

INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE



NATIONAL GREENHOUSE GAS INVENTORIES PROGRAMME

IPCC NGGIP-LULUCF Programme

Fifth Authors/Experts Meeting on Good Practice Guidance for Land Use, Land-Use Change And Forestry (Task 1) and

Fourth Authors/Experts Meeting on the issue of "Degradation of Forests and Devegetation of Other Vegetation Types"

(Task 2)

Meeting Report

Sydney, Australia 29 – 31 July 2003

Supporting material prepared for consideration by the Intergovernmental Panel on Climate Change. This supporting material has not been subject to formal IPCC review and approval process.

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SUMMARY

Authors and experts of the two reports met at the Fifth Authors/Experts Meeting on Task 1 and the Fourth Authors/Experts Meeting on Task 2, held on 29 - 31 July 2003, in Sydney, Australia, to consider the comments received from the second governments/experts review for the preparation of the final draft reports. About 4,000 comments were received during the second review, which ran from 2 May to 27 June 2003.

Task 1 and Task 2 authors agreed on a time schedule for further drafting and finalising the drafts for government consideration in October 2003, before consideration by the IPCC Panel, 3-7 November 2003.

1 BACKGROUND

- 1. The Intergovernmental Panel on Climate Change (IPCC), at its XVIII Session in September 2001, in Wembley, UK, endorsed the Land Use, Land-Use Change and Forestry (LULUCF) Programme of the National Greenhouse Gas Inventories Programme (NGGIP), which responds to the invitations to the IPCC laid out in the Marrakesh Accords (Decision 11/CP.7, paragraphs 3(a) to (d)). IPCC XVIII also accepted the Terms of Reference (TOR), the Table of Contents (TOC), and the Work Plan for the development of Good Practice Guidance for LULUCF. This activity is also known as Task 1 of the NGGIP LULUCF Programme and responds to the invitation contained in paragraphs 3 (a) and (b) in the decision 11/CP.7.
- 2. The First Authors/Experts Meeting for Task 1 was held on 12-14 March 2002, in Eisenach, Germany. The Eisenach meeting accomplished substantive work on Chapters 2 to 5 with an accelerated handling of Chapter 2 (Basis for Consistent Representation of Land Areas) to produce an initial draft. The latter was necessary because the land-use categories in the other chapters are based on Chapter 2. The authors discussed the initial draft outline of each chapter of the report, paying special attention to consistency and harmonisation requirements. The availability of scientific and other relevant material was explored.
- 3. The IPCC also responded to the invitation of the COP contained in its decision 11/CP.7 (paragraph 3 (c)) in the Marrakesh Accords) by preparing a work plan to develop definitions for direct human-induced degradation of forests and devegetation of other vegetation types, and methodological options to inventory and report emissions resulting from these activities. The work plan, TOR and TOC for this task were endorsed by IPCC XIX in April 2002. This task is known as Task 2 of the NGGIP LULUCF Programme. It was agreed that the implementation of Task 2 would be synchronised with Task 1 to ensure consistency of methodologies and products.
- 4. The Second Authors/Experts Meeting for Task 1 and the First Authors/Experts Meeting for Task 2 were held simultaneously on 10-12 July 2002, in Tampere, Finland. The meetings advanced the drafting of all the Task 1 chapters, and considerable progress was made in preparing a draft outline and elaborated contents of the various chapters of Task 2. Links between the two tasks were also identified at these two meetings.
- 5. The Third Authors/Experts Meeting for Task 1 and the Second Authors/Experts Meeting for Task 2 were held, on 2-4 October 2002, in Rio de Janeiro, Brazil. The meetings aim was to produce the first-order draft reports for the first governments and experts review and to plan for the Fourth and Third Authors/Expert Meetings for Task 1 and Task 2, respectively. Authors and the IPCC NGGIP Technical Support Unit (TSU) worked closely in finalising the first-order draft reports after the meetings.
- 6. The first combined government/expert review of the first-order drafts took place during the period 2 December 2002 to 27 January 2003. A total of twenty-five countries, five intergovernmental organisations and thirty-seven experts participated in the review and about 6,000 comments were received by the TSU.
- 7. All comments were compiled into consolidated lists and preliminary recommendations on how to reflect these comments in the second-order drafts were prepared by the TSU. The Steering Group and the TSU prepared a summary of comments that highlighted specific points. The authors considered this summary at the next meeting in Kuala Lumpur, Malaysia.

- 8. The Fourth Authors/Experts Meeting for Task 1 and the Third Authors/Experts Meeting for Task 2 were held on 1-3 April 2003, in Kuala Lumpur, Malaysia. The aim of these meetings was to consider how best to reflect all comments in the second-order drafts. Review editors of both tasks participated in the meeting.
- 9. The second-order drafts were finalised for the second combined government/expert review, which ran from 2 May to 27 June 2003 and produced about 4,000 comments. The comments were compiled by the TSU into consolidated lists by chapter, and key issues addressed in the comments were summarised as after the first review.

2 OBJECTIVES AND ORGANISATION OF THE MEETING

- 10. The Fifth Authors/Experts Meeting for Task 1 and the Fourth Authors/Experts Meeting for Task 2 were held on 29–31 July 2003, in Sydney, Australia. The objectives of the meetings were to consider the comments from the second combined government/expert review for the preparation of the final draft reports.
- 11. The Australian Greenhouse Office (AGO) hosted the meetings. The TSU of the IPCC NGGIP organised these meetings with the support from the AGO. The TSU is grateful for the excellent support from the AGO under Dr Gary Richards' leadership. A private company "Horizon Events" also greatly assisted with the logistics at the venue. One hundred and nine experts/authors, review editors and TSU members participated in the meetings (see the Participant List at the end of this report).
- 12. A Co-ordinating Lead Authors (CLA) Meeting, on 28 July 2003 attended by the CLAs, the Steering Group, and the TSU preceded the two meetings. Additional CLA meetings were held also during the meeting to address identified key issues and to ensure consistency in the consideration of the comments. The essential points discussed at these meetings are given in subsequent paragraphs of this report and the attached minutes from these meetings. The first CLA meeting also discussed the tasks for the breakout groups, identification of inter-linkages between chapters of each task, as well as between Tasks 1 and 2.
- 13. Essentially, the meetings were conducted in breakout groups (BOGs) that were based on the chapters of the report. When necessity warranted it, smaller or larger BOGs were also formed either within BOGs or among/between them. Details of the discussions of these and of chapter-specific issues are provided in the next sections of this report.
- 14. In the BOG sessions of each chapter, the authors considered all substantive comments on Task 1 and Task 2. Most of them were accepted or taken into account in the drafts. Responses from authors indicating how each comment was treated were compiled in the Excel files with the consolidated comments.
- 15. Review Editors for each chapter of Task 1 and Task 2 were present at the plenary and breakout group discussions to ensure that all substantive comments from governments and experts were appropriately dealt with, to advise authors how to handle controversial issues, and also how they would be addressed in the final draft to be sent to governments.

3 CLA MEETINGS

- 16. The CLA meetings discussed identified key issues, and especially comments that would also affect the other chapters of the Task 1 reports, and/or also Task 2.
- 17. The first CLA meeting discussed the key issues relating to the comments as identified by the Steering Group and TSU, and recommended responses to be taken by the authors in response to these. The CLAs of each chapter provided additional analysis of the comments for the respective chapter, presented comments that would need a common approach and provided an evaluation of how these issues could be addressed during the meetings. The first CLA meeting discussed also issues relating to the conduct of the Task 1 and Task 2 meetings (timing of the plenaries/BOG sessions etc) and general issues like the timetable for finalising the draft reports after the meetings. The minutes of the first CLA meeting are attached (see Attachment 1).
- 18. Additional CLA meetings were held during the meetings, usually in the mornings before the BOG or plenary sessions, the final CLA meeting was held after last plenary of the meetings. These meetings assessed the progress in each chapter, discussed the responses to major comments or comments of cross-cutting nature. The meetings discussed, amongst others, proposed changes to the broad land-use categories, the annexes and appendices (content and role) of Chapter 3, issues relating to -the reporting and harmonisation of terminology, abbreviations and symbols used in the reports (see Attachments 2 3 for more information). The CLA meeting agreed on the recommendation on how to use of the phrase "it is *good practice* to" and language referring to the requirements in the Marrakesh Accords (see Attachment 4).

4 CHAPTER-SPECIFIC CONSIDERATION OF THE COMMENTS

4.1 TASK 1 - CHAPTER 1: OVERVIEW

- 19. No BOG sessions were held for Chapter 1 as the authors are also authors for the other chapters of the report and were attending the BOG sessions for these. The authors had gone through the comments before the meeting, prepared their responses for those comments that could be attended to before the meeting and revised the text accordingly. These were given to the review editors for checks, and the authors and review editors discussed the responses to the comments during breaks. There were no controversial issues in the comments, and most comments were accepted (some comments were rejected to maintain consistency with the IPCC report on Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories, or the responses were modified to ensure consistency with other parts of the text).
- 20. Responses to some comments depended on decisions and actions to be taken in the other chapters; some of these were incorporated in the draft text during the meetings, others needed to await the finalisation of the consideration of the comments on the chapters. The review editors prepared a written report on the consideration of the comments of this chapter during the meeting, including a list of comments that would require additional responses after the meeting.

4.2 TASK 1 - CHAPTER 2: CONSISTENT REPRESENTATION OF LAND AREAS

- 21. The group went through the comments and labelled some comments as "priority" comments based on the nature and importance of the comments. Issues with implications to other chapters were raised.
 - To Chapter 1: proposal to include text on reasoning for consistent representation of land areas (use area information in a sensible manner);
 - To Chapter 4: proposal to make some changes in wording of Table 4.2.2 addressing the relationship with Chapter 2 approaches and Chapter 4 reporting methods relating to land area representation;
 - To all chapters: proposal to consider the inclusion of natural water bodies (lakes, rivers) into the wetland category (this was accepted during the meeting).
- 22. The authors considered also the following actions to respond to the comments and assign authors with tasks to complete these tasks:
 - To produce a decision table to replace the decision tree, or improve the existing decision tree;
 - Re-ordering of tables and figures.
- 23. The electronic files with the all comments responded to would be relayed to the TSU for consolidation. TSU was also tasked to incorporate "non-priority" (editorial) responses to comments into the SOD text. The CLAs/TSU were tasked to combine text versions with "priority" and "non-priority" comment edits to produce the final draft.

4.3 TASK 1 - CHAPTER 3: LUCF SECTOR GOOD PRACTICE GUIDANCE

- 24. The group summarised the key issues that would need improvement and additional work in Chapter 3 as follows: user-friendliness, default data tables (including default values for biomass expansion factors), decision trees, forest fires, uncertainties, annexes and appendices, and reporting tables. Contact persons were assigned to take the lead in addressing second-order draft (SOD) comments and were requested to compile authors' responses on these key issues.
- 25. So-called "pre-Sydney drafts" edited versions of the SOD text for the different sections of Chapter 3 were provided to the group to address the issue of user-friendliness. The group agreed to develop a process on how to deal with the SOD comments and the pre-Sydney drafts.
- 26. The group agreed to introduce a "road map" in Section 3.1 (Introduction) to improve the user-friendliness.
- 27. For Section 3.2 (Forest Land) and Section 3.3 (Cropland), an agreement was reached that default tables will be placed, as much as possible, in the main text and not in the annex and that default values for Tier 1 should be provided. However, it was anticipated that more tables on biomass default values will be developed and it would seem to be more appropriate to put them in the annex. A subgroup was formed to develop default values for biomass expansion factors which would be important components of Section 3.2. It was also pointed out that tables have to provide sources and references and that text and units in the tables should be in harmony with the text/descriptions in the equations.
- 28. It was decided to have a decision tree only at the land-use category level and not at the carbon pool level. Text explaining the decision trees should be provided in Section 3.1.

- 29. On forest fires, it was decided to deal with this issue in one place or section of the chapter in a comprehensive way and just to cross-reference to it in the other sections or chapters. Section 3.1 will provide guidance on where forest fires are discussed in the chapter.
- 30. On uncertainties, it was agreed to have a discussion on "Uncertainty Assessment" for each carbon pool (under the subsection Methodological Issues) instead of having a general discussion on this subject at the end of each section.
- 31. For the annexes and appendices, it was agreed that annexes would include tables of default values (for Section 3.2) and the reporting tables. Appendices will include the sections on harvested wood products, non-CO₂ emissions from drainage and rewetting of forest soils; and some parts of the wetlands (including reservoirs) and settlements sections.
- 32. For the reporting tables, it was pointed out that the units should be consistent with the equations (in the main text) and that all the elements of the equations should be reflected. The format, as much as possible, should be consistent with the IPCC 1996 Guidelines, including the use of signs/conventions.

4.4 TASK 1 - CHAPTER 4: SUPPLEMENTARY METHODS AND GOOD PRACTICE GUIDANCE ARISING FROM THE KYOTO PROTOCOL

- 33. Reflecting the structure of the chapter and continuing the practice of previous authors' meetings, the Chapter 4 projects section's authors worked on the comments and draft of Section 4.3 separately.
- 34. To improve efficiency, for Sections 4.1 and 4.2 the CLAs had identified comments that required a consistent treatment throughout the Chapter which were discussed in the group as a whole, whereas specific comments were dealt with in smaller groups during and after the meeting. Authors of Section 4.3 went through all comments one by one, working directly on the electronic version of the text and a log file for authors' responses to comments.
- 35. The major issue of discussion were comments on Sections 4.1 and 4.2 demanding a clearer guidance on:
 - how to classify lands/units of land subject to Article 3 activities and
 - which reporting method to use for this.

Here consistency with Chapters 2, 3, and 5 was improved substantially.

- 36. Section 4.3 authors generally improved the user-friendliness of the section, also by clarifying the scope of the section in the Introduction and by further delineating the activities resulting in changes in non-CO₂ greenhouse gas emissions covered from those already included in other sectors, notably Agriculture. The text on sampling and other statistical concepts employed were improved considerably.
- 37. Both Chapter 4 breakout groups agreed on detailed schedules for finishing the work in time.

4.5 TASK 1 - CHAPTER 5: CROSS-CUTTING ISSUES

38. The group identified some cross-cutting issues that need to be discussed with authors of other chapters. The group split into three major groups to consider comments on Chapter 5 of the Second Order Draft, and cross-cutting issues including the harmonization with Chapter 4 on the issues related to reporting were discussed in the inter-BOG discussions.

- 39. Key category analysis was the outstanding issue that received general and basic questions to the Second Order Draft. Authors agreed to further elaborate the explanation on the difference between key source analysis in *GPG2000* and key category analysis to include LULUCF, rather than to consider any conceptual deviation from the Second Order Draft.
- 40. For the section of Uncertainties, additional explanation, further elaboration of subsections to provide more practical information would be considered in finalizing the draft.
- 41. Comments on sections on issues on Sampling and Verification were mainly technical, that were considered in finalizing draft in sub-BOG groups.
- 42. Chapter 5 breakout group agreed on detailed schedules to finalizing the draft and complete the list of comments in filling in their responses to each comment.

4.6 TASK 2 - DEGRADATION OF FORESTS AND DEVEGETATION OF OTHER VEGETATION TYPES"

- 43. One of the most significant issues was how to respond to the diverse comments on the definitions of "degradation" and "devegetation", some of which called for more restrictive definitions, while many others called for less restrictive ones. Authors gave substantial consideration and intensive discussion to this issue, and concluded to provide 5 alternative definitions for degradation of forests and 4 for devegetation. They also concluded to provide their policy and methodological implications and criteria for acceptable and operational definitions.
- 44. In response to the comments claiming that the examples of potential degradation/devegetation activities listed in the SOD were not appropriate or ambiguous, authors concluded to remove the controversial tables and to provide only a few illustrative examples to make some comparisons among definitions.
- 45. As regards the issue on the lack of clear guidance on detailed methodological options, authors agreed to explain why it was difficult to provide it. They also agreed to provide a discussion on methodological approaches substantively drawing upon Chapter 3 of the Task 1 report (*GPG-LULUCF*).
- 46. Authors agreed to pay due attention to the consistent use of terms. Authors decided, among others, to ensure consistent use of "managed forest" and "forest management" as well as "unbalanced accounting" and "asymmetric accounting" with Chapter 4 of the Task 1 report (*GPG-LULUCF*).
- 47. The authors agreed to provide discussion on circumstances in which LULUCF accounting and reporting could be unbalanced and how the accounting for forest degradation and devegetation of other vegetation types would address it.
- 48. Task 2 breakout group agreed on the role of each author and the detailed schedule for finishing the work in time.

5 CONCLUSIONS - LAST PLENARY

49. The Task1 and Task 2 authors agreed on a time schedule for further drafting and finalising the third order drafts, which would be subject to government consideration during the month of October. The authors would provide the final drafts to the TSU and Steering Group for final editorial work and consistency checks by 5 September, and the

- drafts would be sent for checks to authors again by mid September and the final technical editing by the TSU would take place at the end of the month.
- 50. Despite the large number of comments the authors were able to address most of them during the meeting and felt that the groups had addressed all substantial issues. Chapter 3 of Task 1 with the largest amount of comments and work load had not been able to consider all individual comments but had discussed all major issues and assigned authors/groups of authors with tasks to finalise consideration of the comments, and the drafting with advice on how to respond to the comments.
- 51. The authors felt that the review comments were constructive and incorporating them in the final drafts would result in a better product. They also believed that the drafting of final reports could be completed in the agreed time line.
- 52. The TFB Co-chairs thanked the Australian authorities for hosting the meetings, conference officers for their support, report authors and Steering Group for their instrumental contribution for the preparation of the draft reports, as well as the members of the TSU for their effortless supports. The meetings concluded at 17:30.

MAIN POINTS FROM CLA MEETING- 27 July 2003

General Points:

1. Key category analysis – some fundamental comments on how and at what level the analysis would be done, and on key category analysis related to KP activities – changes in treatment would affect especially Chapter 3 and 4.

Conclusion: No fundamental changes anticipated (rationale could be clarified more); KP specific issues will be discussed with Chapter 4 authors.

2. BEFs and allometric equations harmonization between Chapters 3 and 4

Conclusion: It was recognized that there are inconsistencies between the chapters and that these would need harmonizing.

3. Tracking management practices: some guidance is lacking in Chapter 3 and 4. Including detailed guidance would need specification of the practices; this was not seen as feasible and could also result in policy prescriptiveness regarding practices related to the KP activities.

Conclusion: General guidance (e.g. how remote sensing, agricultural census data, etc. can be used for this purpose) will be included in Chapter 3 as part of the guidance on activity data.

4. Use of "Good practice" – both are "over- and under-used" in current drafts. It was noted that "Good Practice" should be used in a consistent way.

Conclusions:

- Preferred wording "it is good practice to"
- Use only in recommendations for producing good inventories; use other words (it is recommended etc.) for something of less importance/priority;
- Task 2 should not use the term "Good Practice" in principle;
- "Good practice" should not be in appendices when these refer to future methodological development

The Steering Group was asked to prepare recommendations on the issue.

5. Consistency between definitions (e.g. forest, cropland) in Chapters 3 and 4.

Chapter 3 definitions have to be consistent with the 1996 IPCC Guidelines, though this does not preclude the use of Marrakesh Accords definitions. Explaining any differences between Chapter 3 and 4 definitions should be a reporting requirement in Chapter 4. The wordings to be used to express this was not agreed upon (whether to use "it is good practice to report on any changes...." or other wordings).

Chapter-specific:

Chapter 1:

A revised draft will be distributed to all CLAs for comments (no major revisions are expected but the special status of the chapter – adoption section by section at Plenary – will need attention).

Conclusions on specific comments:

- a more representative decision tree on the key source concept will be provided (choice after Chapter 3 decision trees are revised)
- need for more diagrams a diagram on how to use the report will be developed
- policy-relevant issues that need to be addressed in Chapter 1 could include: statistical vs. complete enumeration, key category analysis, reporting tables.

Chapter 2:

- (i) Land Use/Land Cover many comments on the need to use of the terminology, how can it be made clearer? Conclusion: use "land use" and clarify that in this report the use is a hybrid of "land use" and "land cover"
- (ii) Approaches are hierarchical this is stated in some comments. Conclusion: the issue will be clarified more
- (iii)Linkages between Chapters 2, 4 and 5 need improving.

Chapter 3:

Conclusions:

- (i) Harmonisation of equations
 - o abbreviations that could cause confusion will be revised or written in full
 - o early introduction of carbon units was encouraged
 - o conversion to CO₂ would be made at the highest level (in reporting tables)
 - o signs: the text will be written as in the 1996 IPCC Guidelines, that is carbon stock changes that increase the stock have a positive sign and vice versa; the conversion to signs consistent with other sectors and UNFCCC reporting (emissions positive and removals negative) will be made in the reporting tables. This practice needs to be explained in the text.
 - Way forward: symbols as in paper but units discretion is left to the LA's according to the 1996 IPCC Guidelines
 - The term for harvested wood products (HWP) will be removed from Equation 3.2.1 and a footnote will be included that Parties that may want to introduce HWP can do so provided that the pool is increasing in accordance with text in the 1996 IPCC Guidelines.
- (ii)Managed and unmanaged lands how long will land abandoned remain in the inventory (once managed but now unmanaged abandonment of managed lands in category 5C of the 1996 IPCC Guidelines) indefinitely or till the changes are no longer attributable to the change?

(iii) Decision-trees:

A small BOG to consider all decision trees on the basis of the generic decision tree presented by Annette Freibauer (based on pre-Sydney work by the CLAs). The level of key category analysis and the level at which the decision trees are developed is interlinked and need joint consideration by Chapter 3 and Chapter 5.

Chapter 4:

(i) Some comments found it controversial that land units can be classified to belong to more than one category. Conclusion: the text will not be changed but it will be clarified

that the reporting should be done in only one category. The decision on the category should be left to the country. This should be explained in Chapter 1 as well.

- (ii) links to Chapter 3 could be made more explicit regarding the estimation of changes in carbon stocks and non-CO₂ gas emissions
- (iii) the column on uncertainty estimates in the reporting table was seen as inconsistent with the GPG2000 Chapter 4 and Chapter 5 will discuss the issue further

(iv)Projects:

- symbols and some statistical representation should be improved
- guidance on plots how to take into account comments that it will be too expensive and labour intensive to implement the guidance (will be clarified)
- Non-CO₂ issues will be made more concise by referring to GPG 2000

Chapter 5:

- (i) Uncertainties calculations should be reported by gas at source category level (estimates would be based on estimates of uncertainties at lower level area, pool);
- (ii) Section 5.2.4 Reporting Documentation the tables in the GPG2000 referred to in this section should be included into Chapter 5 and not only referred to.
- (iii) Key category analysis is discussed above (see general points, Chapter 3 and Chapter 4). Presentation in Chapter 5 will need further clarification, and the treatment/links should be consistent throughout the report.

Task2:

Things to be done:

- Work on definitions
- Concrete methodologies lacking (can largely be taken care of by more detailed referencing to Task 1)
- Use of Terminologies: activity, practice and processes consistency to be improved
- Unbalanced vs. asymmetric accounting Task 1 uses asymmetric but Task2 TOR refer to unbalance accounting.

Additional BOGs:

Task 2 and Chapter 4: Revegetation and devegetation

Chapter 3 and 4: Reporting Tables – to meet 30 July at lunchtime

Chapter 3: Equations; Decision trees

Chapter 5: consistency in cross-cutting issues (Chapter 5 will contact the other groups as needed)

CLA meeting 30 July 2003, 9 – 10 am

- 1. The minutes of the CLA meeting 27 July 2003 were distributed to the participants for comments.
- 2. A paper from SG on recommendations on the use of language, particularly "good practice" was distributed to the CLAs for comments and it was agreed to distribute the paper to all authors. Heikki Granholm and Roberto Acosta cautioned also about the fact that the phrase "the Marrakesh Accords require..." may not be appropriate for all cases and that there are some interpretations in the drafts that may not be correct. No specific wordings for change were proposed. (The paper has been distributed without changes to the authors).
- 3. **Task 2**: Is working on alternative definitions and looking at the merit and shortcoming for these. They have also looked at the comments on the examples provided in the text and decided to keep illustrative examples in the text but move the table to an annex or to supplementary material. Interactions with Task authors (Chapter 4: forest management/forest degradation and revegetation/devegetation) are scheduled for today.
- 4. Task 1, **Chapter 1**: A revised draft (copies were distributed at the meeting) and the comment file with the authors' responses (will be put on the EDG) were given to the TSU. There are still some issues pending considerations in other chapters.
- 5. Task 1, **Chapter 2**: The group has gone through the comments and has responses to the comments and are working on including these in the draft today. Issues with implications to other chapters were raised.
 - To Chapter 1: proposal to include text on reasoning for consistent representation of land areas (use area information in a sensible manner) [to be discussed]
 - To Chapter 4: proposal to make some changes in wording to the table 4.2.2 (to be discussed)
 - To all: proposal to consider including natural water bodies (lakes, rivers) into the wetland category (to be decided)
- 6. **Chapter 3:** The chapter has made a list of issues to be addressed and assigned responsibilities on these. The group is working in small groups and has addressed the general comments. The group has reached agreement on the decision trees, harmonising the equations (symbols) and the key category treatment, and has discussed how to condense and improve the text on uncertainties (this will be continued). Issues considered at the CLA meeting were
 - How to treat the comment that it is "good practice to report on all lands (managed and unmanaged)." It was agreed that no such recommendation such be in the text. The issue on reporting on managed/unmanaged land should be clarified in Chapter 1.
 - The text on wetlands is now split between the main text and appendices. It was proposed to enhance readability and consistent treatment of all gases it would be preferable to have all text in one place main body or the appendix. There was support for the proposal but the implications would need further consideration. Having the text in the appendix was seen as less controversial but the place would be decided later.
 - The differentiation of appendices (an appendix would always have the title: Basis for future methodology development consistent with Chapter 4 in GPG2000) and annexes (default values and reporting tables) was discussed and there were varying views on how the distinction should be made and which issues should be in

- appendixes. There were comments all text that was in the 96GLs should be in the main body of the report and that the differences between and annex and an appendix should be clarified in Chapter 1. (TSU will prepare a table on the appendices with information on how the issues were treated in the 96GLs)
- Reporting tables one comment addressed the need to develop these ("the UNFCCC will anyway develop reporting tables"). It was clarified that the UNFCCC will develop only common reporting formats for Annex I countries, not reporting tables for all.
- 7. **Chapter 4** has addressed important (major issues) comments and prepared an action list based on this, and is starting to look at the line-by-line comments. Issues discussed were
 - Lands meeting the definition of both forest and cropland/grazing land the current content that making the distinction will be up to the criteria set by the countries will not be changed but more guidance how to set these criteria will be given. Chapter 4 will provide also Chapter 1 text on this.
 - Interaction with other chapters is planned as follows. Uncertainties, key categories and verification (Chapter 5 methods may not be applicable for Kyoto Protocol reporting) will be discussed with Chapter 5. There will be a meeting on the reporting tables in draft reports [lunch time Wednesday]. Land area reporting in Chapter 4 need to be discussed with Chapter 2 (see also above Chapter 2) and a meeting with Task 2 (Henry Janzen will be the contact person).
 - Possible missing expertise on Article 6 projects and comments asking for a tierstructure for the section were discussed in relation to Section 4.3. Including additional tiers was seen as problematic as it would mean a major change to the text. Alternative options (such as alternative methods for sampling and references to Chapter 3 methodologies will be made). There will also be a joint meeting with Chapter 3 authors on the BEFs and allometric equations.
- 8. **Chapter 5** has considered all comments and is implementing these into the drafts. In addition to the meeting with Chapter 4 the group will meet with Chapter 3 authors to address cross-cutting issues.

Table on appendices and annexes in Chapter 3.

Annexes are an integral part of the main text. Appendices are basis for future methodological development and contain those methodologies that have not reached the level of GPG.

SOD	Proposal	Remark
Annex 3A HWP	Appendix	96GLs default methods is to not report on HWP unless the country can report on HWP only in the case where the country can document that the existing stocks of long-term forest products are in fact increasing. Especially the first review
		produced many comments that the methodologies are premature as the issue is under consideration by the SBSTA.
Annex 3 B Settlement	Appendix	The category is not included in 96GLs.
Annex 3 C Reservoirs	Appendix/with technical material from 3.5 (CO2)	The category is discussed under Possible refinement or additions to basic categories in 96GLs.
Annex 3 D Non-CO ₂ from drainage and rewetting of soils		The category is discussed under Possible refinement or additions to basic categories in 96GLs.
Annex 3 E List of appendix tables for Chapter 3.2 (FL)	Annex	
Annex 3 F Reporting Tables	Annex	
3.5 Wetland	Text in the main body need to cover conversions to wetlands	
3.6 Settlement	Text in the main body need to cover conversions to settlement	

Comment from Annette:

Annex 3 C Reservoirs

Could be OK as it is, but it would increase readability and user-friendliness a lot of it was merged with wetlands. Wetlands are optional for reporting, they could go entirely to an Appendix (except for land use change).

Annex 3 D Non-CO₂ from drainage...

Inconsistent with 96 guidelines because non-CO₂ emission from drainage for cropland and grassland are included as mandatory in Agriculture Chapter of 96 Guidelines.

It created a lot of confusion because part of N₂O emissions is included in main chapter and part of it in Annex. Parties felt they are missing appropriate guidance.

 CH_4 methodology will be possibly removed due to uncertainties, so all the remaining bit are current knowledge. The fact that the natural variability in N_2O emissions tends to be higher than for CO_2 should not be an argument for an Appendix.

CLA meeting 31 July 2003 8.30 – 9.30

- 1. Chapter 2 proposal to include lakes and rivers under the Wetland category instead of the Other land category was accepted (consistency with Ramsar Convention).
- 2. The proposal on the differentiation of the appendices (Basis for future and annexes was accepted. The main text would clarify the link to the appendices (text to harmonise the views to be developed).
- 3. Review Editor meeting was held on 30 July. The Review Editors will prepare a report to the IPCC Panel on the consideration of the comments (Mike Apps, Tom Wirth and Jamidu Katima will coordinate Task 1 and Helen Plume Task 2 reports). These reports are due one week before the Panel meeting in November. The Reviewer Editors will need the drafts and excel sheets with authors' responses for their work.
- 4. Reports from interbogs issues have been solved or a process to solve them underway.
- 5. Reporting Tables a meeting was convened on Wednesday to discuss the content of the tables and the process to finalise them. It was concluded not to include total CO₂ equivalent columns with sum of all GHGs in the tables. For other issues, see the paper on Reporting Tables below.
- 6. Brief reports from the CLAs of Chapters 1 5 of Task 1 and Task two were given. The work is progressing well. Chapter 3 and 4 may not be able to consider all comments during the meeting, Chapter 4 expected to be able to respond to at least 95% of the comments.

REPORTING TABLES

2003-07-31 12.30 pm

A summary on the discussions in the reporting table meeting on Wednesday 30 July including the changes proposed in the CLA meeting and agreements between Chapter 3 and 4 CLAs and the UNFCCC secretariat 31 July.

Chapter 3

The worksheets, compilation tables and summary tables prepared by the TSU in consultation with CLAs (Ravi and Gert-Jan) will serve as the basis for finalisation of the table. The revision will take following issues into account:

- the worksheets will be changed in accordance with the changes in the equations (TSU is harmonising the equations but the responsibility of the outcome and especially the content is with the authors)
- the units in the worksheet will correspond to the equations (input data most often tonnes d.m. per ha and the conversion to C and CO₂ is made in the worksheets)
- in the compilation and summary tables the units will be Gg CO₂ with separate columns for emissions and removals for those pools where this can be made. The countries can provide estimates on only the total emissions/removals if their estimation methods do not support the division [at present this footnote is in the compilation tables, not in the summary tables]
- sign in the equations will be positive for increases in C stocks and negative for decreases
- signs used in the tables are: + for emissions/- for removals (the main text and text in the reporting tables will reinforce the guidance on the use of the signs)

• the reporting tables will all be at the end of the chapter in an annex and introductory text on the use of the worksheet and tables (key steps) will be included

Chapter 4

The proposed compilation table for Chapter 4 is attached. The table will have columns for carbons stock changes (+ increase and – decrease) for all pools and the total C stock change, a column to convert this into CO₂-equivalents with the signs in Chapter 3 and UNFCCC reporting (+ emissions and – decrease).

The footnote in the biomass columns will be included for litter and dead wood if separation into emissions/removals can be done [to be checked].

Following text will be included in the main body of the text:

In addition to the data in the compilation and summary tables (4.2.5 and 4.2.6), it is good practice to report the underlying assumptions and factors used for the calculation of the carbon stock changes and emissions of CH_4 and N_2O , such as information included in the worksheets in Chapter 3 or equivalent information supporting the estimates obtained using higher tiers or other methods.

Task 2

- if tables are included they will have similar format as those in Chapter

are, at the same time, lands subject to Article 3.3. A similar table for CM, GM and RV should be completed once for the base year activities²; D; D that is also subject to elected Article 3.4 activities²; FM if elected; CM if elected; GM if elected; RV if elected), as well as for units of land subject to Article 3.4, which activity/land (A and R¹ not harvested during the first commitment period; A and R¹ harvested during the first commitment period; A and R¹ that are also subject to elected Article 3.4 Table 4.2.6. Compilation table for reporting carbon stock changes and emissions by sources and removals by sinks for the inventory year. A similar table should be completed for each

Activity:

Inventory year:

Total for the activity	Z	•	3	2	1	Serial No.	Geographical Location ³
						\mathbf{ID}^7	1
						(ha)	Area of Activity
						(Gg C/yr)	Above ground biomass ⁸
						(Gg C/yr)	Increases (+) and Decreases (-) in Carbon Stock ⁴ Nbove Below Litter Dead Soi round ground wood wood
						(Gg C/yr)	Litter
						(Gg C/yr)	in Carbon S Dead wood
						(Gg C/yr)	tock ⁴ Soil
						(Gg C/yr)	Total Carbon Stock Changes ⁵
						$(\operatorname{Gg}\operatorname{CO}_2\operatorname{e/yr})$	Emissions (+) or Removals (-) from Carbon Stock Changes ⁶
						(Gg/yr) (Gg/yr)	CH ₄ Emissions
						(Gg/yr)	N ₂ O Emissions

harvested during the first commitment period is necessary because of the requirement set in Para 4, page 59, FCCC/CP/2001/13/Add.1. ': As afforestation (A) and reforestation (R) activities are treated the same way, they can be reported together. The separation of afforestation and reforestation lands that are harvested from those that are not

²: FCCC/CP/2001/13/Add 3.6, (b) (ii): Units of land subject to activities under Article 3.3 which would otherwise be included in land elected under Article 3.4 must be reported.

³ Geographical location refers to the areas that encompass units of land subject to Article 3.3 and lands subject to Article 3.4 activities

^{4:} If a pool is not reported, the text "NR" (for not reported) must be entered, and it must be demonstrated that the pool is not a source.

⁵ Total carbon stock changes are the sum of carbon stock changes of all five pools

⁶ Emissions/Removals are calculated by multiplying total carbon stock changes by 44/12 to convert to CO₂ followed by reversing the sign to follow conventions of emissions/removals reporting

⁷ ID: identifier of the geographic location

carbon stock changes the net terms of biomass stock changes are used Those countries that use Tier 1 and Tier 2 methods that allow reporting of separate increase and decrease terms for biomass pools should report these as well as the net term. For the calculation of the total

Language for making recommendations

Usage	When to use		
'It is good practice to' or 'Good practice is to' or "Fig x describes good practice"	For recommendations which a well-prepared inventory should follow under the circumstances (notably, the Tier level) being described. Specific elements of good practice where the usages would be appropriate are described below.		
	These terms should not be used in Appendices or the Task 2 Report		
'The UN-FCCC/Kyoto	For recommendations corresponding to requirements (shall		
Protocol/Marrakesh Accords			
require that'	conclusions of Subsidiary Bodies.		
'must' or 'shall'	Avoid these verbs – the above formulations should be used as		
	appropriate		
'should'	For recommendations which are highly desirable		
'may'	For recommendations which are desirable		
'it is efficient to'	For recommendations which lead to better use of resources		

SPECIFIC PLACES TO USE "GOOD PRACTICE" LANGUAGE IN CHAPTER 3

[Note: these are suggestions based on a quick review of GPG2000. Specific good practice language can be adapted to the characteristics of the category being discussed.]

Methodological Choice section

- To describe what needs to be estimated for various tiers for particular subcategories and/or pools.
- To use the decision tree. (GPG2000 language was often: "The decision tree in Figure x describes good practice in choosing a method for estimating this category."

Emission Factors/Parameters & Activity Data sections

- Use good practice language to describe fundamental aspects of data collection and (if appropriate) use of data
- Example: Where to get data for various tiers (Examples: "Under Tier 1, it is good practice to use the defaults found in Table xxx." "Under Tier 2, it is good practice to obtain country-specific data by doing x, y or z.")
- Example: To highlight any important considerations on data use (e.g., to ensure consistency of data, avoid possible mistakes (like double counting), it is good practice to...)

Reporting & Documentation section

- "It is good practice to report the following items:..."
- "It is good practice to report the items contained in table..."

QA/QC

- Two types of good practice, typically: First, good practice to use the cross-cutting guidance ("It is good practice to perform the Tier 1 QC checks described in Chapter 5, Section 5.3.") Second, good practice to do some additional data checks related to the specific category. ("It is good practice to supplement the general QA/QC related to data processing, handling and reporting with the following procedures:...")

Time Series

 Following GPG2000, there may not be category specific good practice, although it should be a generic requirement in Chapter 5.

Uncertainty

Following GPG2000, there may not be category specific good practice, although for some sources there
was a discussion and it should be a generic requirement in Chapter 5.

Completeness

- Following GPG2000, there may not be specific good practice, although it should be a general requirement in Chapter 5.

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