

More Twists, Turns and Stumbles in the Jungle: A Further Exploration of Land Use, Land-Use Change and Forestry Decisions within the Kyoto Protocol

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This article traces the history of decisions relating to land use, land-use change and forestry (LULUCF) under the United Nations Framework Convention on Climate Change and the Kyoto Protocol, for the period from 2001 until the present. It follows from an earlier article written by the author. As times progress, matters relating to LULUCF become more convoluted and complex. The article explores such issues as the definition of a forest, what constitutes 'Kyoto land', modalities for afforestation and reforestation under the Clean Development Mechanism, greenhouse gas inventories, reporting and reviews, and possible actions to reduce emissions from deforestation. The article also looks at the role of the Intergovernmental Panel on Climate Change and its input into the science and policy-making process relating to LULUCF.

This article follows on from a previous article by the author¹ and describes the ongoing development of decisions and international environmental law with respect to land use, land-use change and forestry (LULUCF) within the Kyoto Protocol.² The previous article noted the tortuous path of defining activities and accounting systems under Article 3.3, 3.4 and 3.7 of the Kyoto Protocol leading up to the seventh session of the Conference of Parties (COP-7) to the United Nations Framework Convention on Climate Change (UNFCCC)³ held in Marrakesh in 2001. This article picks up from this point and discusses the recent developments on LULUCF activities (commonly known as sinks).

COP-7

COP-7 was a major milestone in the process of establishing the rules for the implementation of the Kyoto Protocol. Discussions on LULUCF activities at COP-7 were extremely complex and controversial. While progress was made at COP-7 to define what sinks activities would be eligible within the Kyoto Protocol, further definitional work was required. The complex accounting approaches became more complex as parties began to put down on paper the multi-faceted accounting boundaries of organic carbon.

DEFINING A FOREST

After long and late-night deliberations at COP-7, parties finally agreed on (subject to the final approval of the Conference of Parties serving as the Meeting of Parties to the Kyoto Protocol) definitions, modalities, rules and guidelines relating to LULUCF activities under Articles 3, 6 and 12 of the Kyoto Protocol. These included definitions of forest,⁴ afforestation, reforestation and deforestation,⁵ but left consideration of definitions and/or approaches relating to 'degradation' and 'de-vegetation' for possible consideration at COP-9 after

¹ See I. Fry, 'Twists and Turns in the Jungle: Exploring the Evolution of Land Use, Land-use Change and Forestry within the Kyoto Protocol', 11:2 *RECIEL* (2002), 159.

² Kyoto Protocol to the United Nations Framework Convention on Climate Change (Kyoto, 11 December 1997).

³ United Nations Framework Convention on Climate Change (New York, 9 May 1992).

⁴ A 'forest' is defined in the Annex to Decision 16/CMP.1, Land Use, Land-Use Change and Forestry (FCCC/KP/CMP/2005/8/Add.3, 30 March 2006), as a '... minimum area of land 0.05–1.0 hectare with tree crown cover (or equivalent stocking level) of more than 10–30 per cent with trees with the potential to reach a minimum height of 2–5 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'.

⁵ The complex definition of a forest would lead to later complications and a call for a new definition.

the Intergovernmental Panel on Climate Change (IPCC) had considered the matter.⁶ COP-7 also defined what eligible activities would be allowed within Article 3.4 of the Kyoto Protocol. This included 'revegetation', 'forest management', 'cropland management' and 'grazing land management'. Accounting limitations, reporting and inventorying methods were set for these activities.

Finding a suitable definition of a 'forest' was not easy. Japan and Canada wanted a flexible definition to suit national circumstances, while the EU opted for the UN Food and Agriculture Organization's (FAO) definition with limited flexibility to consider national circumstances. On the other hand, Tuvalu commented that a universal definition was needed to ensure that accounting was consistent across all countries.⁷ The need for a clear definition was highlighted by the IPCC in its Special Report on Land Use, Land-Use Change and Forestry.⁸ In the end, the US proposed, and parties generally accepted, a compromise based on the FAO definition with some flexibility for certain parameters including height and percentage canopy cover.

The definition of a 'forest' that was agreed upon at COP-7 is messy⁹ and as such left the door open for later complications in the consideration of 'eligible land' under the Protocol's Clean Development Mechanism (CDM).

KYOTO LAND

The establishment of Article 3.3 and 3.4 activities for Annex I parties meant that new 'Kyoto land' had to be identified in national inventories to indicate the land being used for accountable LULUCF emissions and removals under the Kyoto Protocol. The identification of this 'Kyoto land' dramatically changed the reporting landscape for Annex I parties. Virtually every piece of organic carbon had to be accounted for on this land. This meant that the spatial assessment of the Kyoto land was critical and defining this assessment led to intense negotiations at COP-7. Large forested countries like Canada and the Russian Federation wanted

broad assessment tools to cut down the cost of measuring their Kyoto land. For the Alliance of Small Island States (AOSIS) ensuring the environmental integrity of the Kyoto Protocol was paramount, therefore AOSIS was opting for the most precise assessment tools available so that false or inaccurate accounting could not slip into the system.¹⁰

AFFORESTATION AND REFORESTATION

At COP-7, parties also agreed on which LULUCF project activities would be eligible under the CDM. Again, there were intense negotiations over this issue. Finally, parties agreed that LULUCF activities under the CDM would be limited to projects relating to 'afforestation' and 'reforestation'.¹¹ The limitation of the CDM to afforestation and reforestation was not a decision that sat happily with some delegations, particularly some Latin American countries and the Umbrella Group.¹² They had hoped for a broader allocation of LULUCF project activities, particularly around the concept of 'avoided deforestation'. A number of Latin American countries wanted the inclusion of CDM projects that gave credit to countries that protected forests from sources of emissions, such as logging and land clearing. Some countries had already undertaken pilot 'avoided deforestation' projects under various funding arrangements including projects established by the World Bank.¹³ On the other hand, other countries had serious reservations about the inclusion of 'avoided deforestation' activities in the CDM. Again the IPCC tacitly entered its view on the issue by dedicating almost a whole chapter of its Special Report on LULUCF to project-based activities.¹⁴ Some governments, notably AOSIS and Germany, were disappointed that the final draft of the Summary for Policy Makers in the IPCC Special Report on LULUCF appeared to be advocating for the inclusion of LULUCF projects under the CDM.¹⁵ This is despite the fact that parties had not agreed whether or not to include sinks in the CDM.

⁶ See Decision 16/CMP.1, n. 4 above, para. 3(c).

⁷ See L. Rajamani *et al.*, 'Highlights from SB 13', 12:143 *Earth Negotiations Bulletin* (6 September 2000).

⁸ See R.T. Watson, *et al.* (eds), *Land Use, Land-Use Change, and Forestry, A Special Report of the IPCC* (Cambridge University Press, 2000), at 377.

⁹ The messiness was partially due to the insistence by Australia, during earlier negotiations, to include a low threshold for canopy cover, so that arid woodlands subject to land clearing in Australia would be covered. This allowed Australia to be one of the few countries that fall into the net-net accounting system established within Article 3.7 of the Kyoto Protocol. While Australia had partially created this mess, they would not be included in the mess because although Australia signed the Protocol in Kyoto they never ratified it (personal observation).

¹⁰ Personal observation.

¹¹ See, Decision 16/CMP.1, n. 4 above, Section D, para. 13.

¹² The 'Umbrella Group' of countries includes Australia, Canada, Iceland, Japan, New Zealand, Norway and the USA, although as this was a Kyoto Protocol issue, both Australia and the USA played low key roles in these discussions, seemingly allowing Canada to champion their cause.

¹³ The World Bank had established some 'avoided deforestation' projects under their Prototype Carbon Fund. It could be argued that the actions of the World Bank created a false expectation that 'avoided deforestation' projects would be eligible project activities under the CDM. This agenda-driving action by the Bank would be repeated when the issue of reducing emissions from deforestation resurfaced at COP-11.

¹⁴ See I. Fry, n. 1 above, at 162.

¹⁵ Personal observation.

Initially, the EU had opposed the inclusion of LULUCF activities under the CDM, but had a change of heart due to internal pressures within the group, particularly from the Netherlands, which perceived that it would need to buy a considerable number of certified emissions reductions (CERs)¹⁶ to meet its emissions reduction target in the first commitment period.¹⁷ While relenting on the CDM, the EU decided not to include LULUCF in its own emissions trading scheme.

Like the Netherlands, the Umbrella Group's members supported the inclusion of a broad range of LULUCF activities to allow them greater opportunities to offset their domestic greenhouse gas emissions with CDM projects at a much cheaper price than renewable energy or energy efficiency projects. On the other hand, Brazil, China and AOSIS were opposed to the inclusion of 'avoided deforestation'. This was due to a variety of reasons including the potential loss of sovereignty, transfer of CDM credits away from renewable energy, giving credit for no actual gain in carbon stocks, the potential for leakage and the potential for establishing cheap carbon credits which could be offset against a growth in Annex I emissions.¹⁸ The lack of consensus on including avoided deforestation meant that this issue was shelved for the first commitment period. Nevertheless, the issue would return under the theme 'reducing emissions from deforestation' at COP-11.

Despite some sense of finality in the definitions of forests, afforestation, reforestation and deforestation, the last paragraph of decision 16/CMP.1 states that they should apply to the first commitment period, hence leaving the door open for revisions in time for the second commitment period (whenever that would be).¹⁹

Noting the complexity associated with the decisions made at COP-7, parties to the COP invited the IPCC to undertake four tasks. In simplified terms these were, *inter alia*, to:

- (1) elaborate methods to estimate, measure, monitor, and report changes in carbon stocks and emissions and removals by sinks;
- (2) prepare good practice guidance relating to (1) above;
- (3) develop definitions for 'degradation' and 'devegetation';
- (4) develop methodologies to factor out direct human-induced changes in carbon stocks and emissions and sources due to indirect human-induced and natural effects.²⁰

These were complex tasks for the IPCC and, as a consequence, placed the IPCC in the invidious position of proposing methodologies that required some interpretation of COP decisions. Interestingly, many of the people that had given this task to the IPCC (as negotiators for various countries) became the same people who would take up this work, wearing their IPCC hats. The line between policy prescription and scientific objectivity was significantly blurred by the dual role of many of the government representatives. As the IPCC delved into these issues, the frictions among negotiators during the COP decision-making process would manifest itself in debates among IPCC 'experts' on the technicality of issues. This friction later surfaced at the twenty-fifth session of the IPCC in Mauritius over a discussion on flooded lands.²¹ Despite these concerns, COP-7 granted the IPCC significant authority in determining methodologies for estimating emissions and removals by LULUCF activities, although this authority would be implicitly questioned in subsequent decisions.

It was very evident at COP-7 that LULUCF activities were controversial and had the potential to undermine the environmental integrity of the Kyoto Protocol. This fact was emphasized at COP-7 in the decision on the three mechanisms.²²

Apart from defining various activities, COP-7 also drafted a decision for the first Conference of Parties serving as the meeting of Parties (COP/MOP-1) on how Annex I parties would account for assigned amounts using LULUCF activities under Articles 3.3 and 3.4 of the Kyoto Protocol.²³ This included reference to the use of the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* for those parties that had a net source of emissions in the base year.²⁴ The same decision also required Annex I parties to include in their report of their calculation of their assigned amount for the first commitment period which activities under Article 3.4 they would elect to use.²⁵

¹⁶ The unit for the CDM credits.

¹⁷ Personal observation.

¹⁸ Personal observation.

¹⁹ See, Decision 16/CMP.1, n. 4 above, para. 4.

²⁰ For the full text on these tasks, see Decision 16/CMP.1, n. 4 above, para. 3(a)-(d).

²¹ See I. Barnsley *et al.*, 'Summary of the 25th Session of the Intergovernmental Panel on Climate Change, 26-28 April', 12:295 *Earth Negotiations Bulletin* (1 May 2006).

²² See Decision 15/CP.7, Principles, Nature and Scope of the Mechanisms Pursuant to Articles 6, 12 and 17 of the Kyoto Protocol (FCCC/CP/2001/13/Add.2, 21 January 2002).

²³ See the Annex to Decision 13/CMP.1, Modalities for the Accounting of Assigned Amounts under Article 7, paragraph 4, of the Kyoto Protocol (FCCC/KP/CMP/2005/8/Add.2, 30 March 2006).

²⁴ See the second sentence of Article 3.7 of the Kyoto Protocol, n. 2 above.

²⁵ While Decision 16/CMP.1, n. 4 above, noted that there were four eligible activities that parties could account for under Article 3.4 in the first commitment period, parties were also given the discretion to decide which of these four activities they would account for and which ones they would not account for. This meant that parties could elect to account for activities which they thought may constitute a net removal in the first commitment period and not account for Article 3.4 activities which were potentially a net emission in the first commitment period, hence creating an accounting imbalance.

BANKING REMOVAL UNITS

One further controversial element of this decision related to whether or not credits from LULUCF activities (known as removal units or RMUs) could be carried over to subsequent commitment periods.²⁶ Key developing countries, notably Brazil on behalf of the G77 and China, were opposed to banking. In the end, the view of the G77 and China appeared to prevail and LULUCF credits were not allowed to be 'banked'. The reasoning for this was based on the fact that the G77 and China was concerned that Annex I parties had the potential to accumulate significant 'credits' from LULUCF activities at the end of the first commitment period and then use these in any subsequent commitment period. In effect, this could undermine efforts to reduce overall emissions of greenhouse gases.²⁷ Despite the apparent victory for the G77 and China, this notion of stopping the carry-over of credits from LULUCF activities was cleverly undermined by the fact that RMUs could be converted into 'assigned amount units' (AAUs) for the purpose of Article 17 (emissions trading (ET)). Any excess AAUs that had not been retired could be carried over into the subsequent commitment period.²⁸ This meant that through an accounting loophole, removal units could be banked.

INVENTORIES

Another important decision made at COP-7 related to inventory preparation as required under Article 5.1 of the Kyoto Protocol. This decision required that Annex I parties develop national systems for estimating emissions and *removals* as prescribed by the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* and IPCC good practice guidance, in accordance with relevant decisions of the COP and/or the COP/MOP.²⁹ This, in effect, locked in the IPCC as the key determining authority for methodologies for estimating emissions and removals. The authority given to the IPCC would create complications at later COPs and meetings of the IPCC, as some countries contended that the interpretations by the IPCC were not necessarily consistent with decisions of the COP or text within the convention and the Kyoto Protocol.

INFORMATION REQUIRED UNDER ARTICLE 7

Parties at COP-7 also agreed on a decision regarding information under Article 7, paragraphs 1 and 2 of

the Kyoto Protocol.³⁰ This decision required the reporting of emission reduction units, certified emission reductions, assigned amount units and removal units. In anticipation of the complexity of the reporting requirements for sinks activities, parties included a safety net for parties that failed to submit information on activities in relation to Article 3.3 and 3.4 of the Kyoto Protocol. COP-7 decided to allow the Subsidiary Body for Scientific and Technological Advice (SBSTA) to consider criteria for cases of failure to submit information. The criteria would be developed after the IPCC had finished its work on good practice guidance for LULUCF.³¹ Again, the IPCC would be called upon to resolve difficult political and technical decisions.

COP-7 also prepared a COP decision and a draft decision for COP/MOP-1 concerning modalities for the accounting of assigned amounts under Article 7, paragraph 4 of the Kyoto Protocol.³² The COP/MOP decision established requirements for Annex I parties on, *inter alia*, reporting requirements under the second sentence of Article 3, paragraph 7 of the Kyoto Protocol,³³ the identification of activities under Article 3.4, the issuance of RMUs and non-issuance of RMUs where questions of implementation arise, the cancellation of units generated from Articles 3.3 and 3.4, requirements of the transaction log particularly in relation to the infringement of limits from LULUCF activities and over-acquisition of CERs from LULUCF activities

³⁰ Article 7, para. 1 of the Kyoto Protocol, n. 2 above, states: 'Each Party included in Annex I shall incorporate in its annual inventory of anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol, submitted in accordance with the relevant decisions of the Conference of Parties, the necessary supplementary information for the purposes of ensuring compliance with Article 3, to be determined in accordance with paragraph 4 below'. Article 7, para. 2 states: 'Each Party included in Annex I shall incorporate in its national communication, submitted under Article 12 of the Convention, the supplementary information necessary to demonstrate compliance with its commitment under this Protocol, to be determined in accordance with paragraph 4 below'.

³¹ See Decision 21/CP.7, Good Practice Guidance and Adjustments under Article 5, Paragraph 2, of the Kyoto Protocol (FCCC/CP/2001/13/Add.3, 21 January 2002), para. 2.

³² See Decision 19/CP.7, Modalities for accounting of assigned amounts under Article 7, paragraph 4, of the Kyoto Protocol and Decision 13/CMP.1, Modalities for the Accounting of Assigned Amounts under Article 7, paragraph 4, of the Kyoto Protocol (FCCC/CP/2001/13/Add.2, 21 January 2002).

³³ See Kyoto Protocol, n. 2 above, Article 3.7. The second sentence of Article 3.7 states: 'Those Parties included in Annex I for whom land-use change and forestry constituted a net source of greenhouse gas emissions in 1990 shall include in their 1990 emissions base year or period the aggregate anthropogenic carbon dioxide equivalent emissions by sources minus removals by sinks in 1990 from land-use change for the purposes of calculating their assigned amount'. This is widely known as the 'Australia clause' as it was introduced by Australia at around 2.00 am of the final night of COP-3 in Kyoto to give Australia an additional allowance for their Kyoto target (personal observation).

²⁶ See Decision 13/CMP.1, n. 23 above, para. 16.

²⁷ Personal conversation with representatives from G77 and China.

²⁸ See Decision 19/CMP.1, Guidelines for National Systems under Article 5, paragraph 1, of the Kyoto Protocol (FCCC/KP/CMP/2005/8/Add.3, 30 March 2006), para. 15.

²⁹ See *ibid.*, Annex, para. 9.

under Article 12, and the database held by the UNFCCC Secretariat in relation to LULUCF activities.

EXPERT REVIEW TEAMS

The final piece in the set of COP-7 decisions related to guidelines for expert review teams (ERTs) established under Article 8 of the Kyoto Protocol. The key element of this decision, which would have implications for LULUCF, related to information required for the reinstatement of eligibility to use the flexibility mechanisms.³⁴ If parties did not meet their inventory requirements they would not be eligible to use the mechanisms to meet their commitments. In other words, if a country did not have a good inventory system they would not be able to buy carbon credits from outside of their country. As parties had anticipated using the CDM and likely Joint Implementation (JI) before the start of the commitment period, their inventories associated with Article 3.3 and 3.4 would need to be accurate to ensure that they could use the credits from the mechanisms. The burden of reporting elected Article 3.4 activities, and the consequence of not being able to use the mechanisms if their reporting was found to be inadequate, weighed heavily on the minds of negotiators from a number of parties. This possibly led some parties to choose not to use Article 3.4 activities in the first commitment period. The procedures for reinstating eligibility was not decided at COP-7. This was passed on to the SBSTA to consider.

An annex to the decision on expert review processes elaborated on the role of the ERTs. ERTs would undertake annual reviews of Annex I parties. These reviews included a national inventory report and a common reporting format for undertaking their inventory.³⁵ With respect to LULUCF activities, Annex I parties are required to provide supplementary information on Article 3.3 and 3.4 activities annually during the commitment period.³⁶ Undertaking annual reviews of all Annex I parties, including the supplementary information for Article 3.3 and 3.4 activities, will undoubtedly place a significant burden on the UNFCCC Secretariat, and the resources of the convention, to find sufficiently competent people to serve on the ERTs. Many of the potential ERT members are likely to be involved in their own country's inventory report and may not have the time to participate in ERTs. In this case, many of the ERT members may need to come from non-Annex I countries.

The annex to the decision on expert review processes also states that ERTs are instructed to examine the application of *IPCC good practice guidance and any other good practice guidance by the COP/MOP*.³⁷ This is an interesting clause as it does not give sole authority to the IPCC to develop good practice guidance. This being said, it would be hard to imagine how the COP/MOP would be able to develop its own good practice guidance.

COP-8

GUIDELINES FOR INFORMATION UNDER ARTICLE 7

The COP moved to New Delhi in 2002 for its eighth session. At COP-8, parties added some guidelines for the preparation of information required under Article 7 and the guidelines for the review of information under Article 8. The decision requested the Secretariat to develop an appropriate electronic format for reporting supplementary information on, *inter alia*, removal units.³⁸ The decision also included three annexes, which further elaborated reporting procedures. With respect to information on the reporting of CERs, Annex I to this decision stipulated that CERs generated from afforestation and reforestation had to be reported separately to CERs gained from other CDM projects.³⁹ Annex II to the decision asked ERTs to review how the assigned amount is calculated to avoid double counting for Article 3.4 activities.⁴⁰ Annex III established expedited procedures for the review of the reinstatement of eligibility to use the Kyoto mechanisms (CDM, JI and ET). It is interesting to note that the ERT for the expedited review cannot be constituted by the same members as the original review team that found problems.⁴¹ For LULUCF, this could represent a further drain on the limited gene pool of LULUCF experts and hence may affect the quality of reviews.

EXPERT PANELS UNDER THE CDM EXECUTIVE BOARD

COP-8 also developed a decision on guidance to the CDM Executive Board (EB), which included a draft

³⁴ See para. 13 of Decision 23/CP.7, Guidelines for Review under Article 8 of the Kyoto Protocol (FCCC/CP/2001/13/Add.3, 21 January 2002).

³⁵ See *ibid.*, Annex, para. 15(a).

³⁶ See *ibid.*, Annex, para. 15(b)(i).

³⁷ See *ibid.*, Annex, para. 65(c).

³⁸ See Decision 22/CP.8, para. 2, Additional Sections to be Incorporated in the Guidelines for the Preparation of the Information Required under Article 7, and in the Guidelines for the Review of Information under Article 8, of the Kyoto Protocol (FCCC/CP/2002/7/Add.3, 28 March 2003), para. 2.

³⁹ See *ibid.*, Annex I, para. 2(e).

⁴⁰ This was to fulfil the requirement found in para. 9 of the Annex to 16/CMP.1, n. 4 above, which recognized that there could be a potential land-use overlap for some Article 3.4 activities (i.e. agroforestry and grazing land management).

⁴¹ See Decision 22/CP.8, n. 38 above, Annex III, para. 5.

COP/MOP decision.⁴² The most significant aspect of this decision with respect to LULUCF was the provision for the establishment of committees, panels and expert groups to assist the EB in its work.⁴³ It would be later found that these expert panels would be called upon to provide invaluable assistance to the CDM EB in reviewing afforestation and reforestation projects under the CDM.

Another COP-8 decision on additional information for Articles 7 and 8 provided a short procedural element to link definitions and modalities for afforestation and reforestation projects under the CDM with reporting guidelines under Article 7. The decision includes three annexes containing a set of lengthy procedural matters associated with providing supplementary information under Article 7.1 and responsibilities of ERTs.

Parties at COP-8 also agreed on a decision relating to technical standards for data exchange between registry systems.⁴⁴ In an annex to this decision, a table identifying 'elements of serial numbers' indicates that there is no requirement to report that an AAU has been generated by a LULUCF activity.⁴⁵ This reconfirms the loophole that was created at COP-7 whereby AAUs generated from LULUCF activities can be banked for future commitment periods, despite the fact that RMUs (which can generate AAUs) cannot be banked.

COP-9

GOOD PRACTICE GUIDANCE

In 2003, COP-9 was hosted by the Italian government in Milan. Parties considered the IPCC good practice guidance (GPG) for LULUCF in the preparation of national greenhouse gas inventories. There was debate as to whether the COP should 'adopt' the GPG or 'note' it.⁴⁶ AOSIS contended that the GPG had just been published immediately prior to the COP and therefore

it was inappropriate to adopt a report which parties had only just received at the COP.⁴⁷ AOSIS also contended that, based on an earlier draft of the GPG circulated to governments, there were some elements of the report that were not legally consistent with the convention. One particular point of contention related to the treatment of forested land. The GPG divides forested land into 'managed' and 'unmanaged'. Countries are required to account for emissions and removals from managed forest land but not required to account for emissions and removals on unmanaged land.⁴⁸ It could be argued that this division of land is not consistent with the UNFCCC as the convention makes reference to anthropogenic emissions wherever they occur and hence makes no distinction between managed and unmanaged forests.⁴⁹ The IPCC used the concept of managed land as a proxy for anthropogenic emissions. However, there are situations where this may not be the case. For instance, the emissions from a fire that was started deliberately on farmland would need to be reported, but if the fire escaped into 'unmanaged' forest the resultant emissions would not have to be reported.

Other parties that had been more closely involved in the development of the GPG believed that it should be adopted. Again the issue of the separation of authorities of the COP and the IPCC and the overlap of COP delegates and IPCC GPG authors became a source of contention. In the end, parties agreed to 'welcome' the report and decided that Annex I parties should 'use' it for preparing annual inventories under the convention.⁵⁰ The decision also included a set of detailed common reporting format tables with an extensive list of footnotes.⁵¹ It was these footnotes to

⁴⁷ Personal observation.

⁴⁸ See Jim Penman *et al.* (eds), *Good Practice Guidance for Land Use, Land-Use Change and Forestry* (Institute for Global Environmental Strategies, 2003), chapter 3, section 3.2, at 3.23.

⁴⁹ Article 4, para. 1 of the UNFCCC, n. 3 above, states: 'All Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, shall: (a) Develop, periodically update, publish and make available to the Conference of the Parties, in accordance with Article 12, national inventories of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, using comparable methodologies to be agreed upon by the Conference of the Parties'. The definition of sinks is found in Article 1, para. 8 which states: "'Sink' means any process, activity or mechanism which removes a greenhouse gas, an aerosol or a precursor of a greenhouse gas from the atmosphere'. Hence it could be argued that all emissions and removals from all forest lands must be included in national inventories, whether they are managed or not.

⁵⁰ See Decision 13/CP.9, *Good Practice Guidance for Land Use, Land-Use Change and Forestry in the Preparation of National Greenhouse Gas Inventories under the Convention* (FCCC/CP/2003/6/Add.1, 22 April 2004).

⁵¹ The CRF tables were initially prepared by the Secretariat, in consultation with the IPCC as per instructions of SBSTA-18. See *Good Practice Guidance and Other Information on Land Use, Land-Use Change and Forestry (Agenda Item 4 (E))*, n. 46 above, Section E, para. 26(b).

⁴² See Decision 21/CP.8 Guidance to the Executive Board of the Clean Development Mechanism (FCCC/CP/2002/7/Add.3, 28 March 2003).

⁴³ See Decision 4/CMP.1, Guidance relating to the Clean Development Mechanism (FCCC/KP/CMP/2005/8/Add.1, 30 March 2006), Annex I, Rule 32.

⁴⁴ See Decision 24/CP.8, Technical Standards for Data Exchange between Registry Systems under the Kyoto Protocol (FCCC/CP/2002/7/Add.3, 28 March 2003).

⁴⁵ See *ibid.*, Annex, table 2.

⁴⁶ Note that SBSTA-18 had invited the IPCC: 'to submit the report (GPG) for consideration by the SBSTA at its nineteenth session for possible adoption by the COP at its ninth session' (emphasis added). See *Good Practice Guidance and Other Information on Land Use, Land-Use Change and Forestry (Agenda Item 4 (E))*, Report of the Subsidiary Body for Scientific and Technological Advice on its Eighteenth Session, held at Bonn, from 4 to 13 June 2003 (FCCC/SBSTA/2003/10, 31 July 2003), Section E, para. 26(a)(i).

the tables that provided the greatest amount of debate among delegates at COP-9, as parties considered how they would apply the tables with respect to GPG.⁵²

MODALITIES FOR AFFORESTATION AND REFORESTATION UNDER THE CDM

Another major decision at COP-9 related to modalities for the inclusion of afforestation and reforestation project activities under the CDM. The decision included a detailed annex of modalities and procedures. Some of these procedures included significant advancements in international environment law. Under the decision, project proponents are required to undertake both environmental and social impact assessments, within and outside the project boundary.⁵³ The decision also introduced the concept of 'leakage'⁵⁴ and the need to report on the possible presence of rare or endangered species and their habitats. Furthermore project participants are required to describe, *inter alia*, the legal title of the land and the rights of access to the sequestered carbon.⁵⁵ One of the most difficult elements within the decision concerned the treatment of 'non-permanence'.⁵⁶ Colombia proposed a temporary crediting system,⁵⁷ which most countries supported, however, Canada insisted on another system, which initially started as an insurance scheme and evolved into a certified emission reduction extended crediting scheme.⁵⁸ In the end, both options were

included in the decision leading to the creation of new certified emissions reduction units known as tCERs and ICERs.⁵⁹ The COP also invited parties and accredited observers to submit their views on how to facilitate small-scale afforestation and reforestation project activities – an issue that would be taken up at the next COP.

COP-9 also adopted a decision relating to technical guidance on methodologies for adjustments under Article 5 of the Kyoto Protocol.⁶⁰ Interestingly, this decision was modified at COP-11 to change some reporting requirements.⁶¹

COP-10

SIMPLIFIED MODALITIES FOR SMALL-SCALE AFFORESTATION AND REFORESTATION PROJECTS

In 2004, the negotiations moved to Buenos Aires for COP-10 with the LULUCF negotiations focusing on simplified modalities for small-scale afforestation and reforestation project activities under the CDM. One of the most contentious elements of the negotiation was the limit of tonnes of carbon dioxide equivalent that would set the ceiling for determining a small-scale afforestation and reforestation project activity. The limit set the maximum tonnage of CO₂ equivalent that could be sequestered by an afforestation or reforestation project. Below that limit a project would be considered small scale and would be subject to simplified proposal and approval procedures. Debate on this issue was intense. China suggested that the ceiling should be as small as possible, preferring in fact to have no small-scale projects at all. Other countries, like Chile, were opting for the highest figure they could negotiate. In the end, a figure of 8 kilotonnes of CO₂ equivalent was agreed upon. Despite this agreement on the tonnage, dispute over the figure would resurface at COP/MOP-2 with some developing countries

⁵² Personal observation.

⁵³ See Decision 19/CP.9, Modalities and Procedures for Afforestation and Reforestation Project Activities under the Clean Development Mechanism in the First Commitment Period of the Kyoto Protocol (FCCC/CP/2003/6/Add.2, 22 April 2004), Annex.

⁵⁴ Defined in the Annex to Decision 19/CP.9, *ibid.*, as 'the increase in greenhouse gas emissions by sources which occur outside the boundary of an afforestation or reforestation project activity under the CDM which is measurable and attributable to the afforestation and reforestation project activity'.

⁵⁵ A concept sometimes called *profit-à-prendre*.

⁵⁶ A concept not defined in the decision, but generally accepted to refer to the fact that planted trees do not live forever and at some stage they will die, be cut down or burnt and hence some or all of the stored carbon will be released back into the atmosphere.

⁵⁷ Whereby credits for afforestation or reforestation projects would expire and have to be replaced by another project.

⁵⁸ Initially the Canadian proposal allowed countries to 'insure' their CERs by an international brokerage, but this was considered to be too complicated. The proposal evolved into an arrangement whereby any ICER that was transferred into a retirement account of a party included in Annex I would need to be replaced by an equivalent carbon credit generated by the various Kyoto mechanisms. If a reversal of the sink occurred (e.g. due to fire or logging activity) before the end of the crediting period, an equivalent amount of carbon credits would need to be found to replace the loss. See Decision 5/CMP.1, Modalities and Procedures for Afforestation and Reforestation Project Activities under the Clean Development Mechanism in the First Commitment Period of the Kyoto Protocol (FCCC/KP/CMP/2005/8/Add.1, 30 March 2006), Annex, Section K.

⁵⁹ tCERs stands for 'temporary' certified emissions reduction and the curiously named ICERs stands for 'long-term' CERs.

⁶⁰ See Decision 20/CP.9, Technical Guidance on Methodologies for Adjustments under Article 5, paragraph 2, of the Kyoto Protocol (FCCC/CP/2003/6/Add.2, 22 April 2004).

⁶¹ See Decision 15/CP.11, Issues Relating to Adjustments under Article 5, paragraph 2, of the Kyoto Protocol (FCCC/CP/2005/5/Add.2, 30 March 2006). This decision later became Decision 21/CMP.1, Issues relating to Adjustments under Article 5, Paragraph 2, of the Kyoto Protocol (FCCC/KP/CMP/2005/8/Add.3, 30 March 2006). The changing of a decision of the COP marks a notable change in protocol. Decisions of the COP generally remain sacrosanct. The changes from 20/CP.9 to 15/CP.11 are fairly minimal, however the implications for reporting are significant. This was one issue that appears to slip under the radar for most parties.

(notably Chile again) pushing for a higher ceiling. The new decision on simplified procedures contains three annexes, which in itself suggests that simplified modalities would still be complicated. An interesting component of the decision is the stipulation that small-scale projects should be for low income communities and individuals.⁶²

A procedural decision to incorporate the new temporary certified emissions reductions in supplementary information for national registries was also agreed upon at COP-10.⁶³

COMMON REPORTING FORMAT TABLES

The good practice guidance for LULUCF was another issue considered at COP-10. Parties negotiated a set of common reporting format tables for Article 3.3 and 3.4 activities under the Kyoto Protocol. These tables are quite complex and contain detailed footnotes to deal with particular circumstances such as biomass burning, overlaps of land subject to Article 6 activities (joint implementation project activities), and emissions from liming. Some of the intrigue surrounding the tables related to the depiction of the geographical location of the boundaries of areas of land subject to afforestation and reforestation. This was a repeat of the COP-7 positions taken by Canada and the G77 and China concerning the level of precision required to identify units of land subject to accounting requirements under the Kyoto Protocol.⁶⁴

Parties also agreed on a draft decision for the first COP/MOP on good practice guidance. The key element of this decision is the requirement that parties 'should apply' the IPCC good practice guidance of LULUCF in a manner consistent with the Kyoto Protocol and relevant decisions of the COP/MOP. The caveat that the IPCC be applied consistently with the Kyoto Protocol tends to imply that some of the guidance provided by the IPCC may not be consistent with the Kyoto Protocol.

⁶² See Decision 14/CP.10, Simplified Modalities and Procedures for Small-Scale Afforestation and Reforestation Project Activities under the Clean Development Mechanism in the First Commitment Period of the Kyoto Protocol and Measures to Facilitate their Implementation (FCCC/CP/2004/10/Add.2, 19 April 2005).

⁶³ See Decision 13/CP.10, Incorporation of the Modalities and Procedures for Afforestation and Reforestation Project Activities under the Clean Development Mechanism into the Guidelines under Articles 7 and 8 of the Kyoto Protocol (FCCC/CP/2004/10/Add.2, 19 April 2005).

⁶⁴ The G77 sought precise identification of the geographical boundary of all activities subject to accounting under Articles 3.3 and 3.4 of the Kyoto Protocol, whereas Canada sought less specific reporting requirements.

SBSTA-22

SEMINAR OF GOVERNMENT EXPERTS

In 2005, during the Subsidiary Bodies meeting in Bonn, the UNFCCC parties held a meeting called the Seminar of Government Experts (SOGE).⁶⁵ This was the first step in the consideration of what a post-2012 regime may look like.⁶⁶ During the seminar, the representative from Papua New Guinea (PNG) proposed an optional protocol with tradable credits issued against avoided deforestation. He also questioned whether the Marrakesh Accords should be amended to allow avoided deforestation as a project activity under the CDM.⁶⁷ An old COP-7 battle ground had been reopened by this presentation and was destined not to go away.

COP-11

Later in 2005, parties moved on to frozen Montreal for COP-11. As the Kyoto Protocol had entered into force in the interval between COP-10 and COP-11 due to the Russian Federation's ratification, the Montreal COP also marked COP/MOP-1. All the draft COP/MOP decisions that had banked up since the Kyoto Protocol was concluded in 1997 were passed in a package.

REDUCING EMISSIONS FROM DEFORESTATION

Undoubtedly the most intriguing LULUCF issue at COP-11 was the proposal put forward by PNG and Costa Rica on reducing emissions from deforestation in developing countries.⁶⁸ The submission by PNG and Costa Rica was an elaboration of the proposal by PNG at the SOGE in May. The submission suggested two possible pathways for reducing emissions from deforestation (RED). The first was to develop a protocol on

⁶⁵ The mandate for the Seminar came from COP-10 and represented one of the most controversial outcomes of this meeting. See Report of the Conference of the Parties on its tenth session, held at Buenos Aires from 6 to 18 December 2004 (FCCC/CP/2004/10, 18 April 2005), Annex II, Seminar of Government Experts, at 39.

⁶⁶ 2012 is the end of the first commitment period for the Kyoto Protocol.

⁶⁷ See K. Kulovesi, M. Muñoz and C. Spence, 'Summary of the UNFCCC Seminar of Government Experts', 12:261 *Earth Negotiations Bulletin* (19 May 2005).

⁶⁸ See Submission by the Governments of Papua New Guinea and Costa Rica: Reducing Emissions from Deforestation in Developing Countries: Approaches to Stimulate Action (FCCC/CP/2005/MISC.1, 11 November 2005).

RED and the second was to revise the Marrakesh Accords and to allow 'avoided deforestation' as a project activity under the CDM in the first commitment period. The contact group on this issue was packed with parties and observers and certainly sparked considerable interest. Brazil and AOSIS were adamant that the Marrakesh Accords⁶⁹ should not be re-opened. Others clearly wanted to resurrect the issue of avoided deforestation in the CDM. In an interesting procedural manoeuvre, the COP made a series of conclusions on the issue rather than reach a decision.⁷⁰ In reaching these conclusions, Brazil, speaking on behalf of G77 and China, strategically ensured that the future consideration of this issue would be taken up by the COP and not the COP/MOP, thereby removing it from any carbon trading options under the Kyoto Protocol. This theoretically had the intent of putting to bed any consideration of opening up the Marrakesh Accords. The COP conclusion included an invitation to parties to submit their views on this issue and requested the Secretariat to organize a workshop, thus ensuring that the issue would begin to have a life of its own. In a further carefully conceived manoeuvre, the next time the issue would be considered would be under the SBSTA, thus relegating the issue to methodological discussions rather than financial considerations, had it been considered under the agenda of the next Subsidiary Body on Implementation (SBI) meeting. The forest experts would have plenty of time to ponder various methodological issues such as measurement of relevant carbon stocks, baseline determination, assessment of deforestation rates using various remote and ground-truthing methods, etc., before any serious consideration would be made of finding incentive schemes to deal with the issue.

FAILURE TO SUBMIT INFORMATION

As further indication of the complexity of LULUCF issues under the Kyoto Protocol, parties at COP/MOP-1 in Montreal made a decision relating to criteria for cases of failure to submit information relating to estimates of greenhouse gas emissions by sources and removals by sinks from activities under Article 3.3 and 3.4 of the Kyoto Protocol.⁷¹ In what must be a first in

climate change decisions and possibly any other multi-lateral environmental agreement, the decision includes an annex,⁷² which contains a mathematical equation to determine the magnitude of adjustments. The adjustments to the assigned amount of an Annex I party are based on a review undertaken by expert review teams established under Article 8 of the Kyoto Protocol. If a review team considers that a party has failed to submit information relating to estimates of greenhouse gas emissions or removals by sinks activities, an adjustment to the party's assigned amount can be determined.

FUTURE COMMITMENTS

While the RED proposal was probably the most interesting LULUCF outcome at COP-11 and COP/MOP-1 discussions on how to progress beyond the SOGE and consider future commitments and future actions post-2102 turned out to be the most vexing for parties. Negotiations on procedures and mandates were long and exhausting. In a memorable piece of negotiating theatre, the US representative walked out of a high-level roundtable. Then, the Russian Federation negotiators extended the COP and COP/MOP to an all-night negotiation based on an insistence that there should be a process to allow for voluntary commitments by developing countries. In the end, four negotiating tracks were opened, each creating an avenue for further LULUCF discussions. The first track came from a mandated review under the Kyoto Protocol with parties establishing a process to consider further commitments by Annex I parties for the period beyond 2012, in accordance with Kyoto Protocol, Article 3.9.⁷³ An *ad hoc* working group of parties to the Protocol was initiated to undertake this review.⁷⁴ The second was another mandated requirement under Article 9 of the

⁶⁹ The Marrakesh Accords are the set of decisions made at COP-7. See Report of the Conference of Parties on its Seventh Session, held at Marrakesh from 29 October to 10 November 2001 (FCCC/CP/2001/13, 15 May 2002).

⁷⁰ See Report of the Conference of the Parties on its Eleventh Session, held at Montreal from 28 November to 10 December 2005, Part One: Proceedings (FCCC/CP/2005/5, 30 March 2006), Section VI, 'Reducing Emissions from Deforestation in Developing Countries: Approaches to Stimulate Action'.

⁷¹ See Decision 18/CMP.1, Criteria for Cases of Failure to Submit Information Relating to Estimates of Greenhouse Gas Emissions by Sources and Removals by Sinks from Activities under Article 3, Paragraphs 3 and 4, of the Kyoto Protocol (FCCC/KP/CMP/2005/8/Add.3, 30 March 2006).

⁷² The Annex to Decision 18/CMP.1, *ibid.*, states: 'The magnitude (M) of the adjustments to an activity for a year of the commitment period, expressed as a percentage, is measured as the absolute value of the "adjusted net estimate for that activity minus the submitted net estimate for the activity", divided by the sum of the absolute values of all submitted components for that activity, multiplied by 0.18'. A footnote to the figure 0.18 states: 'This value was selected as an indicator of the average share of the land use, land-use change and forestry emissions and removals relative to total emissions for Parties included in Annex I to the Convention'. This description is then written as a mathematical equation.

⁷³ Kyoto Protocol, n. 3 above, Article 3.9 states: 'Commitments for subsequent periods for Parties included in Annex I shall be established in amendments to Annex B to this Protocol, which shall be adopted in accordance with the provisions of Article 21, paragraph 7. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall initiate the consideration of such commitments at least seven years before the end of the first commitment period referred to in paragraph 1 above'.

⁷⁴ See Decision 1/CMP.1, Consideration of Commitments for Subsequent Periods for Parties included in Annex I to the Convention under Article 3, Paragraph 9, of the Kyoto Protocol (FCCC/KP/CMP/2005/8/Add.1, 30 March 2006).

Kyoto Protocol to review the Protocol in its entirety.⁷⁵ The third came from a need to discuss future actions on climate change that included countries that were not party to the Kyoto Protocol. This was called a 'dialogue' to exchange experiences and analyse strategic approaches for long-term cooperative action to address climate change ('Dialogue').⁷⁶ The final track was to accommodate the concern of the Russian Federation regarding voluntary commitments and became colloquially known as the 'Russian proposal'.⁷⁷ None of the negotiations concerning these tracks discussed any substance. This would come later.

SBSTA-23

HARVESTED WOOD PRODUCTS

The twenty-third session of the SBSTA also met in Montreal in December 2005. It had two LULUCF issues on its agenda. The first related to the never-ending discussion on harvested wood products (HWP). SBSTA noted the report by the IPCC on progress made with respect to the development of methods to estimate and report on HWP in the context of the preparation of the *2006 IPCC Guidelines for National Greenhouse Gas Inventories*.⁷⁸ The acknowledgement of the work of the IPCC again brought the IPCC into the spotlight with respect to its role in interpreting policy, particularly as parties had not agreed on an approach on how to report on HWPs.

⁷⁵ Article 9 of the Kyoto Protocol, n. 2 above, states: '1. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall periodically review this Protocol in the light of the best available scientific information and assessments on climate change and its impacts, as well as relevant technical, social and economic information. Such reviews shall be coordinated with pertinent reviews under the Convention, in particular those required by Article 4, paragraph 2(d), and Article 7, paragraph 2(a), of the Convention. Based on these reviews, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall take appropriate action. 2. The first review shall take place at the second session of the Conference of the Parties serving as the meeting of the Parties to this Protocol. Further reviews shall take place at regular intervals and in a timely manner'.

⁷⁶ See Decision 1/CP.11, Dialogue on Long-Term Cooperative Action to Address Climate Change by Enhancing Implementation of the Convention (FCCC/CP/2005/5/Add.1, 30 March 2006).

⁷⁷ There was no decision to consider the Russian proposal. It was recorded in the report of the meeting. See S. Aguilar *et al.*, 'Summary of the Eleventh Conference of Parties to the UN Framework Convention on Climate Change and First Conference of Parties serving as the Meeting of Parties to the Kyoto Protocol: 28 November–10 December 2005', 12: 291 *Earth Negotiations Bulletin* (12 December 2005).

⁷⁸ See Methodological Issues under the Convention, Part A, 'Harvested Wood Products' (FCCC/SBSTA/2005/10, 1 March 2006), Section V.

There was very little substantive discussion on the issue of HWPs, although Tuvalu introduced a new proposal relating to the concept of 'wood miles' – a concept originating from Japan.⁷⁹ The SBSTA Chair concluded that SBSTA would continue considering HWP at its twenty-sixth session.⁸⁰

The SBSTA also developed tables of the common reporting format (CRF) for LULUCF in accordance with decision 13/CP.9.⁸¹ These tables were designed for the purpose of submitting annual inventory information by Annex I parties.⁸² As with previous CRF tables, these tables perpetuated the IPCC's concept of 'managed and unmanaged land' with complications further compounded by the CRF tables having reporting categories for 'controlled burning' and 'wildfires'.⁸³

DIALOGUE ON LONG-TERM COOPERATIVE ACTION

Just prior to SBSTA-24 in May 2006, parties gathered together in Bonn to participate in the first 'Dialogue on Long-term Cooperative Action'. LULUCF was briefly mentioned, with Iceland and Hungary seeking an expanded role for LULUCF in any new regime. Tuvalu suggested that expanding LULUCF would create disincentives for other mitigation action, particularly in relation to renewable energy, while PNG reiterated its interest in reducing emissions from deforestation and suggested the need for valuing ecosystem services and reforming commodity pricing. Brazil highlighted the potential of biofuels in mitigating climate change and by doing so introduced yet another LULUCF issue for consideration by parties.⁸⁴

⁷⁹ Personal observation. For information on woodmiles, see *The Woodmiles Forum*, available at <<http://www.woodmiles.net/english/index.html>>.

⁸⁰ See Methodological Issues under the Convention, Part A, 'Intergovernmental Panel on Climate Change Guidelines for National Greenhouse Gas Inventories, and Issues Related to Harvested Wood Products: Draft Conclusions proposed by the Chair' (FCCC/SBSTA/2006/5, 13 September 2006).

⁸¹ See Decision 13/CP.9, n. 50 above.

⁸² SBSTA's work included a draft decision, which was adopted by COP-11. See Decision 14/CP.11, Tables of the Common Reporting Format for Land Use, Land-Use Change and Forestry (FCCC/CP/2005/5/Add.2, Section VII, 30 March 2006).

⁸³ The IPCC guidelines would suggest that emissions from wildfires in 'unmanaged' forests according to its definition would not be considered as a reportable emission, even if these wildfires were started by human activities (e.g. escape from burn-offs on agricultural land).

⁸⁴ See A. Conrad *et al.*, 'Summary of the UNFCCC Dialogue on Long-term Cooperative Action, 15–16 May 2006', 12:297 *Earth Negotiations Bulletin* (17 May 2006).

AD HOC WORKING GROUP ON ARTICLE 3.9

Following the 'Dialogue' parties reconvened in Bonn as the *Ad Hoc* Working Group on Article 3.9 of the Kyoto Protocol (AWG) to consider further commitments by Annex I parties for the post-2012 period. This new subsidiary body to the Kyoto Protocol became the second track for considering a post-2012 regime. While procedural issues dominated discussions, LULUCF was noted by some parties (notably Norway and New Zealand) as a key issue for consideration.⁸⁵

SBSTA-24

SBSTA-24 then convened and parties again looked at the issue of reducing emissions from deforestation. The SBSTA initiated consideration of submissions from parties and accredited observers and agreed to consider further scientific, technical and methodological issues at its twenty-fifth session based on the workshop agreed by COP-11 to be held in Rome in August 2006.⁸⁶ The SBSTA also requested the Secretariat to plan for a second workshop in 2007.

SBSTA also took up the issue of IPCC guidelines for national greenhouse gas inventories with some specific references to biomass burning and natural disturbances and implications on reporting using IPCC conversion factors for emitted methane and non-methane volatile organic compounds.⁸⁷ Participants at SBSTA-24 also very briefly discussed the issue of harvested wood products with no resolution or consideration of how to resolve the issue.

SBSTA also considered a last minute twist to the COP/MOP decision 16/CMP.1⁸⁸ (the key LULUCF decision). Italy proposed a numerical revision to its allocated value for forest management inscribed in the appendix to the annex of this decision.⁸⁹ There was little discussion around this proposal by Italy, although there was noticeable unease among other EU countries. It

appeared that some EU members were not happy with Italy's last minute change,⁹⁰ particularly as this concession may have disadvantaged other EU countries. SBSTA prepared a draft decision for COP/MOP-2 and this was later passed without comment at that COP/MOP.

WORKSHOP ON MITIGATION RELATING TO AGRICULTURE, FORESTRY AND RURAL DEVELOPMENT

Added to the Dialogue, the AWG and SBSTA, LULUCF was also the focus of an in-session workshop on mitigation relating to agriculture, forestry and rural development during the May 2006 Subsidiary Bodies sessions.⁹¹ The workshop discussed such issues as how to achieve sustainable forest management under the Convention, monitoring emission reductions from deforestation in developing countries and the need to differentiate forest types for accounting of avoided deforestation emissions.⁹² Curiously this workshop was held in parallel with the SBSTA and the AWG, making it difficult, if not impossible, for small delegations to cover SBSTA LULUCF discussions, the AWG and the workshop at the same time. Useful informational opportunities were subsequently lost.

COP-12 AND COP/MOP-2

SPECIAL CLIMATE CHANGE FUND

In November 2006, the COP (at its twelfth session) and COP/MOP (at its second session) went on safari

⁸⁵ See A. Conrad *et al.*, 'Kyoto Protocol Ad Hoc Working Group, Wednesday 17 May 2006', 12:298 *Earth Negotiations Bulletin* (Thursday, 18 May 2006).

⁸⁶ See Reducing Emissions from Deforestation in Developing Countries (FCCC/SBSTA/2006/5, 13 September 2006), Section VI.

⁸⁷ The issue on biomass burning came from a request from Tuvalu as a follow up to the issue of wildfires and managed and unmanaged lands. The issue relating to methane and volatile organic compounds came from Australia. Personal observation.

⁸⁸ Formerly Decision 11/CP.7, Land Use, Land-Use Change and Forestry (FCCC/CP/2001/13/Add.1, 21 January 2002).

⁸⁹ The figure proposed by Italy was 2.78Mt C/year (a 260% increase) over the original allocated 0.18 Mt C/yr.

⁹⁰ According to para. 12 of Decision 16/CMP.1, n. 4 above: 'A Party may request the Conference of the Parties to reconsider its numerical values as contained in paragraph 10 and in the appendix to paragraph 11, with a view to the Conference of the Parties recommending a decision for adoption to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, no later than 2 years prior to the beginning of the first commitment period' (emphasis added). Apparently, Italy's submission just made the cut off date with hours to spare.

⁹¹ The mandate for this workshop came originally from Decision 10/CP.9, Scientific, Technical and Socio-Economic Aspects of Impacts of, and Vulnerability and Adaptation to, Climate Change, and Scientific, Technical and Socio-Economic Aspects of Mitigation (FCCC/CP/2003/6/Add.1, 22 April 2004) and was further elaborated upon at SBSTA-23. See Scientific, Technical and Socio-Economic Aspects of Mitigation of Climate Change (FCCC/SBSTA/2005/10, 1 March 2006), Part IV, para. 26.

⁹² See A. Bhardwaj *et al.*, 'SB 24 & AWG Highlights, Tuesday, 23 May 2006', 12:303 *Earth Negotiations Bulletin* (Wednesday, 24 May 2006).

to Nairobi, Kenya. The COP revisited an old decision relating to further guidance to an entity entrusted with the operation of the financial mechanism of the Convention for the operation of the Special Climate Change Fund (SCCF). Parties identified funding opportunities under the SCCF to include afforestation, reforestation and use of marginal land.⁹³ This is a curious category of activities to be funded and appeared to hark back to a decision made at COP-7.⁹⁴ The specific reference to afforestation and reforestation appears to be an 'insurance' measure for some developing countries to ensure that afforestation and reforestation activities would be funded in case they missed out on CDM projects. Possibly some countries thought that the transaction costs of the CDM would be too high to develop afforestation and reforestation projects, and therefore sought another funding source through the SCCF.

The COP did not formally consider the issue of reducing emissions from deforestation. This was left to the SBSTA meeting in Nairobi. Again there was intense interest in the issue. As discussions progressed there appeared to be a partial coup within the G77 and China, with PNG claiming that it was speaking on behalf of the G77 and China, although on another occasion Brazil spoke on behalf of the group.⁹⁵ Despite the fact that the SBSTA is theoretically a body to discuss scientific and technical matters, there was little discussion on substance. Most of the time was spent

drafting a new conclusion, which looked distinctly like the previous conclusion. There was agreement to hold another workshop and a call for further information. The SBSTA also agreed to consider at its next session whether to hold yet another subsequent workshop and the need for expert papers.⁹⁶

SBSTA also held a brief discussion on greenhouse gas inventories and requested that the Secretariat develop a training course for review of information reported under Article 7.1 related to Article 3.3 and 3.4 activities.⁹⁷ This further highlighted the fact that issues relating to greenhouse gas inventories from LULUCF activities are complex and the gene pool of experts needed to be expanded.

ELIGIBLE LAND UNDER THE CDM

In considering further guidance on the CDM, COP/MOP-2 convened a contact group to discuss the eligibility of lands for afforestation and reforestation activities under the CDM. The CDM EB had produced two definitions of eligible land – one at its twenty-second meeting⁹⁸ and one at its twenty-sixth meeting.⁹⁹ Parties differed over which definition was the most accurate and which properly reflected the definition of a forest in Decision 16/CMP.1. The EU contended that the definition presented at the twenty-second meeting created a perverse incentive to allow countries to clear forested land which had started to grow after 1990 and then replant them and gain the credit for the sequestered carbon but not the deficit from the cleared re-growth forest. Others believed the EB's definition limited opportunities for afforestation and reforestation projects. There was also concern that the latter annex introduced concepts that were not consistent with Decision 16/CMP.1.¹⁰⁰ Parties were not able to reach a consensus on this issue and therefore the COP/MOP decided to ask the CDM EB to prepare new procedures to demonstrate the eligibility of lands after a call for

⁹³ See Decision 1/CP.12, Further Guidance to an Entity Entrusted with the Operation of the Financial Mechanism of the Convention, for the Operation of the Special Climate Change Fund (FCCC/CP/2006/5, 26 January 2007).

⁹⁴ The initial Decision 7/CP.7, Funding under the Convention (FCCC/CP/2001/13/Add.1, 21 January 2002) noted that a special climate change fund be established for a number of activities including: '2(c) energy, transport, industry, agriculture, forestry and waste management' (emphasis added). Then COP-8 adopted a follow-up decision entitled: Initial Guidance to an Entity Entrusted with the Operation of the Financial Mechanism of the Convention, for the Operation of the Special Climate Change Fund, Decision 7/CP.8 (FCCC/CP/2002/7/Add.1, 28 March 2003), which established a process to further define the prioritized activities, programmes and measures to be funded out of the Special Climate Change Fund which had been identified in para. 2 of Decision 7/CP.7. Consequently, COP-9 adopted a decision based on the process established at COP-8. This decision, Decision 5/CP.9, Further Guidance to an Entity Entrusted with the Operation of the Financial Mechanism of the Convention, for the Operation of the Special Climate Change Fund (FCCC/CP/2003/6/Add.1, 22 April 2004), para. 2(a), identified that adaptation activities funded under the SCCF in the areas of water resource management, land management, agriculture, health, infrastructure development, fragile ecosystems, including mountain ecosystems, and integrated coastal zone management. It is interesting to note that forestry disappeared from this list but may be considered as being included in broader categories such as land management. At COP-12, parties agreed to prioritized areas for funding including: '1(d) Afforestation, reforestation and use of marginal land'; See Decision 1/CP.12, n. 93 above.

⁹⁵ Personal observation.

⁹⁶ See Reducing Emission from Deforestation in Developing Countries (FCCC/SBSTA/2006/11, 1 February 2007), Part V.

⁹⁷ See Issues Relating to Greenhouse Gas Inventories (FCCC/SBSTA/2006/11, 1 February 2007), Part VIII(B).

⁹⁸ See 'Procedures to Define the Eligibility of Lands for Afforestation and Reforestation Project Activities', *Executive Board of the Clean Development Mechanism, Twenty-Second Meeting Report* (CDM-EB-22, 25 November 2005), Annex 16.

⁹⁹ See 'Procedures to Demonstrate the Eligibility of Lands for Afforestation and Reforestation Project Activities (Version 02)', *Executive Board of the Clean Development Mechanism, Twenty-Second Meeting Report* (CDM-EB-26, 29 September 2006), Annex 18.

¹⁰⁰ For instance Annex 18 includes the concept of 'minimum width' with respect to forest definition thresholds. This concept is not found in Decision 16/CMP.1, n. 4 above, but is found in the IPCC Good Practice Guidance on LULUCF; see IPCC, *Good Practice Guidance for Land Use, Land-Use Change and Forestry* (Institute for Global Environmental Strategies, 2003), at 4.11.

public input. In the end, the CDM EB did come up with a new definition, which, however, still creates an incentive to clear forests after 1990.¹⁰¹

The COP/MOP also requested parties, intergovernmental organizations and non-government organizations to submit their views on the implications of possibly changing the limit established for small-scale afforestation and reforestation project activities under the CDM.¹⁰² Another old CDM LULUCF battle had bubbled to the surface.

DIALOGUE-2

Nairobi was also the venue for the second Dialogue. During the first day of the Dialogue, Brazil explained its proposal to provide positive incentives to reduce emissions from deforestation in developing countries, noting that it is a voluntary arrangement and was not linked to carbon trading.¹⁰³ This presentation clearly marked the difference between Brazil's non-market approach and PNG's market-based system.

AWG-2

The second AWG was also held in Nairobi. In the context of LULUCF, there was agreement that there would need to be consideration of the rules for the treatment of LULUCF in future commitment periods¹⁰⁴ – a task, some may argue, being worthy of a separate *ad hoc* working group in itself.

¹⁰¹ The CDM EB developed a new set of draft procedures at its thirty-first meeting. The EB decided to base the definition of eligible land on decisions under 16/CMP.1, n. 4 above, and 5/CMP.1, n. 58 above, rather than trying to reinterpret the definitions as the CDM EB had done previously. The CDM EB did however indicate that land could be cleared after 1990 and then reforested and still be eligible subject to the provision of 'transparent information that demonstrates that the land was not intentionally converted to non-forest land for the purpose of implementing an afforestation and reforestation CDM project activity'. See 'Draft Procedures to Demonstrate the Eligibility of Lands for Afforestation and Reforestation Project Activities', *Executive Board of the Clean Development Mechanism, Thirty-First Meeting Report* (CDM-EB-31, 4 May 2007), Annex 14. This is an interesting decision by the EB as the concept of 'intentional conversion' of land is not found within 16/CMP.1, n. 4 above. It presents an interesting conundrum as to how far the CDM EB can interpret, or in fact, reinterpret, COP/MOP decisions.

¹⁰² Recalling that the limit had been set a 8 kilotonnes of CO₂ equivalent in Decision 14/CP.10, n. 62 above.

¹⁰³ See S. Carter *et al.*, 'COP-12 and COP/MOP 2 Highlights, Wednesday, 15 November 2006', 12:316 *Earth Negotiations Bulletin* (16 November 2006).

¹⁰⁴ See Further Commitments for Annex I Parties and the Duration Thereof: Work Plan and Schedule of Future Sessions (FCCC/KP/ AWG/2006/L.4, 14 November 2006).

ARTICLE 9 REVIEW

The third of the four 'future action tracks' was also considered in Nairobi. This related to the overall review of the Kyoto Protocol under Article 9. Discussions were primarily procedural as Annex I and most non-Annex I parties¹⁰⁵ tussled over the issue of whether the discussions under this agenda would or would not establish new commitments for non-Annex I parties. LULUCF was not discussed; however, the final decision calls for submissions from parties in 2007, thus opening the door for LULUCF considerations.¹⁰⁶

The 'fourth track' known as the 'Russian proposal' became entangled in high-level negotiations with parties finally agreeing that the President of the COP should defer discussions to COP/MOP-3 and, in the meantime, hold a workshop in May 2007.¹⁰⁷

REDUCING EMISSIONS FROM DEFORESTATION WORKSHOP

In 2007, the next event on the LULUCF agenda was a workshop in Cairns, Australia on reducing emissions from deforestation. Brazil and PNG elaborated their proposals, while India claimed that it should be eligible for carbon credits for maintaining their existing forests. Tuvalu highlighted the fact that while India had stopped deforestation in its own country its deforestation footprint was now displaced to other forested countries. The World Bank introduced its new Forest Carbon Partnership Facility, leading some to wonder whether the Bank was repeating a previous mistake by creating a LULUCF carbon market ahead of any COP decision and thereby creating an expectation that its market would be eligible under any new post-2012 regime. In the non-carbon market camp, Tuvalu proposed community-based trust funds with funding from a variety of sources.¹⁰⁸

¹⁰⁵ G77 and China advocated a limited mandate, while AOSIS sought a broader scope. Personal observation.

¹⁰⁶ See Decision 7/CMP.2, Review of the Kyoto Protocol Pursuant to its Article 9 (FCCC/KP/CMP/2006/10/Add.1, 2 March 2007).

¹⁰⁷ See S. Carter *et al.*, 'Summary of the Twelfth Conference of the Parties to the UN Framework Convention on Climate Change and the Second Meeting of Parties to the Kyoto Protocol, 6–17 November 2006', 12:318 *Earth Negotiations Bulletin* (20 November 2006).

¹⁰⁸ See 'Submission by the Government of Tuvalu: Reducing Emissions from Deforestation in Developing Countries', in Views on the Range of Topics and Other Relevant Information relating to Reducing Emissions from Deforestation in Developing Countries, Submissions from Parties (FCCC/SBSTA/2007/MISC.2/Add.1, 3 April 2007).

SBSTA-26

REDUCING EMISSIONS FROM DEFORESTATION

In May 2007, parties again met in Bonn for the twenty-sixth session of SBSTA. Again the topic of reducing emissions from deforestation was a key focus of LULUCF discussions. Parties attempted to draft a decision for COP-13 but were unable to agree on a number of issues, including India's proposal to include forest conservation, whether forest degradation should be included, whether pilot activities should be included and whether relevant organizations should be invited to assist in the process.¹⁰⁹ With no COP decision completed, the SBSTA decided to call for views from parties.

The *IPCC 2006 Guidelines for National Greenhouse Gas Inventories* also came under review. Again, the issue of the IPCC's use of the concept of 'managed' and 'unmanaged land' was the subject of discussion. The SBSTA invited parties to report on their experiences in the use of the Guidelines. HWP rated an extremely brief mention, with parties agreeing to consider this issue in broader LULUCF discussions.¹¹⁰

LIMITS TO SMALL-SCALE AFFORESTATION AND REFORESTATION PROJECT ACTIVITIES

The implications of possible changes to the limit for small-scale afforestation and reforestation CDM project activities came up again for discussion at SBSTA-26. While some countries were keen to see an increase in the tonnage limit to allow simplified procedures for larger afforestation and reforestation projects, Tuvalu (on behalf of AOSIS), Brazil and the EU stressed that the decision on small-scale afforestation and reforestation project activities was part of a balanced package agreed at COP-9 and opposed a review of the tonnage limit. With no agreement reached, SBSTA decided to call for further views from parties, intergovernmental and non-governmental organizations and to consider the issue again at SBSTA-27 in December 2007.

RUSSIAN PROPOSAL

At the end of the first week of the Subsidiary Bodies meeting a workshop was held to discuss the 'Russian

¹⁰⁹ The reluctance to invite relevant organizations to participate is an apparent reaction to the proposal by the World Bank to establish a carbon trading mechanism ahead of any COP decision. Personal observation.

¹¹⁰ See Methodological Issues under the Convention: Intergovernmental Panel on Climate Change Guidelines for National Greenhouse Gas Inventories (FCCC/SBSTA/2007/L.5, 15 May 2007).

Proposal' on voluntary commitments. This is the fourth 'future-action track', with the workshop being the first time this proposal had an opportunity to be discussed in any detail. The Russian proposal contains two key elements: the first to allow countries any easier path to become Annex I and Annex B parties to the Kyoto Protocol and the second to allow parties to the UNFCCC to take on voluntary commitments.¹¹¹ There was not a specific reference to LULUCF in the discussions, but the Russian proposal does open the door for interested developing countries to consider committing to possible LULUCF sectoral targets.¹¹²

AWG-3

The third session of the AWG was also held in Bonn during SBSTA-26. While LULUCF was potentially part of the agenda in the context of discussions relating to 'mitigation potentials', there was very little consideration of this issue.

DIALOGUE-3

The compressed agenda of the SBSTA and SBI in May 2007 was made more complex by the addition of the third session of the Dialogue, from 16 to 17 May 2007. There appeared to be very little discussion of LULUCF issues apart from a reference by the representative from Saint Vincent and the Grenadines, on behalf of AOSIS, to the importance of protecting mangroves as an adaptation strategy.¹¹³

AWG-4

The fourth session of the AWG was held in Vienna 21–31 August 2007. Again there was very little discussion on LULUCF issues, although New Zealand suggested that it was willing to take on quantitative emissions reductions but suggested that new types of commitments would need to be considered.¹¹⁴ This could well be an allusion to an interest in setting targets for different sectors and hence suggesting that different targets could be set for different LULUCF sectors. By setting LULUCF sectoral targets it could open the door for developing countries to establish targets for reducing emissions from deforestation – a subject which remains taboo within

¹¹¹ See A. Appleton *et al.*, 'SB 26 Highlights', 12:327 *Earth Negotiations Bulletin* (12 May 2007).

¹¹² This point was noted in an intervention by Tuvalu at the workshop on reducing emissions from deforestation in developing countries, 7–9 March 2007 in Cairns, Australia. Personal observation.

¹¹³ A. Appleton *et al.*, 'SB 26 Highlights: Thursday, 17 May 2007', 12:332 *Earth Negotiations Bulletin* (18 May 2007).

¹¹⁴ S. Carter, P. Doran and K. Kulovesi, 'Fourth Sessions of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol and Convention Dialogue, 27–31 August 2007', 12:339 *Earth Negotiations Bulletin* (3 September 2007).

most developing countries because it entails emissions reduction commitments. They believe that targets are the responsibility of Kyoto Protocol Annex I parties only.

DIALOGUE-4

The fourth Dialogue was held back to back with the AWG in Vienna. The issue of reducing emissions from deforestation featured in discussions. Erik Haites from Margaree Consultants emphasized the difficulty in estimating the costs of taking action to reduce emissions from deforestation.¹¹⁵ Notwithstanding this cautionary note, the EU and Norway indicated that the package of decisions to be taken at COP-13 should include a decision relating to reducing emissions from deforestation.

CONCLUSION

When the Kyoto Protocol was opened for signature in 1997, few would have imagined how complex the issue of LULUCF would become. The need to report and account for emissions from the land use and forestry sector is a complex business. Scientists have difficulty understanding natural systems on their own. Inserting carbon accounting adds a further level of complexity. Throughout the negotiations, parties have tried to engineer accounting rules to benefit their particular circumstances. Even the IPCC has helped steer the process. But it seems inevitable that the more the accounting system is bent to suit certain circumstances, the more complex it becomes. It is no wonder that parties have had extreme difficulties in trying to come to an agreement on accounting for HWP. Some timber export countries have diametrically opposed positions on how to account for HWP due to perceptions on the economic advantage they will gain from a particular approach. The re-introduction of the concept of reducing emissions from deforestation has added another layer of complexity to the carbon accounting system. Some large rainforest countries see carbon accounting as a pot of gold at the end of the rainbow. Others see this issue as yet another opportunity to manipulate the accounting system so as to make money from carbon trading, while at the same time making little change to atmospheric concentrations of greenhouse gas emissions. With every twist and turn in the LULUCF jungle there is a new opportunity for some to take advantage and others to stumble.

COP-13, the twenty-seventh session of SBSTA, and the ongoing AWG and Dialogue in Bali in December 2007 will be hectic affairs. It is likely that parties will agree on a process to test actions to reduce emissions from deforestation. Parties are also likely to agree on a 'roadmap'

for further action under the UNFCCC, including a possible timeframe for negotiations of a new agreement under the UNFCCC.¹¹⁶ In September 2007, United Nations Secretary-General Ban Ki-moon convened a High-Level Event on Climate Change at the United Nations Headquarters in New York. A number of world leaders emphasized the need to address the issue of reducing emissions from deforestation at the forthcoming COP in Bali.¹¹⁷ In Washington, a few days later, US President George W. Bush convened a Major Economies Meeting on Energy Security and Climate Change. In the Chair's Summary of the meeting it was noted that there was a need to make progress on issues relating to, *inter alia*: 'reducing emissions from deforestation, restoring forest cover, and promoting sustainable harvest and product yields'.¹¹⁸ Whether a new agreement under the UNFCCC includes further actions on LULUCF remains to be seen.

The future for LULUCF remains uncertain. The only certainty is that whatever future regime is developed the system will be complex. There is no escaping the fact that nature is complex. While four tracks have been opened for discussion on new arrangements under the Convention and the Protocol, little effort is being made to discuss the issue of LULUCF in its totality. With every opportunity missed to discuss future considerations of LULUCF issues, the more difficult it is going to be to have an informed negotiation. The last minute negotiations that were held in the development of the Kyoto Protocol may be repeated if parties are not willing to have a substantive and comprehensive discussion on LULUCF issues.

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¹¹⁶ The term 'roadmap' was coined at the Midnight Sun Dialogue on Climate Change in Sweden in June 2007. The term came from the South African Environment Minister, Marthinus van Schalkwyk, as a compromise between agreeing to start negotiations for a new legal instrument under the UNFCCC and agreeing to do nothing at Bali (personal observation). Considering the agreement coming from the G8 + 5 Summit earlier in 2007 to conclude negotiations by the end of 2009, the proposal to have a 'roadmap' means that a mandate to start negotiations will have to be agreed upon in 2008 (unless the UN General Assembly can do this after the COP in December 2007). This gives parties very little time to negotiate such a new agreement and come forward with a comprehensive and cohesive decision on LULUCF.

¹¹⁷ Personal observation.

¹¹⁸ See White House Council on Environmental Quality, *Final Chairman's Summary: First Major Economies Meeting on Energy Security and Climate Change* (27–28 September 2007), available at <<http://www.state.gov/g/oes/climate/mem/93021.htm>>.

¹¹⁵ See *ibid*.