.

Table 2. Elements for the simplification of baseline and monitoring methodologies

Elements[a]	Baseline methodology	Monitoring methodology
Project boundary	To be defined	To be defined
Baseline net greenhouse gas removals by sinks	Method of estimating is to be developed	Need to monitor?
Actual net greenhouse gas removals by sinks	Method of estimating is to be developed	Method of monitoring is to be developed (use IPCC good practice guidance for LULUCF as a basis?)
Leakage	Need to estimate?	Option 1: Method of monitoring is to be developed Option 2: No need to monitor leakage
Net anthropogenic greenhouse gas removals by sinks	Method of estimating is to be developed	Method of monitoring is to be developed

[a] As defined in the annex to decision 19/CP.9.

Table 3. Development of simplified methodologies according to project parameters

Elements	Size	Prior land use	Management type	Forest formation	Level of fragmentation
Project boundary					
Baseline net greenhouse gas removals by sinks		x			z
Actual net greenhouse gas removals by sinks:					
Changes in carbon stocks			x	x	z
Project emissions		z	x		z
Leakage	z	z	z		
Net anthropogenic greenhouse gas removals by sinks[a]	x	x	x	x	x

x = Relevant combination of a categorization parameter and a simplified methodology.
z = Relevant but may not require the development of specific methodologies.

[a] As the net anthropogenic greenhouse gas removals by sinks are calculated with the above elements (see paragraph 1 (f) of the annex to decision 19/CP.9), a parameter that is relevant for any of these elements is also relevant for the net anthropogenic greenhouse gas removals by sinks.

1. Project boundary

35. The project boundary may not need to be defined differently as a function of any of the parameters described in section II.B. Some submissions suggested, however, that small-scale afforestation and reforestation project activities should be allowed to develop dynamic project boundaries. A boundary of a project is dynamic when it can be extended over time to include additional land until the project reaches net anthropogenic greenhouse gas removals by sinks of 8 kt of CO_2 per year.

36. Submissions did not include any detailed guidance as to how dynamic boundaries would be validated, monitored and verified. Under the current modalities and procedures, dynamic boundaries would imply that any addition of land to a project would need a re-validation of the project, because it is not guaranteed that the added land has the same characteristics (e.g., baseline) of the land already included within the boundary of the project.

2. Baseline net greenhouse gas removals by sinks

37. Prior land use may be the most relevant parameter in defining simplified baseline methodologies (see paragraph 24 above). Other parameters are project-related and do not influence the baseline net greenhouse gas removals by sinks. The project scenario will be the subject of section II.C (3) below.

38. As in the case of the simplified methodologies of appendix B to annex II of decision 21/CP.8 for small-scale CDM project activities, default values could be provided and used. The default value selected should always be the one most relevant for the project site. If no local defaults have been developed for the specific project or baseline activity, the next level of specificity should apply.

39. The monitoring methodology could provide for the monitoring of proxies that indicate whether the baseline scenario has been chosen correctly. For example, adjacent areas could be monitored for land-use changes (using remote sensing techniques) and changes in carbon content (using permanent or temporary sample plots). However, this monitoring may be complex and costly as, particularly in complex and diverse landscapes, observed changes could still be argued to be the result of factors that would not have applied within the project boundary. Some submissions explicitly proposed that, considering the difficulty and the high costs involved, small-scale projects should be exempt from monitoring of the baseline.

3. Actual net greenhouse gas removals by sinks

40. In accordance with paragraph 1 (d) of decision 19/CP.9, the actual net greenhouse gas removals by sinks are estimated on the basis of two variables: the sum of the verifiable changes in carbon stocks and the emissions of GHG that result from the implementation of the project. As stated in paragraphs 28 and 29, management type and forest formation have a direct influence on the emissions and on the dynamics of the carbon pools (e.g., the changes in carbon stocks) of a given project. In addition, projects that are established on highly organic soils and/or in very humid conditions (e.g., the prior land use category “wetlands”) might alter local conditions and cause emissions from the soil. Projects where the prior land use was wetland may require emissions to be monitored.

41. The parameters referred to in paragraph 40, above, could be combined in order to facilitate the development of simplified methodologies for the estimation of changes in carbon stocks and the project emissions, as follows:

(a) Dense and open plantations

(b) Agroforestry with dense and open forests

(c) Dense and open restoration forests.

42. Additional methodological guidance could be provided for the monitoring of emissions in cases where afforestation and reforestation projects are implemented in soils with high carbon content, for example, where the prior land use was wetland.

43. The level of fragmentation of a project could have an impact on the emissions resulting from transportation of products. However, criteria would need to be developed in more detail as this seems to be important only for highly fragmented plantations and agroforestry projects.

44. Some submissions call for default values, such as those provided by the IPCC, to be used in estimating carbon stocks to the extent possible. As in the case of the simplified methodologies of appendix B to annex II to decision 21/CP.8 for small-scale CDM project activities, default equations and values could be provided and used. The default values used should always aim to be the most relevant for the project site. If no local defaults have been developed for the specific project or baseline activity, the next level of specificity should apply.

4. Leakage

45. Although some Parties stressed that leakage should continue to be assessed, as for the modalities and procedures for afforestation and reforestation project activities under the CDM, other Parties argued that for small-scale afforestation and reforestation project activities leakage could be equal to zero by default. Some submissions suggested that leakage should only be assessed for small-scale afforestation and reforestation activities if it is estimated to be substantial (that is, it represents 15 per cent or more of the total expected net anthropogenic greenhouse gas removals by sinks), that it is measurable and attributable to the proposed activity, and that "market" leakage should be ignored.

5. Summary

46. On the basis of the above discussion, table 4 (also included in appendix B, section III.F below) proposes a list of simplified baseline and monitoring methodologies for small-scale afforestation and reforestation project activities which the COP may request the CDM Executive Board to develop.

Table 4. List of simplified methodologies to be developed

Elements	Type	Simplified baseline methodology	Simplified monitoring methodology
Project boundary	N/A	Option 1: Same definition as 19/CP.9. Option 2: Allow exclusion of some carbon pools. Allow dynamic boundaries?	Option 1: Same definition as 19/CP.9. Option 2: Allow exclusion of some carbon pools. Allow dynamic boundaries?
Baseline net greenhouse gas removals by sinks	Grassland	Four methods of estimating are to be developed by the Executive Board	Need to monitor?
	Cropland		
	Wetland		
	Other land		
Actual net greenhouse gas removals by sinks	Plantations (dense or open?)	Three methods of estimating are to be developed by the Executive Board (with possible differentiation in each method for dense and open forests?)	Three methods of monitoring are to be developed by the Executive Board (with possible differentiation in each method for dense and open forests?)
	Agroforestry (dense or open?)		
	Restoration (dense or open?)		
Leakage	Small/ Medium?	Need to estimate?	Option 1: Method of monitoring is to be developed Option 2: Method of monitoring for "large" small-scale projects. No need to monitor leakage for "medium" and "small" Option 3: No need to monitor leakage
	Large?		
Net anthropogenic greenhouse gas removals by sinks		Method of estimating is to be developed by the Executive Board	Method of monitoring is to be developed by the Executive Board

47. In order to illustrate the rationale of table 4, the following example is provided. It assumes that a small-scale afforestation and reforestation project has the following characteristics: a dense plantation will be established on 2,000 ha of former cropland; in addition, the project involves 15 different locations (high degree of fragmentation). Table 5 illustrates which simplified methodologies would need to be used by this project:

Table 5. Example illustrating application of table 4

Elements	Simplified methodology
Project boundary	N/A
Baseline net greenhouse gas removals by sinks	Simplified methodology developed for cropland as this was prior land use
Actual net greenhouse gas removals by sinks:	
- Changes in carbon stocks	Simplified methodology developed for dense plantation
- Project emissions	Simplified methodology developed for dense plantations as management type and forest formation. In addition, simplified methodologies for highly fragmented projects should be used
Leakage	Need to estimate because it is a large project
Net anthropogenic greenhouse gas removals by sinks[a]	N/A (as this is the result of the above elements)

[a] As the net anthropogenic greenhouse gas removals by sinks are calculated with the above elements (see paragraph 1 (f) of the annex to decision 19/CP.9), a parameter that is relevant for any of these elements is also relevant for the net anthropogenic greenhouse gas removals by sinks.

6. Additionality

48. In addition to an indicative list of simplified baseline and monitoring methodologies, annex II to decision 21/CP.8 stipulates (paragraph 28) that a simplified baseline and monitoring methodology (listed in appendix B to annex II to decision 21/CP.8) may be used for a small-scale CDM project activity if the project participants are able to demonstrate to a designated operational entity that the project activity would otherwise not be implemented because of the existence of one or more of the barriers listed in attachment A to appendix B to annex II to decision 21/CP.8.

49. Some Parties expressed the view that small-scale afforestation or reforestation project activities should be treated similarly to other small-scale CDM project activities. They should therefore demonstrate that the barriers in attachment A need to be overcome in order to use simplified methodologies. Other Parties considered, however, that the assessment of barriers to small-scale afforestation and reforestation projects was not needed.

50. Arguments in favour of not applying the barriers assessment include:

(a) Evidence that an area has been without forest since at least 31 December 1989 gives an indication of the existence of economic or social barriers impeding its afforestation and/or that natural conditions are such that no natural re-growth occurs. In accordance

with this argument, the definition of afforestation and reforestation is a built-in additionality test;

(b) The demonstration of the existence of barriers is already implicit in the definition of small-scale afforestation and reforestation projects because small-scale projects are to assist low-income communities, which in most cases would not have the means to implement a CDM project activity. There may be a risk that business-as-usual projects will receive credits, but this risk appears to be low.

7. Other issues for which some guidance for simplification could be provided

51. Submissions also highlighted a number of additional issues where simplification may be considered:

(a) The collection and archiving of information relating to the planned monitoring and remedial measures regarding environmental and socio-economic impacts;

(b) The collection of transparent and verifiable information to demonstrate that any choice made does not increase the net anthropogenic greenhouse gas removals by sinks;

(c) Changes in circumstances within the project boundary that affect legal title to the land or rights of access to the carbon pools;

(d) Quality assurance and quality control procedures for the monitoring process.

III. Draft simplified modalities and procedures for small-scale afforestation and reforestation project activities under the clean development mechanism

A. Introduction

52. **Small-scale afforestation and reforestation project activities under the CDM shall follow the stages of the project cycle specified in the modalities and procedures for afforestation and reforestation project activities under the CDM contained in the annex to decision 19/CP.9 (hereinafter referred as the modalities and procedures for afforestation and reforestation project activities under the CDM). In order to reduce transaction costs, modalities and procedures are simplified for small-scale afforestation and reforestation project activities under the CDM, as follows:**

(a) ***Project activities may be bundled or portfolio bundled at the following stages in the project cycle: the project design document, validation, registration, monitoring, verification and certification. [The size of the total bundle should not exceed the limits stipulated in paragraph 1 (i) of the modalities and procedures for afforestation and reforestation project activities under the CDM];***

(b) ***The requirements for the project design document are reduced;***

(c) ***Baseline methodologies by project category are simplified to reduce the cost of developing a project baseline;***

(d) ***Monitoring plans are simplified, including simplified monitoring requirements, to reduce monitoring costs;***

(e) ***The same operational entity may undertake validation, and verification and certification.***

53. **Simplified baseline and monitoring methodologies may be developed for categories of small-scale afforestation and reforestation project activities under the CDM. They are presented in appendix B below. This list shall not preclude other types of small-scale CDM project activity. If a proposed small-scale CDM project activity does not fall into any of the categories in appendix B below, the project participants may submit a request to the Executive Board for approval of a simplified baseline and/or monitoring plan developed bearing in mind the provisions in paragraph 59, below.**

54. **The modalities and procedures for afforestation and reforestation project activities under the CDM shall apply to small-scale afforestation and reforestation project activities under the CDM except for its paragraphs 12–30. The following paragraphs 55–80 apply instead. Appendix B below should replace, as appropriate, the provisions in appendix B of modalities and procedures for afforestation and reforestation project activities under the CDM.**

B. Simplified modalities and procedures for small-scale afforestation and reforestation project activities under the clean development mechanism

55. **To use simplified modalities and procedures for small-scale CDM project activities, a proposed project activity shall:**

(a) **Meet the eligibility criteria for small-scale CDM project activities set out in paragraph 1 (i) of the modalities and procedures for afforestation and reforestation project activities under the CDM;**

(b) **Conform to one of the project categories in appendix B below;**

(c) ***Not be a debundled component of a larger project activity, as determined through appendix C below.***

56. ***Project participants shall prepare a project design document in accordance with the format specified in appendix A below.***

57. ***Project participants may use the simplified baseline and monitoring methodologies*** **specified in appendix B below for their project category.**

58. **Project participants involved in small-scale CDM project activities may propose changes to the simplified baseline and monitoring methodologies specified in appendix B below or propose additional project categories for consideration by the Executive Board.**

59. **Project participants willing to submit a new small-scale project activity category or revisions to a methodology shall make a request in writing to the Executive Board providing information about the technology/activity and proposals on how a simplified baseline and monitoring methodology would be applied to this category. The Board may draw on expertise, as appropriate, in considering new project categories and/or revisions of and amendments to simplified methodologies. The Executive Board shall expeditiously, if possible at its next meeting, review the proposed methodology. Once it is approved, the Executive Board shall amend appendix B below.**

60. **The Executive Board shall review and amend, as necessary, appendix B below at least once a year.**

61. **Any amendments to appendix B below shall apply only to small-scale afforestation and reforestation project activities under the CDM registered subsequent to the date of amendment**

and shall not affect already registered small-scale afforestation and reforestation project activities under the CDM during the crediting periods for which they are registered.

62. ***Several small-scale afforestation and reforestation project activities under the CDM may be bundled for the purpose of validation. An overall monitoring plan that monitors performance of the constituent project activities on a sample basis may be proposed for bundled project activities. If bundled project activities are registered with an overall monitoring plan, this monitoring plan shall be implemented and each verification/certification of the emission reductions achieved shall cover all of the bundled project activities.***

63. ***A single designated operational entity may perform validation as well as verification and certification for a small-scale afforestation and reforestation project activity under the CDM or bundled small-scale afforestation and reforestation project activities under the CDM***.

64. ***The Executive Board, in proposing the share of proceeds to cover administrative expenses and registration fees to recover any project-related expenses, may consider proposing lower fees for small-scale afforestation and reforestation project activities under the CDM.***[9]

C. Validation and registration

65. The designated operational entity (DOE) selected by project participants to validate a proposed **small-scale *afforestation*** and reforestation project activity under the CDM, being under a contractual arrangement with them, shall review the project design document and any supporting documentation to confirm that the following requirements have been met:

(a) The participation requirements set out in paragraphs 28–30 of the annex to decision 17/CP.7 **and paragraphs 8 and 9 of the modalities and procedures for afforestation and reforestation project activities under the CDM** are satisfied;

(b) Comments by local stakeholders have been invited, a summary of the comments received has been provided, and a report to the DOE on how due account was taken of any comments has been received;

(c) *Option 1:* Project participants have submitted to the DOE documentation on the analysis of the socio-economic and environmental impacts, including impacts on biodiversity and natural ecosystems, and impacts outside the project boundary, of the proposed afforestation or reforestation project activity under the CDM. If any negative impact is considered significant by the project participants or the host Party, project participants have undertaken a socio-economic impact assessment and/or an environmental impact assessment in accordance with the procedures required by the host Party. Project participants shall submit a statement that confirms that they have undertaken such an assessment in accordance with the procedures required by the host Party and include a description of the planned monitoring and remedial measures to address them;

Option 2: ***If required by the host country,*** project participants have submitted to the DOE documentation on the analysis of the socio-economic and environmental impacts, including impacts on biodiversity and natural ecosystems, and impacts outside the project boundary, of the proposed afforestation or reforestation project activity under the CDM.

[9] Some Parties have also suggested that small-scale afforestation and reforestation project activities under the CDM should be exempted from the share of proceeds to assist with the costs of adaptation because these projects are expected to be developed or implemented by low-income communities and individuals as determined by the host Party.

If any negative impact is considered significant by ***the host Party***, project participants have undertaken a socio-economic impact assessment and/or an environmental impact assessment in accordance with the procedures required by the host Party. Project participants shall submit a statement that confirms that they have undertaken such an assessment in accordance with the procedures required by the host Party and include a description of the planned monitoring and remedial measures to address them;

Option 3: Project participants have submitted to the DOE documentation on the analysis of the socio-economic and environmental impacts, including impacts on biodiversity and natural ecosystems, and impacts outside the project boundary, of the proposed afforestation or reforestation project activity under the CDM. *Such analysis shall be a locally appropriate, community-driven participatory process organized by the project-implementing community. Such a participatory analysis process should conclude with a consensus statement by the local community or its authorized representative that a community assessment of impacts has been made, a description of the process undertaken and a description of the actions or initiatives to mitigate any anticipated negative impacts. No impact assessment or monitoring after inception of the project would be required.*

(d) The proposed **small-scale** afforestation and reforestation project activity is additional if the actual net greenhouse gas removals by sinks are increased above 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 registered CDM afforestation or reforestation project activity, in accordance with paragraphs 69–71 below;

(e) Project participants have specified the approach proposed to address non-permanence in accordance with paragraph 38 **of the modalities and procedures for afforestation and reforestation project activities under the CDM**;

(f) **The proposed small-scale afforestation and reforestation project activity conforms to one of the project categories in appendix B below and uses the simplified baseline and monitoring methodology for that project activity category as specified in appendix B below, or a bundle of small-scale afforestation and reforestation project activities satisfies the conditions for bundling and the overall monitoring plan for the bundled small-scale afforestation and reforestation project activities is appropriate;**

(g) *[*Provisions for monitoring, verification and reporting are in accordance with decision 19/CP.9, **its annex on modalities and procedures for afforestation and reforestation project activities under the CDM**, the present annex[10] and relevant decisions of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (COP/MOP);*]*

(h) The proposed project activity conforms to all other requirements for afforestation and reforestation project activities under the CDM in decision 19/CP.9, ***its annex on modalities and procedures for afforestation and reforestation project activities under the CDM, the present annex***[10] and relevant decisions by the COP/MOP and the Executive Board.

[10] As stated in paragraph 5 above, chapter III includes draft simplified modalities and procedures for small-scale afforestation and reforestation project activities under the CDM. "The present annex" refers to the text contained in chapter III, which is expected to be included in an annex to a draft decision of the COP.

66. The DOE shall:

(a) Prior to the submission of the validation report to the Executive Board, have received from the project participants written approval of voluntary participation from the designated national authority of each Party involved, including confirmation by the host Party that the proposed **small-scale** afforestation or reforestation project activity under the CDM assists it in achieving sustainable development **and is developed or implemented by low-income communities and individuals;**

(b) In accordance with the provisions on confidentiality contained in paragraph 27 (h) of the annex to decision 17/CP.7, make the project design document publicly available;

(c) Receive, within **[45]** *[30]* days, comments on the validation requirements from Parties, stakeholders and UNFCCC-accredited non-governmental organizations, and make them publicly available;

(d) After the deadline for receipt of comments, make a determination as to whether, on the basis of the information provided and taking into account the comments received, the proposed **small-scale** afforestation or reforestation project activity under the CDM should be validated;

(e) Inform project participants of its determination on the validation of the project activity. The notification to the project participants will include a confirmation of validation and the date of submission of the validation report to the Executive Board, or an explanation of reasons for non-acceptance if the proposed **small-scale** afforestation or reforestation project activity under the CDM, as documented, is judged not to fulfil the requirements for validation;

(f) Submit to the Executive Board, if it determines the proposed **small-scale** afforestation or reforestation project activity under the CDM to be valid, a request for registration in the form of a validation report including the project design document, the written approval of voluntary participation from the designated national authority of each Party involved, as referred to in paragraph 66 (a) above, and an explanation of how it has taken due account of comments received;

(g) Make this validation report publicly available upon transmission to the Executive Board.

67. The registration by the Executive Board shall be deemed final ***four*** weeks after the date of receipt by the Executive Board of the request for registration, unless a Party involved in the proposed **small-scale** afforestation or reforestation project activity under the CDM, or at least three members of the Executive Board, request a review of the proposed **small-scale** afforestation or reforestation project activity under the CDM. The review by the Executive Board shall be made in accordance with the following provisions:

(a) It shall be related to issues associated with the validation requirements;

(b) It shall be finalized no later than at the second meeting following the request for review, with the decision and the reasons for it being communicated to the project participants and the public.

68. A proposed **small-scale** afforestation or reforestation project activity under the CDM that is not accepted may be reconsidered for validation and subsequent registration after appropriate revisions, provided that this project activity follows the procedures and meets the requirements for validation and registration, including those relating to public comments.

69. A **small-scale** afforestation or reforestation project activity under the CDM is additional if the actual net greenhouse gas removals by sinks are increased above 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 registered **small-scale** CDM afforestation or reforestation project activity.

70. The baseline for a proposed **small-scale** afforestation or reforestation project activity under the CDM is the scenario that reasonably represents 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 project activity. A baseline shall be deemed to reasonably represent the sum of the changes in carbon stocks in the carbon pools within the project boundary that would occur in the absence of the proposed **small-scale** afforestation or reforestation project activity under the CDM if it is derived using a baseline methodology **referred to in appendix B below**.

71. *[***A simplified baseline and monitoring methodology listed in appendix B below may be used for a small-scale afforestation and reforestation project activity under the CDM if the project participants are able to demonstrate to a DOE that the project activity would otherwise not be implemented due to the existence of one or more of the barriers listed in attachment A of appendix B below. Where specified in appendix B below for a project category, quantitative evidence that the project activity would otherwise not be implemented may be provided instead of a demonstration based on the barriers listed in attachment A to appendix B below.***]***

72. The crediting period shall begin at the start of the **small-scale** afforestation or reforestation project activity under the CDM. The crediting period for a proposed **small-scale** afforestation or reforestation project activity under the CDM shall be either:

(a) A maximum of 20 years which may be renewed at most two times, provided that, for each renewal, a DOE determines and informs the Executive Board that the original project baseline is still valid or has been updated taking account of new data where applicable; or

(b) A maximum of 30 years.

73. *[*A **small-scale** afforestation or reforestation project activity under the CDM shall be designed in such a manner as to minimize leakage.*]*

D. Monitoring

74. Project participants shall include, as part of the project design document for ***a small-scale afforestation or reforestation project activity under the CDM or a bundle of small-scale afforestation or reforestation project activities under the CDM***, a monitoring plan that provides for:

(a) The collection and archiving of all relevant data necessary for estimating or measuring the actual net greenhouse gas removals by sinks during the crediting period ***as specified in appendix B[11] below for the relevant project category***;

(b) The collection and archiving of all relevant data necessary for determining the baseline net greenhouse gas removals by sinks during the crediting period ***as specified in appendix B below for the relevant project category;***

(c) Unless project participants have successfully shown to the DOE that significant leakage is not expected to occur, the identification of all potential sources of, and the collection

[11] Some Parties have proposed that simplified monitoring methodologies would be presented in an additional, separate appendix.

and archiving of data on, leakage during the crediting period ***as specified in appendix B below for the relevant project category;***

(d) Changes in circumstances within the project boundary that affect legal title to the land or rights of access to the carbon pools;

(e) *[*Quality assurance and quality control procedures for the monitoring process;*]*

(f) *[*Procedures for the periodic calculation of the net anthropogenic greenhouse gas removals by sinks due to the **small-scale** afforestation or reforestation project activity, and documentation of all steps involved in those calculations, and for the periodic review of implementation of activities and measures to minimize leakage.*]*

75. ***The monitoring plan for a proposed small-scale afforestation or reforestation project activity under the CDM may use the monitoring methodology specified in appendix B below for the relevant project activity if the DOE determines at validation that the monitoring methodology reflects good monitoring practice appropriate to the circumstances of the project activity.***

76. ***If small-scale afforestation or reforestation project activities under the CDM are bundled, a separate monitoring plan shall apply for each of the constituent project activities in accordance with paragraphs 74 and 75 above, or an overall monitoring plan shall apply for the bundled projects, as determined by the DOE at validation to reflect good monitoring practice appropriate to the bundled project activities and to provide for the collection and archiving of the data to calculate the net anthropogenic greenhouse gas removals by sinks by the bundled project activities.*** *[Good practice may include monitoring of a sample of projects in a bundle.]*

77. Project participants shall implement the monitoring plan contained in the registered project design document, **archive the relevant monitored data and report the relevant monitoring data to a DOE contracted to verify the net anthropogenic greenhouse gas removals by sinks achieved during the crediting period specified by the project participants.**

78. Revisions, if any, to the monitoring plan to improve the accuracy and/or completeness of information shall be justified by project participants and shall be submitted for validation to a DOE.

79. The implementation of the registered monitoring plan and its revisions, as applicable, shall be a condition for verification, certification and the issuance of tCERs or lCERs.

80. The project participants shall provide to the DOE contracted by the project participants to perform the verification a monitoring report in accordance with the registered monitoring plan set out in paragraph 74 above for the purpose of verification and certification.

E. Additional proposals for simplified modalities

(Note: This section contains a summary of submissions by some Parties proposing simplifications that are additional to those included in annex II to decision 21/CP.8.)

1. Definitions

81. For small-scale afforestation or reforestation project activities under the CDM, "forest" is a minimum area of land of 0.05 ha with tree crown cover of more than 10 per cent with trees with the potential to reach a minimum height of 2 metres at maturity in situ. A forest may consist either of closed forest formations where trees of various storeys and undergrowth cover a high proportion of the ground or open forest. Young natural stands and all plantations which have yet to reach a crown density of 10–30 per cent or tree height of 2–5 metres are included under forest, as are areas normally forming part of

the forest area which are temporarily unstocked as a result of human intervention such as harvesting or natural causes but which are expected to revert to forest.

82. *Small-scale afforestation project activities under the CDM shall be limited to afforestation occurring on lands that did not contain forest in the previous 30 years. Small-scale reforestation projects under the CDM should be limited to reforestation occurring on lands that did not contain forest on 31 December 1999.*

2. Validation and registration

83. *Small-scale afforestation and reforestation project activities under the CDM shall not be required to provide supplementary information for demonstrating additionality. Synergy with any other sources of funding shall not imply a conflict with additionality*.

3. Verification and certification

84. The initial verification and certification of a small-scale afforestation or reforestation project activity under the CDM may be undertaken at a time selected by the project participants. Thereafter, verification and certification shall be carried out every *[*five*] [ten]* years until the end of the crediting period. *Each verification report shall be complemented by an intermediate report, to be submitted five years after each verification report to the Executive Board and the DOE*.

4. Addressing non-permanence

85. *At the end of the crediting period selected by project participants, a tCER or lCER issued from a small-scale afforestation or reforestation project activity under the CDM shall continue to be valid provided that the DOE performs the periodic verification and establishes the continued existence of the carbon stock.*

5. Other

86. *Small-scale afforestation and reforestation project activities under the CDM shall be exempt from the share of proceeds to cover the costs of adaptation*.

87. *Project participants may incorporate additional areas within the project boundary until net anthropogenic greenhouse gas removals by sinks achieved by the small-scale afforestation or reforestation project activity under the CDM are equal to 8 kt of CO_2 per year, provided that the newly incorporated areas have similar characteristics of baselines and additionality*.

88. *Option 1: Project participants may decide which carbon pools will be included in the assessment of changes in carbon stocks. They may choose to exclude any pool without having to provide further information.*

Option 2: Project participants may exclude from the monitoring of the baseline net greenhouse gas removals by sinks and actual greenhouse gas removals by sinks those carbon pools for which no significant changes in carbon stocks are expected or those which it is not possible to assess.

89. Non-CO_2 emissions resulting from small-scale afforestation or reforestation project activities under the CDM, such as increases of nitrous oxide due to fertilization, should only be estimated and deducted from the net anthropogenic greenhouse gas removals by sinks if they represent 15 per cent or more of the proposed net anthropogenic removals by sinks. [Default methods as outlined in the IPCC good practice guidance may be used for their assessment].

90. *In the absence of formal land property, tenure or use rights, recognized customary or access rights to the land should be a sufficient condition for low-income communities and individuals to*

participate in the CDM. A substantial proportion of the benefits from the small-scale afforestation or reforestation project activity under the CDM should be assigned to these low-income communities and individuals.

F. Appendices to chapter 3

91. Following the structure of annex II to decision 21/CP.8, three appendices have been developed for the simplified modalities and procedures for small-scale afforestation and reforestation project activities under the CDM. It is expected that they will be reformatted to be used for the negotiations on an annex to the draft decision of the COP referred to in paragraph 2 above. In order to facilitate the consideration of these appendices, the numbering of each is independent from that of Chapter III.

Appendix A

Project design document for small-scale afforestation and reforestation project activities under the clean development mechanism

1. Option 1: ***A full appendix specifying a simplified project design document for small-scale afforestation or reforestation project activity under the CDM shall be developed by the CDM Executive Board taking into consideration the project design document for afforestation and reforestation project activities under the CDM and simplifications contained in these simplified modalities and procedures.***

Option 2: *The SBSTA may consider and recommend simplifications to appendix B of the modalities and procedures for afforestation or reforestation project activities under the CDM as follows:*

2. The purpose of this appendix is to outline the information required in the project design document for **small-scale** afforestation or reforestation project activities under the CDM. A project activity shall be described in detail in a project design document, taking into account the provisions for afforestation and reforestation project activities under the CDM as set out in the present annex[12], in particular in section III.C. on validation and registration, and section III D. on monitoring. The description shall include the following:

(a) A description of the **small-scale** afforestation or reforestation project activity comprising the project purpose; a technical description of the project activity, including species and varieties selected and how technology and know-how will be transferred, if appropriate; a description of the physical location and boundaries of the project activity; and a specification of the gases whose emissions will be part of the project activity;

(b) A description of the present environmental conditions of the area including a description of climate, hydrology, soils, ecosystems, and the possible presence of rare or endangered species and their habitats;

(c) A description of legal title to the land, rights of access to the sequestered carbon, and current land tenure and land use;

(d) Carbon pools selected, as well as transparent and verifiable information, in accordance with paragraph 21 of the of the modalities and procedures for afforestation and reforestation project activities under the CDM;

(e) A statement **of which project type of appendix B** has been selected;

[12] See footnote 10.

(f) A description of how the **simplified baseline methodology of appendix B** will be applied in the context of the **small-scale** afforestation or reforestation project activity;

(g) *[*Measures to be implemented to minimize potential leakage, as applicable*]*;

(h) The start date for the project activity, with justification, and the choice of crediting periods during which the project activity is expected to result in net anthropogenic greenhouse gas removals by sinks;

(i) A statement of which approach for addressing non-permanence was selected in accordance with paragraph 38 of the modalities and procedures for afforestation and reforestation project activities under the CDM;

(j) A description of how the actual net greenhouse gas removals by sinks are increased above 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 registered afforestation or reforestation project activity under the CDM;

Option 1:

(k) Environmental impacts of the project activity:

(i) Documentation on the analysis of the environmental impacts, including impacts on biodiversity and natural ecosystems, and impacts outside the project boundary, of the proposed afforestation or reforestation project activity under the CDM. This analysis should include, where applicable, information on, inter alia, hydrology, soils, risk of fires, pests and diseases;

(ii) If any negative impact is considered significant by the project participants or the host Party, a statement that project participants have undertaken an environmental impact assessment, in accordance with the procedures required by the host Party, including conclusions and all references to support documentation.

(l) Socio-economic impacts of the project activity:

(i) Documentation on the analysis of the socio-economic impacts, including impacts outside the project boundary, of the proposed afforestation or reforestation project activity under the CDM. This analysis should include, where applicable, information on, inter alia, local communities, indigenous peoples, land tenure, local employment, food production, cultural and religious sites, and access to fuelwood and other forest products;

(ii) If any negative impact is considered significant by the project participants or the host Party, a statement that project participants have undertaken a socio-economic impact assessment, in accordance with the procedures required by the host Party, including conclusions and all references to support documentation.

Option 2:

(k) ***If required by the host Party,*** environmental impacts of the project activity:

(i) Documentation on the analysis of the environmental impacts, including impacts on biodiversity and natural ecosystems, and impacts outside the project boundary, of the proposed afforestation or reforestation project activity under the CDM.

This analysis should include, where applicable, information on, inter alia, hydrology, soils, risk of fires, pests and diseases;

(ii) If any negative impact is considered significant by the project participants or the host Party, a statement that project participants have undertaken an environmental impact assessment, in accordance with the procedures required by the host Party, including conclusions and all references to support documentation.

(l) ***If required by the host Party,*** socio-economic impacts of the project activity:

(i) Documentation on the analysis of the socio-economic impacts, including impacts outside the project boundary, of the proposed afforestation or reforestation project activity under the CDM. This analysis should include, where applicable, information on, inter alia, local communities, indigenous peoples, land tenure, local employment, food production, cultural and religious sites, and access to fuelwood and other forest products;

(ii) If any negative impact is considered significant by the project participants or the host Party, a statement that project participants have undertaken a socio-economic impact assessment, in accordance with the procedures required by the host Party, including conclusions and all references to support documentation.

Option 3:

(k) Environmental impacts of the project activity: Documentation on the analysis of the environmental impacts, including impacts on biodiversity and natural ecosystems, and impacts outside the project boundary, of the proposed afforestation or reforestation project activity under the CDM. *This analysis should include, where applicable, information on, inter alia, hydrology, soils, risk of fires, pests and diseases. Such analysis shall be a locally appropriate, community-driven participatory process organized by the project-implementing community. Such a participatory analysis process should conclude with a consensus statement by the local community or its authorized representative that a community assessment of impacts has been made, a description of the process undertaken and a description of the actions or initiatives to mitigate any anticipated negative impacts. No impact assessment or monitoring after inception of the project would be required.*

(l) Documentation on the analysis of the socio-economic impacts, including impacts outside the project boundary, of the proposed afforestation or reforestation project activity under the CDM. *This analysis should include, where applicable, information on, inter alia, local communities, indigenous peoples, land tenure, local employment, food production, cultural and religious sites, and access to fuelwood and other forest products. Such analysis shall be a locally appropriate, community-driven participatory process organized by the project-implementing community. Such a participatory analysis process should conclude with a consensus statement by the local community or its authorized representative that a community assessment of impacts has been made, a description of the process undertaken and a description of the actions or initiatives to mitigate any anticipated negative impacts. No impact assessment or monitoring after inception of the project would be required.*

(m) *[*A description of planned monitoring and remedial measures to address significant impacts referred to in paragraph 2 (j) (ii) and (k) (ii) above *[*, as appropriate*]]*;

(n) Information on sources of public funding for the project activity from Annex I Parties which shall provide an affirmation that such funding does not result in a diversion of official development assistance and is separate from and is not counted towards the financial obligations of those Parties;

(o) Stakeholder comments, including a brief description of the process, a summary of the comments received, and a report on how due account was taken of any comments received;

(p) A description of how the ***simplified monitoring methodology of appendix B*** will be applied in the context of the ***small-scale*** afforestation or reforestation project activity;

(q) *[*Calculations, including a discussion of how uncertainties have been addressed:

(i) A description of formulae used to estimate the baseline net greenhouse gas removals by sinks for the project activity;

(ii) A description of formulae used to estimate leakage;

(iii) A description of formulae used to calculate the actual net greenhouse gas removals by sinks;

(iv) A description of formulae used to calculate the net anthropogenic greenhouse gas removals by sinks;*]*

(r) References to support the above, if any.

Appendix B

Indicative simplified baseline and monitoring methodologies for selected types of small-scale afforestation and reforestation project activities under the clean development mechanism

Elements	Type	Simplified baseline methodology	Simplified monitoring methodology
Project boundary	N/A	Option 1: Same definition as 19/CP.9. Option 2: Allow exclusion of some carbon pools. Allow dynamic boundaries?	Option 1: Same definition as 19/CP.9. Option 2: Allow exclusion of some carbon pools. Allow dynamic boundaries?
Baseline net greenhouse gas removals by sinks	Grassland	Four methods of estimating are to be developed by the Executive Board	Need to monitor?
	Cropland		
	Wetland		
	Other land		
Actual net greenhouse gas removals by sinks	Plantations (dense or open?)	Three methods of estimating are to be developed by the Executive Board (with possible differentiation in each method for dense and open forests?)	Three methods of monitoring are to be developed by the Executive Board (with possible differentiation in each method for dense and open forests?)
	Agroforestry (dense or open?)		
	Restoration (dense or open?)		
Leakage	Small/ Medium?	Need to estimate?	Option 1: Method of monitoring is to be developed Option 2: Method of monitoring for "large" small-scale projects. No need to monitor leakage for "medium" and "small". Option 3: No need to monitor leakage
	Large?		
Net anthropogenic greenhouse gas removals by sinks		Method of estimating is to be developed by the Executive Board	Method of monitoring to be developed by the Executive Board

[Attachment A to Appendix B

(The full attachment A to appendix B, referred to in paragraph 73 of the simplified modalities and procedures for small-scale afforestation and reforestation project activities, shall be developed by the Executive Board of the CDM.)]

Appendix C

Criteria for determining the occurrence of debundling

Option 1:

1. ***Debundling is defined as the fragmentation of a large project activity into smaller parts. A small-scale project activity that is part of a large project activity is not eligible to use the simplified modalities and procedures for small-scale afforestation and reforestation project activities under the CDM. The full project activity or any component of the full project activity shall follow the regular modalities and procedures for afforestation and reforestation project activities under the CDM.***

2. ***A proposed small-scale afforestation or reforestation project activity shall be deemed to be a debundled component of a large project activity if there is a registered small-scale afforestation or reforestation project activity under the CDM or an application to register another small-scale project activity under the CDM:***

(a) ***With the same project participants;***

(b) ***[In the same project category and technology/measure;]***

(c) ***Registered within the previous two years;***

(d) ***Whose project boundary is within 1 kilometre of the project boundary of the proposed small-scale activity at the closest point.***

3. ***If a proposed small-scale afforestation or reforestation project activity is deemed to be a debundled component in accordance with paragraph 2 above, but the total size of such an activity combined with the previous registered small-scale afforestation or reforestation project activity under the CDM does not exceed the limits for small-scale afforestation or reforestation project activities under the CDM as set in paragraph 1 (h) of the annex to decision 19/CP.9, the project activity can qualify to use simplified modalities and procedures for small-scale afforestation and reforestation project activities under the CDM.***

Option 2:

1. ***Debundling is defined as the fragmentation of a large project activity into smaller parts. A small-scale afforestation or reforestation project activity that is part of a large project activity is not eligible to use the simplified modalities and procedures for small-scale afforestation and reforestation project activities under the CDM. The full project activity or any component of the full project activity shall follow the regular modalities and procedures for afforestation and reforestation project activities under the CDM.***

2. Project areas that, in the opinion of the Designated Operational Entity, are functionally contiguous geographically or are institutionally linked in the social, environmental or economic functions they perform, should not be debundled.

Annex

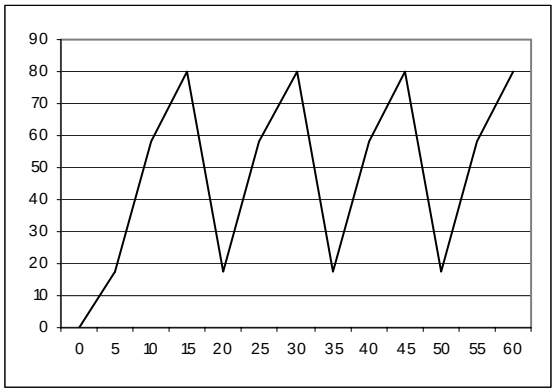
Illustration of implications of the choice of accounting method for the quantitative limitation criterion (8 kilotonnes of CO_2 per year)

1. Scenario 1 of a hypothetical afforestation and reforestation project is presented in table 1 and figure 1. The project plants all its area at year 0 and harvests all its standing biomass at the end of year 15, after which it replants immediately.

Table 1. Annual removals of the hypothetical project using the stock change and average storage accounting methods (Scenario 1)

Year	Removals (t CO_2 eq. x 1000)	Removals per year	
		Stock change	Average storage (since beginning of project)
0	0	0	0.00
5	17.4	3.5	3.48
10	58	**8.1**	5.03
15	79.75	4.4	**5.17**
20	17.4	-12.5	3.45
25	58	8.1	3.07
30	79.75	4.4	2.96
35	17.4	-12.5	2.34
40	58	8.1	2.14
45	79.75	4.4	2.07
50	17.4	-12.5	1.76
55	58	8.1	1.64
60	79.75	4.4	1.59

Figure 1. Removals of the hypothetical project as established in the five-yearly verifications



2. Table 1 shows that this project would not be eligible if the stock change accounting method is used, because the average annual removals in the period of fastest growth between years 5 and 10 of each rotation are above 8 kt of CO_2. If the average storage method is used, however, the project would be eligible, because the highest average of any five-year period since the beginning of the project does not exceed 5.17 (in year 15).

3. In Scenario 2 the planted area of the project has been multiplied by a factor of 1.55. Table 2 shows that the project is now also non-eligible if the average storage method is used, because the highest average of any five-year period since the beginning of the project exceeds 8 kt in year 20. With a slightly smaller area the project would be eligible, even though the annual removals between years 5 and 10 average around 12.5 kt. However, the average is reduced by periods of slower growth.

4. For illustration purposes, Scenario 3 (table 3) shows that the area of the project could be increased by a factor of 2.71 times Scenario 1 if the average storage over the entire crediting period (30 years in this example) is used. However, because the average storage method is used for the assessment of the project's compliance with the definition of small-scale projects (as discussed above), the project would produce an excess number of tCERs or lCERs in each year of the first rotation.

Table 2. Annual removals of the hypothetical project (area x 1.55) using the stock change and average storage accounting methods (Scenario 2)

Year	Removals (t CO_2 eq. x 1000)	Removals per year	
		Stock change	Average storage (since beginning of project)
0	0	0	0.00
5	26.97	5.4	5.39
10	89.9	12.6	7.79
15	123.6125	6.7	**8.02**
20	26.97	-19.3	5.35
25	89.9	12.6	4.76
30	123.6125	6.7	4.58
35	26.97	-19.3	3.63
40	89.9	12.6	3.32
45	123.6125	6.7	3.21
50	26.97	-19.3	2.72
55	89.9	12.6	2.54
60	123.6125	6.7	2.47

Table 3. Annual removals of the hypothetical project (area x 2.71) using the stock change and average storage accounting methods (Scenario 3)

Year	Removals (t CO_2 eq. x 1000)	Removals per year	
		Stock change	Average storage (since beginning of project)
0	0	0	0.00
5	47.154	9.4	9.43
10	157.18	22.0	13.62
15	216.1225	11.8	14.02
20	47.154	-33.8	9.35
25	157.18	22.0	8.33
30	216.1225	11.8	**8.01**
35	47.154	-33.8	6.34
40	157.18	22.0	5.81
45	216.1225	11.8	5.61
50	47.154	-33.8	4.76
55	157.18	22.0	4.44
60	216.1225	11.8	4.31

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