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POLICY BRIEF

Co-creating synergies through indigenous people and local communities' action on Climate, Land and Food

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Executive Summary

Climate change, land degradation, biodiversity loss, and food insecurity are accelerating global crises. One hundred million hectares of productive land disappear annually, threatening 1.3 billion people. COP30 must turn global commitments into local action, led by indigenous people and local communities as key stewards.

Five pillars drive this transformation:

1. **Support inclusive governance platforms for integrated action.**
2. **Adapt and reorient climate, biodiversity, and LDN financing to integrated local dynamics.**
3. **Integrate local and indigenous knowledge systems into the planning, implementation, and monitoring of land-based actions.**
4. **Develop integrated and participatory monitoring and evaluation frameworks.**
5. **Strengthen inclusiveness in Science–Policy Interfaces (SPIs)**

Empowering local actors unlocks synergies for people and for the planet. COP30 is the moment to act.

Context

The challenge of the 2030 agenda, «leaving no one behind,» is one of the most pressing issues we face today. It must overcome i) dramatic climate forecasts (heat waves, droughts, floods, expansion of arid zones and areas prone to fires,…), ii) the loss of 100 million hectares of healthy and productive land and soil every year, affecting 1.3 billion people between 2015 and 2019, iii) a global decline, by 2 to 11%, of biodiversity impairing biodiversity-based ecosystem-services. While the world's population is expected to reach 9.7 billion by 2050, food systems face challenges that disproportionately impact low-income countries and the most vulnerable groups. We are breaching most planetary boundaries, with more than half of the global land area suffering critical losses in functional biosphere integrity. While ambitious global policies to reduce greenhouse gas emissions are essential, concrete adaptation measures must also be implemented on the ground and supported by strong political engagement at the very local level. In the face of this situation, the Brazilian presidency has defined «the acceleration of the implementation of the Paris Agreement» as one of its core objectives for COP30, which notably

entails putting concrete mechanisms and solutions into practice. While global agendas increasingly call for integrated responses to climate, biodiversity, and food security challenges, this integration is yet to be operationalized. By investing in proactive measures to enhance the health, productivity, and sustainability of land and soil, co-designed and led by indigenous people and local communities, governments can fulfill their global commitments under the Paris Agreement, the Riyadh Action Agenda, the Kunming–Montreal Global Biodiversity Framework, and the SDGs. Moreover, local land and soil-based actions offer the most effective scale to break silos and generate solutions that align global goals with local priorities.

Since secured access to land is often cited as a key priority for indigenous people and local communities, this brief focuses on land-based solutions articulated on the nexus between land degradation/desertification, soil health depletion, climate change, biodiversity loss, and food insecurity. The interdependent nature of these challenges calls for immediate coordinated actions.

Our recommendation

To effectively implement integrated responses to the impacts of climate change, biodiversity loss, land degradation/desertification, soil health depletion, and food insecurity, decision-makers should prioritize and support locally led land-based initiatives. These are the most operational scales for breaking institutional and disciplinary silos, as they enable co-constructed solutions that align with both community needs and global stakes. Investing in mechanisms that empower local actors (women, youth), foster cross-sectoral collaboration on the ground, and ensure inclusive governance is key to unlocking synergies and delivering just outcomes.

This relies on five pillars.

PILLAR 1: GOVERNANCE

Inclusive governance structures for synergistic action on climate, biodiversity, food security, and development objectives in the land-use sector are crucial for countries and localities to take steps in this direction. While inclusive governance is critical at the national and international level, local and regional authorities play a key role in territorial planning and governance. The territorial approach emphasizes that socio-environmental changes are primarily experienced by societies living «here and now». Addressing global change involves anchoring and translating it into the specific space-times of societies — from North to South, from cities to rural areas — according to their political, social, ecological, and economic contexts. The specific set-up of local and regional governance arrangements that are fit for the task invariably differs across countries and contexts. However, certain common elements necessary for effective local or regional governance to accelerate action in the land-use sector can be identified.

First, coordination with international and national governance is essential for the effectiveness of subnational governance in supporting synergistic action toward climate and biodiversity targets. International governance is crucial for defining rules and creating spaces for dialogue on matters involving multiple countries, including trade in agricultural and forest commodities, and for providing different kinds of international support to national and subnational governments for the land-use transition. National governance is needed to draft and implement policy frameworks, mobilise and distribute funding to local authorities, and coordinate national and subnational action. To complement the above, subnational governance is needed to reflect local conditions in national policies and to support implementation. Effective subnational governance towards synergistic action toward climate and biodiversity targets requires coordination across these three levels of governance.

Second, climate, biodiversity and land degradation objectives must be mainstreamed across a broad range of policy domains touching on the land-use sector to avoid policy conflicts and support synergistic action toward those objectives. A broad range of policy areas impacts outcomes in the land use, agriculture and forestry sectors, and policy conflicts are common, for instance, between agricultural policy objectives seeking to increase agricultural production and biodiversity conservation policies. Resolving such policy conflicts by mainstreaming climate and biodiversity objectives across key policy domains at the subnational level (as well as at other levels of governance) is key for effective subnational governance. The recent focus on the (socio-) bioeconomy may be promising in this regard.

Third, governance must be inclusive of non-governmental stakeholders to ensure broad support for land use policies, buy-in, and durable commitment to their implementation from diverse actors in the economy. It is also key to ensure that policies driving the land-use transition address the challenges faced by farmers, foresters, the private sector, and NGOs.

Recommendation 1: Support inclusive governance platforms for integrated action towards achieving climate, biodiversity and development objectives

- On the local scale, governance platforms that bring together land users particularly farmers, local authorities, civil society, and technical experts to co-design sustainable land management solutions
- On the national and subnational level, governance platforms that include key institutions at different levels of governance, across different ministries, and both government and non-governmental actors.

PILLAR 2: FINANCING

The landscape of climate finance is characterized by a proliferation of initiatives and instruments with little to no coordination, whether at national or international levels. This additive logic—driven mainly by dynamics of institutional distinction and competition—constitutes a significant obstacle to coherent planning for climate mitigation and adaptation, biodiversity conservation, land safety, and food security. It is estimated that current finance flows to nature-based solutions amount to US$200 billion, only a third of the levels needed to reach climate, biodiversity, and global restoration targets by 2030, and that less than 2% reaches land users such as smallholder farmers. Quadrupling current annual restoration finance flows by 2030 is critical to achieving global restoration targets and to protecting and restoring ecosystems, which are needed at scale to meet the Rio Convention targets. Moreover, a coordinated approach should enhances the effectiveness and efficiency of implementing LDN (Land Degradation Neutrality), NBSAP (National Biodiversity Strategy and Action Plan), and NDC land-focused activities and reduces overall implementation costs **(example 1).**

Recommendation 2: Adapt climate, biodiversity, and LDN financing to integrated local dynamics

- Reform international and national funding mechanisms to allow flexible, multi-sectoral financing that supports integrated, community-led land-based initiatives.
- Incentivize approaches that simultaneously address environmental and social objectives.

Recommendation 3: Reorient Existing Public Finance toward Environmental Objectives.

- Reallocate a substantial portion of public support to agriculture —particularly production-linked payments and input-harmful subsidies—toward climate change mitigation and adaptation. Today, a significant share of public finance still supports practices that degrade soils, deplete water resources and biodiversity, and increase greenhouse gas emissions. As reported by the World Bank, «only a small share of current agricultural support contributes to lowering emissions or to enhancing overall production efficiency.» Redirecting these environmentally harmful subsidies is therefore essential to align agricultural finance with sustainability goals.

PILLAR 3: KNOWLEDGE SHARING

International collaboration drawing on the global expertise of a wide range of actors (academia, civil society, the private sector, funding and development agencies, etc.) is often seen as a prerequisite for overcoming global and local sustainability challenges and tackling «wicked problems», defined as problems that are difficult or impossible to solve because of incomplete, contradictory and changing requirements that are often difficult to recognize. The co-creation of knowledge, as a collaborative process involving two or more actors who intentionally integrate their knowledge and learning, results in the development of insights and solutions that would not be reached independently. This approach is gaining recognition. As such, indigenous people and local communities are bearers of knowledge systems that complement scientific knowledge. Whereas in the past, knowledge sharing followed a top-down approach from scientists to end users, co-creation and co-development of knowledge require input from a variety of stakeholders. Approaches based on lighthouses (pioneering innovative farmers) and living labs (spaces and places for sharing expertise and knowledge) that bring together mainstream researchers and civil society actors, as well as indigenous people and local communities, are more horizontal and enable co-creation **(example 1).**

example 1

Paragoclima, or the commitment of an Amazonian territory to a low-carbon development trajectory

Paragominas, a town in the Brazilian state of Pará, has launched a new payment-for-environmental-services scheme called «Paragoclima.» Under this program, all farmers within the watershed receive payments on the condition that they follow a land-use plan established by public authorities after consultation. The environmental code organizes land use by suitability and redefines mixed landscapes comprising forests, pastures, and agricultural lands. These landscapes can generate income while managing the cycles of carbon and water and providing habitat favorable to biodiversity. The financing mechanism depends on a surcharge added to the water bills of households connected to the public drinking water supply network.

Recommendation 4: Integrate local and indigenous knowledge systems

- Recognize and integrate local and indigenous people and local communities, knowledge and expertise systems into planning, implementation, and monitoring of land-based actions, ensuring that they are valued alongside scientific academic and technical knowledge through the use of lighthouses and living labs.

PILLAR 4: MONITORING

Locally-led solutions need to be grounded in a strong scientific basis that is co-designed and jointly conducted following integrates indigenous people and local communities' ensuring with rigorous monitoring frameworks. This should ensures that land-based actions effectively harness synergies across climate mitigation and adaptation, biodiversity conservation, land degradation neutrality, and food security, while enabling adaptive management and transparent evaluation of outcomes.

Recommendation 5: Develop integrated and participatory monitoring and evaluation frameworks

- Develop and implement integrated, participatory and citizen science monitoring and evaluation frameworks that support, to the extent possible, the reporting processes established under the three Rio Conventions, ensuring coherence with international obligations and enabling transparent tracking of progress across climate, biodiversity, land and soil degradation, and food security agendas.

PILLAR 5: SCIENCE-POLICY INTERFACE

Science-Policy Interfaces materialize in multiple ways and operate at different levels, notably through informal consultations, seminars, networks, projects, interaction platforms, and other spaces. These platforms pursue various objectives: the synthesis and dissemination of knowledge, capacity building, support for policy implementation and monitoring, and the establishment of partnerships. Already, several initiatives have been set up, such as the «Montpellier process **(example 2)**: pooling collective intelligence», which connects local, national, and global expertise and builds communities of practice across sectors and disciplines.

Recommendation 6: Strengthen inclusiveness in Science–Policy Interfaces (SPIs)

- Foster stronger connections between climate, biodiversity, land and soil, food, and science-policy platforms to avoid siloed approaches and enable integrated solutions,
- Institutionalize multi-level connectivity of SPIs by setting common joint working groups, shared data platforms, and co-produced reports to create common baselines across sectors, support communities of practice that link scientists, policymakers, and practitioners.

example 2

Montpellier process: pooling collective intelligence

The Montpellier Process aims to create risky safe spaces to advance necessary dialogue, progress, and impact of Science Policy Interfaces on the Global Goals. Risky safe spaces are designed to facilitate deep dialogues and understanding, especially on high-tension topics that involve trade-offs and divergences across sectors, such as Nexus, which brings together health, environment, food, and social justice issues, and across scales, from local to global and *vice versa*. They provide a space where individuals engage with a willingness to reflect on their own positions, as well as those of others, and to act based on that reflection, recognizing their agency as a key driver of change. The first step acknowledges that often we don't even understand why we disagree. This initial step allows all actors to openly share their positions without judgment through mediation to understand the origins and reasons behind polarized views. This sets the stage for the second step, which involves dialogue-based understanding and a collective effort to identify where community members disagree and why these disagreements exist. The third step begins a process of collective co-design and refinement, especially where fundamental differences and their rationales are identified. Finally, the fourth step, when appropriate and relevant, involves negotiation aimed at reaching an agreement, which includes acknowledging points of persistent disagreement and understanding why they remain.

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