Decision 15/CP.10

Good practice guidance for land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol

The Conference of the Parties,

Recalling decisions 11/CP.7, 19/CP.7, 21/CP.7, 22/CP.7 and 13/CP.9,

1. *Recommends* that the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol adopt draft decision -/CMP.1 (*Good practice guidance for land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol*) below;

2. *Encourages* Parties included in Annex I to the Convention that have ratified the Kyoto Protocol to submit, on a voluntary basis, with their submission due on 15 April 2007: estimates of greenhouse gas emissions by sources and removals by sinks resulting from activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol, using the tables of the common reporting format¹ contained in annex II to this decision; and supplementary information to be included in an annex to the national inventory report, in accordance with the guidance contained in annex I to this decision;

3. *Invites* Parties to submit to the secretariat, by 30 June 2007, their views on the tables of the common reporting format referred to in paragraph 2 above and accounts of their experiences on the use of these tables;

4. *Requests* the secretariat to synthesize the views of Parties submitted in accordance with paragraph 3 above, for consideration by the Subsidiary Body for Scientific and Technological Advice at its twenty-seventh session (November 2007);

5. *Requests* the Subsidiary Body for Scientific and Technological Advice, following the consideration of experiences gained in using the tables referred to in paragraph 2 above, to update those tables and to prepare a draft decision for adoption by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol to incorporate the updated tables in an annex to the decision referred to in paragraph 1 above;

6. *Requests* the secretariat, subject to the availability of supplementary funding, to develop a provisional module for the tables referred to in paragraph 2 above, in order to facilitate their submission.

6th plenary meeting 17–18 December 2004

¹ The common reporting format is a standardized format to be used by Parties for electronic reporting of estimates of greenhouse gas emissions and removals and any other relevant information. For technical reasons (for example, size of tables and fonts), the layout of the printed version of the tables of the common reporting format for land use, land-use change and forestry activities in this document cannot be standardized.

ANNEX I

Guidance on reporting of supplementary information on land use, land-use change and forestry (LULUCF) activities under Article 3.3 and 3.4 to be included in an annex to the national inventory report

1. This annex provides guidance on reporting supplementary information on land use, land-use change and forestry (LULUCF) activities under Article 3.3 and 3.4 to be included in the national inventory report¹ (NIR). This guidance is provided to help Parties fulfil the requirements of decision 22/CP.7 and is based, where appropriate, on the *IPCC Good Practice Guidance for Land Use, Land-Use Change and Forestry* (hereinafter referred to as the IPCC good practice guidance for LULUCF). Additional information may be included in the NIR, depending on the Party's national approach for estimating greenhouse gas (GHG) emissions and removals from LULUCF under the Kyoto Protocol.

- 2. Consistent with the guidance below, Parties should report:
 - (a) General information
 - (b) Land-related information
 - (c) Activity-specific information
 - (d) Other information
 - (e) Information relating to Article 6.

3. The activity-specific information should be reported for each activity under Article 3.3 and each elected activity under Article 3.4. As Afforestation and Reforestation are subject to the same provisions specified in the annex to draft decision -/CMP.1 (*Land use, land-use change and forestry*), attached to decision 11/CP.7, they can be reported together.

1. General information

- 1.1. Definition of forest (as in table NIR 1.1) and any other criteria (e.g., minimum width)
- 1.2. Elected activities under Article 3.4 (as in table NIR 1)
- 1.3. Description of how the definitions of each activity under Article 3.3 and each elected activity under Article 3.4 have been implemented and applied consistently over time
- 1.4. Description of precedence conditions and/or hierarchy among Article 3.4 activities, and how they have been consistently applied in determining how land was classified.

2. Land-related information

- 2.1. Spatial assessment unit used for determining the area of the units of land under Article 3.3 (in accordance with paragraph 3 of the annex to draft decision -/CMP.1 (*Land use, land-use change and forestry*), attached to decision 11/CP.7)
- 2.2. Methodology used to develop the land transition matrix in table NIR 2
- 2.3. Maps and/or database to identify the geographical locations, and the system of identification codes for the geographical locations, all of which can be provided electronically.

3. Activity-specific information

3.1. Methods for carbon stock change and GHG emission and removal estimates

3.1.1.Description of the methodologies and the underlying assumptions used

¹ The national inventory report is submitted in accordance with decision 18/CP.8, as modified by decision 13/CP.9.

- 3.1.2. Justification when omitting any carbon pool or GHG emissions/removals from activities under Article 3.3 and elected activities under Article 3.4 (table NIR 1 should be accompanied by such information in all cases where NR is entered)
- 3.1.3.Information on whether or not indirect and natural GHG emissions and removals have been factored out
- 3.1.4. Changes in data and methods since the previous submission (recalculations) (see, inter alia, section 4.2.4.1 of the IPCC good practice guidance for LULUCF)
- 3.1.5.Uncertainty estimates (see, inter alia, section 5.2 of the IPCC good practice guidance for LULUCF)
- 3.1.6.Information on other methodological issues (e.g., measurement intervals, interannual variability) (see, inter alia, section 4.2.3 of the IPCC good practice guidance for LULUCF)
- 3.1.7.For the purpose of accounting as required in paragraph 18 of the annex to draft decision -/CMP.1 (*Land use, land-use change and forestry*) attached to decision 11/CP.7, an indication of the year of the onset of an activity, if after 2008.

3.2. Article 3.3

- 3.2.1.Information that demonstrates that activities under Article 3.3 began on or after 1 January 1990 and before 31 December 2012 and are direct human-induced
- 3.2.2.Information on how harvesting or forest disturbance that is followed by the re-establishment of forest is distinguished from deforestation
- 3.2.3.Information on the size and geographical location of forest areas that have lost forest cover but which are not yet classified as deforested.

3.3. Article 3.4

- 3.3.1.Information that demonstrates that activities under Article 3.4 have occurred since 1 January 1990 and are human-induced
- 3.3.2.Information relating to Cropland Management, Grazing Land Management and Revegetation, if elected, for the base year
- 3.3.3.Information relating to Forest Management:
 - (a) That the definition of forest for this category conforms with the definition in item 1.1 above
 - (b) That forest management is a system of practices for stewardship and use of forest land aimed at fulfilling relevant ecological (including biological diversity), economic and social functions of the forest in a sustainable manner (paragraph 1 (f) of the annex to

draft decision -/CMP.1 (*Land use, land-use change and forestry*), attached to decision 11/CP.7).

4. Other information

4.1. Key category analysis for Article 3.3 activities and any elected activities under Article 3.4 (as in, inter alia, table NIR 3, section 5.4 of the IPCC good practice guidance for LULUCF).

5. Information relating to Article 6

5.1. The identification code in the relevant tables of the common reporting format for activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol, contained in annex II to decision - /CMP.1 (*Good practice guidance for land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol*) should include a specific indication of whether the boundary of the geographical location encompasses land subject to a project under Article 6 of the Kyoto Protocol.

TABLE NIR 1. SUMMARY TABLE

Activity coverage and other information relating to activities under Article 3.3 and elected activities under Article 3.4

		Cha	nge in carb	on pool i	reported	(1)		Greenho	use gas sources reported	(2)			
	Activity	Above- ground biomass	Below- ground biomass	Litter	Dead wood	Soil	Fertilization ⁽³⁾	Drainage of soils under forest management	Disturbance associated with land-use conversion to croplands	Liming	B bu	iomas rning	S (4)
							N ₂ O	N_2O	N ₂ O	CO ₂	CO ₂	CH_4	N_2O
Article 3.3 activities	Afforestation and Reforestation												
	Deforestation												
	Forest Management												
Article 3.4 activities	Cropland Management												
activities	Grazing Land Management												
	Revegetation												

⁽¹⁾ Indicate R (reported), NR (not reported), IE (included elsewhere) or NO (not occurring), for each relevant activity under Article 3.3 or elected activity under Article 3.4. If changes in a carbon pool are not reported, it must be demonstrated in the NIR that this pool is not a net source of greenhouse gases. Indicate NA (not applicable) for each activity that is not elected under Article 3.4. Explanation about the use of notation keys should be provided in the text.

⁽²⁾ Indicate R (reported), NE (not estimated), IE (included elsewhere) or NO (not occurring) for greenhouse gas sources reported, for each relevant activity under Article 3.3 or elected activity under Article 3.4. Indicate NA (not applicable) for each activity that is not elected under Article 3.4. Explanation about the use of notation keys should be provided in the text.

 $^{(3)}$ N₂O emissions from fertilization for Cropland Management, Grazing Land Management and Revegetation should be reported in the Agriculture sector. If a Party is not able to separate fertilizer applied to Forest Land from Agriculture, it may report all N₂O emissions from fertilization in the Agriculture sector.

 $^{(4)}$ If CO₂ emissions from biomass burning are not already included under changes in carbon stocks, they should be reported under biomass burning; this also includes the carbon component of CH₄. Parties that include CO₂ emissions from biomass burning in their carbon stock change estimates should report IE (included elsewhere).

Table NIR 1.1 Additional information

Selection of parameters for defining "Forest" under the Kyoto Protocol

Parameter	Range	Selected value
Minimum land area	0.05 - 1 ha	
Minimum crown cover	10 - 30 %	
Minimum height	2 - 5 m	

Table NIR 2. LAND TRANSITION MATRIX

Area change between the previous and the current inventory $year^{(1), (2), (3)}$

		Article 3.3	activities		Article 3.4	activities			
	то	Afforestation and Reforestation	Deforestation	Forest Management (if elected)	Cropland Management (if elected)	Grazing Land Management (if elected)	Revegetation (if elected)	Other	Total
FROM.		,			(kha)	•			
Article 3.3	Afforestation and Reforestation								
activities	Deforestation								
	Forest Management (if elected)								
Article 3.4	Cropland Management ⁽⁴⁾ (if elected)								
activities	Grazing Land Management ⁽⁴⁾ (if elected)								
	Revegetation ⁽⁴⁾ (if elected)								
Other									
Total a	rea								

⁽¹⁾ This table should be used to report land area and changes in land area subject to the various activities in the inventory year. For each activity it should be used to report area change between the previous year and the current inventory year. For example, the total area of land subject to Forest Management in the year preceeding the inventory year, and which was deforested in the inventory year, should be reported in the cell in column of Deforestation and in the row of Forest Management.

⁽²⁾ Some of the transitions in the matrix are not possible and the cells concerned have been shaded.

⁽³⁾ In accordance with section 4.2.3.2 of the IPCC good practice guidance for LULUCF, the value of the reported area subject to the various activities under Article 3.3 and 3.4 for the inventory year should be that on 31 December of that year.

⁽⁴⁾ Lands subject to Cropland Management, Grazing Land Management or Revegetation which, after 2008, are subject to activities other than those under Article 3.3 and 3.4, should still be tracked and reported under Cropland Management, Grazing Land Management or Revegetation, respectively.

TABLE NIR 3. SUMMARY OVERVIEW FOR KEY CATEGORIES FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL

Country Year

Submission

	GAS	CRITERIA USED FO	R KEY CATEGORY IDENTI	FICATION	COMMENTS ⁽³⁾
KEY CATEGORIES OF EMISSIONS AND REMOVALS		Associated category in UNFCCC inventory ⁽¹⁾ is key (indicate which category)	Category contribution is greater than the smallest category considered key in the UNFCCC inventory ⁽¹⁾ (including LULUCF)	Other ⁽²⁾	
Specify key categories according to the national level of disaggregation used ⁽¹⁾					
For example: Cropland Management	CO_2	X (Cropland remaining Cropland)			

(1)

See section 5.4 of the IPCC good practice guidance for LULUCF. This should include qualitative consideration as per section 5.4.3 of the IPCC good practice guidance for LULUCF or any other criteria. (2)

(3) Describe the criteria identifying the category as key.

Documentation box:

Parties should provide in the NIR the full information on methodologies used for identifying key categories (according to section 5.4 of the IPCC good practice guidance for LULUCF).

ANNEX II

Tables of the common reporting format for land use, land-use change and forestry under the Kyoto Protocol*

 TABLE 5(KP). REPORT OF SUPPLEMENTARY INFORMATION FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES
 Country

 UNDER THE KYOTO PROTOCOL^{(1), (2)}
 Year

 Submission
 Submission

GREENHOUSE GAS SOURCE AND SINK ACTIVITIES	Net CO ₂ emissions/ removals ^{(3), (4)}	CH4 ⁽⁵⁾	N ₂ O ⁽⁶⁾
		(Gg)	
A. Article 3.3 activities			
A.1. Afforestation and Reforestation ⁽⁷⁾			
A.1.1. Units of land not harvested since the beginning of the commitment period			
A.1.2. Units of land harvested since the beginning of the commitment period			
A.2. Deforestation			
B. Article 3.4 activities			
B.1. Forest Management (if elected)			
B.2. Cropland Management (if elected)			
B.3. Grazing Land Management (if elected)			
B.4. Revegetation (if elected)			

Documentation box:

Parties should provide detailed explanation on the land use, land-use change and forestry sector in the relevant annex of the NIR: Supplementary information on LULUCF activities under the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR if any additional details are needed to understand the content of this table.

⁽¹⁾ All estimates in this table include emissions and removals from projects under Article 6 hosted by the reporting Party.

stocks are converted to CO₂ by multiplying C by 44/12 and by changing the sign for net CO₂ removals to be negative (-) and net CO₂ emissions to be positive (+).

 $^{(4)}$ CO₂ emissions from liming, biomass burning and drained organic soils, where applicable, are included in this column.

⁽⁵⁾ CH₄ emissions reported here for Cropland Management, Grazing Land Management and Revegetation, if elected, include only emissions from biomass burning (with the exception of savannah burning and agricultural residue burning which are reported in the Agriculture sector). Any other CH₄ emissions from Agriculture should be reported in the Agriculture sector. ⁽⁶⁾ N₂O emissions reported here for Cropland Management, if elected, include only emissions from biomass burning (with the exception of savannah burning and agricultural residue

 N_2O emissions reported here for Cropland Management, if elected, include only emissions from blomass burning (with the exception of savannan burning and agricultural resides burning which are reported in the Agriculture sector) and N₂O from conversion to Cropland of lands other than Forest Land (Table 5(KP-II)3). Any other N₂O emissions from Agriculture should be reported in the Agriculture sector.

⁽⁷⁾ As both Afforestation and Reforestation under Article 3.3 are subject to the same provisions specified in the annex to draft decision -/CMP.1 (*Land use, land-use change and forestry*), attached to decision 11/CP.7, they can be reported together.

* On all CRF tables, please use, as applicable, the notation keys as specified in the annex to decision 18/CP.8.

 ⁽²⁾ If Cropland Management, Grazing Land Management and/or Revegetation are elected, this table and all relevant tables should also be reported for the base year for these activities.
 (3) According to the Revised 1996 IPCC Guidelines, for the purposes of reporting, the signs for removals are always negative (-) and for emissions positive (+). Net changes in carbon tables are always negative (-) and for emissions positive (+). Net changes in carbon tables are always negative (-) and for emissions positive (+).

TABLE 5(KP-I)A.1.1. SUPPLEMENTARY BACKGROUND DATA ON CARBON STOCK CHANGES AND NET CO₂ EMISSIONS AND REMOVALS FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL Article 3.3 activities: Afforestation and Reforestation^{(1), (2)}

Units of land not harvested since the beginning of the commitment period

GEOGRA- PHICAL LOCATION ⁽³⁾	ACTIVITY	DATA		IMPL	IED CA	RBON	STOCK	CHANG	GE FAC	TORS ⁽⁷⁾					CHA	NGE I	N CAR	BON ST	OCK ⁽⁷⁾			
			in a bioma		change ound rea ^{(5), (6)}				stock	Net carbon stock	stock	Implied emission/ removal		on stock above-gr iomass ⁽⁵	change cound		on stock oelow-gr iomass ⁽⁵	change cound 5), (6)	Net carbon	Net carbon	Net carbon	Net CO ₂ emissions/
Identification code	code Subdivision Gains Losses Net change (kha)							Not	in litter per	change in dead wood per area ⁽⁵⁾	in soils per area ⁽⁵⁾		Gains	Losses	Net change	Gains	Losses	Net change		stock change in dead wood ⁽⁵⁾	change in	removals ⁽⁸⁾
		(kha)					(Mg C/I	ha)	-		-	(Mg CO ₂ /ha)					(Gg C	C)				(Gg CO ₂)
Total for activity A.1.1																						
[specify identification code]																						
	[specify subdivision]																					
	[specify subdivision]																					
[specify identification code]																						
	[specify subdivision]																					
Documentatio	on box:																					
Parties should												he relevant a								LULUC	CF activ	ities under

the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR if any additional details are needed to understand the content of this table.

Report here information on anthropogenic change in carbon stock for the inventory year for all geographical locations that encompass units of land subject to Afforestation and Reforestation under Article 3.3 not harvested since the beginning of the commitment period.

⁽²⁾ As both Afforestation and Reforestation under Article 3.3 are subject to the same provisions specified in the annex to draft decision -/CMP.1 (Land use, land-use change and forestry), attached to decision 11/CP.7, they can be reported together.

⁽³⁾ Geographical location refers to the boundaries of the areas that encompass units of land subject to Afforestation and Reforestation.

(4) Activity data may be further subdivided according to climate zone, management system, soil type, vegetation type, tree species, ecological zone, national land classification or other criteria. Complete one row for each subdivision.

 $^{(5)}$ The signs for estimates of gains in carbon stocks are positive (+) and of losses in carbon stocks are negative (-).

⁽⁶⁾ In all cases where the good practice guidance methods used give separate estimates of gains and losses, these estimates should be reported.

⁽⁷⁾ Note that net change corresponds to increase/decrease of carbon stock (see table 4.2.6a of the IPCC good practice guidance for LULUCF).

⁽⁸⁾ According to the Revised 1996 IPCC Guidelines, for the purposes of reporting, the signs for removals are always negative (-) and for emissions positive (+). Net changes in carbon stocks are converted to CO₂ by multiplying C by 44/12 and changing the sign for net CO₂ removals to be negative (-) and for net CO₂ emissions to be positive (+).

Country Year

Submission

TABLE 5(KP-I)A.1.2. SUPPLEMENTARY BACKGROUND DATA ON CARBON STOCK CHANGES AND NET CO₂ EMISSIONS AND REMOVALS FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL

Article 3.3 activities: Afforestation and Reforestation^{(1), (2)}

Units of land harvested since the beginning of the commitment period

GEOGRA- PHICAL LOCATION ⁽³⁾	ACTIVITY	DATA		IMP	LIED CA	ARBON	STOCK	CHANG	GE FACI	FORS ⁽⁷⁾					С	HANGE I	N CARBO	ON STOC	K ⁽⁷⁾			
		Area	Carbo above p	n stock c -ground er area ⁽⁵	hange in biomass	Carbo below- p	n stock c •ground er area ⁽⁵		Net carbon stock	Net carbon stock	stock	Implied emission/ removal	al	n stock c bove-gro biomass ⁽⁵	hange in und	Carbor below-gr	n stock cha ound biom	nge in ass ^{(5), (6)}	Net carbon	Net carbon	Net carbon	Net CO ₂ emissions/
Identification code	Subdivision ⁽⁴⁾	subject to the activity	Gains	Losses	Net change	Gains	Losses		change in litter per area ⁽⁵⁾			factor per area ⁽⁸⁾	Gains	Losses	Net change	Gains	Losses	Net change	in	stock change in dead wood ⁽⁵⁾	stock change in soils ⁽⁵⁾	removals ⁽⁸⁾
		(kha)					(Mg C/	ha)	•	•		(Mg CO ₂ /ha)					(Gg C)	·	•			(Gg CO ₂)
Total for activity A.1.2																						
[specify identification code]																						
_	[specify subdivision]																					
	[specify subdivision]							·														
[specify identification code]																						
	[specify subdivision]																					
	•••																					

Documentation box:

Parties should provide detailed explanation on the land use, land-use change and forestry sector in the relevant annex of the NIR: Supplementary information on LULUCF activities under the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR if any additional details are needed to understand the content of this table.

⁽¹⁾ Report here information on anthropogenic change in carbon stock for the inventory year for all geographical locations that encompass units of land subject to Afforestation and Reforestation under Article 3.3 harvested since the beginning of the commitment period.

⁽²⁾ As both Afforestation and Reforestation under Article 3.3 are subject to the same provisions specified in the annex to draft decision -/CMP.1 (*Land use, land-use change and forestry*), attached to decision 11/CP.7, they can be reported together.

⁽³⁾ Geographical location refers to the boundaries of the areas that encompass units of land subject to Afforestation and Reforestation.

(4) Activity data may be further subdivided according to climate zone, management system, soil type, vegetation type, tree species, ecological zone, national land classification or other criteria. Complete one row for each subdivision.

 $^{(5)}$ The signs for estimates of gains in carbon stocks are positive (+) and of losses in carbon stocks are negative (-).

⁽⁶⁾ In all cases where the good practice guidance methods used give separate estimates of gains and losses, these estimates should be reported.

⁽⁷⁾ Note that net change corresponds to increase/decrease of carbon stock (see table 4.2.6a of the IPCC good practice guidance for LULUCF).

⁽⁸⁾ According to the Revised 1996 IPCC Guidelines, for the purposes of reporting, the signs for removals are always negative (-) and for emissions positive (+). Net changes in carbon stocks are converted to CO₂ by multiplying C by 44/12 and changing the sign for net CO₂ removals to be negative (-) and for net CO₂ emissions to be positive (+).

Country Year Submission

TABLE 5(KP-I)A.1.3. SUPPLEMENTARY BACKGROUND FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL

Article 3.3 activities: Afforestation and Reforestation^{(1), (2)}

Units of land otherwise subject to elected activities under Article 3.4 (information item)

Country Year Submission

GEOGRAPHICAL LOCATION ⁽³⁾	ACTIVITY	DATA
Identification code	Subdivision ⁽⁴⁾	Area subject to the activity (kha)
Total for activity A.1.3		
[specify identification code]		
	[specify subdivision]	
	[specify subdivision]	
[specify identification code]		
	•••	

Documentation box:

Parties should provide detailed explanation on the land use, land-use change and forestry sector in the relevant annex of the NIR: Supplementary information on LULUCF activities under the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR if any additional details are needed to understand the content of this table.

⁽¹⁾ Units of land subject to Afforestation or Reforestation under Article 3.3 otherwise subject to elected activities under Article 3.4 are implicitly included under A.1.1 or A.1.2. They are reported here for transparency and to fulfill the requirement of paragraph 6 (b) (ii) of the annex to draft decision -/CMP.1 (*Article 7*), attached to decision 22/CP.7.

⁽²⁾ As both Afforestation and Reforestation under Article 3.3 are subject to the same provisions specified in the annex to draft decision -/CMP.1 (Land use, land-use change and forestry), attached to decision 11/CP.7, they can be reported together.

⁽³⁾ Geographical location refers to the boundaries of the areas that encompass units of land subject to Afforestation and Reforestation, which would otherwise be included in land subject to elected activities under Article 3.4.

⁽⁴⁾ Activity data may be further subdivided according to climate zone, management system, soil type, vegetation type, tree species, ecological zone, national land classification or other criteria. Complete one row for each subdivision.

TABLE 5(KP-I)A.2. SUPPLEMENTARY BACKGROUND DATA ON CARBON STOCK CHANGES AND NET CO₂ EMISSIONS AND REMOVALS FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL Article 3.3 activities: Deforestation⁽¹⁾

Country Year Submission

GEOGRA- PHICAL LOCATION ⁽²⁾	ACTIVITY	DATA		IMPL	IED CA	RBON	STOCK	CHAN	GE FAC	TORS ⁽⁶⁾					СНА	NGE I	N CARI	BON STO	OCK ⁽⁶⁾			
			Carbo in a bioma	n stock bove-gr ss per a	change ound rea ^{(4), (5)}	Carbo in b bioma	on stock elow-gr ss per a	change ound rea ^{(4), (5)}	carbon stock	stock	stock	Implied emission/ removal		on stock above-gro piomass ⁽⁴⁾			on stock pelow-gr iomass ⁽⁴	change ound), (5)	Net carbon		Net carbon	Net CO ₂ emissions/
Identification code	a (3)	subject to the activity	Gains	Losses	Net change	Gains	Losses	Net change	in litter	in dead wood	change in soils per area ⁽⁴⁾	area ⁽⁷⁾	Gains	Losses	Net change	Gains	Losses	Net change	in	stock change in dead wood ⁽⁴⁾	change	removals ⁽⁷⁾
		(kha)					(Mg C/I	ha)				(Mg CO ₂ /ha)					(Gg C	.)				(Gg CO ₂)
Total for activity A.2.																						
[specify identification code]																						
	[specify subdivision]																					
	[specify subdivision]																					
[specify identification code]																						
	[specify subdivision]																					
•••	•••																					

Documentation box:

Parties should provide detailed explanation on the land use, land-use change and forestry sector in the relevant annex of the NIR: Supplementary information on LULUCF activities under the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR if any additional details are needed to understand the content of this table.

(1) Report here information on anthropogenic change in carbon stock for the inventory year for all geographical locations that encompass units of land subject to Deforestation under Article 3.3.

⁽²⁾ Geographical location refers to the boundaries of the areas that encompass units of land subject to Deforestation.

(3) Activity data may be further subdivided according to climate zone, management system, soil type, vegetation type, tree species, ecological zone, national land classification or other criteria. Complete one row for each subdivision.

⁽⁴⁾ The signs for estimates of gains in carbon stocks are positive (+) and of losses in carbon stocks are negative (-).
 ⁽⁵⁾ In all cases where the good practice guidance methods used give separate estimates of gains and losses, these estimates should be reported.
 ⁽⁶⁾ Note that net change corresponds to increase/decrease of carbon stock (see table 4.2.6a of the IPCC good practice guidance for LULUCF).

⁽⁷⁾ According to the Revised 1996 IPCC Guidelines, for the purposes of reporting, the signs for removals are always negative (-) and for emissions positive (+). Net changes in carbon stocks are converted to CO_2 by multiplying C by 44/12 and changing the sign for net CO_2 removals to be negative (-) and for net CO_2 emissions to be positive (+).

TABLE 5(KP-I)A.2.1. SUPPLEMENTARY BACKGROUND DATA FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL

Article 3.3 activities: Deforestation⁽¹⁾

Units of land otherwise subject to elected activities under Article 3.4 (information item)

Country Year Submission

GEOGRAPHICAL LOCATION ⁽²⁾	ACTIVII	TY DATA
Identification code	Subdivision ⁽³⁾	Area subject to the activity (kha)
Total for activity A.2.1.		
[specify identification code]		
	[specify subdivision]	
	[specify subdivision]	
[specify identification code]		
	•••	

Documentation box:

Parties should provide detailed explanation on the land use, land-use change and forestry sector in the relevant annex of the NIR: Supplementary information on LULUCF activities under the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR if any additional details are needed to understand the content of this table.

⁽¹⁾ Units of lands subject to Deforestation under Article 3.3 otherwise subject to elected activities under Article 3.4 are implicitly included under A.2. They are reported here for transparency and to fulfill the requirement of paragraph 6 (b) (ii) of the annex to draft decision -/CMP.1 (*Article 7*), attached to decision 22/CP.7.

⁽²⁾ Geographical location refers to the boundaries of the areas that encompass units of land subject to Deforestation which would otherwise be included in land subject to elected activities under Article 3.4.

⁽³⁾ Activity data may be further subdivided according to climate zone, management system, soil type, vegetation type, tree species, ecological zone, national land classification or other criteria. Complete one row for each subdivision.

TABLE 5(KP-I)B.1. SUPPLEMENTARY BACKGROUND DATA ON CARBON STOCK CHANGES AND NET CO₂ EMISSIONS AND REMOVALS FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL Elected Article 3.4 activities: Forest Management⁽¹⁾

GEOGRA-ACTIVITY DATA IMPLIED CARBON STOCK CHANGE FACTORS⁽⁶⁾ CHANGE IN CARBON STOCK⁽⁶⁾ PHICAL LOCATION⁽²⁾ Carbon stock change Implied Carbon stock change Net Net Net Carbon stock change Carbon stock change Net CO₂ emission/ Net in above-ground biomass per area^{(4), (5)} in below-ground biomass per area^{(4), (5)} carbon carbon carbon in above-ground biomass^{(4), (5)} in below-ground biomass^{(4), (5)} Net Net removal carbon carbon carbon emissions/ Area stock stock stock removals⁽²⁾ subject change change change factor per stock stock stock Identification Subdivision⁽³ to the in dead in soils area⁽⁷⁾ change change change in code Net Net Net Net activity Gains Losses in in dead in litter Gains Losses wood per Gains Losses Gains Losses change change change change area⁽⁴⁾ litter⁽⁴⁾ wood⁽⁴⁾ soils⁽⁴⁾ per per area⁽⁴⁾ area⁽⁴⁾ (kha) (Mg C/ha) (Mg CO₂/ha) (Gg C) (Gg CO₂) Total for activity B.1 [specify identification code1 [specify subdivision1 [specify subdivision1 [specify identification code1 [specify subdivision1 ••• ...

Documentation box:

Parties should provide detailed explanation on the land use, land-use change and forestry sector in the relevant annex of the NIR: Supplementary information on LULUCF activities under the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR if any additional details are needed to understand the content of this table.

⁽¹⁾ If Forest Management has been elected, report here information on anthropogenic carbon stock change for the inventory year for all geographical locations that encompass land subject to Forest Management under Article 3.4.

⁽²⁾ Geographical location refers to the boundaries of the areas that encompass land subject to Forest Management (if elected).

⁽³⁾ Activity data may be further subdivided according to climate zone, management system, soil type, vegetation type, tree species, ecological zone, national land classification or other criteria. Complete one row for each subdivision.

⁽⁴⁾ The signs for estimates of gains in carbon stocks are positive (+) and of losses in carbon stocks are negative (-).

⁽⁵⁾ In all cases where the good practice guidance methods used give separate estimates of gains and losses, these estimates should be reported.

⁽⁶⁾ Note that net change corresponds to increase/decrease of carbon stock (see table 4.2.6a of the IPCC good practice guidance for LULUCF).

 $^{(7)}$ According to the Revised 1996 IPCC Guidelines, for the purposes of reporting, the signs for removals are always negative (-) and for emissions positive (+). Net changes in carbon stocks are converted to CO₂ by multiplying C by 44/12 and changing the sign for net CO₂ removals to be negative (-) and for net CO₂ emissions to be positive (+).

Country Year Submission

[ENGLISH ONLY]

TABLE 5(KP-I)B.2 SUPPLEMENTARY BACKGROUND DATA ON CARBON STOCK CHANGES AND NET CO₂ EMISSIONS AND REMOVALS FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL Elected Article 3.4 activities: Cropland Management^{(1), (2)}

Country Year Submission

GEOGRA- PHICAL LOCATION ⁽³⁾	ACTIV	ITY DAT	ГA			IMPLI	ED CAF	BON ST	оск сі	IANGE I	FACTOR	S ⁽⁷⁾						CHAN	NGE IN (CARBON	N STOCK	(7)			
		Area	Area of	Carbo above	n stock cl -ground er area ⁽⁵⁾	hange in biomass	Carbon below- p	n stock cl •ground l er area ⁽⁵⁾	hange in biomass , (6)	Net carbon stock	Net carbon stock	change in are	oon stock n soils per ea ⁽⁵⁾	Implied emission/ removal	Carbo in a b	on stock (above-gro iomass ⁽⁵⁾	change ound	Carbo in b bi	on stock o pelow-gro iomass ^{(5),}	change ound	Net C stock	Net carbon	Net carb change	n soils ⁽⁵⁾	Net CO ₂ emissions/ removals ⁽¹⁰⁾
Identification code	Subdivision ⁽⁴⁾	subject to the activity	organic soils ⁽⁹⁾	Gains	Losses	Net change	Gains	Losses	Net change	change in litter per area ⁽⁵⁾	change in dead wood per area ⁽⁵⁾	Mineral	Organic soils	factor per area ⁽¹⁰⁾	Gains	Losses	Net change	Gains	Losses	Net change	change in litter ⁽⁵⁾	stock change in dead wood ⁽⁵⁾	Mineral soils		
		(kha)	(kha)					(N	(Ig C/ha)					(Mg CO ₂ /ha)					((Gg C)					(Gg CO ₂)
Total for activity B.2																									
[specify identification code]																									
	[specify subdivision]																								
	[specify subdivision]																								
[specify identification code]																									
	[specify subdivision]																								
	•••																								

Documentation box:

Parties should provide detailed explanation on the land use, land-use change and forestry sector in the relevant annex of the NIR: Supplementary information on LULUCF activities under the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR if any additional details are needed to understand the content of this table.

⁽¹⁾ If Cropland Management has been elected, report here information on anthropogenic carbon stock change for the inventory year for all geographical locations that encompass land subject to Cropland Management under Article 3.4.

(2) If Cropland Management has been elected, this table and all relevant CRF tables should also be reported for the base year for Cropland Management.

⁽³⁾ Geographical location refers to the boundaries of the areas that encompass land subject to Cropland Management (if elected).

(4) Activity data may be further subdivided according to climate zone, management system, soil type, vegetation type, tree species, ecological zone, national land classification or other criteria. Complete one row for each subdivision.

⁽⁵⁾ The signs for estimates of gains in carbon stocks are positive (+) and of losses in carbon stocks are negative (-).

⁽⁶⁾ In all cases where the good practice guidance methods used give separate estimates of gains and losses, these estimates should be reported.

⁽⁷⁾ Note that net change corresponds to increase/decrease of carbon stock (see table 4.2.6b of the IPCC good practice guidance for LULUCF).

⁽⁸⁾ The value reported here is an emission and not a carbon stock change.

⁽⁹⁾ This information is needed for the calculation of the net carbon stock changes in soils per area.

⁽¹⁰⁾ According to the Revised 1996 IPCC Guidelines, for the purposes of reporting, the signs for removals are always negative (-) and for emissions positive (+). Net changes in carbon stocks are converted to

CO₂ by multiplying C by 44/12 and changing the sign for net CO₂ removals to be negative (-) and for net CO₂ emissions to be positive (+).

[ENGLISH ONLY]

TABLE 5(KP-I)B.3 SUPPLEMENTARY BACKGROUND DATA ON CARBON STOCK CHANGES AND NET CO₂ EMISSIONS AND REMOVALS FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL Elected Article 3.4 activities: Grazing Land Management^{(1), (2)}

GEOGRAPHICAL LOCATION ⁽³⁾	ACTIV	ITY DAT.	A			IMPL	IED CA	RBON ST	ЭСК СН	IANGE F	ACTOR	S ⁽⁷⁾						CHAN	IGE IN	CARBO	N STOC	K ⁽⁷⁾			
		Area	Area of	Carbo in at biomas	n stock (oove-gro s per ar			n stock cha round bior area ^{(5), (6)}		carbon	stock	change in are	oon stock n soils per ea ⁽⁵⁾	Implied emission/	in : b	on stock above-gr iomass ⁽⁵	ound		on stock elow-gre iomass ⁽⁵⁾		Net C stock	Net carbon	Net carb change	on stock in soils ⁽⁵⁾	Net CO ₂ emissions/
Identification code	Subdivision ⁽⁴⁾	Subdivision ⁽⁴⁾ to the organic soils ⁽⁹⁾	Gains	Losses	Net change	Gains	Losses	Net change	change in litter	m ueau	Mineral	Organic soils	removal factor per area ⁽¹⁰⁾		Losses	Net change	Gains	Losses	Net change	change in litter ⁽⁵⁾	stock change in dead wood ⁽⁵⁾	Mineral soils	Organic soils ⁽⁸⁾	removals ⁽¹⁰⁾	
		(kha)	(kha)					(M	g C/ha)		·	·	·	(Mg CO ₂ /ha)		<u> </u>				(Gg C)		·			(Gg CO ₂)
Total for activity B.3		-													Γ										
[specify identification code]																									
	[specify subdivision]																								
	[specify subdivision]																								
[specify identification code]																									
	[specify subdivision]																								

Documentation box:

Parties should provide detailed explanation on the land use, land-use change and forestry sector in the relevant annex of the NIR: Supplementary information on LULUCF activities under the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR if any additional details are needed to understand the content of this table.

⁽¹⁾ If Grazing Land Management has been elected, report here information on anthropogenic carbon stock change for the inventory year for all geographical locations that encompass land subject to Grazing Land Management under Article 3.4.

⁽²⁾ If Grazing Land Management has been elected, this table and all relevant CRF tables should also be reported for the base year for Cropland Management.

⁽³⁾ Geographical location refers to the boundaries of the areas that encompass land subject to Grazing Land Management (if elected).

(4) Activity data may be further subdivided according to climate zone, management system, soil type, vegetation type, tree species, ecological zone, national land classification or other criteria. Complete one row for each subdivision.

⁽⁵⁾ The signs for estimates of gains in carbon stocks are positive (+) and of losses in carbon stocks are negative (-).

⁽⁶⁾ In all cases where the good practice guidance methods used give separate estimates of gains and losses, these estimates should be reported.

⁽⁷⁾ Note that net change corresponds to increase/decrease of carbon stock (see table 4.2.6b of the IPCC good practice guidance for LULUCF).

⁽⁸⁾ The value reported here is an emission and not a carbon stock change.

⁽⁹⁾ This information is needed for the calculation of the net carbon stock changes in soils per area.

 $^{(10)}$ According to the Revised 1996 IPCC Guidelines, for the purposes of reporting, the signs for removals are always negative (-) and for emissions positive (+). Net changes in carbon stocks are converted to CO₂ by multiplying C by 44/12 and changing the sign for net CO₂ removals to be negative (-) and for net CO₂ emissions to be positive (+).

Country Year

Submission

[ENGLISH ONLY]

TABLE 5(KP-I)B.4 SUPPLEMENTARY BACKGROUND DATA ON CARBON STOCK CHANGES AND NET CO₂ EMISSIONS AND REMOVALS FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL Elected Article 3.4 activities: Revegetation^{(1), (2)}

Country Year Submission

GEOGRAPHICAL LOCATION ⁽³⁾	ACTIVITY DATA IMPLI				ED CARBON STOCK CHANGE FACTORS ⁽⁷⁾					CHANGE IN CARBON STOCK ⁽⁷⁾																		
					Area	Area of	above-	n stock cl ground er area ⁽⁵⁾	hange in biomass	Carbon below- po	stock c ground er area ⁽⁵	hange in biomass	carbon	stock	Net carb change in are	oon stock 1 soils per ea ⁽⁵⁾	Implied emission/ removal		n stock c oove-gro iomass ⁽⁵	hange in und		n stock cl low-grou iomass ⁽⁵⁾		Net C stock	Net carbon	Net car change	oon stock in soils ⁽⁵⁾	Net CO ₂ emissions/ removals ⁽¹⁰⁾
Identification code	Subdivision ⁽⁴⁾		organic soils ⁽⁹⁾		Losses	Net change	Gains	Losses		change in litter	change in dead wood per area ⁽⁵⁾	Mineral soils	Organic soils	factor per area ⁽¹⁰⁾	Gains	Losses	Net change	Gains	Losses	Net	change in	stock change in dead wood ⁽⁵⁾	Mineral soils	Organic soils ⁽⁸⁾				
		(kha)	(kha)					(N	/Ig C/ha)					(Mg CO ₂ /ha) (Gg C)					(Gg CO ₂)									
Total for activity B.4																												
[specify identification code]																												
-	[specify subdivision]																											
	[specify subdivision]																											
[specify identification code]																												
	[specify subdivision]																											

Documentation box:

Parties should provide detailed explanation on the land use, land-use change and forestry sector in the relevant annex of the NIR: Supplementary information on LULUCF activities under the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR if any additional details are needed to understand the content of this table.

⁽¹⁾ If Revegetation has been elected, report here information on anthropogenic carbon stock change for the inventory year for all geographical locations that encompass land subject to Revegetation under Article 3.4.

⁽²⁾ If Revegetation has been elected, this table and all relevant CRF tables should also be reported for the base year for Revegetation.

⁽³⁾ Geographical location refers to the boundaries of the areas that encompass land subject to Revegetation (if elected).

(4) Activity data may be further subdivided according to climate zone, management system, soil type, vegetation type, tree species, ecological zone, national land classification or other criteria. Complete one row for each subdivision.

⁽⁵⁾ The signs for estimates of gains in carbon stocks are positive (+) and of losses in carbon stocks are negative (-).

⁽⁶⁾ In all cases where the good practice guidance methods used give separate estimates of gains and losses, these estimates should be reported.

⁽⁷⁾ Note that net change corresponds to increase/decrease of carbon stock (see table 4.2.6b of the IPCC good practice guidance for LULUCF).

⁽⁸⁾ The value reported here is an emission and not a carbon stock change.

⁽⁹⁾ This information is needed for the calculation of the net carbon stock changes in soils per area.

 $^{(10)}$ According to the Revised 1996 IPCC Guidelines, for the purposes of reporting, the signs for removals are always negative (-) and for emissions positive (+). Net changes in carbon stocks are converted to CO₂ by multiplying C by 44/12 and changing the sign for net CO₂ removals to be negative (-) and for net CO₂ emissions to be positive (+).

TABLE 5(KP-II)1 SUPPLEMENTARY BACKGROUND DATA FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL Direct N₂O emissions from N fertilization^{(1), (2)}

Country Year Submission

	ACTIVITY DATA	IMPLIED EMISSION FACTOR	EMISSIONS
Identification code of geographical location	Total amount of fertilizer	N ₂ O-N emissions per unit	
	applied	of fertilizer	N_2O
	(Gg N/year)	$(\text{kg N}_2\text{O-N/kg N})^{(3)}$	(G g)
A.1.1. Afforestation/Reforestation: units of land not harvested since			
the beginning of the commitment period ⁽⁴⁾			
[specify identification code]			
A.1.2. Afforestation/Reforestation: units of land harvested since the			
beginning of the commitment period ⁽⁴⁾			
[specify identification code]			
B.1. Forest Management (if elected) ⁽⁵⁾			
[specify identification code]			

Documentation box:

Parties should provide detailed explanation on the land use, land-use change and forestry sector in the relevant annex of the NIR: Supplementary information on LULUCF activities under the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR if any additional details are needed to understand the content of this table.

 $^{(1)}$ N₂O emissions from fertilization for Cropland Management, Grazing Land Management and Revegetation should be reported in the Agriculture sector. If a Party is not able to separate fertilizer applied to Forest Land from Agriculture, it may report all N₂O emissions from fertilization in the Agriculture sector. This should be explicitly indicated in the documentation box.

⁽²⁾ Direct N_2O emissions from fertilization are estimated following section 3.2.1.4.1 of the IPCC good practice guidance for LULUCF based on the amount of fertilizer applied to land under Forest Management. The indirect N_2O emissions from Afforestation and Reforestation and land under Forest Management are estimated as part of the total indirect emissions in the Agriculture sector based on the total amount of fertilizer used in the country. Parties should show that double counting of N_2O emissions from fertilization with Agriculture sector estimates has been avoided.

 $^{^{(3)}}$ In the calculation of the implied emission factor, N₂O emissions are converted to N₂O-N by multiplying by 28/44.

⁽⁴⁾ Geographical location refers to the boundaries of the areas that encompass units of land subject to Afforestation and Reforestation.

⁽⁵⁾ Geographical location refers to the boundaries of the areas that encompass land subject to Forest Management (if elected).

TABLE 5(KP-II)2 SUPPLEMENTARY BACKGROUND DATA FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL N₂O emissions from drainage of soils^{(1), (2)}

Country Year Submission

Identification code of geographical location ⁽³⁾	ACTIVITY DATA Area of drained soils	IMPLIED EMISSION FACTOR N ₂ O-N per area drained	EMISSIONS N ₂ O
identification code of geographical location	(kha)	$(\text{kg N}_2\text{O-N/ha})^{(4)}$	(Gg)
B.1. Forest Management (if elected)			
Total for organic soils			
Total for mineral soils			
[specify identification code]			
Organic soils			
Mineral soils			

Documentation box:

Parties should provide detailed explanation on the land use, land-use change and forestry sector in the relevant annex of the NIR: Supplementary information on LULUCF activities under the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR if any additional details are needed to understand the content of this table.

 $^{(1)}$ Methodologies for estimating N₂O emissions from drainage of soils are not addressed in the Revised 1996 IPCC Guidelines, but Appendix 3a.2 of the IPCC good practice guidance for LULUCF provides methodologies for consideration.

 $^{(2)}$ N₂O emissions from drainage of soils include those resulting from Forest Management. N₂O emissions from drained Cropland and Grassland soils are covered in the Agriculture sector under Cultivation of Histosols.

⁽³⁾ Geographical location refers to the boundaries of the areas that encompass land subject to Forest Management (if elected).

 $^{(4)}$ In the calculation of the implied emission factor, N₂O emissions are converted to N₂O-N by multiplying by 28/44.

TABLE 5(KP-II)3 SUPPLEMENTARY BACKGROUND DATA FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL N_2O emissions from disturbance associated with land-use conversion to cropland^{(1), (2)}

Country Year Submission

	ACTIVITY DATA	IMPLIED EMISSION FACTOR	EMISSIONS		
Identification code of geographical location	Land area converted	N ₂ O-N per area converted ⁽⁵⁾	N ₂ O		
	(kha)	(kg N ₂ O-N/ha)	(Gg)		
A.2. Deforestation ^{(3), (6)}					
Total organic soils					
Total mineral soils					
[specify identification code]					
Organic soils ⁽⁷⁾					
Mineral soils ⁽⁷⁾					
B.2. Cropland Management (if elected) ^{(4), (8)}					
Total organic soils					
Total mineral soils					
[specify identification code]					
Organic soils ⁽⁷⁾					
Mineral soils ⁽⁷⁾					
Information items ⁽⁹⁾					
A.2.1. Deforestation: units of land otherwise subject to elected activities under Article 3.4 ⁽⁶⁾					
Total organic soils					
Total mineral soils					
[specify identification code]					
Organic soils ⁽⁷⁾					
Mineral soils ⁽⁷⁾					

Documentation box:

Parties should provide detailed explanation on the land use, land-use change and forestry sector in the relevant annex of the NIR: Supplementary information on LULUCF activities under the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR if any additional details are needed to understand the content of this table.

⁽¹⁾ Methodologies for N_2O emissions from disturbance associated with land-use conversion to Croplands are found in section 3.3.2.3.1.1 of the IPCC good practice guidance for LULUCF. N_2O emissions from fertilization in the preceding land use and new land use should not be reported here. Parties should avoid double counting with N_2O emissions from drainage and from cultivation of organic soils reported in Agriculture under Cultivation of Histosols.

 $^{(2)}$ According to the IPCC good practice guidance for LULUCF N₂O emissions from disturbance of soils are relevant only for land conversions to Cropland. N₂O emissions from Cropland Management when Cropland is remaining Cropland are included in the Agriculture sector.

⁽³⁾ Geographical location refers to the boundaries of the areas that encompass units of land subject to Deforestation.

⁽⁴⁾ Geographical location refers to the boundaries of the areas that encompass land subject to Cropland Management, if elected.

⁽⁵⁾ In the calculation of the implied emission factor, N_2O emissions are converted to N_2O -N by multiplying by 28/44.

⁽⁶⁾ N₂O emissions associated with Deforestation followed by the establishment of Cropland should be reported under Deforestation even if Cropland Management is not elected under Article 3.4.

⁽⁷⁾ Parties may separate data for organic and mineral soils, if they have data available.

 $^{(8)}$ This includes N₂O emissions in land subject to Cropland Management from disturbance of soils due to the conversion to Cropland of lands other than Forest Lands.

⁽⁹⁾ Units of land subject to Deforestation under Article 3.3 otherwise subject to elected activities under Article 3.4 are implicitly included under A.2. They are reported here for transparency and to fulfil the requirement of paragraph 6 (b) (ii) of the annex to draft decision -/CMP.1 (*Article 7*), attached to decision 22/CP.7.

TABLE 5(KP-II)4 SUPPLEMENTARY BACKGROUND DATA FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL Carbon emissions from lime application⁽¹⁾

Country Year Submission

	ACTIVITY DATA	IMPLIED EMISSION FACTOR	EMISSIONS
(2)	Total amount of lime		
Identification code of geographical location ⁽²⁾	applied	Carbon emission per unit of lime	Carbon
	(Mg/year)	(Mg C/Mg)	(Gg)
A.1.1. Afforestation/Reforestation: units of land not			
harvested since the beginning of the commitment period ^{(2), (8), (9)}			
Total for limestone			
Total for dolomite			
[specify identification code]			
Limestone (CaCO ₃)			
Dolomite (CaMg(CO ₃) ₂)			
A.1.2. Afforestation/Reforestation: units of land			
harvested since the beginning of the commitment period ^{(2), (8), (9)}			
Total for limestone			
Total for dolomite			
[specify identification code]			
Limestone (CaCO ₃)			
Dolomite (CaMg(CO ₃) ₂)			
A.2. Deforestation ^{(3), (8), (9)}			
A.2. Deforestation ⁽⁰⁾ (0) (0) Total for limestone			
Total for dolomite			
[specify identification code]			
Limestone (CaCO ₃)			
Dolomite (CaMg(CO ₃) ₂)			
••••			
B.1. Forest Management (if elected) ^{(4), (8), (9)}			
Total for limestone			
Total for dolomite			
[specify identification code] Limestone (CaCO ₃)			
Dolomite (CaMg(CO ₃) ₂)			
B.2. Cropland Management (if elected) ^{(5), (8), (9)}			
Total for limestone			
Total for dolomite			
[specify identification code]			
Limestone (CaCO ₃)			
Dolomite (CaMg(CO ₃) ₂)			
B.3. Grazing Land Management (if elected) ^{(6), (8), (9)}			
Total for limestone			
Total for dolomite			
[specify identification code]			
Limestone (CaCO ₃)			
Dolomite (CaMg(CO ₃) ₂)			
(7) (9) (0)			
B.4. Revegetation (if elected) ^{(7), (8), (9)}			
Total for limestone			
Total for dolomite			
[specify identification code] Limestone (CaCO ₃)			
Dolomite (CaCO ₃)			

Documentation box:

Parties should provide detailed explanation on the land use, land-use change and forestry sector in the relevant annex of the NIR: Supplementary information on LULUCF activities under the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR if any additional details are needed to understand the content of this table.

(3) (4)

(5)

(6)

(7)

(8)

Geographical location refers to the boundaries of the areas that encompass units of land subject to Alforestation and Reforestation. Geographical location refers to the boundaries of the areas that encompass units of land subject to Deforestation. Geographical location refers to the boundaries of the areas that encompass land subject to Forest Management, if elected. Geographical location refers to the boundaries of the areas that encompass land subject to Cropland Management, if elected. Geographical location refers to the boundaries of the areas that encompass land subject to Cropland Management, if elected. Geographical location refers to the boundaries of the areas that encompass land subject to Revegetation, if elected. Geographical location refers to the boundaries of the areas that encompass land subject to Revegetation, if elected. If Parties are not able to separate lime application for different geographical locations, they should include liming for all geographical locations in the total. A Party may report asymptotic total lime amplications when data are not available for limestone and dolomite. (9) A Party may report aggregate estimates for total lime applications when data are not available for limestone and dolomite

⁽¹⁾ (2) Carbon emissions from agricultural lime application are addressed in sections 3.3.1.2.1.1 and 3.3.2.1.1.1 of the IPCC good practice guidance for LULUCF. Geographical location refers to the boundaries of the areas that encompass units of land subject to Afforestation and Reforestation.

TABLE 5(KP-II)5 SUPPLEMENTARY BACKGROUND DATA FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL GHG emissions from biomass burning

	ACTIV	TTY DAT	`A		IED EMIS FACTOR		EMISSIONS			
	Description ⁽⁷⁾	Unit	Values	CO ₂	CH ₄	N ₂ O	CO ₂ ⁽⁸⁾	CH4 ⁽⁸⁾	N ₂ O	
Identification code of geographical location	Area (AB) or biomass burned (BB)	ha or kg dm	value.s		ctivity data		(Gg)		N20	
A.1.1. Afforestation/Reforestation: units of land not harvested since the beginning of the commitment period ^{(1), (9)}										
Total for controlled burning										
Total for wildfires										
[specify identification code]										
Controlled burning Wildfires										
A.1.2. Afforestation/Reforestation: units of land harvested since the beginning of the commitment period ^{(1), (9)}						<u> </u>				
Total for controlled burning										
Total for wildfires										
[specify identification code]										
Controlled burning										
Wildfires										
A.2. Deforestation ^{(2), (9)}										
A.2. Deforestation Total for controlled burning										
Total for wildfires										
[specify identification code]										
Controlled burning										
Wildfires										
B.1. Forest Management (if elected) ^{(3), (9)}										
Total for controlled burning										
Total for wildfires										
[specify identification code]										
Controlled burning Wildfires										
B.2. Cropland Management (if elected) ^{(4), (9), (10)}										
Total for controlled burning										
Total for wildfires										
[specify identification code]										
Controlled burning										
Wildfires										
B.3. Grazing Land Management (if elected) ^{(5), (9), (11)}										
Total for controlled burning Total for wildfires										
[specify identification code]										
Controlled burning										
Wildfires										
B.4. Revegetation (if elected) ^{(6), (9)}										
Total for controlled burning										
Total for wildfires										
[specify identification code]										
Controlled burning										
Wildfires										
							1			

Documentation box:

Parties should provide detailed explanation on the land use, land-use change and forestry sector in the relevant annex of the NIR: Supplementary information on LULUCF activities under the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR if any additional details are needed to understand the content of this table.

Geographical location refers to the boundaries of the areas that encompass units of land subject to Afforestation and Reforestation. (2)

Geographical location refers to the boundaries of the areas that encompass units of land subject to Deforestation. Geographical location refers to the boundaries of the areas that encompass land subject to Forest Management, if elected. (3)

(4)

(5)

- Geographical location refers to the boundaries of the areas that encompass land subject to Cropland Management, if elected. Geographical location refers to the boundaries of the areas that encompass land subject to Cropland Management, if elected. Geographical location refers to the boundaries of the areas that encompass land subject to Grazing Land Management, if elected. Geographical location refers to the boundaries of the areas that encompass land subject to Revegetation, if elected. (6)
- (7)

(7) For each activity, activity data should be selected between area burned (AB) or biomass burned (BB). Units will be ha for area burned, and kg dm for biomass burned. The implied emission factor will refer to the selected activity data with an automatic change in the units.
 (8) If CO₂ emissions from biomass burning are not already included in Tables 5(KP-I)A.1.1 to 5(KP-I)B.4, they should be reported here. This also includes the carbon

component of CH₄. This should be clearly documented in the documentation box and in the NIR. Parties that include all carbon stock changes in the carbon stock tables (5(KP-I)A.1.1 to 5(KP-I)B.4) should report IE (included elsewhere) in the CO₂ column. Parties should report controlled/prescribed burning and wildfires emissions separately, where appropriate.

(10)

Burning of agricultural residues is included in the Agriculture sector. (11)

Greenhouse gas emissions from prescribed savannah burning are reported in the Agriculture sector.

Draft decision -/CMP.1

Good practice guidance for land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol

The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,

Recalling, in particular, Article 3, paragraphs 3 and 4, Article 5, paragraph 2, and Article 7, paragraph 1, of the Kyoto Protocol,

Recalling also decisions 11/CP.7, 19/CP.7, 21/CP.7, 22/CP.7 and 13/CP.9,

Reaffirming that anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol should be reported in a transparent, consistent, comparable, complete and accurate way,

Having considered the relevant recommendations of the Subsidiary Body for Scientific and Technological Advice,

1. Decides that for the first commitment period Parties included in Annex I to the Convention that have ratified the Kyoto Protocol shall apply the good practice guidance for land use, land-use change and forestry, as developed by the Intergovernmental Panel on Climate Change, in a manner consistent with the Kyoto Protocol and draft decision -/CMP.1 (*Land use, land-use change and forestry*) and the annex to this draft decision,¹ for the purpose of providing information on anthropogenic greenhouse gas emissions by sources and removals by sinks from land use, land-use change and forestry activities under Article 3, paragraph 3, and, if any, elected activities under Article 3, paragraph 4, in accordance with Article 5, paragraph 2 of the Kyoto Protocol;

2. *Decides* to use, for reporting information supplementary to annual greenhouse gas inventory information in the first commitment period, in addition to the elements specified in paragraphs 5–9 of the annex to draft decision -/CMP.1 (*Article 7*), attached to decision 22/CP.7, supplementary information to be included in an annex to the national inventory report, contained in annex I to this decision, as well as the tables of the common reporting format² for activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol, contained in annex II to this decision;

3. *Requests* the secretariat to develop reporting software for the tables referred to in paragraph 2 above.

¹ Noting that reporting methods contained in chapter 4 of the Intergovernmental Panel on Climate Change *Good Practice Guidance for Land Use, Land-use Change and Forestry*, should ensure that areas of land subject to land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, are identifiable.

² The common reporting format is a standardized format to be used by Parties for electronic reporting of estimates of greenhouse gas emissions and removals and any other relevant information. For technical reasons (for example, size of tables and fonts), the layout of the printed version of the tables of the common reporting format for land use, land-use change and forestry activities in this document cannot be standardized.

ANNEXES

[to be incorporated in accordance with decision 15/CP.10, paragraph 5]