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# A Rights-Based Approach to Land Use in a Future Climate Agreement: Policy and Implementation Framework

## INTRODUCTION

Negotiations are currently underway for a new global climate agreement, in which all countries will commit to limiting greenhouse gas emissions to try and prevent the worst impacts of climate change. In many places, climate change is already impacting land and land use, with reduced food production among the earliest and most far-reaching consequences. Projections around the intensity and frequency of these impacts suggest that they will only worsen.[1] Overall, impacts on land and ecosystems have a disproportionate effect on the world's poorest and most vulnerable, who are often directly or indirectly reliant on natural resources for daily survival. How the land sector is included in a future climate deal will therefore be crucial, both for ensuring effective mitigation, and for protecting human rights, food security, and biodiversity.

There is growing appreciation that climate change can directly undermine human rights, particularly the rights of local communities and vulnerable peoples. The International Bar Association (IBA) recently highlighted how climate change undermines internationally protected human rights, identifying the right to life, the right to health and the right to subsistence as three fundamental human rights that climate change impacts will jeopardize.[2] Effectively recognizing these rights can strengthen resilience and support more sustainable solutions. Thus, it is critical to take a rights-based approach to climate change, designing policies that respect human rights as well as ecological integrity.

Unfortunately, there is a risk that policies aimed at addressing climate change could threaten rather than protect human rights. Increased competition for land, undermining tenure rights, and escalating conflicts has already resulted from some biofuel and carbon offset policies.[3] To prevent such risks in the future, approaches to land use in the climate regime must move beyond a pure mitigation focus. They must also recognize the critical role of adaptation for sustainable, long-term climate solutions that produce equitable responses while protecting biodiversity and rights. Emphasizing the link between climate change and human rights demonstrates the need for increased, simultaneous and urgent action on both fronts. While climate change is a direct threat to many core human rights, promoting and respecting rights is a central part of an effective response to the climate crisis.

### A New Global Climate Agreement

Negotiations are currently underway for a new international climate agreement, to be concluded at the end of 2015. The Durban

Overview

Four key principles must guide approaches to the land sector in the ADP: rights, ambition, equity, and biodiversity.

Platform for Enhanced Action (ADP), launched at the 17th UN Climate Conference of the Parties (COP17) in Durban in 2011, commits countries to work towards a post-2020 agreement with legal force that is "applicable to all" and negotiated "under the Convention."[4]

Parties have already started to submit Intended Nationally Determined Contributions (INDCs) in advance of COP 21 in Paris, France. The Lima "Call for Climate Action" provided guidance on the upfront information Parties will provide when putting forward their INDCs, although the scope of the INDCs continues to be debated. We argue here that INDCs must cover all of the elements of the 2015 agreement (mitigation, adaptation, finance, technology development and transfer, capacity-building and transparency), in line with Parties' respective commitments under the Convention. If mitigation and adaptation are to be effective and implemented in a way that both increases ambition and ensures equity, then actions in developing countries must be supported through links to finance, technology transfer, and capacity building.

This paper provides concrete recommendations for the current negotiations on how to implement a rights-based approach to the land sector in the future climate agreement. In the next sections we cover human rights, agriculture and food security, biodiversity and emissions from land use, with recommendations in each section. We offer recommendations for the elements of the Paris agreement and for information to be included in the INDCs.



While climate change is a direct threat to many core human rights, promoting and respecting rights is a central part of an effective response to the climate crisis.

## HUMAN RIGHTS FRAMEWORK

*How can human rights and the evolving international framework on the rights of indigenous peoples and local communities inform mitigation and adaptation policies in the land sector?*

Established principles of international human rights law provide that all people are entitled to fundamental rights and freedoms, yet climate change impacts and measures to mitigate or adapt to these impacts threaten to violate these rights on a massive scale. According to the UN Charter, the Universal Declaration of Human Rights, and other international human rights instruments, states have a duty to cooperate to protect human rights, including the duty to take effective action in the fight against climate change. Further, states must take adequate measures to respect and protect human rights when working to mitigate climate change or adapt to its impacts.[6]

Land and natural resources are central to providing livelihood security for much of the world's population, especially to indigenous peoples, women and minorities.[7] These stakeholders have deep historical and cultural connections to the land - they depend on the forest for basic needs and livelihoods. However, they often face risks and limitations in accessing forest resources. Notably, approximately one eighth of the world's forests are government-recognized community forests.[8] Climate action in the forest and land use sector must take these issues into account in a comprehensive way, focusing both on mitigation as well as adaptation, and ensuring that any land policies established under the UNFCCC are consistent with existing human rights obligations and principles. Such obligations are enshrined in international human rights conventions and other agreements, which articulate human rights generally and indigenous peoples' rights specifically relevant to land activities—including but not limited to the rights to life, food, health, housing, property, culture, non-discrimination, right to participate, access to information, access to justice and self-determination.

These rights are recognized and protected by a range of international agreements, in particular, the International Covenant on Civil and Political Rights, the International Covenant on Economic, Social and Cultural Rights, the International Convention on the Elimination of Racial Discrimination, ILO Convention 169, the UN Declaration on the Rights of Indigenous Peoples (UNDRIP),[9a] and the Convention on Biological Diversity. Indigenous peoples' rights, in particular, are recognized in UNDRIP and International Labour Organization Convention on Indigenous and Tribal Peoples, Convention No. 169 (ILO 169). UNDRIP provides minimum standards for indigenous peoples' survival, dignity and well-being and free prior and informed consent (FPIC); and ILO 169 explicitly recognizes indigenous peoples' right to self-determination and sets standards for governments regarding their economic, social-cultural and political rights, including the right to a land base. Notably, the Parties to these human rights treaties are also party to the UNFCCC.

### Overview of Recent Developments on Human Rights and Climate Change

In 2010, the Parties to the UNFCCC took a critical first step towards integrating human rights in the climate regime by including several references to rights in the Cancun Agreements. With respect to all climate actions, the decision explicitly recognizes the existing rights obligations of Parties to the UNFCCC, stating that countries should fully respect human rights in all climate change-related actions. While there is no reference to human rights in the land use provisions of the Kyoto Protocol[9b], such as Land Use, Land Use Change and Forestry (LULUCF), and the Clean Development Mechanism (CDM), with respect to reducing emissions from deforestation and forest degradation (REDD+), the Cancun Agreements established a set of safeguards that require, inter alia, REDD+ activities to be consistent with existing international conventions and agreements, which include human rights obligations.

# A Rights-Based Approach to Comprehensive Land Use Planning

Addressing all of the unique attributes of the land sector requires a broad approach that goes beyond mitigation to include adaptation, governance and respect for existing standards and international law. It also relies on financial and other support to effectively implement a comprehensive approach to land use planning. This can be understood as a broad framework for the development and support of policies and measures to enhance and protect land sector resources and the people who rely on them. Such a framework will need to go beyond a narrow carbon focus to include adaptation and to contribute to sustainable development.

## Key principles:

- **Rights:** ***Respect for rights to land, territories and resources*** - Rights must be integrated as a core part of any inclusion of the land sector in a new climate agreement. They must be protected and consistent with international standards and obligations.
- **Ambition:** ***Mitigation in the land sector must not displace or reduce mitigation in other sectors*** - Sequestration of carbon in land does not compensate for continued fossil fuel emissions. Competition for land also needs to be considered in any land-based mitigation policies.
- **Equity:** ***Food security*** - The principle of equity calls for equal atmospheric space to all, based on the concept of fair shares.[5] In terms of food security, this means a per capita allocation of the global carbon budget for emissions from food production, while at the same time prioritizing the need to eliminate unnecessary and wasteful agricultural emissions.
- **Biodiversity:** ***Ecological integrity and biodiversity*** - Mitigation and adaptation in the land sector should ensure ecological integrity and incentivise broader environmental benefits – such as enhanced biodiversity, water quality, habitat for wild fauna and flora, and soil fertility.



While the overarching language calling for rights protections has not yet been fully operationalized in the climate regime, it should be a guiding principle in the design and implementation of land policies. The UN Human Rights Council and other human rights bodies have recognized the link between climate change and human rights in a number of decisions and resolutions, including Resolutions 7/23, 10/4 and 26/L.33. Most recently, 28 international experts of the Human Rights Council (known as special procedures) issued an open letter to the Parties to the UNFCCC, calling for human rights protections in the 2015 agreement. In particular, the special procedures called on states to "ensure that all of the actions they [states] take to address climate change are fully in accordance with all of their human rights obligations."

The special procedures demanded that FPIC of indigenous peoples be respected as well as other rights such as access to information and public participation in decision-making, especially for those most affected by climate change.

Finally, recognition of indigenous peoples', local communities' and women's critical role in protecting forests and contributing to a climate solution has increased. These marginalized groups, whose well-being are tied to forests, often have weak, if any, legal rights that recognize their ownership of their forest. There are a number of studies supporting what indigenous, local communities and many civil society organizations have been arguing for years - that by strengthening communities' rights to their forests, countries can significantly reduce deforestation and mitigate climate change.[10] Therefore, states should legally recognize and strengthen indigenous peoples', local communities' and women's land and resources rights. Tenure rights provide recognized rights-holders with the ability to be involved in the design and implementation of land use activities as well as to benefit from them. Such tenure rights should recognize community rights to own, access, use, withdraw, alienate and exclude others' from accessing the forest. They should also include the right to benefit from and manage forest resources.

## *Recommendations*

- Developing country INDCs should prioritize strengthening tenure rights and land demarcation as an appropriate commitment in the context of land-based adaptation and mitigation contributions.
- The financial obligations and commitments that form part of developed country commitments should be stated in INDCs, and can be used for governance reform, demarcation and law enforcement to strengthen rights to land in developing countries.
- Include language in the operational provisions of the Paris agreement stating that the Parties to the UNFCCC shall, in all climate change-related actions, respect, protect, promote, and fulfill human rights for all.

# THE CHALLENGES TO MITIGATION IN THE LAND SECTOR

*There are limits to land-based mitigation, due to environmentally determined limits such as sink saturation, and competing uses for land. Hence, guidelines are needed that limit land sector mitigation, prioritizing and directing it to actions that strengthen rights, equity and biodiversity.*

The inclusion of land in mitigation contributions should be considered carefully in terms of whether and to what degree it enhances ambition. The land sector has the potential to contribute to mitigation, but it also has important implications for adaptation. The land sector is also fundamentally different from other sectors due to high levels of uncertainty in monitoring emissions, and the risks of reversals and non-permanence. Hence there are barriers to treating emissions from land, as comparable to emissions from other sectors.

## The problem with permanence

The land sector is unique in climate mitigation as it is the only sector where both emissions and removals occur. There is a common assumption that $CO^2$ emissions from different sources are uniform and interchangeable (fungible) within our climatic system. However, in terms of ecological impact, volume, and stability over time, the carbon released from fossil fuels is not equivalent to the carbon stored in trees, plants and soils in the terrestrial ecosystem. Emissions and removals of terrestrial carbon occur on different time scales (decades to centuries) than fossil carbon sequestration (which happens over millennia). Reducing emissions from industrial processes can therefore be considered permanent, while sequestration of emissions in the land sector (forests and soils) is only temporary. Reducing emissions from avoided deforestation can be considered as similar to reduced emissions from fossil fuel use, however forests (and other land carbon stocks) are more vulnerable to reversals than industrial emissions. Reversals can occur through the risk of climatic impacts turning sinks to sources as described above, and the risk that increased pressure for land will place on land use decisions in coming decades.

If this fundamental difference between fossil and terrestrial carbon is not recognized, then carbon 'savings' from land use change may be used to justify the continued combustion of fossil fuels, substituting irreversible fossil fuel emissions with temporary terrestrial stores. While reducing carbon loss from land use can contribute to reducing global greenhouse gas (GHG) emissions, the maximum amount of this reduction is equivalent to only a small fraction of potential fossil fuel emissions, and is further limited by the natural carrying capacity of the terrestrial carbon stock.[11]

## Separate pillars for the land sector

The current policy approach that accounting for $CO^2$ emissions from land can be comparable to emissions from fossil fuels leads to undue focus on emission reductions in land. This is distracting climate policy making away from reducing emissions from the burning of fossil fuels. Separate targets for land-based and industrial emissions — meaning emission reductions from these two sources would not be fungible (exchangable) — would ensure greater environmental integrity in reporting and accounting rules. Accounting separately for industrial and terrestrial emission sources would allow more simplified monitoring requirements for the land sector enabling a variety of approaches to mitigation targets in the land sector.

Greater flexibility and non-quantitative targets (such as policy-based measures) could enhance ambition in the land sector by allowing for policy-based commitments that are more appropriate to facilitating action in some of the areas outlined in this briefing paper — rights, food and biodiversity. IPCC reporting guidelines, which Parties currently use for reporting on land-based emissions under the Convention, are a good starting point. However, these reporting frameworks must be expanded to include social and environmental considerations. The carbon storage capacity of land can provide a valuable, cost-effective, short-term service in helping to reduce atmospheric CO2, and slow the rate of anthropogenic climate change, bringing co-benefits for biodiversity and sustainable livelihoods.

## *Recommendations*

- Balance between flexibility and transparency for reporting on emissions can be achieved through current reporting requirements for all countries under the Convention.
- Non-fungibility: in order to ensure ambition of the overall climate framework, mitigation in the land sector should not be used to displace or reduce mitigation in other sectors. The principle of non-fungibility between industrial and terrestrial emissions should be reflected in the 2015 agreement.
- Proportionality: Expected mitigation from the land sector should be in proportion with its overall contribution to national GHG emissions. This limits the role of sequestration in land-based mitigation policy, in line with a science-based understanding of non-permanence and sink saturation.

- Guidelines for INDCs should include special requirements for land-based mitigation (considering accounting uncertainties, lack of comparability, and social and environmental risks).

## THE NEED TO PRIORITIZE FOOD SECURITY

*Prioritizing rights is essential to food security, and includes the rights to food, land, water, and seeds.*

Agriculture is central to the lives and livelihoods of billions of people around the world, with more than 70% of the global food supply coming from small-scale producers.[12]

The impacts of climate change on agriculture threaten us all, but especially those whose lives depend directly on producing food that sustain their families and their communities. Even another degree of temperature rise will be a matter of life and death for millions.

The rights of small-scale producers and consumers in developing countries therefore must be at the center of climate change policy-making on agriculture, to ensure adaptation is prioritized, mitigation is ambitious and equitable, and the right to food is ensured. Perverse outcomes from climate policy, such as current biofuels policies and practices that run the risk of undermining food security, must be avoided.[13]

### Securing the right to food in the face of climate change means securing the rights to essential resources: land, water, and seeds

Land, water, and seeds are essential to produce food and ensure the right to food – especially in a changing climate. The starting point for the consideration of agriculture and land use within a new climate agreement must be a recognition of the fundamental need to protect the rights to food, land, water, and seeds as measures are developed to address climate change.

Beyond ensuring these rights, the agreement must provide small-scale food producers with adequate financial and technical resources and support to adapt to climate change. For example, small-scale producers will benefit greatly from investment in agro-ecological methods that increase resilience and improve soil quality and yields. Access to seed and breed diversity and the means to freely share and work with this diversity is essential for producers to be able to adapt crops and livestock to changing climatic conditions.

Finally, there is a fundamental need to increase overall mitigation ambition in order to minimize the adaptation that small-scale producers will need to undertake and realize the right to food. Climate change is already having impacts on agricultural production worldwide, impacts that will continue to increase as temperatures rise. A global goal to limit temperature rise to 1.5°C above pre-industrial levels is paramount to limit these impacts.

### Addressing mitigation in the agriculture sector: a food security threshold

Because of the centrality of the agriculture sector and food production for lives and livelihoods, how we reduce emissions in the sector is critical. A rights-based approach to addressing land use in a future climate agreement has two important implications for emissions from agriculture. First, the mitigation burden in agriculture should fall on those who are high emitters of GHGs, rather than relying on largely unknown sequestration potential in soils and other ecosystems. Second, emission reductions should be permanent – through reductions in emissions from industrial agriculture[14] – rather than temporarily sequestered soil carbon.

Industrial and intensive systems of agricultural production and high per capita levels of consumption and food waste are responsible for far greater amounts of agricultural GHG emissions per capita than small-scale production. An equitable approach to mitigation in the agriculture sector would determine responsibilities based on per capita emission numbers. Countries with lower per capita agricultural emissions would have the right to a basic level of emissions from agriculture to protect food security.

Currently the agriculture sector produces at least 14% of direct global emissions of GHGs, principally non-CO2 gases: nitrous oxide (N2O) from the use of synthetic nitrogen fertilizers and methane (CH4) from animals, which corresponds to around 5.0-5.8 Gt CO2 eq/yr.[15,16] Emissions from agriculture are expected to increase rapidly over the coming century. However, effective climate mitigation will require emissions to decline to near zero around the middle of the century.

But food consumption is not optional. In producing our food the agriculture sector will have to continue to emit some amount of GHGs. However, rather than increasing, agricultural emissions will need to remain at roughly the current level for the remainder of this century. This reality presents not only a technical challenge of feeding the world's population without increasing emissions from agriculture, but also the ethical challenge of equitably sharing the rights to the remaining atmospheric space for agricultural emissions. A rights-based approach to food security demands an equal per capita allocation of agricultural emissions, which could be considered a food security threshold. Emission reductions would need to come from areas of agriculture with high emissions, such as industrial agriculture and over-use of nitrogen fertilizers, while protecting the rights of small-holders to food production and a base level of food security emissions.

## Mitigating agricultural $CO^2$ emissions

Carbon sequestration is not a viable mitigation strategy for agriculture, in part because $CO^2$ emissions are a very small part of overall agricultural emissions (excluding land use change and mineral soils). $CO^2$ mitigation options for the agriculture sector often focus on the potential for sequestering carbon into soils and other ecosystems, rather than avoiding emissions. This approach should be rejected for at least three reasons. First, carbon sequestration in terrestrial ecosystems is, by nature, temporary compared to the permanent emission reductions achieved by preventing CH4, N2O, and fossil fuel emissions (as discussed above). Second, the mitigation burden in agriculture must be assumed by those countries where emissions take place, rather than by using carbon sequestration to allow continued emissions elsewhere.

A third reason why focusing on carbon sequestration in soils is problematic is because it could increase competition for land, placing demands for carbon sequestration against food production. A range of agricultural practices that enhance soil health and increase carbon sequestered in soils, in particular agro-ecological practices, can reverse soil degradation and increase water-holding capacity. These practices should be supported for food security and adaptation benefits, not as mitigation actions.



### *Recommendations*:

- The elements of a 2015 agreement should include a global goal on adaptation and food security - minimizing impacts on food security and the right to food also means limiting global temperature rise to 1.5°C.
- The mitigation burden in agriculture must be assumed by those with the means to do so. Contributions related to the agriculture sector should reflect:
    - Equity – a fair share of the remaining global carbon budget for agricultural emissions, using a per capita approach;
    - Adaptation approaches and practices that contribute to ensuring the right to food;
    - A food security threshold in guidelines under the ADP.
- INDC mitigation contributions should focus on the main emissions from the sector (CH4, N2O). Examples of priority mitigation actions would include addressing high national per capita meat consumption and the production and use of synthetic nitrogen fertilizers in industrial agriculture systems.

## BIODIVERSITY

*The threat climate changes poses to global biodiversity is extensive - impacts vary across regions and a recent study shows the tropics will be highly affected, leading to climates with no current analogues in the planet.*

Global biodiversity refers to the diversity of all life on the planet. We are now facing an escalating extinction crisis with irreversible loss of biodiversity, such as species' extinctions, continuing every day at up to 1,000 times or more the natural rate.[17] It is widely known that climate change and biodiversity are interconnected, with projected impacts of climate change showing extensive biodiversity loss at around 3°C additional warming.[18] At the same time, biodiversity increases resilience to climate change and enhances adaptation and mitigation. Hence, conserving and sustainably managing biodiversity is critical to addressing climate change.

This growing body of scientific evidence on the current and projected impacts of climate change on biodiversity led a group of scientists and policy makers to put forward the Lima Declaration on Biodiversity and Climate Change at the beginning of COP 20 in Peru.[19] The Declaration calls for integrated research on biodiversity and climate change and increased recognition of key biodiversity issues in the context of climate change. Effective action to address climate change and biodiversity loss requires a coherent set of actions across sectors and levels of government and society, including a policy framework with economic incentives, public participation, continuous monitoring and effective enforcement.[20] Here we elaborate on the links between biodiversity and the principles for a rights-based approach to land use and climate change in a future climate agreement.

## Biodiversity and human rights

Loss of biodiversity will have negative consequences for human well-being. Increased recognition of the links between human rights and the environment has led to a rapid growth in the number and scope of international and domestic laws, judicial decisions, and academic studies on the relationship between human rights and the environment. In 2012 the Human Rights Council established a mandate on human rights and the environment, which investigates the human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, and promotes best practices relating to the use of human rights in environmental policy-making. This resolution resulted in establishing an Independent Expert on human rights and the environment, whose mandate is to study human rights obligations with respect to the enjoyment of a sustainable environment and to develop best practices in this field.[21]

The IBA has also established a Human Rights Task Force, which wrote a report in July 2014 calling for a rights-based approach to climate change as well as a recognition of a freestanding right to a safe, clean, healthy, and sustainable environment.[22]

## Biodiversity and agriculture

Agro-biodiversity is defined as all of the components of biological diversity relevant to food and agriculture present in agro-ecosystems, including microbes, insect pollinators, among others. Agrobiodiversity is key to enhancing food security and improving human well-being.

A particularly important aspect of Agrobiodiversity, which is under threat, is seed diversity. Diverse varieties of seeds and breeds are important to create resilient agricultural systems and for breeding new varieties adapted to changing climatic conditions. Crop and livestock diversity represent options for the future under a changing climate, and need to be stewarded and protected.

Agricultural practices can have negative environmental and biodiversity consequences. The intensification of agricultural production involves increased use of synthetic fertilizers, pesticides, and often irrigation. Fertilizer use significantly reduces the diversity of soil organisms that are critical for long-term soil health and fertility. Pesticides are often broad-spectrum, killing wildlife, beneficial insects like pollinators, and contaminating freshwater sources used by people and animals.

There are also risks that policies and actions to address climate change can have negative impacts on biodiversity. A recent report from International Union for the Conservation of Nature (IUCN) finds that current biofuels policies and practices run the risk of undermining food security, while degrading ecosystems through deforestation, agrochemical pollution and the introduction of invasive species and genetically modified feedstock.[23]

## Forests and biodiversity

The loss of intact natural forests is one of the leading causes of biodiversity loss, as well as a significant source of GHG emissions. The expansion of agriculture and timber plantations is the biggest threat to the world's forests, leading to a downward spiral of encroaching road networks and forest mosaics, which lack the ecological integrity of intact forest landscapes. The resilience of a forest ecosystem is tied to its biodiversity. Thus, any isolated and fragmented areas of deforestation and forest degradation can further undermine the health and viability of the forest ecosystem.

The effects of deforestation and forest degradation can increase the incidence of drought, fire and tree mortality, with studies indicating that additional climate change would have substantial impacts on tropical forests, reinforcing their contributions to global climate change.[24] Recent research in the Amazon rainforest shows higher-than-expected incidence of die-off from drought, with slow recovery of canopy structure and function, potentially leading to loss of carbon storage and changes in rainfall patterns.[25]

### *Recommendations*:

- Recognize the links between human rights and the environment, integrating the right to a healthy environment within human rights and climate change language.
- Protect seed diversity to create resilient agricultural systems and to breed new varieties adaptable to changing climatic conditions.
- Maintain and enhance forest resilience through protecting biodiversity, and safeguarding the conversion of intact natural forest landscapes.

## Conclusion

Considering the unique nature and impacts of the land sector, how it is integrated into the 2015 climate agreement will determine whether it effectively mitigates carbon, and protects human rights, food security, and biodiversity. Four key principles-rights, ambition, equity, and biodiversity- must guide a rights-based approach to land use in the actual policy and in the implementation framework.

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