



## Statement of Principles

Earth's remaining primary forests<sup>\*†</sup> are unique natural life-support systems, critical to sustain forest dependent communities<sup>1</sup>, Indigenous Peoples and their cultures<sup>2-6</sup>, biological diversity<sup>7-10</sup> and vital ecosystem services<sup>11</sup> such as climate stabilization<sup>12-16</sup> and clean water<sup>17-19</sup>. Primary forests are fundamental to the good ecological functioning of the planet and to human wellbeing: the values they provide are irreplaceable and cannot be matched by production forests or plantations.

Despite increasing recognition of their importance<sup>20</sup>, including at IUCN's World Conservation Congress<sup>21</sup>, Earth's primary forests are in crisis<sup>22-25</sup>. Over a third of the planet's original forest cover has been cleared<sup>22</sup> (including half of all tropical forests<sup>24</sup>), much of it in the last sixty years<sup>22</sup>. Of our remaining forests, only about a third qualify as primary forests<sup>25</sup> and we are destroying, fragmenting and degrading these forests at very high rates<sup>22-30</sup>. Only about a fifth of our remaining primary forests are protected, just 5% of their original extent<sup>22</sup>. By comparison, about a third of the planet's forests overall are used primarily for the production of wood and non-wood products<sup>31</sup>.

A convergence of recent findings creates a powerful impetus for a new global consensus to respond to this crisis and protect our remaining primary forests:

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\* Consistent with the FAO (2012) we recognize three categories of forest: (i) primary forest – naturally regenerated forest of native species that have not been subjected to industrial activities and where ecological processes are not significantly disrupted; (ii) secondary forests (also called “production forests”) – forests used for industrial logging and where there are clearly visible signs of forest degradation due to extensive human impacts but where the forest is still reliant upon natural regeneration processes, and (iii) planted forests (also called “plantation forests” predominantly composed of trees established through planting and/or deliberate seeding of commercial varieties. See: FAO (2015). Forest Resources Assessment 2015 Terms and definitions, Forest Resources Assessment Working Paper 180, Food and Agriculture Organizations of the United Nations, Rome; and discussion in the Supplementary Materials of Mackey et al. 2014).

† We focus on primary forests but note that other ecologically intact ecosystems, such as grasslands or wetlands, are also critically important to protect.

- **Primary forest destruction, degradation and fragmentation continues at alarming rates:** The United Nations Food and Agriculture Organization estimates net primary forest loss at 67 million hectares between 1990-2015<sup>25</sup>. However, numerous studies indicate losses are far higher and emphasize that remaining primary forests are increasingly vulnerable due to fragmentation<sup>26-31</sup>.
- **Primary forest degradation and destruction contributes significantly to the global biodiversity crisis.** Primary forests contain about two thirds of the planet's terrestrial species<sup>32</sup>, and their degradation and loss is driving us towards Earth's sixth mass extinction crisis<sup>33-34</sup>, the first mass extinction to be caused by humans.
- **Primary forest degradation and destruction are major drivers of the climate change crisis.** Primary forests contain massive carbon stocks and also act as a major carbon sink<sup>12-16,35-36</sup>. Clearing and degrading primary forests therefore generates substantial carbon dioxide emissions<sup>12-16,35-40</sup>. Protecting primary forests from degradation and conversion, restoring degraded forest and allowing cleared forest to regenerate are essential elements of a comprehensive approach to stabilizing atmospheric carbon at safe levels and transitioning as rapidly as possible from fossil fuels to environmentally friendly renewables<sup>12-14</sup>. Estimates suggest tropical forests alone could reduce annual greenhouse gas emissions by 30%-50% over the next several decades<sup>12-14</sup>. Temperate and boreal systems also store very large amounts of carbon and are among the most carbon-dense forests on the planet<sup>40</sup>.
- **Primary forest degradation and destruction has profound social and cultural impacts.** Primary forests are vital to the cultures<sup>5-6</sup>, livelihoods<sup>1</sup>, health,<sup>40</sup> and wellbeing<sup>2,42</sup> of hundreds of millions of people, including Indigenous Peoples and many primary forests are on the traditional lands of Indigenous Peoples<sup>3-4</sup>. Defenders of primary forests often suffer human rights abuses and many are murdered each year<sup>43-44</sup>. The loss and degradation of primary forests therefore causes serious negative social, cultural and economic impacts.
- **Clearing primary forests can have major impacts on forest-driven water and energy cycles at local, global and continental scales.** Primary forests provide the highest water quality<sup>17-19</sup>. Forests, including primary forests, also generate water vapor through evapotranspiration, affecting precipitation at continental scales, provide cooling at local and global scales, and providing infiltration and groundwater recharge.<sup>45</sup>
- **Best practices and certification schemes have not reconciled industrial activity with primary forest conservation at large scales.**
  - **Industrial logging has not proven sustainable in primary forests.** Industrial logging causes extensive carbon dioxide emissions and biodiversity losses, decreases resilience, reduces water quality, increases risk of uncharacteristic fires, and in the tropics often leads to conversion to agriculture<sup>22,46-58</sup>. Sustaining timber yields at economically viable extraction rates through industrial logging is likely not possible in primary tropical forests: tropical timber species targeted by industrial logging are often depleted within three rotations<sup>46-49</sup>. The ability to log sustainably in boreal and temperate primary forests is unproven<sup>53-55</sup>.

Many timber operations are certified around the world despite lack of sustainability and poor enforcement of certification requirements<sup>59-62</sup>. Where certification has helped reduce deforestation, benefits have been small<sup>26,63</sup> and some certified operations may cause greater damage than non-certified operations<sup>64</sup>. Poor governance is a serious global concern and primary forests are often illegally logged<sup>65-69</sup>; in many cases, legal concessions enable illegal logging<sup>61-62</sup>. Logging in primary tropical forests also provides few local economic benefits<sup>70-75</sup>. While some logged forests retain important conservation values<sup>76</sup>, industrial logging is not a conservation strategy for the world's primary forests.

- **Industrial agriculture is having a devastating impact on primary forests.** Industrial agriculture and in particular 'forest risk commodities' including palm oil, soy, rubber, cocoa, cattle and raw materials for bio-energy are rapidly expanding and are responsible for the majority of global deforestation over the last several decades<sup>65,77-78</sup>.
- **Mining, oil and gas and hydroelectric (dam) projects** are also proliferating rapidly and are increasingly a threat to primary forests around the world<sup>79-82</sup>.
- **Roads, pipelines, power-lines and other forms of linear infrastructure are having major impacts on primary forests.** Hundreds of thousands of kilometers of roads are being built in tropical, temperate, and boreal regions for logging and other industrial activities<sup>83-85</sup>. Beyond the direct degradation and deforestation resulting from road building itself, significant indirect ecological impacts are associated with the spread of roads through intact primary forest landscapes. For example, in the Amazon region, 95% of tropical deforestation occurs within 5.5 kilometers of a road or a river<sup>58</sup>.
- **Excluding industrial activities from primary forests is the most effective way to keep primary forests intact.** Government protected areas, Indigenous Peoples' and community conserved territories and areas, private protected areas, and other mechanisms such as payments for ecosystem service schemes, have proven capacity to maintain primary forests and their values intact, and can optimize biodiversity, ecosystem service and social and cultural benefits.<sup>3-4,90-96</sup>

Consistent with the Palangka Raya Declaration we note that Indigenous Peoples' and local community rights to own, use, manage and access primary forests to which they have customary rights must be recognized at all times. Implementation of conservation mechanisms or designations of no-go areas for industrial activity must only be taken with the free, prior and informed consent of indigenous peoples and local communities and in a manner fully consistent with rights based approaches. Indigenous Peoples' and local communities' self-declared no-go areas for industrial activity should also be recognized and respected. We emphasize that recognizing land tenure is a critical determinant in preventing deforestation and degradation of primary forests<sup>93-96</sup>.

- **We can develop solutions to meet global wood demand that do not involve exploiting primary forests.** A much larger proportion of global timber demand can be met through

plantations on previously cleared, degraded land or degraded forests with low biodiversity value, by using alternative fibers, and by reducing wasteful consumption<sup>98-99</sup>. Industrial logging of primary forests in developing countries often targets precious or semi-precious timber species for luxury markets, or markets for products that could be substituted from plantations, such as decking or plywood<sup>98</sup>. Industrial logging in primary forests is also often subsidized<sup>100-101</sup>. However, plantations should not be established without the free, prior and informed consent of indigenous peoples and local communities.

Although forest conservation has been a longstanding international goal, the protection of primary forests in particular has not been an explicit objective in international agreements, despite the fact that destruction and degradation of primary forests threatens global life support systems and critical planetary boundaries<sup>102-103</sup>.

However, the recognition in the Paris Agreement under the UN Framework Convention on Climate Change (UNFCCC) of the importance of ecosystem integrity and carbon sinks opens a valuable window of opportunity. There is also a growing realization that achieving the UN's 2030 Agenda for Sustainable Development and Sustainable Development Goals (SDGs), the Convention on Biological Diversity's goal of halting biodiversity loss, and the Convention to Combat Desertification's objective of reversing and preventing desertification and mitigating the effects of drought, will require prioritizing the protection of primary forests in national and multilateral policies. We also note growing civil society consensus regarding the need to protect primary forests, as reflected in International Union for Conservation of Nature Resolution WCC 2016 Res. 045<sup>21</sup>.

**We therefore call upon governments, intergovernmental and non-governmental organizations, corporations and financiers around the world to recognize as a matter of principle that the planet's primary forests should be set aside as "no-go areas" for industrial activities.** We further call upon these actors to apply this principle as a matter of urgency, by integrating it into laws and policies and taking actions to protect primary forests by supporting the full range of available conservation mechanisms. These include government protected areas, Indigenous Peoples' and local communities' systems of forest use and management, including Indigenous Peoples' and community conserved territories and areas (ICCAs) and sacred natural and cultural sites, private protected areas, conservation concessions and/or areas protected to maintain ecosystem services and biodiversity values. To support this call, we recommend the following actions:

- Defining, mapping and monitoring remaining primary forests for exclusion from industrial logging and other industrial activities.
- Adopting science-based definitions within multilateral environmental agreements that distinguish between primary forests and other forest categories and that can be used for monitoring purposes.
- Strengthening legal and governance frameworks, transparency and law enforcement to protect primary forests.
- Recognizing the following hierarchy of actions related to forest management worldwide needed to maximize climate, biodiversity and social outcomes: (1) protection of primary

forests; (2) restoration of degraded natural forests and natural regeneration of forests; and (3) improving management of production forests and plantations.

- Implementing landscape-level land use spatial planning, ideally at national levels, to ensure connectivity between, and buffering of, primary forests.
- Prioritizing conservation activities that provide long-term protection of primary forests in International forest policy and funding mechanisms. There should be no financial or economic incentives for activities that degrade primary forests, such as industrial logging.
- Encouraging restoration, including natural disturbance processes, and natural regeneration activities that enhance primary forest protection, for example by buffering primary forests and enhancing ecological connectivity.
- Ensuring policy, financial and market mechanisms discourage conversion of natural forests to agricultural crops including tree crops.
- Recognizing that improved management of production forests and plantations has a role to play in reducing land-use pressure on primary forests.
- Protecting, upholding and strengthening the rights of Indigenous Peoples, as expressed in the United Nations Declaration on the Rights of Indigenous Peoples, and providing funding to Indigenous Peoples and local communities that choose to prioritize the protection of primary forests, including through Indigenous Peoples' and community conserved territories and areas (ICCAs) and sacred natural and cultural sites.
- Ensuring more effective linkages between the Convention on Biological Diversity and other relevant international and regional conventions to ensure they reinforce each other's objectives and support conservation of primary forests.
- Removing perverse incentives in international instruments leading to degradation or conversion of primary forests. For example, plantations and production forests must not be treated as equivalent to primary forests under the UNFCCC and burning forest biomass for large-scale energy production should be actively discouraged.
- Recognizing through environmental accounting systems the unique and essential contributions of primary forests in maximizing biodiversity conservation and ecosystem services.
- Conducting analyses of forest and agricultural product market dynamics and pricing levers to facilitate primary forest protection.
- Educating key markets, media and business associations about the consequences of primary forest loss and the availability of alternative sources of timber supply, and establishing a "primary forest-free" certification for wood products in existing certification mechanisms.

- Likewise, ensuring recognition of primary forests in private sector commitments on zero deforestation, so that plantations and production forests are not treated as equivalent to primary forests in terms of impact assessment and actions under the mitigation hierarchy.

A new policy consensus is needed on the protection of Earth's remaining primary forests to secure the ecological health of our planet and the wellbeing of people everywhere. We will not achieve the objectives of key social and environmental agreements, including the United Nations Framework Convention on Climate Change, the Convention on Biological Diversity and the Sustainable Development Goals, unless we move quickly to protect Earth's remaining primary forests.

For more information please see <http://primaryforest.org>

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