Principle 1

Ecosystem Protection *– Rules for project selection, accounting, reporting and crediting must aim to prevent undesirable impacts on ecosystems.*

No credit should be available for sequestration projects where native ecosystems were converted after adoption of the Kyoto Protocol. Certain project activities, including the conversion of natural forests, woodlands and grasslands to plantations, alteration of natural fire regimes, and plantations using genetically modified organisms must not be eligible for credit. Projects must be consistent with the goals of concurrent environmental conventions, including the Convention on Biological Diversity, the RAMSAR Convention on Wetlands, and the Convention to Combat Desertification, as well as with local or national environmental protection goals or laws.

Project approval and certification should require a transparent assessment, based on international standards at least as rigorous as those of the World Bank, of environmental and related social impacts. Such an assessment must involve full public participation, and should occur periodically throughout the life of the project. Projects that provide multiple environmental benefits, including increased forest resilience to climate change, restoring and protecting the functional integrity of landscapes, protection of biodiversity or other high value conservation areas, and equitable sustainable development benefits, should be given highest priority during project selection.

Proposed Rules:

1. Project activities that may result in net GHG emissions reductions and/or removals, as well as benefits for ecosystems and local human communities, are eligible for crediting, subject to a transparent assessment of environmental and related social impacts. LULUCF activities eligible for crediting include:
   - Emissions-avoidance activities, such as protection and conservation-based management of threatened natural systems, including forests, woodlands, grasslands and savannahs.
   - The following carbon sequestration activities, on lands that were converted or degraded before the adoption of the Kyoto Protocol:
     - the restoration of natural ecosystems, such as forests, wetlands, grasslands or savannahs
     - reduced tillage and other improved and sustainable agricultural practices that increase soil carbon;
     - sustainable agroforestry

2. Project activities that may result in net GHG emissions reductions and/or removals, but also cause net harm to ecosystems and/or local human communities, are not eligible for crediting. LULUCF activities that are not eligible for crediting include:
   - Activities on lands that were fully or partially converted from native to non-native ecosystems after the adoption of the Kyoto Protocol.
   - The conversion of natural forests, woodlands and grasslands to plantations.
   - Establishment of permanent plantations of non-native species in sites where natural or assisted restoration of native forests is feasible.
   - Plantations using genetically modified organisms.

- The alteration of natural fire regimes.

3. The operational entities/executive board of the CDM shall approve and certify eligible project activities subject to a transparent assessment of environmental and related social impacts using international standards at least as rigorous as those of the World Bank, while being appropriate to the scale of individual projects. The operational entities/executive board shall also ensure that project activities are consistent with local or national environmental protection goals or laws, as well as with the goals of concurrent environmental conventions, including the Convention on Biological Diversity, the RAMSAR Convention on Wetlands, and the Convention to Combat Desertification. Such an assessment will involve full public participation, based on local and international standards for public review and comment, and shall occur periodically throughout the life of the project.

4. The operational entities/executive board of the CDM shall prioritize LULUCF activities that provide multiple environmental benefits, including increased resilience of ecosystems to climate change, when approving and certifying projects. LULUCF activities shall not be eligible for "fast track" approaches that alter the standard rules for determining the number of CERs ultimately issued for a project. Prioritized LULUCF activities shall include:
   - Restoration and protection of the functional integrity of landscapes, including watersheds, particularly by avoiding fragmentation of intact ecosystems.
   - Protection of threatened and endangered species, and high-value conservation areas based on CITES, IUCN red lists or other local or international guidelines.

Principle 2

Sustainable Development *– Projects must contribute to the sustainable development of the host country by conforming to sustainable development criteria that are both internationally recognized and nationally and locally sanctioned.*

In the absence of sustainable development criteria, LULUCF projects could lead to ecological, social and economic deterioration, adversely affecting development patterns of the host country. If criteria vary significantly across countries or regions, there may be incentives to locate projects in areas with less stringent criteria. To ensure that environmental and social benefits are achieved, projects must conform to sustainable development requirements, such as environmental and socioeconomic impact assessments, that are both internationally recognized and nationally and locally sanctioned. Projects must address community needs and priorities through effective public participation and transparency in project design and implementation in order to ensure an equitable distribution of sustainable development benefits.

Proposed Rules:

1. For each project, prior to registration, an independent environmental auditor shall prepare an environmental and social impact assessment based on criteria that are both internationally recognized and nationally and locally sanctioned.

2. In the absence of domestic rules and criteria governing environmental and social impact assessments, efforts should be made to incorporate international rules and regulations on sustainable development, agreed upon in Agenda 21.

3. Assessments shall be prepared in a transparent manner, including input from the general public and affected local communities.

4. Parties, directly affected local communities, public or private entities, members of the public and NGOs residing in any country that is a Party to the Protocol may submit in writing any comments, information, analysis or opinions that they consider relevant to the proposed project. Comments may address, but are not limited to, additionality, baselines, leakage, permanence, and local, national, or international environmental and social impacts.

5. Projects must monitor and report on environmental, social and cultural impacts, based on criteria that are both internationally recognized and nationally and locally sanctioned. Monitoring should include the participation of local stakeholders.

6. Project information, including project design documents, assessments, public comments, minutes and validation, monitoring and verification reports should be made publicly available, following sufficient notification to allow civil society an effective input, on the UNFCCC web site when this information is provided to Parties.

Principle 3

Measurability – *Emission reductions and removals must be measurable and verifiable to be credited towards a Party's assigned amount. All projects must have scientifically valid monitoring and verification, as well as transparent reporting.*

Monitoring guidelines must ensure accurate and transparent emissions and carbon stock monitoring based on applicable scientific techniques. Monitoring must occur at specified periods and must cover all decreasing stocks, increasing stocks for which credit is sought, and any project-related emissions. The guidelines must include procedures for identifying such stocks and related emissions, for establishing baselines, and for ensuring public participation. The guidelines should also include methodologies to account for uncertainties in measurement.

Verification guidelines must ensure periodic reporting, including audits from third party auditors accredited by the UNFCCC. Reports must be reviewed by operational entities to determine the project's compliance before certifying emission reductions.

Proposed Rules:

1. Carbon pools to be monitored in LULUCF projects include above-ground biomass, litter and woody debris, below-ground biomass, and soil carbon. Wood products are not available for crediting and are to be treated as instantaneous emissions. A project developer may choose to exclude carbon pools from measurement that are credibly and independently determined to be increasing at a high level of certainty. Such pools are not available for crediting.

2. Carbon stocks will be measured at project initiation and then estimated and verified, as appropriate, at the completion of each commitment period.

3. Changes in carbon stocks are to be estimated using some combination of direct measurements, activity data, and models based on accepted principles of statistical analysis, forest inventory, remote-sensing techniques, flux measurements, soil sampling, and ecological surveys appropriate to project type and scale. Measurement and estimation methodologies must be consistent with best practice guidelines developed by the IPCC. To ensure verifiability and transparency, project measurement methodologies must be publicly available.

4. Greenhouse gas emissions associated with application of fertilizers and use of fossil fuels in on-site project implementation must be measured, verified, and deducted from project CERs.

5. Carbon stocks are to be presented as a range at a confidence interval of 95%. CERs will be estimated conservatively using the lowest figure in the range.

6. Carbon stock measurements and estimates are to be verified by an independent, third-party expert. Results of independent verification should be publicly available.

Principle 4

Baselines and Additionality *– Emissions reductions or removals must be additional to those that would have occurred otherwise, in order to be credited toward a Party's assigned amount.*

Project credits should be based on the net increase in carbon stocks and changes in emissions of other greenhouse gases relative to objective and accurate national, regional, or sectoral baselines, including existing emissions and land-use laws and regulations (e.g. forest practice rules). Because there is a risk that project developers may choose scenarios that maximize awarded credits, baselines must be set or validated by independent certifying agents accredited by the UNFCCC.

Proposed Rules:

1 The Executive Board (or authorized technical advisory bodies) shall develop methodologies for determining the additionality of and baselines for LULUCF projects. These methodologies shall specify a baseline of relevant project activities against which projects shall be evaluated, using national and regional historic data and projections, and taking into account host country laws and their implementation. Methodologies shall be conservative, relative to the average.

2 The Executive Board may approve other methodologies on a case-by-case basis: (1) a national (sector-specific) baseline developed by the host country, such that evaluation of additionality and subsequent monitoring occurs nationally; or (2) project-specific baselines developed using more narrowly drawn geographic boundaries in cases where reliable national or regional data is unavailable, in cases where there is extremely high variability within the standard boundary of analysis, or where a credible case can be made that local circumstances exist that make the standard methodology inapplicable.

3 The Executive Board (or authorized technical advisory bodies) shall take into consideration the unique characteristics of different LULUCF project types in developing methodologies, including but not limited to the following considerations:

- Projects that Result in a Net Change in Land Cover Relative to the Baseline (e.g., curbing deforestation; reforestation and afforestation): The evaluation of baselines and additionality shall occur in three steps: (1) determine eligible land areas based on additionality; (2) develop baseline activity trends for eligible areas; and (3) determine that project design plans and subsequent implementation are sufficient to cause the shift from the baseline activity.
  (1) Additionality/Eligibility: Specify which specific land areas and types within a region are eligible for consideration, by determining where there exists a significant threat of deforestation, likelihood that reforestation would not occur, in the absence of project activities. The specific circumstances necessary to meet the eligibility criteria must have existed prior to the adoption of the Kyoto Protocol. The eligibility specification shall take into account analyses of historical trends of land cover change and indicators of potential change such as distance to roads, wood mills, markets, and other infrastructure; local demand for land and associated services; and land title or zoning.

(2) Baseline Determination: Within eligible areas, determine at what rate the changes in land cover (either to more or less carbon storage) would have occurred within the monitoring boundary if the project activities had not been implemented.
(3) Planning/Implementation: Determine that on-the-ground activities are planned (for registration/validation) and implemented (for certification) sufficient to cause the shift from the baseline activity.

- Projects that Increase Net Carbon Storage without a Net Change in Land Cover Relative to the Baseline (e.g., agroforestry, improved forest management, conservation tillage, reduced impact logging): Without-project baselines should be based upon the use of controls, or reference cases, that conservatively represent best regional practices. The reference cases should be representative of what is projected to continue in the region without the project, given historical trends. The reference cases should be as similar as possible to the project area in terms of soil type, land cover class, distance to roads, and other significant factors.
- Bioenergy Projects. Methodologies for the LULUCF component of bioenergy projects shall be developed taking into account the sources of biomass, and where applicable shall use identical methods as for LULUCF projects with no energy component. Emissions from the combustion of biomass shall be accounted for in the removal of these stocks from the land area, which is treated as an emission. That portion of fuel consumption in a bioenergy project not derived from biomass (e.g., co-firing), if any, shall be evaluated using energy sector methodologies.

4. Methodologies shall be updated on a regular basis to reflect trends in relevant activities.

5. Local, site-specific monitoring consistent with the principles of measurability and verifiability shall be required from all projects to determine the carbon stock changes occurring in the baseline reference case and as a result of project activities.

Principle 5

Leakage *– Offsite emissions caused by the project (leakage) must be avoided or properly accounted for in the determination of any credits to be applied to a Party's assigned amount.*

Projects must demonstrate that leakage has been avoided or fully accounted for. Methods for avoiding leakage include addressing local land use and land tenure issues, providing replacement products that are less carbon intensive, and improving the productivity of land. Local leakage may be accounted for by expanding the system boundary to include all areas where it might occur. Where leakage could occur over larger areas it may be necessary to apply standard leakage factors.

Proposed Rules:

1. The Executive Board (or authorized technical advisory bodies) shall develop for each project type a list of potential types of leakage (ranked by level of concern) and suggested project design responses. In their application for project registration, developers must include these responses or an explanation of why they are unnecessary. Implementation of these responses must be verified during verification/monitoring/certification.

2. For each project type and relevant type of leakage, the Executive Board (or authorized technical advisory bodies) shall develop guidelines for establishing a monitoring area and baseline. The monitoring area is the area over which carbon stocks must be monitored, including the project site and proximate areas where leakage may occur. The monitoring area must be appropriate to the type and scale of the project, taking into account the cost of monitoring and potential magnitude of the leakage. The project developer must justify any alterations to the recommended monitoring area to the satisfaction of the Executive Board.

3. The Executive Board shall develop standard methodologies to account for unmitigated leakage that occurs outside the monitoring area and apply these methodologies in the estimation of CERs. Methodologies should take account of national or regional trends and projections, analysis of regional and international markets, among other factors. The Executive Board may require reasonable data from project developers in order to apply standard methodologies.

Principle 6

Duration/Permanence *– Projects must provide a permanent net reduction of greenhouse gases in the atmosphere or otherwise must account for the time that the carbon is kept out of the atmosphere.*

Carbon sequestration in forests and other biotic systems is potentially reversible. Therefore, projects must identify risk factors that threaten the permanence of emissions reductions and implement measures that improve the long-term security of the carbon benefits. Projects must be monitored indefinitely to ensure that changes in carbon stocks can be appropriately credited and debited. Project sponsors must be liable for ensuring accurate monitoring and crediting of changes in carbon stocks until project lands are covered under a national accounting system or similar mechanism. For projects of limited duration that end prior to implementation of such a system, project sponsors could, inter alia, purchase insurance and/or replace reversible LULUCF credits with credits from permanent emissions abatement at the end of the project period.

Proposed Rules:

1. The duration of each project, and the expiration dates of CERs resulting from that project, shall be agreed upon by the entities involved in the project, with the approval of the Parties involved in the project. A CER shall expire at the end of the commitment period or at a later date, specified by the project developer, that extends into subsequent commitment periods.

2. Upon expiration of the CER or release of the carbon, whichever comes first, the Party that used the CER to meet its quantified limitation or reduction commitment must replace the CER with another CER, ERU or AAU. If the Party replaces the CER with another CER from a LULUCF project, this rule applies upon expiration of the replacement CER.

3. If the carbon is released before a Party uses the CER to meet its quantified limitation or reduction commitment, the CER is void and may not be so used.

4. Third party audits of all LULUCF projects must be conducted at the end of each commitment period to verify that the carbon remains fixed.

Principle 7

Proportionality *– The number of credits available to Parties from LULUCF projects should be commensurate with the proportion of total greenhouse gas emissions attributable to emissions from land use, land-use change and forestry.*

Most greenhouse gas emissions originate with the energy, industry and transport sectors and the large majority of emission reductions should come from these sectors. A limitation must be placed on the amount of credit available from LULUCF projects in the CDM, commensurate with the proportion of global greenhouse gas emissions attributable to land use, land-use change and forestry, as determined by the Intergovernmental Panel on Climate Change. In this way, LULUCF projects can contribute to a balanced portfolio that delivers technology transfer benefits across multiple sectors, while best meeting the sustainable development requirements of the CDM and the overall objectives of the Convention.

Proposed Rules:

1. Within any single commitment period, the number of CERs from LULUCF projects shall be limited so as to be consistent with a requirement that the percentage contribution of the LULUCF sector to total net emissions reductions shall not exceed the percentage of GHGs emitted from LULUCF globally, as determined by the IPCC.