Land Matters for Climate
Reducing the Gap and Approaching the Target

The land use sector represents almost 25% of total global emissions. These emissions can be reduced. There is also great potential for carbon sequestration through the scaling up, and scaling out, of proven and effective practices.

Improved land use and management, such as low-emissions agriculture, agro-forestry and ecosystem conservation and restoration could, under certain circumstances, close the remaining emissions gap by up to 25%.

These climate-smart land management practices nearly always come with adaptation co-benefits. Their more efficient use of resources and inputs ensure greater food and water security, and build community resilience while, at the same time, sequestering carbon.

In this brief, we identify a key element in the climate change equation often missing in the current discussions. We offer an evidence-based argument that the mitigation potential of the land use sector, realized through land rehabilitation and restoration activities, can make a significant contribution to closing this gap.

Priorities for Action

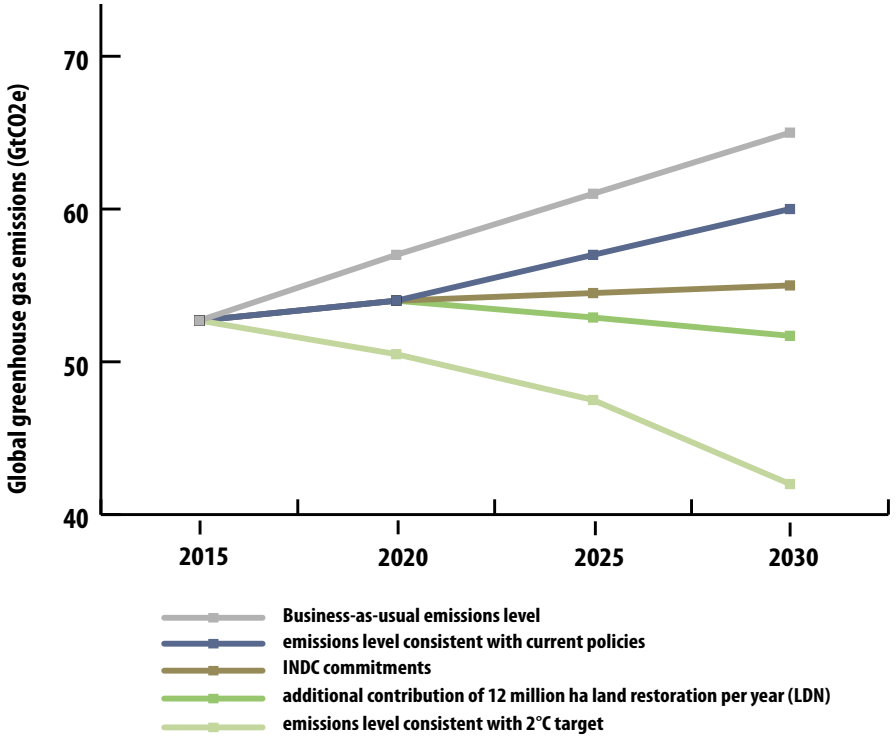
- **URGENT CHALLENGE:** The emissions gap is likely to remain significant and threatening, requiring actions above and beyond those currently being pledged.
- **IMMEDIATE ACTION:** Policies and incentives that promote sustainable land management, including carbon sequestration through rehabilitation and restoration, may well be the missing piece of the climate puzzle that helps to further reduce the emissions gap in a demonstrable and cost-effective manner.
- **SETTING PRIORITIES:** The transition to "climate-smart" land management practices, including for example low-emissions agriculture, agroforestry and the restoration of high carbon-value ecosystems, such as forests and peatlands, will require sectoral coordination and investments in integrated land use planning.
- **MULTIPLE BENEFITS:** Adopting and scaling up more sustainable management practices in the land use sector not holds significant mitigation potential but often provides short-term returns in terms of land productivity and food security while, at the same time, helping to ensure the long-term resilience and adaptive capacity of vulnerable communities.
- **MEASURING PROGRESS:** An evidence-based framework for accounting for carbon debits and credits will be absolutely essential for measuring progress. Future carbon accounting frameworks will need to cover all land uses and land use changes in order to fully recognize the land use sector's mitigation contribution.
- **NEW PARADIGM:** Under one scenario to achieve Land Degradation Neutrality (Sustainable Development Goal target 15.3), additional commitments in the land use sector, namely to restore and rehabilitate 12 million hectares of degraded land per year could help close the emissions gap by up to 25% in the year 2030.

The emissions gap is the difference between the level of greenhouse gas emissions, consistent with meeting the 2° C target set by the Cancun climate change conference, and the emissions reductions that governments have committed to in their current policies. The gap that needs to be closed in order to stay on target is currently estimated a18 $GtC0_2e$ (gigatons carbon dioxide equivalent). This means that from the expected global emissions of 60 $GtC0_2e$, we need to come down to 42 $GtC0_2e$ by 2030 .

By December 2015, it is anticipated that the commitments in the Intended Nationally Determined Contributions (INDCs) would only reduce emissions by 5 $GtC0_2e$ by 2030 . This closes the emissions gap by less than 30% of what is required; so the urgent challenge now is to find the missing piece of the puzzle and close the remaining gap. While investment in low-carbon energy infrastructure is increasing, a more concerted effort, particularly in the land use sector, will now be required.

In the short to medium term, parallel actions are critical. Firstly, we must continue to improve the efficiency of current energy production and consumption, the major focus of efforts until now. Secondly -- and the premise of this brief – is that the adoption of more sustainable land management, rehabilitation and restoration, up till now largely untapped, would provide a rapid and low-cost reduction in emissions. This would not only help close the gap, but also provide significant benefits to the rural poor and other vulnerable communities.

Land matters for climate, its rehabilitation and sustainable management is critical to closing the emissions gap and staying on target. In the post-2015 world, the confluence of the development and climate agendas can now be leveraged to raise the profile of the land use sector in climate change mitigation and adaptation while, at the same time, addressing multiple global challenges.



THE CHANGWON INITIATIVE

UNCCD
United Nations Convention to Combat Desertification

United Nations Convention to Combat Desertification, UN Campus, Platz der Vereinten Nationen 1, 53113 Bonn, Germany
Postal Address: PO Box 260129, 53153 Bonn, Germany
T el. +49 (0) 228 815 2800 Fax: +49 (0) 228 815 2898/99 E-mail: secretariat@unccd.int Web-site: www.unccd.int