



**NDC ASPECTS**

# Policy Brief

## **Global Climate Governance for the Decarbonisation of the AFOLU sector**

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## Key messages

- The Agriculture, Forest and Other Land Use (AFOLU) sector is one of the major gross emitters of greenhouse gases (GHG), mostly driven by deforestation and agricultural emissions, while Forest and Other Land Use (FOLU) remains a net sink. Mitigation measures in the sector can contribute positively to climate change adaptation and several of the Sustainable Development Goals (SDGs).
- International cooperation has significant potential to promote mitigation in the sector, in particular in developing countries. However, up to now mitigation results have been limited and not sustained over time despite the investments made in capacity building and readiness activities.
- Enhancing coordination among initiatives, and broadening the participation (i.e. government-civil society, public-private) and balancing decision-making (i.e. developing and developed countries) power among relevant groups, could help to incorporate these actors' interests into global governance and make the initiatives more effective and the results resilient.
- To successfully foster the sector's potential in an increasingly interconnected world, land-use governance needs to be strengthened through consistent land policies and regulation, enhanced land administration functions, and better land information and monitoring systems at all scales
- The adoption of consistent sector standards for measurement, reporting and verification (MRV) across existing institutions and initiatives, aligned with the rules and modalities adopted by the UN Framework Convention on Climate Change (UNFCCC), could greatly enhance the transparency and comparability of efforts across countries.
- No solution will work if there is only reliance on one finance stream based on result-based payments (i.e. though carbon markets) where the underlying risk aversion of donors and buyers and the short-term nature of targets and goals remains an issue. Upfront investments and other economic and non-economic incentives will need to be considered in the space of international cooperation and finance.

## The Potential of International Institutions to Address Barriers

The AFOLU sector accounted for 13-21% of global total anthropogenic greenhouse gas (GHG) emissions in the period 2010-2019 (IPCC, 2022). The emissions profile of AFOLU differs from other sectors, with a greater proportion of non-CO<sub>2</sub> gases (CH<sub>4</sub> and N<sub>2</sub>O) and its biological capacity to sequester CO<sub>2</sub> from the atmosphere. The larger driver of CO<sub>2</sub> emissions is deforestation (45% of AFOLU gross emissions, IPCC, 2022), though it has declined in the last three decades. At the same time, CH<sub>4</sub> and N<sub>2</sub>O emissions are increasing, with the largest sources being manure application, nitrogen deposition and fertilizer use. Overall, the FOLU sector is a net sink. Recent studies indicate that to achieve overall carbon neutrality by 2050, substantial CO<sub>2</sub> removals (CDR) will be needed in the sector to compensate for unavoidable emissions in other sectors (Roe et al., 2019; Griscom et al., 2017). However, there is evidence that land sinks will become less effective over time (Dow et al. 2022, Jiang et





al. 2020, IPCC 2021) due to climate change, and land use competition (i.e. food security, deployment of renewables). It is therefore important to caution against excessive reliance on land sinks to slow down or avoid decarbonisation in other sectors.

Forest, agriculture, and other land uses governance are not usually integrated into a common framework at national level, but often lie with competing institutions and interests. Similarly, its international governance initiatives often can result in conflicting support across different subsectors (i.e. Agriculture and Forest). Integration has been mainly promoted through soft law, programmes, promotion of integrative approaches (e.g. the landscape approach, Climate Smart Agriculture and agroforestry) and framing (Soto & Visseren-Hamakers, 2018).

The identified barriers to mitigation action are related to technological, ecological, institutional, economic and socio-cultural aspects. To this can be added the potentially increasingly high vulnerability of the AFOLU sector to climate change impacts when considering its role in global mitigation pathways. The existing sectoral governance landscape partially addresses these barriers through several governance functions like providing guidance and signalling to actors, setting rules to facilitate collective action, enhancing transparency and accountability (including compliance), offering support to means of implementation (capacity building, technology and finance), and promoting knowledge diffusion and learning.

Table A summarises mitigation barriers that still need to be further addressed and possible broad actions for international cooperation to help overcome them against five key governance functions (Oberthür et al 2017) that international institutions can perform. A more in-depth analysis can be found in Vidal et al (2022).

**Table A: Potential of international institutions to address barriers**

Governance function	Mitigation barrier	Options to address barriers
<ul style="list-style-type: none"> <li>› Guidance &amp; signal</li> </ul>	<ul style="list-style-type: none"> <li>› Lack of political commitment and ambition</li> <li>› Governance misalignment</li> </ul>	<ul style="list-style-type: none"> <li>› International governance could send stronger guidance and signals in a more effective and concrete way on how to effectively implement action, also considering the increasing vulnerability of land systems due to climate change.</li> <li>› Providing space for better alignment among the specific subsector governance initiatives with the UNFCCC existing rules and modalities.</li> </ul>
<ul style="list-style-type: none"> <li>› Rules &amp; standards</li> </ul>	<ul style="list-style-type: none"> <li>› Lack of institutional capacity</li> <li>› Complexity of rules and modalities</li> <li>› Uneven share of benefits</li> </ul>	<ul style="list-style-type: none"> <li>› Strengthening the capacities to respect and promote the application of international rules and standards will allow for the mobilization and distribution of support according to specific country and stakeholders needs*.</li> <li>› Supporting the capacities and providing spaces for knowledge sharing of success stories and failures (South-South and North-South) on the implementation of MRV and environmental and social safeguards, and more broadly fostering the inclusion of information on trade-offs with critical ecosystem services beyond carbon.</li> <li>› Promoting international consensus on the range of incentives (including market and non-market based) and/or disincentives that could support the AFOLU sector NDC commitments implementation the while respecting national sovereignty and flexible enough to be tailored to specific country circumstances.</li> </ul>





<ul style="list-style-type: none"> <li>› Transparency &amp; accountability</li> </ul>	<ul style="list-style-type: none"> <li>› Lack of transparency</li> <li>› Lack of high-quality data on carbon emissions</li> </ul>	<ul style="list-style-type: none"> <li>› Supporting the engagement of country experts in the process of assessments under the Enhanced Transparency Framework (ETF) for the sector (for example, financing expert forums for experience exchange) to build trust in the process.</li> <li>› Efforts to build the ETF to track the implementation of AFOLU mitigation results, in particular land use measures, in the NDCs should be based on the existing experience and stabilised systems**, while incorporating in a consistent manner the new data and monitoring technologies with the support on international cooperation.</li> </ul>
<ul style="list-style-type: none"> <li>› Means of implementation</li> </ul>	<ul style="list-style-type: none"> <li>› Access to finance</li> <li>› Uneven share of benefits</li> <li>› Opportunity cost</li> </ul>	<ul style="list-style-type: none"> <li>› Catalysing the mobilisation of finance for implementation according to the specific needs and capacities to access finance in the national and regional context.</li> <li>› Providing space for identification of monetary and non-monetary incentives and for the engagement of the different stakeholders (e.g., public, business and civil society organizations) to facilitate Parties to act and enhance ambition by improving the benefits sharing.</li> </ul>
<ul style="list-style-type: none"> <li>› Knowledge &amp; learning</li> </ul>	<ul style="list-style-type: none"> <li>› Proliferation of potentially conflicting data</li> <li>› Lack of technical capacity</li> <li>› Environmental awareness</li> <li>› Access to education</li> <li>› Lack of trained workers</li> </ul>	<ul style="list-style-type: none"> <li>› Enhancing transparency of data sets that are emerging at different scales (in particular globally), including on their potential use and the comparability among them and with nationally collected data.</li> <li>› Ensuring coordination among international capacity building initiatives within and across the subsectors and land uses in a particular scale of implementation and across scales.</li> <li>› Facilitating the sharing of scientifically based information and knowledge across different relevant social actors.</li> <li>› Strengthen technical and institutional capacity necessary to track progress of the NDC implementation. Ensuring traditional and local community knowledge is considered.</li> <li>› Promoting sustainable land management skills through the Forestry and Agriculture Technical Schools and Universities.</li> </ul>
<ul style="list-style-type: none"> <li>› Orchestration / coordination</li> </ul>	<ul style="list-style-type: none"> <li>› Governance misalignment</li> <li>› Misalignment of cooperation agendas</li> </ul>	<ul style="list-style-type: none"> <li>› Further coordination of existing institutions could increase synergy and reinforce the implementation of initiatives providing a more integrated approach across landscapes.</li> <li>› Providing space for bottom-up initiatives, including civil society, to translate global arrangements to local conditions, increasing the effectiveness in implementation by adjusting to the specific context and enhancing inclusiveness in decision-making.</li> </ul>

\* The Warsaw Framework for REDD+ (WFR) under the UNFCCC constituted a good example for the forest sector but more international capacities for its implementation are needed.

\*\* MRV is being one of the strongest points for international cooperation and governance initiatives in the AFOLU sector, in particular for forests, due to the Kyoto Protocol, the Warsaw Framework (WFW) for REDD+, and the multiple initiatives that emerged on its margins.

Overall, all barriers are strongly interrelated. Such is the case of the barriers related to transparency that are strongly interlinked to rules and standards. For example, better clarity and advances on Article 6 rules, in particular for carbon standards and safeguards under article 6.4, could lower concerns over uncertainties, additionality, double counting, risk of reversals and environmental impacts and help to mobilize economic incentives to act.





Similarly, barriers related to means of implementation and orchestration-coordination (i.e. insufficient funds mobilised, lack of non-monetary incentives, and the duplicity of efforts and disconnection across different initiatives) could be addressed by approaching them in an integrated manner to ensure complementarity in providing capacity building and readiness activities, accompanied with blended sources of funding for the necessary investment to catalyse transformations. This will require strong coordination among and across donors and recipients.

## How International Institutions Have so far Delivered on Mitigation in the AFOLU Sector

AFOLU international governance remains complex, with coordination between initiatives and institutions still posing a challenge. Most of the governance functions (Table A) have been activated to a very different extent in the different subsectors of the AFOLU sector. While our research identified more than 80 institutions and initiatives (Figure A) as relevant to the AFOLU sector contributions to reducing emissions and/or increasing sinks, there is no clear frame that will address the sector as a whole, despite the recent introduction of more systemic thinking for example including demand side measures (IPCC, 2022).

The existing sectoral governance landscape addresses many of the barriers through several governance functions, in particular for forest, like providing guidance and signalling to actors, setting rules to facilitate collective action, enhancing transparency and accountability (including compliance), offering support to means of implementation (capacity building, technology and finance), and promoting knowledge diffusion and learning.

However, several gaps remain, especially regarding proliferation of rules and standards considering the role of Article 6 of Paris Agreement, and the proliferation of disconnected initiatives. The key gaps identified are the need for signalling a realistic mitigation potential of the sector and to consider trade-offs; the misalignment of current Monitoring, Reporting and Verification (MRV) standards; the remaining uncertainties surrounding Articles 6.2 and 6.4 of Paris Agreement; the application of environmental and social principles and safeguards; land tenure; and concerns over uncertainties, additionality, double counting, risk of reversals and environmental impacts of the mitigation projects. These gaps resulted in insufficiency of the funds mobilised so far despite expectations raised on result-based payments, the lack of non-monetary incentives, and the duplicity of efforts and disconnection across different initiatives. Nonetheless, some options remain open to close existing gaps in the sector governance.

On forests, WFR for REDD+ was a major international success (Voigt and Ferreira, 2016). Using the WFR as a basis for orchestration demonstrated it can help developing countries to implement mitigation actions more effectively and transparently in the forest sector. At the same time, in the context of the Paris Agreement, it allowed to include the forest measures in the NDCs while not blocking the possibility to implement higher standards required by different international funding streams, such as market approaches. The WFR provides a robust implementation frame that ensures environmental integrity to an extent mostly absent in other sectors since it incorporates a strict set of safeguards and a strong MRV governance due to the strong support of several initiatives guided by the REDD+ decisions since 2008.



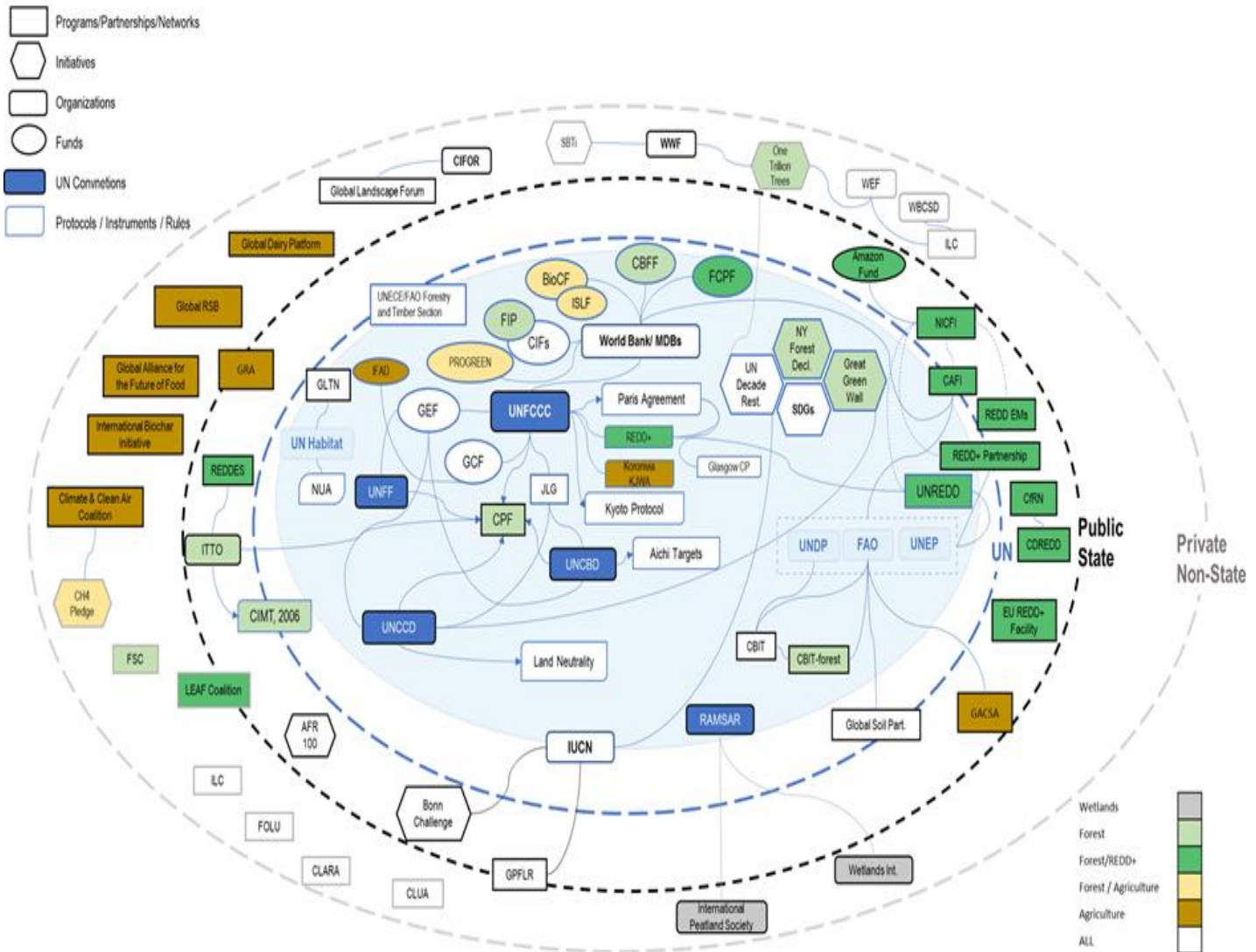


Figure A. AFOLU global governance landscape. Blue shaded area represents the space of collaboration facilitated by UN. MRV partnerships and standards are not included.

## Recommendations for Strengthening Global Governance and International Cooperation

The complexity of the sector leads to an intricate governance where natural and built resources of land are put to good use, including through consistent land policies and regulation, land administration functions, and land information systems. However, forest, agricultural, and other land uses governance are not usually integrated into a common framework but rather lie with competing institutions and interests. Three priority areas could be identified for strengthening international cooperation.



## Enhancing and aligning international inclusive cooperation with the UNFCCC

Enhancing and aligning international governance initiatives with the UNFCCC rules and modalities as a common framework and making them more inclusive by, for example:

The adoption of consistent standards for MRV across existing institutions and initiatives, aligned with the rules and modalities adopted by the UNFCCC (as the WFR for REDD+ and the ETF) could greatly enhance transparency and comparability of efforts and, therefore, climate action.

Broadening the participation and balancing decision-making power of relevant groups (developing-non-developing countries, government-civil society, public-private) into existing structures and initiatives supporting action governance (i.e. Development Banks' programs, international funds, etc.) that aim to support the Paris Agreement could help to incorporate these actors' interests and concerns into the global governance landscape

The creation of sector partnerships as spaces to share knowledge on transformative action, lessons learnt on MRV and to build capacities could facilitate identification of good practices and trade-offs across the sector.

### Rules, modalities, transparency and accountability

Strengthening the application of internationally agreed rules and modalities that allow for the mobilization and more fair distribution of support according to specific country and stakeholders needs. Including providing spaces for knowledge sharing of success stories and failures (South-South and North-South).

Supporting the creation of capacities for NDC assessment and accountability processes under the ETF for the land related measures in the AFOLU sector.

Promoted spaces (for example joint working groups under the UN) could be created to serve as an in-depth technical dialogue across modellers and GHG inventories communities, signalling for a realistic mitigation potential of the sector and trade-offs, including addressing feedbacks with climate change impacts, and cautioning about the limitation of global assessments.

### Means of implementation

No solution will work if there is only reliance on one finance stream, such as carbon markets, where the underlying risk aversion of donors and buyers and the short-term nature of targets and goals remain. Given the complexity of the biological processes and drivers of emissions and removals involved, it is necessary to gain more understanding of this complexity and finding affordable "science based" ways to minimise the risks to inform the necessary climate investment decisions.

Climate related finance so far focused on capacity building and results-based payments schemes, particularly in the forest sector. Investments in more transformative measures on the AFOLU sector that are driven by careful assessments of country needs on the short and long term to achieve their NDCs and Long Terms strategies are still missing. There is a need to identify and mobilize most appropriated blended finance to catalyse the





necessary transformations in the sector (i.e. loans, grants, result base payments, etc) and increase the efficiency in resource allocation towards mitigation.

Addressing the lack of predictable finance and addressing the barriers identified above will help to protect past investments in capacity-building and readiness. Many countries have built significant technical and institutional capacity over the past 10-15 years, both for MRV and for governance that needs to be preserved and enhanced beyond forest in the context of the NDCs implementation and ETF under the Paris Agreement.

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## POLICY BRIEF

# Global Climate Governance for the Decarbonisation of the AFOLU Sector

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