Positioning the land-use sector to contribute to post-2020 climate mitigation

Pipa Elias, Jason Funk and Nora Greenglass

18 November 2014

We would like to thank the International Union for the Conservation of Nature and the Environmental Defense Fund for financing this work, which was completed independently by the authors.

Author contact information:
Pipa Elias – pipa.elias@gmail.com
Jason Funk – jfunk@ucsusa.org
Nora Greenglass – ngreenglass@gmail.com
Executive Summary
As stated by ministers at a high-level panel at COP 19, addressing mitigation and adaptation in the land-use sector is essential for meeting the Convention’s ultimate objective. Most ministers called for three outcomes from the sector: simplicity, flexibility, and transparency. In this paper we present opportunities for meeting these outcomes for mitigation in the land-use sector, and conclude that existing knowledge and experience can provide a sufficient basis for developing a simple and flexible yet harmonized and transparent approach to incorporating land-use contributions into the ADP.

While each Party may choose how to include the land-use sector in its intended nationally determined contribution (INDC), experience has shown that the sector, and Parties’ INDCs, will benefit from guidance about how Parties may be expected to account for their mitigation contributions. In anticipation of the need for such a framework under the ADP, we outline four potential options, each of which would offer guidance for including land use in countries’ INDCs. The four options for incorporating a land-use accounting framework in the ADP are:

1. All participating Parties operating under a single, common set of accounting rules
2. Parties choose from one of a few differentiated modalities, all of which meet common elements
3. Parties choose one of the existing accounting modalities (LULUCF, REDD+, CDM)
4. No overarching framework; Parties account using a self-defined approach

We also examine the potential for each option to fulfill existing principles and guidance that apply to the land-use sector through past UNFCCC decisions and Intergovernmental Panel on Climate Change approaches. Based on an analysis of the extent to which those options do or do not meet these principles, as well as the goal of the simple, flexible, and transparent inclusion of the land sector in INDCs, we conclude that:

- An ambitious package at COP 21 should include opportunities and incentives to incorporate the land-use sector into mitigation contributions.
- Existing principles and decisions provide sufficient elements and procedures for including contributions from the land-use sector in the ADP package.
- Parties could apply these principles to include the land-use sector in INDCs now.
- The ADP framework could (1) harmonize Parties’ contributions under existing land-use sector mechanisms, and (2) create a pathway forward that allows Parties to transition smoothly toward more complete coverage of the sector in accordance with their unique country circumstances.

At COP 20, Parties should outline the principles necessary to facilitate transparent, comparable, and consistent inclusion of the land sector in INDCs. Then, during 2015, Parties can negotiate a path forward to harmonize those principles under an approach to the land-use sector that can contribute to an ambitious deal at COP 21.

---

1 We recognize the important role of adaptation in the land-use sector, but it is outside the scope of this report.
## Table of Contents

Executive Summary 1

### Section 1
Introduction 3
  - Scope of this report 4
  - Developing a pathway to Paris 4

### Section 2
Principles and considerations 5
  - Articles 2 & 4 of the Convention 6
  - Continuous improvement 6
  - Use of IPCC principles and inventory guidance 7
  - Once in always in 7
  - Pathway to complete coverage 8
  - Focus on the measurable effects of policies and measures 8
  - Promote good social and environmental governance 9
  - Technical facilitation of land-use sector reporting and assessment 9

### Section 3
Options for incorporating the land-use sector into intended nationally determined contributions 9
  - Considerations for incorporating one of these options into overall ADP accounting 10
  - Option 1: All participating Parties operating under a single, common set of accounting rules 10
  - Option 2: Differentiated modalities 11
  - Option 3: Application of existing operating rules 13
  - Option 4: No overall guidance 14

### Section 4
Building a path to Paris and beyond 16

Annex I: Elements of accounting systems 17

Annex II: Comparison of how options fit with principles 24
1. INTRODUCTION

Ministers participating in a high-level panel at COP 19 emphasized that addressing mitigation and adaptation in the land-use sector is essential to achieving the Convention’s ultimate objective. Most ministers expressed a desire to achieve three outcomes from the sector: simplicity, flexibility, and transparency. In preparation for the adoption of a global agreement to address climate change in December 2015, Parties are currently deliberating the role of the land-use sector in their nationally determined contributions. The land-use sector – the term we use to refer to agriculture, forestry, and other land uses (AFOLU) – is responsible for just under a quarter (~10–12 GtCO\textsubscript{2}eq/yr) of anthropogenic GHG emissions, with annual GHG emissions from agricultural production in 2000–2010 estimated at 5.0–5.8 GtCO\textsubscript{2}eq/yr, while annual greenhouse gas flux from land use and land-use change activities accounted for approximately 4.3–5.5 GtCO\textsubscript{2}eq/yr.\textsuperscript{3}

The Convention itself, previous United Nations Framework Convention on Climate Change (UNFCCC) decisions, Intergovernmental Panel on Climate Change (IPCC) guidance, and relevant technical considerations for the land-use sector all provide useful background for including the land-use sector in the 2015 agreement, and can contribute to common understanding and efficiency in the negotiations. We lay out a range of options for incorporating the land-use sector into intended nationally determined contributions (INDCs), and analyze these options against existing information and experiences pertaining to the sector under the Convention.

Past decisions and guidance from the UNFCCC and IPCC provide established, tested building blocks that can facilitate the incorporation of the land-use sector in a 2015 agreement. These building blocks reflect the degree of consensus that was possible among scientists, policy-makers, and civil society at key times in the past. The IPCC’s guidance for national approaches to measuring sources and sinks in the land-use sector provide helpful background and lessons as Parties turn to the important work of crafting a framework for defining and evaluating the range of options for this sector under the Ad Hoc Working Group on the Durban Platform for Enhanced Action (ADP).

Nevertheless, the Party-driven process of developing the ADP allows Parties to collectively move beyond their past work, and to build a new consensus under the Convention that incorporates the lessons of their own experience, the balance of their collective ambition, and the goals of the future they wish to work toward. Therefore, while we use previous decisions and known technical considerations as references for framing the future possibilities, we do not limit ourselves to the bounds of this previous work. Instead, we use the precedents and principles therein to circumscribe a broader scope of possibilities, and within this we articulate four options for a future framework that could guide the incorporation of land use.


\textsuperscript{3} IPCC AR5 WGIII Chapter 11: Agriculture, Forestry, and Other Land Use (AFOLU). http://report.mitigation2014.org/drafts/final-draft-postplenary/ipcc_wg3_ar5_final-draft_postplenary_chapter11.pdf
Scope of this report

Parties may select to incorporate the land-use sector into their INDCs in terms of the role it plays in mitigation, adaptation, or both. While this analysis focuses on the role the land-use sector can play in producing mitigation results under the ADP, many of the principles and conclusions drawn here could be applicable to adaptation and means of implementation, as well. Adaptation and means of implementation, however, are beyond the scope of this document.

Many of the principles and lessons we apply to the land-use sector were developed primarily for the forest context, under Land-use, land-use change and forestry (LULUCF), reducing emissions from deforestation and forest degradation, conservation of forest carbon stocks, sustainable management of forests and enhancement of forest carbon stocks (REDD+), and/or the Clean Development Mechanism (CDM). Nevertheless, the applicability of these principles and lessons can extend beyond the forest context to inform a broader suite of land management and agricultural activities. There appear to be no technical reasons – either in existing IPCC guidance or in past UNFCCC decisions – to limit the application of the principles and lessons described here to forests in the 2015 agreement. Therefore, the principles and approaches in this document could be applied to mitigation across the entire sector, allowing Parties to consider options for the ADP that may allow for a phased approach to expanding coverage, as appropriate, over time.

Developing a pathway to Paris

Table 1 summarizes the four options for incorporating land use mitigation into the ADP and the tasks that would need to be accomplished for COP 21; these options will be analyzed in section 3. Our analysis compares how each option would satisfy the necessary principles and elements for the land-use sector.

Table 1: Options for incorporating the land-use sector into INDCs.

<table>
<thead>
<tr>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
<th>Option 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single set of rules for all</td>
<td>A few modalities, with common elements</td>
<td>Existing modalities, no common elements</td>
<td>No overall guidance</td>
</tr>
<tr>
<td>Select and/or construct elements for a single accounting approach for all Parties</td>
<td>Start with current accounting approaches and create a pathway for improvement over time</td>
<td>Continue the current accounting approaches under LULUCF, REDD+ and CDM</td>
<td>Parties develop their own accounting approaches; no common framework</td>
</tr>
</tbody>
</table>

Any one of these options could be incorporated into the 2015 agreement, and each could allow Parties to submit INDCs in the immediate future based on existing land-use sector principles and guidance. Each option has advantages and disadvantages, in terms of the ability to achieve the principles. Therefore, reaching agreement to apply a common set of principles to all relevant contexts of the agreement could be a helpful step at COP 20, to engender trust and understanding within the negotiating process, clearing the way for inclusion of the land-use sector and avoiding delays. A common set of principles for the land-use sector could also create a pathway towards the harmonization of existing mechanisms over the longer term. Such a pathway toward could
facilitate Parties to transition between existing mechanisms in a transparent manner, without the need to renegotiate the agreement, while providing for consistent and comparable coverage of the land-use sector. In Section 2, we propose a set of candidate principles for Parties to consider.

A two-phased approach could be used for the negotiating process. The first phase would begin at COP 20, where Parties could agree that, in the near term, INDCs can include the land-use sector based on existing mechanisms – this would increase overall ambition of INDCs, since the land-use sector contributes significantly to greenhouse gas emissions. Parties could also agree that one of the four options above will inform consideration of the sector within the larger ADP framework. Between COPs 20 and 21, Parties may continue to discuss which of the four options is most appropriate for inclusion under the ADP.

The second phase would begin at COP 21, where Parties could include language on the principles that should guide consideration of the land-use sector moving forward, as well as on the option selected to guide incorporation of the sector in the post-2020 agreement. The 2015 agreement should also allow for continued discussions—starting in 2016—to fully develop the technical guidance necessary to implement the selected option in their post-2020 actions.

2. PRINCIPLES AND CONSIDERATIONS

The land-use sector has long been considered critical to achieving the Convention’s ultimate objective, including its commitments regarding sources, sinks, and reservoirs of carbon. This has led to the establishment of foundational principles for the sector that are implemented within the UNFCCC’s existing land-related frameworks: REDD+, LULUCF, and the CDM’s guidance for afforestation/reforestation project activities. As Parties look to the future, these existing principles, policy decisions, and technical considerations can provide a common foundation for incorporating the land-use sector into the ADP and Parties’ INDCs. Although some of these principles apply to other sectors as well, we include them here because they have particular relevance in the land-use context and therefore should be included in the analysis of options for the sector.

However, Parties are not limited under the ADP by the bounds of their previous work; they have the opportunity to revisit, revise, and build upon this work moving forward. In this process, Parties may find that not all currently existing principles and considerations will continue to be relevant in the post–2020 context. While the ones listed below are based in existing guidance, they create ample scope for a new framework that is more than simply the continuation of the existing individual land-use sector mechanisms.

Taken together, the following principles and considerations provide a starting point for Parties’ consideration of the land-use sector moving forward. This is not an exhaustive list, but rather a suggestion of the types of issues that should inform (1) Parties’ collective consideration of the land-use sector under the ADP, and (2) Parties’ individual INDCs under the post-2020 agreement.
**Articles 2 & 4 of the Convention**

All Parties have committed to pursuing actions in the land-use sector that (1) contribute to the ultimate objective, and/or (2) promote sustainable management and enhancement of greenhouse gas sinks and reservoirs.

Article 2 of the Convention states that the ultimate objective is to achieve “stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.” All three existing land-based mechanisms—REDD+, LULUCF, and the CDM—incorporate the goal of greenhouse gas mitigation into their objectives and purposes; this objective must continue to be fundamental component of a land-based mechanism under the ADP.

Article 4.1(d) provides both a mandate and guidance on how the land-use sector and other natural systems should contribute to achieving the Convention’s ultimate goal. It provides that “All parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, shall . . . Promote sustainable management, and promote and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all greenhouse gases not controlled by the Montreal Protocol, including biomass, forests and oceans as well as other terrestrial, coastal and marine ecosystems . . . .”

Parties have the opportunity, under the ADP, to take another large step toward fulfilling the Convention’s mandate that all Parties work towards mitigating emissions, enhancing removals, and conserving and enhancing reservoirs of greenhouse gases in the land-use sector.

**Continuous Improvement**

The land-use sector has benefited from rules-based frameworks that assist Parties in addressing the sector in a transparent, comparable, and consistent manner. Parties have the opportunity to incorporate lessons learned from existing mechanisms into both the post-2020 framework and their individual contributions for the land-use sector.

Parties have made significant strides in creating and participating in mechanisms to achieve the Convention’s goals vis-à-vis the land-use sector. However, during the Ministerial Roundtable in Warsaw, many acknowledged that there is still room for improvement. The post-2020 agreement is an opportunity for Parties, both individually and collectively, to align their efforts to protect and incentivize the full range of values in the land-use sector, including food security, mitigation, adaptation, and carbon storage.

The principle of “Continuous Improvement” applies collectively to all Parties under the UNFCCC, through their continuing and expanding participation in land-use sector mitigation actions, as well as their improvements in technical capacity and reporting. To facilitate further

---

4 Parties may also undertake projects targeting the land-use sector under the Kyoto Protocol’s Joint Implementation mechanism; however, very few have elected to do so. Of the 648 JI projects listed on the UNFCCC website as of November 2014, three involved forests and seven focused on no-till agriculture. Given the minimal number of LULUCF projects and methodologies under JI, we do not explicitly consider this mechanism in this analysis.
collective action, we anticipate that the post-2020 agreement will continue to require Parties to utilize rules-based reporting and accounting frameworks. Parties’ experiences negotiating and implementing the existing land-use sector mechanisms have informed the widespread calls for common but flexible rules to address some of the unique characteristics of the sector. In this context, “expanding comprehensiveness” means that the land-use sector will continue to require a rules-based framework in order for all Parties to address these considerations.

A second component of “Continuous Improvement” applies at the Party level, where it refers to a Party’s inclusion of lands, activities, carbon pools, and greenhouse gas fluxes in their INDCs, as well as its investment in technical capacity and gradual change to higher tiers of reporting. In order to fulfill the Convention’s mandates, Parties that currently have land-related commitments under the Kyoto Protocol or that have taken or intend to take voluntary actions in the land-use sector under the Convention should build upon existing commitments and actions under the ADP. This principle is elaborated below in the sections on “Once In, Always In” and “Pathway to Complete Coverage.”

Use of IPCC Principles and Inventory Guidance

The Intergovernmental Panel on Climate Change’s (IPCC) principles of accuracy, comparability, completeness, consistency, and transparency should continue to guide Parties’ approach to the land-use sector.

The Intergovernmental Panel on Climate Change (IPCC) provides guidance on national greenhouse gas inventories, reporting, and accounting under the Convention and its Kyoto Protocol. The IPCC’s guidelines and good practice guidance have proven to be an effective framework by which to measure, monitor, report on and/or account for carbon stocks greenhouse gases under both REDD+ and LULUCF. Five principles guide the IPCC’s approach to quantifying emissions and measuring progress: accuracy, comparability, completeness, consistency, and transparency. These foundational principles should continue to guide Parties’ the approach to the land-use sector under the post-2020 agreement generally, as well as Parties’ individual nationally determined contributions.

Once In, Always In

Once a Party has elected to account for lands, activities, carbon pools, and greenhouse gas fluxes, it must continue to account for those lands, activities, etc. moving forward.

The principle “Once In, Always In” is applicable in two distinct (but related) contexts, both of which are based on the concept of “no backsliding.” In a policy context, it requires that INDCs include, at a minimum, accounting for lands and/or activities that a Party has previously included in accounting, e.g., reducing deforestation under REDD+ or forest management under LULUCF. This is consistent with the principles of “Continuous Improvement” and progress toward meeting the objectives of the Convention, discussed above.

Second, “Once In, Always In” also applies in the technical sense to the coverage of each Party’s land-use sector accounting. Once a Party has elected to include particular lands, activities, pools, and fluxes, it must continue to account for those same lands, activities, etc. in all subsequent
accounting periods. “Once In, Always In” helps to address the risk of reversals (reversals occur when carbon sequestered in one accounting period is released back to the atmosphere in a subsequent accounting period), as well as the risk of “cherry picking” (only accounting for lands, activities, etc. when they result in net sequestration).

**Pathway to Complete Coverage**

*In addition to satisfying the threshold principle of “Once In, Always In,” Parties’ INDCs should facilitate pathways to move them towards complete coverage of all relevant lands, activities, carbon pools, and greenhouse gas fluxes over time.*

Existing mechanisms for the land-use sector allow Parties to account for a particular subset of land uses or activities, such as, for example, reducing deforestation or cropland management. This piecemeal approach to the land-use sector has two fundamental weaknesses. First, it can result in a patchwork of policies and measures that does not address either the synergies or trade-offs between land uses and management activities. Second, less-than-complete accounting fails to incentivize the full range of actions Parties can take in the land-use sector, and thus falls short of fulfilling their commitments under the Convention. Parties should therefore strive for complete coverage of lands, activities, carbon pools, and greenhouse gas fluxes in their INDCs.

However, assessing progress within the land-use sector can be technically complex, and most Parties are still in the process of building inventories and other tools necessary to support complete coverage. Moreover, many developing countries face the dual task of building this capacity while also planning their activities in the land-use sector to help them achieve their sustainable development goals. Existing IPCC guidance provides a framework for Parties measure and monitor greenhouse gases in the land-use sector, regardless of current capacity. Consistent with the IPCC approach, Parties’ INDCs should facilitate pathways that allow Parties to move towards complete coverage of all relevant lands, activities, carbon pools, and greenhouse gas fluxes over time, as their capacities improve.

**Focus on the Measurable Effects of Policies and Measures**

*Emissions from natural disturbances and legacy effects may overwhelm the effects of policies and measures in the land sector; a rules-based framework can help Parties design transparent, comparable, and consistent contributions that focus on the effects of their policies and measures.*

The Convention’s mechanisms are designed to facilitate incentives and support for actions that result in measurable progress toward achieving its objectives. Existing rules and guidance focus on assessing the effects of policies and measures that Parties have identified as contributing to their goals, whether those goals are adaptation, mitigation, or finance-related.

In the land-use sector, however, two phenomena may obscure the effects of policies and measures aimed at decreasing emissions, enhancing removals, and/or conserving carbon reservoirs. First, natural disturbances result in non-anthropogenic emissions that can overwhelm the impacts of a Parties’ efforts to improve greenhouse gas management. Second, legacy effects of previous management decisions can result in trends and/or cycles of emissions and removals.
that obscure the impacts of current policies and measures. Both of these situations have the potential to limit or diminish the incentive for Parties to undertake additional, positive actions in the land-use sector. Because these phenomena can occur in any country, the approach to addressing this principle in the ADP should be applicable and accessible to all Parties.

**Promote Good Social and Environmental Governance**

In order for the land-use sector to fulfill its many roles, a set of commonly agreed social and environmental safeguards should guide Parties’ INDCs.

The land-use sector plays many roles under the Convention, other international instruments, sustainable development programs, and a range of national and sub-national policies and programs. In addition to providing climate change adaptation and mitigation, the land-use sector may also be critical in the context of food security, respect for the rights of indigenous peoples and local communities, biodiversity and other ecosystem services, and cultural values. In order for the sector to fulfill its many societal roles and functions, Parties’ INDCs should be guided by a set of commonly agreed social and environmental safeguards, as well as procedures to support the transparency and accountability of Parties’ actions in the land-use sector.

**Technical Facilitation of Land-Use Sector Reporting and Assessment**

A post-2020 framework should include a facilitative, iterative technical review process and/or assessment to maximize the accuracy, comparability, completeness, consistency, and transparency of Parties’ contributions for the land-use sector.

As noted above, measuring and monitoring progress in the land-use sector is relatively complex. Existing land-related mechanisms utilize technical review and/or assessment processes to assist Parties and improve the accuracy, comparability, completeness, consistency, and transparency of reporting and accounting. A framework for the land-use sector in the post-2020 agreement should also include an iterative, facilitative process aimed at building Parties’ capacities and maximizing the integrity of their INDCs.

### 3. Options for Incorporating the Land-Use Sector into Intended Nationally Determined Contributions

Based on the existing principles (Section 2) and elements necessary for addressing the land-use sector (Annex I), we analyze four possible options for Parties to incorporate the land-use sector into their INDCs and the ADP agreement (Annex II). These options are informed by existing principles and agreements on the land-use sector under the UNFCCC. They provide a range of possibilities for moving forward with the sector under the ADP agreement in Paris, although most would require further details to be negotiated in the 2016-2020 period (see timeline in Section 4). Under each option we provide a brief description, explain how it would reflect necessary elements (Annex I), and outline its challenges and benefits.
Considerations for incorporating one of these options into overall ADP accounting

Under any of the options below, Parties will need to consider how their approach to the sector fits into their overall ADP contributions and accounting. During the COP 19 land-use sector ministerial and through their submissions, Parties have suggested that differentiated capacities may require a need for differentiated accounting approaches. Nevertheless, Parties have also expressed a desire for a degree of harmonization and simplification in land-use sector accounting, to a level that provides transparency without compromising the need for flexibility in the way they make their contributions.

Option 1: All participating Parties operating under a single, common set of accounting rules

In this option, all Parties would operate under one mandatory set of uniform rules to account for the land-use sector within their ADP contributions. Such rules would be negotiated, and would provide a common framework for any country interested in participating in the sector.

Under this option, all of the elements listed in Annex I would be incorporated in all Parties’ INDCs in the same or similar manner. For example, for baselines/reference levels, this option would require Parties to agree upon a common approach to setting baselines or reference levels. This could include deciding on common base years, period, and other elements. For accounting this option would create a single operational approach to accounting for mitigation from the land-use sector under the ADP.

In this option there are various ways activities could be jointly agreed and included by Parties, depending on the agreed approach. One variation could be that all Parties need to participate in all land-use sector activities, as they do for Convention reporting, which uses a land-based approach. Another variation could be allowing Parties to reach a minimum threshold of accounted emissions and removals, selected from a list of possible activities, perhaps using key categories as a guide. This approach would still require Parties to meet the principles of addressing “Pathway to Complete Coverage” and “Once in, Always in.” The set of rules created under this option would also need to meet IPCC principles (accuracy, comparability, completeness, consistency, and transparency).

Requiring all Parties to adhere to a single set of rules could have disadvantages. For instance, some countries might be excluded from participating because they cannot meet the requirements of the accounting approach. Another possibility is that the accounting approach might only achieve only the minimum possible level of ambition (a “race to the bottom”), failing to create rigorous standards for high-capacity countries and violating the principle of continuous improvement.

Beyond these disadvantages to the system, there could be various challenges to implementation of this option. Most notably, a single set of rules may require that some or all elements of a land-use framework be applied in a uniform manner across all Parties. Thus, option 1 may not adequately address Parties’ needs or desires to differentiate among approaches to the land-use sector. That is, a uniform set of rules may not provide Parties with the flexibility to reflect their
varying national circumstances and capacities for mitigation in their INDCs. Furthermore, based on previous experience, it is likely that the development of one set of operating rules would take many years to negotiate and would result in a highly complex framework for the land-use sector.

On the other hand, a benefit of this option is that it could be seen as providing the maximum ability to compare land use contributions across countries. A universal approach to accounting might also enhance transparency through common reporting formats and timelines.

The following provides a visual representation of how countries (small circles) could participate in this option.

**Option 2: Differentiated modalities**

In this option, Parties would have flexibility to approach the land-use sector in different ways, but within the bounds of a defined set of possibilities that share common elements. This approach would create a set of differentiated modalities within which there are similar operating rules, but across which there are common elements, as well as differences that allow for varying capacities and priorities for addressing this sector. The development of these modalities should be guided by existing principles (Section 2), and the accounting elements necessary for any approach to the land-use sector (Annex I).

Under a differentiated modalities approach, the elements listed in Annex I would be applicable to all Parties; however, each Party could choose the package of rules that best fits its capacity and nature of its contributions. For example, baselines/reference levels would follow common guidance that frames how to set baselines or reference levels; but different modalities would allow for that benchmark to include the entire land base (as in land-based accounting), a

---

5 This figure is for illustrative purposes only, and is not meant to suggest specific commitments from particular countries or to prejudge the outcome of negotiations.
particular set of activities (such as forest management), or a set of geographic areas (such as a set of projects aimed at sustainable development). The modalities option would allow Parties to reflect their capacities and capabilities in their approach to accounting. Commonalities across modalities could include the review process, the focus on measurable effects of policies and measures, and consistency between accounting approaches and baselines/reference levels. However, there would also be differences across modalities, in terms of expectations about the use of different IPCC accounting tiers, and possibly the availability of a natural disturbance mechanism.

This approach could allow Parties to adopt different initial levels of coverage, depending on the modality in which they are operating. To meet existing principles and guidance, countries would be expected to address significant sources, sinks, pools and gases (to meet the “Pathway to Complete Coverage” principle). Furthermore, the consideration of “Once in, Always in” would need to be applied to all modalities. Flexibility among modalities could reflect whether or not all key categories should be accounted for, or provide room for those Parties that want to apply land-based approaches. Each modality would need to meet IPCC principles (accuracy, comparability, completeness, consistency, and transparency), acknowledging that different modalities may be suited to different levels of capacity.

Similar to Option 1, a challenge to the adoption of differentiated modalities would be creating the time and common space to allow Parties to negotiate the content and operating rules for each modality. Processes would be needed to (1) ensure that Parties best match their capacities and their ADP contribution types with the most appropriate modalities, and (2) encourage Parties to move forward along the pathway towards increasing coverage of the land-use sector. To this end, Parties could elect to address the common elements first, and then negotiate the specific rules that would apply to each context or modality. While negotiating the rules to apply both within and across modalities may increase the complexity associated with this approach, the operating rules themselves could be relatively simple to implement.

There appear to be many benefits to a differentiated modalities option. First, relative to options 3 and 4 (below), transparency would likely be improved by creating a greater degree of alignment among the accounting approaches. This approach could provide a common set of accounting elements for all countries, thus providing a degree of harmonization, without asking all participants to work under a single set of common rules. Furthermore, this option would provide space for countries to meet the “Continuous Improvement” principle by creating a pathway a Party to transition from one modality to another, as capacity increases. Bringing existing land-use sector mechanisms under a common “umbrella” with common principles and processes could allow Parties to more easily chart a course towards increasing comprehensiveness. This approach could also ensure the durability of the mechanism over multiple accounting periods, while providing immediate flexibility and enhancing Parties’ abilities to participate in the sector early and build up their capacity over time.

The following provides a visual representation of how countries (small circles) could participate in this option.  

---

6 This figure is for illustrative purposes only, and is not meant to suggest specific commitments from particular countries or to prejudge the outcome of negotiations.
Option 3: Application of existing operating rules

Under this option, Parties would transfer the existing operating land use approaches to the ADP agreement. This would provide countries with the opportunity for a Party to operate under LULUCF, REDD+ or CDM accounting approaches, even if it did not participate in such approaches before 2015.

Existing land-use sector approaches provide for variable applicability of the elements listed in Annex I, depending on which set of rules a Party selects. For example, Parties would select baselines/reference levels based on the methodologies available under the relevant mechanism, as detailed in Annex I. Similarly, Parties would apply existing accounting approaches under LULUCF, REDD+ or the CDM, according to the mechanisms they select.

Currently, each of the existing operating approaches includes a set of possible activities. Parties would select from those included in the approach they are using, applying the “Once in, Always in” and “Pathway to Complete Coverage” principles. Additionally, the current operating rules are all based on meeting IPCC principles (accuracy, comparability, completeness, consistency, and transparency); therefore, application of existing approaches would sufficiently meet this principle.

A disadvantage of this approach is that some of these existing rules have known problems that limit or inhibit mitigation from this sector, and some of them fail to address the full suite of principles detailed in Section 2. Two of the existing mechanisms, LULUCF and the CDM, are relatively complex systems of rules; this complexity and the lack of coherence across mechanisms arguably reduces their transparency. In the case of the CDM, this complexity also creates a barrier for participation by developing countries, and stymies innovation. Furthermore,
the option to continue the existing approaches would require countries to select among existing operating rules, and therefore could provide a barrier to meeting the “Continuous Improvement” principle. Unlike option 2, relying on existing mechanisms does not leave space for Parties to readily create a pathway for harmonization between and/or beyond those mechanisms. Additionally, a process would be needed to ensure that Parties best match their capacity and their ADP contribution type to the accounting system they select, even though those systems may have been designed for a different context.

The main benefit to relying on existing mechanisms is that all of the operating rules for LULUCF, REDD+ and the CDM already exist, so a Party would simply need to decide which accounting approach it would prefer to use. In this sense, the adoption of option 3 could engender a relatively simple negotiating process under the ADP. This option would also provide Parties with the flexibility to choose the mechanism that is best suited for their land-use sector circumstances and capacities. Furthermore, under existing operating rules there are already some common elements that could be used to provide some harmonization or comparability among Parties applying different approaches.

The following provides a visual representation of how countries (small circles) could participate in this option.7

Option 4: No overall guidance
Under this option, Parties would account for the land-use sector in their contributions in any way they decide; that is, there would be no agreed-upon guidance for accounting. Parties could self-differentiate, choosing elements, rules, and mechanisms from among any of the existing approaches, creating their own new ones, or electing not to include the land-use sector at all.

For this option, none of the elements listed in Annex I would necessarily be similarly reflected in Parties’ INDCs, because they would not be operating under any agreed guidance for the land-use sector. This could raise the likelihood of reduced transparency for setting baselines/reference

7 This figure is for illustrative purposes only, and is not meant to suggest specific commitments from particular countries or to prejudge the outcome of negotiations.
levels, as well as for accounting. Countries would be able to participate in whatever activities they choose, and this could lead to violation of the “Once in, Always in” or “Pathway to Complete Coverage” principles. Finally this approach would require an individualized analysis of each Party’s land-use sector contribution, to ensure that the IPCC principles (accuracy, comparability, completeness, consistency, and transparency) are being met.

The main challenges of a “no guidance” approach include a lack of transparency, lack of comparability, and inconsistent adherence with principles. Without some degree of harmonization, it would be exceedingly difficult to ensure that all Parties are meeting previously agreed-upon principles (Annex I), and the approach in itself would essentially violate the “Continuous Improvement” principle. Furthermore, unlike option 2, there could be less motivation under this option for Parties to improve over time. The lack of harmonization and wide range of accounting approaches that would likely result would drastically decrease the ability of countries to assess the transparency and comparability of each other’s contributions from the land-use sector. Additionally, without any further guidance on how to account for the land-use sector, it would be difficult to evaluate the mitigation impact of actions in the sector. This approach could ultimately result in low ambition for the sector, leading to a failure to meet the objective of the Convention.

The benefits to this approach would be the ability to implement land-use sector contributions without any negotiations on the accounting approaches or operational rules. A “no overall guidance” approach would also grant Parties the maximum flexibility possible with regard to their land-use sectors. Furthermore, Parties could, if desired, ensure maximum parallels between the land-use sector and other sectors under their INDCs.

The following provides a visual representation of how countries (small circles) could participate in this option.  

---

8 This figure is for illustrative purposes only, and is not meant to suggest specific commitments from particular countries or to prejudge the outcome of negotiations.
4. BUILDING A PATH TO PARIS AND BEYOND

There are several concrete steps Parties can take in the near term to put them on the path to including the land-use sector in their post-2020 efforts under the Convention (Figure 1).

**COP 20**

In Lima, Parties can agree that an ambitious post-2020 climate agreement must include a role for the land-use sector. Additionally, Parties can acknowledge that existing principles, decisions, guidance, and experience provide a sufficient basis for robust inclusion of the sector under the ADP. Accordingly, Parties may agree to incorporate land use into their INDCs under existing mechanisms, that is, LULUCF, REDD+, NAMAs, or the CDM.

Parties can also agree to dedicate time in the lead-up to COP 21 to work on a set of common principles that will aid in the transparent, comparable, and consistent inclusion of the land-use sector in the post-2020 agreement. Additionally, a decision in Lima could request Parties to consider which of the options outlined here should govern the sector moving forward.

**COP 21**

In Paris, Parties could agree on a set of common principles that will govern treatment of the land use under the post-2020 agreement. Parties should also settle on the option—one set of common rules, choice of modalities with common elements, existing rules and mechanisms, or no rules—that will govern the sector moving forward.

A land-use sector decision in Paris could also request that Parties continue working in the period between 2016 and 2020 to develop guidance for implementing the agreed upon principles and considerations. As explained in the sections above, much of this guidance could be based on existing principles, rules, and mechanisms.

**2016 to 2020**

Parties may use this time to continue to develop and implement principles and considerations described above. Additionally, depending on the option chosen, Parties may use the pre-2020 period to both improve upon and harmonize existing land-use sector mechanisms. Such efforts may take the form of a pathway to help facilitate Parties’ transitions between mechanisms in a way that provides transparency and flexibility for application to a wide range of country circumstances.

Figure 1: Timeline for incorporating the land-use sector into the post-2020 framework
Annex I

The following elements are already components of one or more of the accounting systems that apply to the land-use sector, and they could be considered for application to the ADP accounting framework.

IPCC principles and review

IPCC guidance and the Marrakech Accords focus on 5 principles of “good practice” in accounting: transparency, accuracy, comparability, consistency, and completeness (TACCC), which provide robust accounting that conservatively estimates the impacts of a Party’s activities on the net emissions of GHGs. Over the history of the UNFCCC, Parties have developed approaches within each mechanism or accounting framework to meet these principles, and it is reasonable to expect this process to continue for the ADP context.

For LULUCF, these principles are met through the annual inventories, national communications, and the review process. Expert reviewers assess whether information provided by Parties meets these principles, and they provide input and guidance to Parties about how to improve their reporting and accounting. The results of the review are made publicly available by the IPCC Secretariat.

For REDD+, a similar process is conducted through the review of results. Expert reviewers assess the degree to which a Party has achieved transparency, accuracy, consistency and completeness in its documentation. This information will be shared on the REDD+ information hub, where it can be utilized by those entities providing financial and technical support to REDD+ countries.

For the CDM, projects apply to the Executive Board, and they are reviewed against one of the approved CDM methodologies. If approved, these projects are actively monitored by approved third party experts, and accounts are regularly updated and made publicly available.

Baselines/reference level

A baseline of emissions is necessary, in any sector, as a point of reference for measuring changes in emissions in the future, which can indicate progress towards or away from goals. Agreement on the nature and form of a baseline for contributions from the land-use sector has proven difficult in the past.

An ideal baseline would serve as a basis to measure future changes in the anthropogenic contribution of net emissions from the land-use sector, including the result of short-term and long-term decisions. Such a baseline could also facilitate the use of performance-based incentives to increase the mitigation contribution from the land-use sector.

---

9 “Conservative” refers to the atmospheric perspective, so that emissions are accounted at the higher range of uncertainty (i.e. tending to estimate more emissions), and removals are accounted at the lower range of uncertainty (i.e. tending to estimate fewer removals).
In the first Kyoto commitment period, Kyoto Parties used a “gross-net” approach to the land sector. This approach used the absolute net emissions from an activity as the benchmark for measuring contributions – that is, any deviation from zero net emissions was accounted as a contribution to atmospheric GHGs (positive and negative). Under this approach, the expected contribution from the land sector under BAU was informally considered in the evaluation of the overall economy-wide target from the contributing Party. This approach was used in KP CP1, in conjunction with a Party-specific quantitative cap on credits.

In negotiations for the second KP commitment period, Parties initially considered a “net-net” approach, which was seen to have some advantages over the “gross-net” approach. This approach used a Party’s annual emissions in a given year (e.g. 1990) as the benchmark for measuring contributions. Any increase or decrease in emissions, relative to that benchmark, would be accounted by a Party as a debit or credit, respectively.

Parties eventually rejected net-net in favor of a third approach, called “reference levels,” for developing baselines for the forest management activity. This approach allows a Party to project its future emissions under BAU (or, as a variant, to use a historical emissions level as a representation of its future BAU emissions), and to account for any increase or decrease in emissions, relative to that benchmark, as a debit or credit, respectively. This approach was adopted for KP CP2 as a baseline for the activity of forest management, in conjunction with a common, percentage cap on credits, set at 3.5% of the Party’s total emissions in 1990.

Many Parties see the “gross-net” and “net-net” approaches as infeasible, and they consider “reference levels” an improvement over these two approaches. Nevertheless, these approaches to baselines were developed to account for forest-related activities, and the procedures may need to be modified if they are applied more broadly across the land-use sector. Furthermore, the precedent for the KP has always included a quantitative limit on credits from LULUCF accounting, as a backstop to limit the moral hazard created when Parties are allowed to construct their own baselines.

**Accounting**

Accounting refers to the quantification of emissions from land use, measured relative to a baseline, for the purpose of determining the extent of progress toward (or away from) emissions goals. All Parties share the common goal of reducing emissions, and the accounting process plays a dual role with the baseline to measure how the land-use sector, or elements of it, are contributing toward reductions. This goal has been met through several different approaches within the UNFCCC so far.

Past approaches to quantification of net emissions:

1. **Convention reporting.** The Convention required Parties to regularly submit information about their emissions and removals, in annual inventories and national communications. The IPCC has provided several rounds of guidance for this process, and in the most recent guidance (2006), emissions and removals from the land sector are categorized together as Agriculture, Forestry, and Other Land Use (AFOLU). Procedures to quantify and report emissions are roughly divided into those activities that are measured using emission factors not linked to land area (e.g. tons
CO₂-e per ton of fertilizer applied) in Agriculture, or through emission factors linked to the area of land (e.g. tons of CO₂-e per hectare) for Forestry and Other Land Use.

(2) Kyoto Protocol accounting. The Kyoto Protocol instituted a system for its signatory countries that could accommodate accounting for economy-wide policies and measures, including those in the land sector, under the heading LULUCF. Unlike other sectors, the land sector has the potential to generate removals (i.e. net negative emissions) and this capacity had to be taken into account in order to judge the relative level of ambition across the signatory Parties. Kyoto Parties (and their partners) have negotiated extensive rules for accounting, in an attempt to clarify and quantify the effects of policies and measures.

In theory, these rules were constructed to facilitate the delivery of incentives to decision makers and land managers, especially where such incentives could influence decisions at the margin, shifting these actors toward actions that increased mitigation. At the national level, accounting rules for LULUCF would reward countries when they achieved reductions (relative to the baseline) by yielding quantified reductions that they could apply toward their targets. On the other hand, if countries increased their net emissions (relative to the baseline), they would be penalized by counting those emissions against their economy-wide targets, making it more difficult for them to achieve those targets. This created the potential for symmetry between rewards and penalties from the land sector, aligning the “marginal incentives” at the management level with the goal of the country at the country level. However, in practice, these “marginal incentives” have rarely been applied in this way, and the effect of these rules on policies and measures has yet to be well documented.

(3) REDD+ accounting. Because REDD+ is designed primarily to measure reductions in net emissions from forests, rather than measuring changes in relative levels of net removals, its accounting procedures are simpler and more straightforward. REDD+ only measures reductions relative to the baseline, but does not count emissions when they are above the baseline. This creates an asymmetrical accounting approach, which differentiates it from Kyoto accounting.

The approach is specifically designed to attract support for REDD+ countries, and special rules were developed to meet other objectives beyond the quantification of emissions reductions. These features aimed at ensuring that the reductions met certain standards of quality, related to the scientific integrity of the measurements, and the social and environmental outcomes where REDD+ policies and measures were implemented. To ensure these qualities would be associated with all REDD+ reductions, Parties agreed to a set of criteria for monitoring, reporting, and verification (MRV) of reductions, as well as social and environmental safeguards.

The quantification of REDD+ reductions was also designed to facilitate, but not require, the delivery of incentives from sources external to the implementing country, with special attention to incentives delivered in proportion to performance. This approach follows the same principle of “marginal incentives” as LULUCF. However, unlike LULUCF and the CDM, REDD+ also facilitated the delivery of incentives not based on performance, including ex ante incentives and support for implementation.
(4) **CDM accounting.** Because the CDM was intended to generate measured reductions that could be counted toward Kyoto Party mitigation targets, the accounting for the CDM adhered to a rigorous process, aimed at ensuring that the quality of reductions would be comparable to (and fungible with) reductions within Kyoto Parties, from any sector. Several layers of standards and oversight were developed for CDM projects. In the land sector, methodologies have been developed and approved for afforestation and reforestation projects, along with special rules intended to prevent a loss of accounting integrity in the event of a future reversal of the mitigation benefit.

In practice, these safeguards have had the effect of limiting the implementation of CDM projects in the land sector, and buyers have been reluctant to purchase the mitigation units. As in Kyoto accounting, the CDM employs a symmetrical accounting approach, in which projects are rewarded or penalized in accordance with their quantified mitigation performance.

**Categorization and scope of emissions reductions**

IPCC guidance provides for two approaches to the categorization of emissions reductions from the land sector. Under the “activity-based” approach, Parties identify specific management activities within their country, sum up the net effect of each activity on its emissions, and then sum up the effect on emissions from all accounted activities. Under the “land-based” approach, Parties categorize all land (usually on the basis of land cover), measure the net change in emissions from all land categories, and sum up the net effect on emissions across all categories.

Reporting under the Convention uses a land-based approach, and by default, this approach comprehensively accounts for all land. Accounting under the Kyoto Protocol uses an activity-based approach, and the Protocol requires accounting for some activities, while Parties may elect to account for others. The two approaches would converge if Parties accounted for all activities and treated all lands as subject to management activities.

The activities for LULUCF currently listed in Kyoto Protocol can be characterized as follows:

- **For the first commitment period:**
  - Mandatory (Article 3.3): afforestation, deforestation, reforestation.
  - Elected (Article 3.4): forest management, grazing land management, cropland management,

- **As amended for the second commitment period:**
  - Mandatory now includes forest management
  - Elected: now includes wetland drainage and rewetting

REDD+ was developed outside of the Kyoto Protocol, and its scope was more focused than the activities for the KP. The following activities are part of REDD+:

- Reducing emissions from deforestation;
- Reducing emissions from forest degradation;
- Conservation of forest carbon stocks;
- Sustainable management of forests;
- Enhancement of forest carbon stocks.

Parties engaging in REDD+ activities may choose one or more of these activities to implement.
Afforestation and reforestation are the two types of activities in the land-use sector are currently eligible to develop projects under the CDM.

Some Parties have proposed adding additional activities and to develop new methodologies, but to date there are none formally under consideration.

IPCC Guidance (2006) provides the basis for the use of a land-based approach to accounting, as is used for reporting under the Convention. A land-based approach does not differentiate between managed and unmanaged land, but uses land cover as a basis for categorizing lands that are managed for different purposes. This approach can encompass the net emissions from anthropogenic activities, especially when measured against a reference level. For example, emissions from all grasslands will include net emissions from grazing land management, and the change in emissions that result from anthropogenic activities can be measured over the accounting period, relative to a reference level that also includes all grasslands. If the net emissions from unmanaged grasslands are accounted as zero, as is allowed under the IPCC guidance, then any change in net emissions from management activities will be measured during the accounting period. This is an example of an approach that could simplify the accounting process, because the accounts will match what is reported in the Party inventory under the Convention, eliminating the need for a separate set of accounts.

**Relationship to support and means of implementation**

Among KP Parties, LULUCF implementation is expected to occur as a result of the Party’s own efforts, through policies and measures. On the other hand, REDD+ and CDM implementation are designed to facilitate external support. Accounting for emissions reductions under both of these mechanisms has proven to be a challenge. (The Joint Implementation mechanism for KP Parties has rarely been utilized, and so we do not consider it here, although it remains a potentially useful concept for consideration in the ADP.)

The differing capacities of developing countries – and experience with the REDD+ and CDM mechanisms – suggest that some external support, in the form of technology and capacity-building, will be needed by many countries before they can successfully implement mitigation measures in the land-use sector. In many cases, institutions and agents for delivering these means of implementation have been created for these mechanisms, or the already exist. There is much potential for these services to be delivered through joint or centralized approaches, to minimize duplication of effort and redundancy.

While the exact relationship between support for means of implementation and performance under the ADP will continue to be worked out, and may not be resolved by a single answer, it has become clear that many Parties anticipate that some mitigation may occur in developing countries as a result of their own effort, when measured against their baselines. The most significant implication is that financial support may not begin until a country has reduced its land-use sector emissions below its baseline level.

In LULUCF and CDM accounting, each unit of emissions reductions below the baseline is fungible with other emissions reductions (within some technical limits, such as discounts for leakage or under a quantitative cap). As a result, each unit of reduction is eligible for marginal
incentives. In LULUCF, these incentives are expected to be delivered internally; in the CDM, they are expected to be delivered completely externally, through project finance, with the resulting “credits” accounted to the financing Party.

These considerations highlight the difference between accounting and support. It is worth synthesizing the status of these issues in the following points:

- In general, the goals of accounting are to (1) quantify the effect of anthropogenic activities on emissions and removals during the accounting period, and (2) to facilitate the creation of incentives that can decrease emissions and/or increase removals at the “margins” of land management decisions.
- Nevertheless, such incentives are distinct from the accounting itself.
- Marginal incentives have been thought of as financial or economic in character, and are aimed at changing land management or agricultural practices.
- Many countries see advantages to making all accounted units comparable, in terms of their effect on atmospheric GHG concentrations. Among other benefits, this could facilitate payments for performance and/or emissions trading among Parties.

Managing risks from the land-use sector
In each track where the land-use sector has arisen in the negotiations, a set of risks arise in the discussions. Some of these risks only apply to particular contexts; others are common throughout the land-use sector. In each case, mechanisms to address and manage these risks have been incorporated into the accounting framework. We anticipate that many of these risks will continue to exist in an ADP framework for the land-use sector, and Parties will continue to see a need to address these risks, either building on past approaches or developing new ones. Yet development of approaches to managing these risks may not be possible or appropriate until Parties have agreed, at least in principle, to specific features or elements of the ADP agreement. To prompt such discussions at the appropriate time, we list many of these risks and their associated mechanisms in the table below. (This list is illustrative and not complete.)

Table 2: Risks in mitigation from the land-use sector, and the mechanisms to address them

<table>
<thead>
<tr>
<th>Risk</th>
<th>Mechanism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disproportionate mitigation in the land-use sector, a.k.a. “offsetting”</td>
<td>Quantitative cap on mitigation (LULUCF)</td>
</tr>
<tr>
<td>Emissions from natural disturbances will overwhelm effects of policies and measures, potentially creating large liabilities</td>
<td>Natural disturbance emissions exemption provisions, subject to statistical threshold for eligibility (LULUCF)</td>
</tr>
<tr>
<td>Overly conservative estimate of emissions from harvested wood products</td>
<td>Option to account for HWPs using IPCC decay rates (LULUCF)</td>
</tr>
<tr>
<td>Policies that have the potential to undermine human rights or non-climate environmental benefits and services</td>
<td>Social and environmental safeguards as explicit requirements for eligibility (REDD+)</td>
</tr>
<tr>
<td>Failure to report in a transparent, accurate, consistent, comparable, and complete</td>
<td>Expert review process (LULUCF and REDD+)</td>
</tr>
<tr>
<td>Potential reversals of accounted reductions from a project</td>
<td>Temporary and long-term credits (CDM)</td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>Displacement of emissions from an accounted geographic area to an unaccounted geographic area</td>
<td>Discount for leakage (CDM); environmental safeguards (REDD+)</td>
</tr>
<tr>
<td>Failure to meet qualitative standards that ensure the accounted reductions contribute the same atmospheric benefit as reductions in other sectors</td>
<td>Conservativeness factors and expert review (LULUCF and REDD+); methodological and project approval by Executive Board, with ongoing oversight (CDM)</td>
</tr>
</tbody>
</table>
Annex II
This table provides an analysis of how the four options from Section 3 fit within the principles outlined in Section 2.

<table>
<thead>
<tr>
<th>Option</th>
<th>Articles 2 &amp; 4 of the Convention</th>
<th>Continuous Improvement</th>
<th>Use of IPCC Principles and Guidance</th>
<th>Once in, Always in</th>
<th>Pathway to complete coverage</th>
<th>Focus on Measurable Effects of Policies and Measures</th>
<th>Promote Good Social and Environmental Governance</th>
<th>Technical Facilitation of Land-Use Sector Reporting &amp; Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>One set of rules</td>
<td>It seems unlikely that a single set of rules could be agreed that satisfies CBDR, and the end result might be weak lowest common denominator.</td>
<td>Fixed &quot;one-size-fits-all&quot; means comprehensive coverage for all, starting in 2020. This seems difficult to achieve in practice.</td>
<td>Good on comparability and transparency; may be difficult to achieve completeness, consistency, and accuracy due to wide range of capacities across Parties.</td>
<td>This could lead to a future scenario on which all lands would be accounted for by all Parties.</td>
<td>In theory, coverage would be complete at the outset and there would be no phasing.</td>
<td>This option could develop a universally applicable approach for addressing natural disturbances and a single approach to setting baselines.</td>
<td>Existing safeguards and approaches, such as those for REDD+, could be expanded to apply to all Parties.</td>
<td>A single set of rules would continue to facilitate effective reporting and assessment.</td>
</tr>
<tr>
<td>Differentiated Modalities</td>
<td>The strength of this approach is that it allows differentiation, with some common elements that help ensure the sector contributes to meeting the objective of the Convention.</td>
<td>This approach would encourage increase in coverage within modalities, as well as facilitate ease of transition from one modality to another, with no reduction in comprehensiveness.</td>
<td>This option would facilitate adherence to all the accounting principles, while affording some flexibility to Parties to select the modality that best matches their capacity.</td>
<td>This approach need to require no backsliding in coverage.</td>
<td>The differentiation in this approach allows Parties to choose when to move from one modality to another, without the need to renegotiate the entire agreement.</td>
<td>This option could develop a universally applicable approach for natural disturbances and common approaches to setting baselines.</td>
<td>Existing safeguards and approaches, such as those for REDD+, could be expanded to apply to all Parties.</td>
<td>A limited number of modalities with some common elements would continue to facilitate effective reporting and assessment.</td>
</tr>
<tr>
<td>Existing rules</td>
<td>Existing rules are segmented and do not reinforce progress toward a common goal. Parties are not.</td>
<td>Existing rules allow for the possibility of expanded election of voluntary activities, but this is not expected.</td>
<td>Existing rules are founded upon IPCC principles and guidance, though these are sometimes</td>
<td>Approach to Kyoto Protocol has been to negotiate an increase in coverage that applies to all</td>
<td>Only Kyoto Protocol has mechanism for exempting emissions from natural disturbances.</td>
<td>Existing mechanisms have differing approaches to promoting good social and environmental</td>
<td>Existing rules contain mechanisms for technical assessment and review, but these are not</td>
<td></td>
</tr>
</tbody>
</table>

24
| No overall guidance | Self-differentiation would make it difficult to assess progress towards the objective of the Convention, and would inhibit cooperation. These would likely obscure the level of ambition, and probably weaken it across all Parties. | No expectation of expanding comprehensiveness. | No overall guidance implies that Parties have the flexibility to choose whether and how to use IPCC guidance. They currently have a reasonably good track record. | No overall guidance implies that Parties determine for themselves whether lands or activities continue to be accounted in the future. They currently have a reasonably good track record. | No overall guidance implies voluntary changes in coverage, with no expectation of move to complete coverage. | Lack of guidance would imply reliance on other agreements or national law to promote good governance. | Self-differentiation would make technical facilitation much more difficult for experts; international review and comparability would be very challenging to achieve and maintain. |