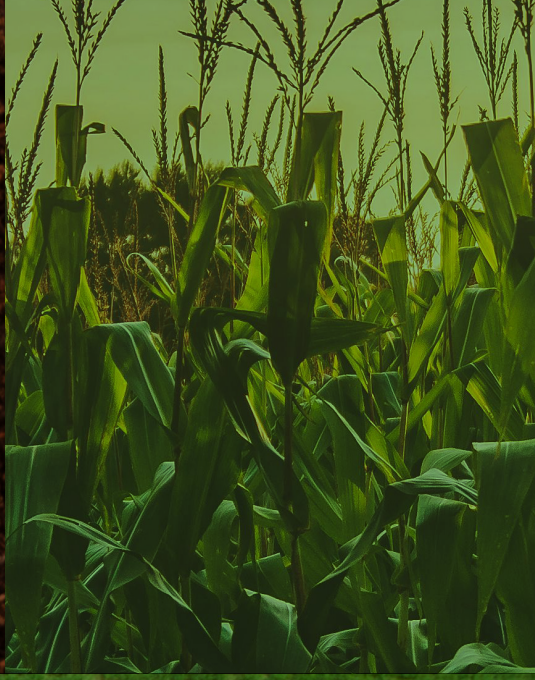
RAIZ

Resilient Agriculture Investment
for net-Zero land degradation



A GLOBAL "MUTIRÃO" FOR FOOD SECURITY, LAND RESTORATION AND CLIMATE

WHITE PAPER

COP30 BRASIL AMAZÔNIA
BELÉM 2025

MINISTRY OF AGRICULTURE AND LIVESTOCK

BRAZILIAN GOVERNMENT
BRASIL
STANDING WITH THE BRAZILIAN PEOPLE

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SUMMARY

Over 20% of agricultural land is degraded worldwide as reported by the Food and Agriculture Organization of the United Nations (FAO, 2022). Land degradation stands as one of the most pressing challenges of our time, undermining food security, accelerating biodiversity loss, and exacerbating climate change and its impacts. Restoring degraded land is a priority across the Convention on Biological Diversity (CBD), the United Nations Convention to Combat Desertification (UNCCD), the United Nations Framework Convention on Climate Change (UNFCCC) and the 2030 Agenda and its Sustainable Development Goals (SDG Target 15.3).

Reversing the extent of land degradation requires a joint effort to rapidly scale finance from multiple sources to meet these global commitments and achieve important co-benefits for climate, nature and food security. The COP30 Resilient Agriculture Investment for Net-Zero land degradation (RAIZ) will convene existing initiatives, partnerships, stakeholders and financial actors, along with the UNFCCC, UNCCD, and the CBD, to unlock funding from multiple sources for agricultural landscape restoration at scale.

RAIZ emerges as a transformative response, bridging the gaps between policy, finance, and on-the-ground action, aimed at catalyzing large-scale restoration of degraded lands, aligning with national commitments under the Paris Agreement, the Kunming-Montreal Global Biodiversity Framework, the Land Degradation Neutrality goal and the challenges to improve food security aligned with countries realities and needs.

The case for land restoration is irrefutable. Degradation is geographically widespread. The FAO reports that around 1 billion hectares of agricultural land are degraded (FAO, 2022). In Africa, 221 million hectares are degraded (FAO, 2021b). In Brazil, an estimated 109.7 million hectares of pastureland are degraded (Bolfe, É. L. et al., 2024). In Asia, around 33% of land is classified as highly or moderately degraded (FAO, 2023). The impact of yield loss from degradation is amplified when considering rates of soil health and malnutrition.

According to the 2024 State of Food Security and Nutrition in the World, between 713 and 757 million people faced hunger in 2023 and around 2.33 billion people (28.9% of the global population) were moderately or severely food insecure (FAO et al., 2024).

Reversing just 10 percent of human-induced degradation debt could restore 44 million tonnes of production and feed an additional 154 million people annually. Economically, it could generate $1.4 trillion in ecosystem services, from water filtration to ecotourism. Socially, it would safeguard the 28.9% of the global population facing food insecurity, many of whom are smallholder farmers trapped in cycles of degraded soils and poverty. To boost this restoration agenda globally requires a paradigm shift in how land is valued.

The current system incentivizes short-term exploitation over long-term stewardship. RAIZ will counter this by unlocking alternative sources of finance including multilateral development banks, national development banks, private banks, and multilateral funding (e.g., the Green Climate Fund) channeling them towards high-impact projects and innovative instruments such as blended finance. Critically, it will prioritize inclusive solutions based on continuous innovations.

The RAIZ path is grounded in four pillars:

» Map and update data on degraded landscapes and value-chains with productive potential worldwide and prioritize areas with medium and high productive potential to drive action, leveraging the latest locally relevant scientific evidence.

» Estimate costs and identify sources of financing for land restoration by means of a collective effort (*mutirão*) to scale up and accelerate funding from multiple sources, aiming to restore degraded land for food security using sustainable and regenerative production systems.

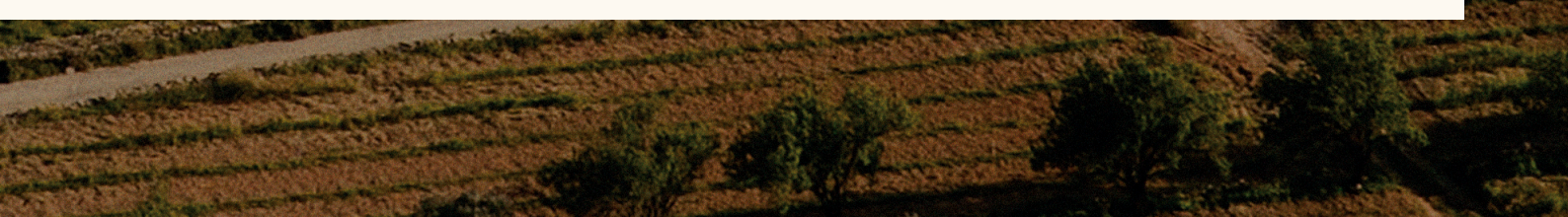
» Design optimal co-investment mechanisms and scale proven solutions: RAIZ will convene governments and interested investors to build or tailor co-investment vehicles that leverage public finance to derisk private investments and reduce the cost of capital.

» Foster knowledge sharing and create opportunities for peer-to-peer exchange on best practices for the implementation of agricultural landscape restoration efforts globally, spot lighting and learning from successful cases.

COP30 presents a pivotal moment to operationalize this vision. Brazil, as host, can galvanize momentum by embedding RAIZ within the COP30 Action Agenda, inviting countries, civil society, private sector, banks, investments funds, academia, Indigenous Peoples and local communities, among other actors to engage into fostering restoration of degraded land for food security.

Land restoration and sustainable agriculture are key objectives for transforming agriculture and food systems, which puts RAIZ as the center of the COP30 Presidency's third pillar, "Transformation of agriculture and food systems," specifically goal 8 on land restoration and sustainable agriculture.

Fostering restoration is at the core of the new paradigm of the multilateral environmental agenda, based on the implementation of actions according to country's needs, realities and opportunities. Millions of hectares restored, gigatons of carbon sequestered, and millions lifted from food insecurity. The cycle of degradation must end. By uniting science, policy, and finance under the banner of restoration, RAIZ offers a roadmap to a resilient future, where thriving landscapes sustain both people and the planet.



1

INTRODUCTION

LAND DEGRADATION POSES A DIRECT AND ESCALATING THREAT TO GLOBAL FOOD SECURITY, WITH PROFOUND IMPLICATIONS FOR HUMAN WELLBEING.

The 2025 *State of Food Security and Nutrition* report (FAO et al., 2025) reveals that between 638 and 720 million people experienced hunger in 2024, while 2.3 billion - nearly 28% of the world›s population - faced moderate or severe food insecurity.

Land degradation has a direct impact to the availability and, therefore, the access to safe and nutritious food, key pillars of food security and nutrition. Approximately 1.0 billion hectares of agricultural soils are currently degraded worldwide (FAO, 2022), representing both a fundamental challenge to food production and a significant opportunity for sustainable intensification through regeneration strategies.

The relationship between soil health and agricultural productivity is well-established scientifically. The IPCC's Special Report on Climate Change and Land (2019) documents how land degradation diminishes the productive capacity of soils through multiple pathways: loss of organic matter, reduced water-holding capacity, and depletion of essential nutrients. These processes create a vicious cycle where degraded soils produce lower yields, prompting expansion into marginal lands and further degradation.

In sub-Saharan Africa, where over 65% of arable land shows signs of degradation (UNCCD, 2022), cereal yields average just 1.2 tons per hectare compared to 3 tons globally (World Bank, 2023), directly contributing to regional food insecurity.

Land regeneration offers a scientifically validated solution to break this cycle. Agroecological approaches that rebuild soil organic matter can increase yields by 20-30% in degraded systems (International Panel of Experts on Sustainable Food Systems [IPES-Food], 2022), while simultaneously enhancing resilience to climate shocks.

Brazil's ABC Plan fostered the restoration of 26.8 million hectares of degraded pastures from 2010-2020 (Brazilian Ministry of Agriculture, 2023). Similarly, the adoption of conservation agriculture techniques across 180 million hectares worldwide has shown average yield increases of 20% alongside reduced input costs (FAO, 2021d). These examples underscore that regeneration is not merely an environmental imperative, but an agricultural productivity strategy, combining adaptation and mitigation.

The food security benefits of land restoration extend beyond immediate yield improvements. Healthy, regenerated soils demonstrate greater water infiltration and retention capacity - critical attributes as climate change increases drought frequency. Research from the Sahel region shows that farmland treated with regenerative practices maintains 30-40% higher soil moisture during dry periods (International Crops Research Institute for the Semi-Arid Tropics [ICRISAT], 2022), directly protecting crops from water stress.

Furthermore, diversified regenerative systems enhance nutritional outcomes by supporting a wider variety of crops. In Malawi, farms practicing agroforestry produced 40% more dietary diversity than conventional systems (World Agroforestry Centre [ICRAF], 2023), addressing both calorie and micronutrient deficiencies.

The spatial dimension of regeneration opportunities aligns closely with global hunger hotspots. Africa, which accounts for 60% of the world's uncultivated arable land but suffers the highest rates of undernourishment (FAO, 2024), stands to benefit particularly from large-scale regeneration efforts.

Initiatives like the Great Green Wall demonstrate how integrated landscape restoration can simultaneously address food production and ecosystem health, with restored areas in Niger supporting 50% higher millet yields alongside improved biodiversity (UNCCD, 2023). Similar potential exists in South Asia, where widespread soil degradation threatens the productivity of the Indo-Gangetic Plain - a breadbasket for over 800 million people.

Realizing this potential requires moving beyond isolated success stories to systemic transformation of agricultural paradigms. This entails: i) mainstreaming soil health indicators into national agricultural policies; ii) reorienting extension services to prioritize regenerative practices; and iii) diversifying financial sources narrowed to project specificities according to regional needs; iv) developing value chains that reward farmers for ecosystem services.

RAIZ is anchored at the COP30 Presidency's third pillar, "Transformation of agriculture and food systems," specifically goal 8 on land restoration and sustainable agriculture, aimed at tackling a land degradation cycle. By uniting science, policy, and finance under the banner of restoration, RAIZ offers a roadmap to a resilient future, where thriving landscapes sustain both people and the planet.

2

THE GLOBAL CALL FOR ACTION TO RESTORE DEGRADED FARMLANDS

Pexels_Todd Trapani

THE SCALE OF LAND DEGRADATION PRESENTS ONE OF THE MOST CRITICAL ENVIRONMENTAL AND SOCIO-ECONOMIC CHALLENGES OF OUR TIME.

According to the FAO, approximately 1.0 billion hectares of agricultural land, an area nearly the size of South America, are currently degraded (FAO, 2022). This includes 221 million hectares in Africa (FAO, 2021b), where soil erosion, desertification, and unsustainable farming practices threaten food security for millions, and 109,7 million hectares in Brazil with different levels of degradation (Bolfe, É. L. et al., 2024).

Despite these alarming figures, the extent of land degradation with agricultural potential globally is unclear, reinforcing the importance to map and prioritize degraded areas suitable to agriculture worldwide.

The consequences of land degradation extend far beyond environmental decline, harnessing biodiversity, disrupting water cycles and exacerbating climate change. It jeopardizes the livelihoods, health, and security of an estimated 3.2 billion people - over 40% of the world's population - who depend on healthy ecosystems for food, water, and income.

The economic impacts are equally severe, with the Global Land Outlook estimating that degradation costs the world up to $15 trillion annually in lost ecosystem services (United Nations Convention to Combat Desertification [UNCCD], 2022).

Recognizing the urgency of this crisis, the United Nations Decade on Ecosystem Restoration (2021–2030), led by FAO and the UN Environment Programme (UNEP), has mobilized a global movement to reverse land degradation (FAO & UNEP, 2021). This initiative underscores restoration as a triple-win solution, enhancing food security, mitigating climate change, and protecting biodiversity.

However, progress remains uneven. While some regions have pioneered successful restoration models---such as Africa's Great Green Wall and Brazil's ABC+ Plan (Brazil. Ministry of Agriculture, Livestock and Food Supply, 2021) - many countries lack the technical capacity, financing, and regulatory-governance frameworks to implement large-scale land restoration.

Closing these gaps demands four critical actions:

1 **Improved Data & Monitoring: land degradation assessments to guide targeted interventions.**

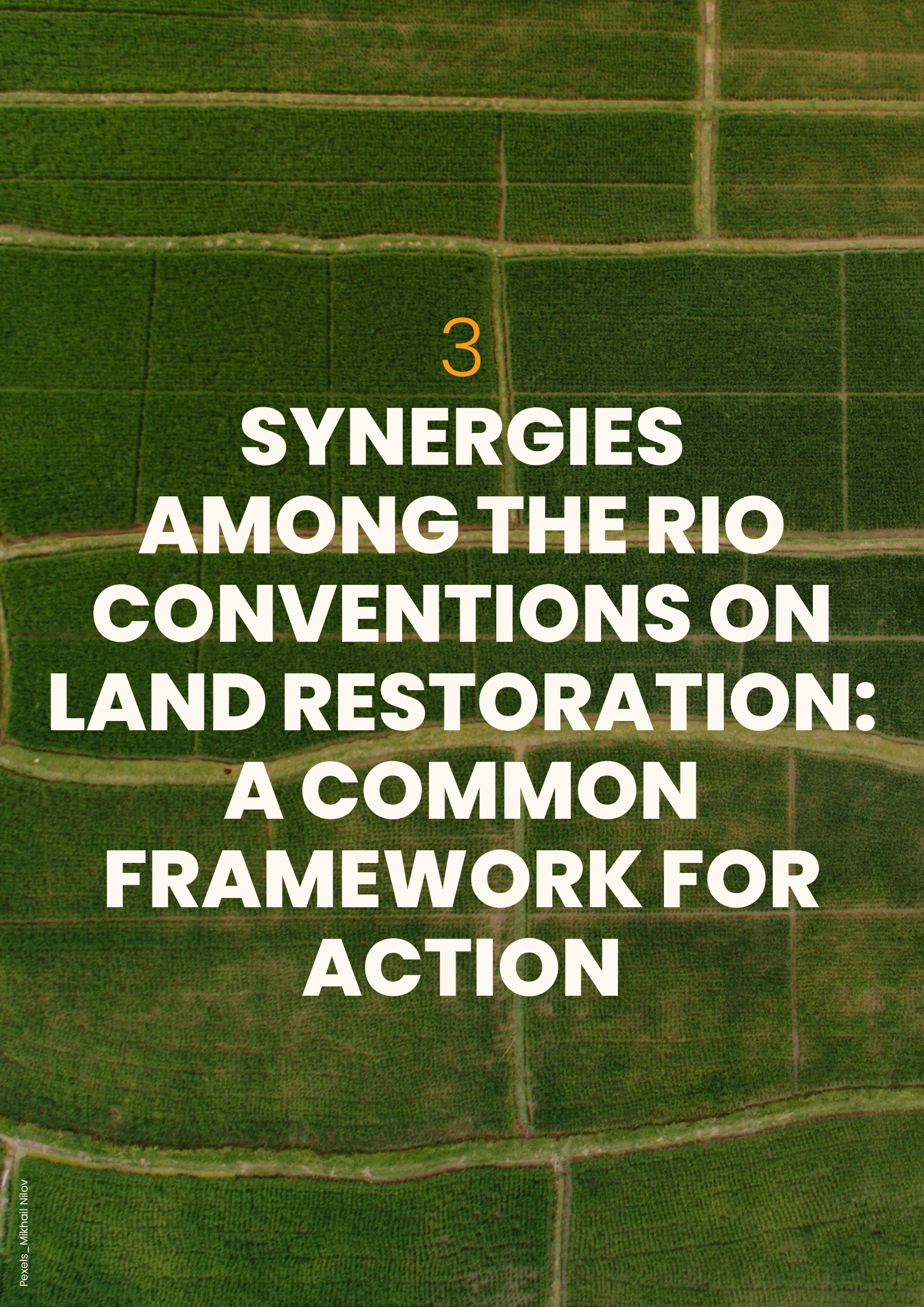
2 **Scaling Proven Solutions: expand technologies and agricultural resilient systems that restore productivity.**

3 **Mobilizing Finance: diversify sources of funding to foster land restoration unlocking private-sector investment.**

4 **Policy Integration: Aligning national strategies with the Rio Conventions (UNCCD, CBD, UNFCCC) and the SDGs to ensure cohesive action.**

The window to act is narrowing. Without decisive measures, degradation will continue to fuel hunger, conflict, and ecological collapse. Yet, with coordinated global effort, restoring degraded lands can become a cornerstone of sustainable development, offering hope for resilient ecosystems and equitable livelihoods.

Johanna Alarcón



3

SYNERGIES AMONG THE RIO CONVENTIONS ON LAND RESTORATION: A COMMON FRAMEWORK FOR ACTION

Pexels_Mikhail Nilov

THE THREE RIO CONVENTIONS - THE UNITED NATIONS CONVENTION TO COMBAT DESERTIFICATION (UNCCD), THE CONVENTION ON BIOLOGICAL DIVERSITY (CBD), AND THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE (UNFCCC) - HAVE PROGRESSIVELY ALIGNED THEIR FRAMEWORKS TO ADDRESS LAND DEGRADATION THROUGH COMPLEMENTARY YET DISTINCT APPROACHES.

The terms “recovering,” “restoring,” and “regenerating” degraded land, while often used interchangeably, carry distinct meanings within the framework of international environmental governance.

These terminological distinctions reflect the complementary but differentiated approaches of the three conventions. The UNCCD’s focus on recovery prioritizes functional productivity, particularly in dryland regions; the CBD’s restoration agenda centers on biodiversity conservation; and the UNFCCC’s regeneration narrative emphasizes climate-resilient systems.

All three approaches, however, converge in their contribution to the Sustainable Development Goals, particularly SDG 15.3, which calls for combating desertification and restoring degraded land and soil. The Sustainable Development Goals Report (2023) notes that while recovery aligns with immediate economic productivity needs, restoration addresses biodiversity loss, and regeneration supports long-term sustainability and climate objectives. Together, these concepts form an integrated response to the multifaceted challenge of land degradation, each addressing distinct but interconnected dimensions of ecological health, human well-being, and planetary resilience.

This convergence creates a powerful, multi-dimensional policy architecture that enables holistic land restoration while delivering co-benefits for climate stability, biodiversity conservation, combat to desertification and sustainable development.

At its core, the UNCCD provides the foundational framework through its Land Degradation Neutrality (LDN) target, established at COP12 (2015) and operationalized through subsequent decisions. The COP15 Abidjan Declaration (2022) and COP16 Decision 19/CP.16 (2024) reinforces this approach by calling for integrated landscape management that simultaneously enhances soil health, agricultural productivity, and drought resilience. The LDN mechanism's robust monitoring framework, with its emphasis on quantifiable baselines and targets, has become a reference point for measuring restoration progress across all three conventions.

The CBD amplifies these efforts through the Kunming-Montreal Global Biodiversity Framework (KMGBF, 2022), which sets specific, ambitious restoration targets. Target 2 commits to restoring 30% of degraded terrestrial, inland water, and coastal ecosystems by 2030 -- building on the earlier Aichi Target 15's 17% benchmark. Critically, Targets 10 and 11 expand the scope to include sustainable agricultural management and the enhancement of nature's contributions to people. These provisions align with global initiatives like the Bonn Challenge, which has secured pledges to restore 350 million hectares of degraded forests and landscapes, demonstrating how biodiversity-focused restoration can achieve multiple objectives.

From the climate perspective, the UNFCCC integrates land restoration into its mitigation and adaptation strategies through several key mechanisms. The Koronivia Joint Work on Agriculture (KJWA, Decision 4/CP.23, 2017) explicitly links sustainable land management with climate resilience, while Article 5 of the Paris Agreement incentivizes carbon sequestration through landscape restoration.

The scientific foundation for these policies comes from the IPCC's Special Report on Climate Change and Land (2019), which quantifies land degradation's role in global emissions (23% of human-induced GHGs from AFOLU) and demonstrates restoration's mitigation potential. This climate focus translates into tangible action through Nationally Determined Contributions (NDCs), where analysis of submissions through September 2024 reveals that 90% incorporate land restoration commitments, including Brazil's pledge to recover 40 million hectares, China's 25 million hectares desertification control program, and multiple African nations' commitments under the African Forest Landscape Restoration Initiative (AFR100).

The Conventions' synergies manifest most clearly in their shared alignment with SDG 15.3 (Land Degradation Neutrality), which serves as a unifying metric for tracking progress. This convergence enables innovative, multi-benefit programming, exemplified by initiatives in Brazil's Cerrado biome, where integrated crop-livestock-forestry systems simultaneously advance LDN targets (UNCCD), contribute to the 30x30 biodiversity goal (CBD), and generate GHG emission reductions (UNFCCC).

The collaborative efforts between the IPCC, IPBES, and UNCCD's Science-Policy Interface have further strengthened this integration by demonstrating how ecosystem restoration delivers interconnected benefits for climate, biodiversity, and livelihoods.

The current policy landscape presents a historic opportunity to accelerate action. Based on the UNCCD's goal of achieving Land Degradation Neutrality by 2030, the CBD's 30x30 target 3 of the GBF, and the UNFCCC's climate commitments based at Parties NDCs, there is a common synergistic approach to anchor degraded land restoration aimed at delivering multiple benefits aligned with food security.

This integrated framework demonstrates how the Rio Conventions, while maintaining distinct mandates, can coalesce around shared restoration objectives, transforming degraded landscapes into thriving ecosystems that benefit both people and the planet. The challenge now lies in translating this policy convergence into large-scale, on-ground implementation that delivers measurable results across all three Conventions' objectives.

Sanja Knezevic

4

GLOBAL COMMITMENTS TO LAND RESTORATION AT THE PARIS AGREEMENT

Pexels_Soummyo Sarker

GLOBAL COMMITMENTS TO LAND RESTORATION HAVE BECOME A CORNERSTONE OF CLIMATE ACTION, AS EVIDENCED AT THE NDC SUBMITTED TO THE UNFCCC.

Across all regions, countries are increasingly recognizing the vital role of healthy ecosystems in achieving both mitigation and adaptation goals, though implementation approaches reflect diverse national circumstances and ecological contexts.

The Americas demonstrate this through varied yet ambitious programs - Brazil's ABC+ Plan and the Green Way Program target 40 million hectares of degraded pastures through innovative financing models that combine public policy with private sector engagement. Canada's approach emphasizes indigenous leadership in its 2 Billion Trees Program, restoring degraded boreal forests through a combination of federal funding and traditional ecological knowledge.

European nations present a mosaic of soil-focused strategies under the umbrella of the EU Farm to Fork Strategy. Germany leads in peatland restoration with a 2 million hectares target that prioritizes carbon-rich wetlands, while France's 4 per 1000 Initiative takes a scientific approach to increasing soil organic carbon. Italy addresses Mediterranean land degradation through traditional agroforestry systems, and the Netherlands pioneer's circular agriculture models to reduce synthetic inputs and prevent erosion. The UK's post-Brexit Environmental Land Management scheme represents an innovative outcomes-based approach, directly compensating farmers for measurable soil conservation results.

African commitments reflect the continent's unique challenges and opportunities, with Great Green Wall nations like Mali and Sudan implementing community-based agroforestry to combat advancing desertification. Tanzania's Village Land Use Planning system demonstrates how local governance structures can drive landscape-scale restoration, having already rehabilitated 3.7 million hectares. The Democratic Republic of Congo protects vast peatland carbon sinks through its REDD+ program, while South Africa's Working for Water initiative combines job creation with ecosystem restoration across critical watersheds.

The Asia-Pacific region showcases both scale and innovation in restoration approaches. China's ambitious 35 million hectares commitment builds on demonstrated successes like the Loess Plateau rehabilitation, where comprehensive terracing transformed 3.5 million hectares of severely eroded land into productive ecosystems. Australia addresses its distinct challenges of salinity and erosion through a National Soil Strategy backed by $196 million in research funding, while New Zealand incorporates indigenous forest regeneration into its emissions trading framework.

Despite this progress, the UNFCCC's 2024 Synthesis report identifies persistent challenges in translating commitments into action. Only 40% of NDCs include quantifiable land restoration targets, creating difficulties in tracking global progress. Many developing nations, particularly in Africa, face financing gaps in implementing their ambitious plans, while monitoring systems remain inconsistent across different ecosystems and governance approaches. The variation in national strategies - from Canada's indigenous-led boreal restoration to China's large-scale ecological engineering - underscores the importance of context-specific solutions while highlighting the need for common metrics and reporting frameworks.

Emerging best practices point to potential pathways for strengthening implementation. Brazil's ABC+ Plan demonstrates how aligning agricultural policy with climate goals can drive large-scale change, while the EU's Farm to Fork Strategy shows the value of continental coordination with local flexibility. The Great Green Wall initiative illustrates how regional cooperation can address transboundary ecological challenges, and New Zealand's integration of traditional knowledge with modern policy frameworks offers a model for inclusive governance. As the global community moves toward the next round of NDC revisions, these examples provide valuable lessons for scaling up restoration efforts while maintaining ecological and social integrity.

The latest data from the FAO-NDC database demonstrates widespread recognition of land restoration's role in climate action. Terrestrial ecosystems feature prominently, identified in 84% of adaptation plans, though only 41% specify concrete restoration actions. Afforestation and forest landscape restoration appear in 49% of adaptation-focused NDCs, while grazing and grassland management measures are included in 31%. Freshwater systems receive attention in 82% of documents, yet merely 8% detail riparian or wetland restoration plans. Coastal ecosystem restoration measures appear in 23% of submissions.

For mitigation strategies, 37% of NDCs incorporate ecosystem restoration, with 60% including afforestation and reforestation initiatives. Grassland conservation for mitigation appears in just 7% of submissions, representing a significant gap given their carbon sequestration potential. The disparity between adaptation and mitigation integration suggests restoration's adaptive benefits are more widely recognized than its carbon storage capacity.

Livestock systems show uneven integration, with 31% of NDCs addressing grazing management for adaptation but only 7% including grassland restoration for mitigation. This limited inclusion contrasts with scientific evidence showing improved pasture management could sequester 0.3-0.8 gigatons CO_2e annually.

Three key patterns emerge from this analysis. First, while most NDCs acknowledge ecosystems' importance, fewer specify actionable restoration measures. Second, certain ecosystems - particularly wetlands and grasslands - remain underrepresented despite their climate value. Third, livestock system improvements are not yet fully leveraged within restoration strategies. These findings suggest the need for more precise target-setting, better integration across climate objectives, and stronger linkages between agricultural practices and landscape recovery efforts. The data reveals both substantial progress in policy recognition and significant opportunities to strengthen implementation through more detailed commitments and ecosystem-specific approaches.

Johanna Alarcón

5

THE FINANCE GAP TOWARDS LAND RESTORATION

Pixabay

GLOBAL COMMITMENTS TO LAND RESTORATION HAVE BECOME A CORNERSTONE OF CLIMATE ACTION, AS EVIDENCED AT THE NDC SUBMITTED TO THE UNFCCC.

The financing gap for global land restoration remains one of the most critical barriers to achieving climate, biodiversity, and food security goals (IPCC, 2019). Despite overwhelming evidence that ecosystem restoration delivers exceptional returns - with every dollar invested generating $7-30 in economic benefits (IPCC, 2019) - current investment levels fall dramatically short of needs.

In 2023, only US$38 billion reached the agriculture, forestry and land use sectors, representing only 2% of the $ 1.9 trillion climate finance in 2023 (Climate Policy Initiative [CPI], 2025). This stands in stark contrast to the sector's 23% contribution to global GHG emissions and the $1.63 trillion in annual harmful subsidies that continue to drive land degradation (United Nations Environment Programme [UNEP], 2022).

"The Triple Gap in Finance for Agrifood Systems", shows that climate finance to agrifood systems is estimated at USD 28.5 billion in 2019/2020, while the costs of transitioning global agrifood systems aligned with the 1.5° require US$ 1,1 trillion annually until 2030. The financial needs to drive action on degraded land restoration integrates the financial needs and is at the center of the climate finance debate (CPI-FAO, 2025).

From a broader perspective, the Independent High-Level Expert Group on Climate Finance (2024) estimates that annual investments must scale from current levels to $400 billion by 2030 to meet restoration targets, while UNEP's State of Finance for Nature (2022) identifies an even larger gap - noting that current flows represent just one-third of the $484 billion required annually. The economic case for closing this gap is irrefutable: the IPCC (2019) calculates that land degradation already costs the global economy up to $15 trillion yearly in lost ecosystem services, far exceeding restoration costs.

At the State of Finance for Nature – Restoration Finance Report, UNEP estimates that sustainable land management needs to more than triple by 2025 (from US$64 billion to US$215 billion) and to more than quadruple to US$296 billion by 2030 to reach global restoration targets and contribute to climate and biodiversity targets (UNEP, 2024).

Emerging solutions demonstrate pathways to bridge this gap. Voluntary carbon markets, projected to generate $50 billion annually by 2030 (Ecosystem Marketplace, 2022), are beginning to channel private capital toward restoration projects, particularly in forest landscapes.

Innovative mechanisms like Brazil's ABC+ Plan (Brazil. Ministry of Agriculture, Livestock and Food Supply, 2021) show how blended finance can mobilize billions for large-scale pasture recovery, while the EU's Deforestation Regulation (European Union, 2023) creates new corporate accountability that could unlock $7 billion yearly for sustainable supply chains. The Great Green Wall Accelerator has already mobilized $19 billion for dryland restoration across Africa, proving the viability of coordinated regional investment.

There are different estimates and approaches to capture the need of climate finance to agrifood systems, nature-based solutions, forest and land restoration, among other actions involving agriculture and land use.

The new collective quantified climate finance goal (NCQG) paves the need to transform climate finance anchored in multiple sources and instruments. The Baku to Belem Roadmap's US$1.3 trillion target that will be presented at COP30 push forward ways to connect climate finance to key goals, such as transforming agriculture and land use, which encompass land restoration.

Scale climate finance narrowed to support the implementation of climate actions on agriculture and food security is crucial to deploy win-win benefits transforming agriculture according to countries needs and realities. The outcomes of the Baku to Belem Roadmap would be instrumentally important to catalyze new sources of finance and instruments that could effectively push forward the adoption of projects.

As a collective effort connecting governments, farmers and investors, RAIZ aims to work as a global connective tissue that will make capital flow faster and smarter.

Fanjan Combrink

6

RAIZ INNOVATIVE APPROACH

@Pexels Flambo

THE GLOBAL MOVEMENT TO RESTORE DEGRADED LANDS HAS EVOLVED SIGNIFICANTLY THROUGH SUCCESSIVE INITIATIVES IN THE PAST YEARS. EARLY EFFORTS LIKE THE BONN CHALLENGE ESTABLISHED IMPORTANT VOLUNTARY COMMITMENTS FOR LANDSCAPE RESTORATION, MOBILIZING PLEDGES TO RESTORE 350 MILLION HECTARES BY 2030.

While this created valuable political momentum, progress has been uneven, with only about 30% of pledged areas under active restoration due to inconsistent financing and monitoring frameworks.

Similarly, the Land Degradation Neutrality Fund pioneered blended finance approaches for sustainable land management, yet its $300 million capitalization remains insufficient relative to global needs, and its focus has been largely limited to reforestation rather than comprehensive agricultural landscape restoration.

Regional initiatives such as the African Forest Landscape Restoration Initiative (AFR100) demonstrated the potential of continental-scale collaboration, securing $19 billion in pledges for African landscape restoration. However, challenges persist in translating these commitments to ground-level impact and ensuring equitable benefits for local communities.

The Koronivia Joint Work on Agriculture made significant strides in policy dialogue by linking agricultural and climate action, though it did not establish concrete financing mechanisms or implementation protocols. The Sharm el-Sheikh joint work on implementation of climate action on agriculture and food security (SJWA) work under development up to COP31 allows to advance approaches towards low carbon agriculture, having the Sharm el-Sheikh online portal as a central place to host Parties, non-Parties, private sector, civil society, among other organizations submissions regarding climate actions on agriculture and food security. (UNFCCC, SJWA 2025).

Linking climate actions on agriculture and food security to climate finance is at the center of the SJWA. The approval of the NCQG with the new climate finance targets at COP29 and the Baku-Belem Roadmap to the US$ 1.3 trillion is expected to boost the integration of climate finance to support the deployment of actions on agriculture.

Restoring and sustainably managing farmland has emerged as a shared priority in response to the complex challenges threatening food production and poverty eradication, challenges emphasized in Article 2 of the UNFCCC and the Paris Agreement.

RAIZ emerges as a global effort to map and mobilize funding for the restoration of degraded farmlands worldwide, aligned with the shared global goals of the CBD, the UNCCD, the UNFCCC and the Sustainable Development Goals (SDGs). RAIZ focuses on restoring degraded agricultural lands to achieve multiple co-benefits, including reducing emissions, strengthening food security, preventing deforestation and conserving biodiversity.

The objectives of RAIZ are fully aligned with the COP30 Presidency's third pillar, "Transformation of agriculture and food systems," specifically goal 8 on land restoration and sustainable agriculture. Accelerate restoration of agricultural lands by fostering innovation and cooperation among countries, producers, technology companies, financial sector and civil society organizations through four key pillars:

1 **Mapping degraded landscapes and prioritizing areas with productive potential.**	**2** **Identifying diverse funding sources and attracting investment.**
3 **Design optimal co-investment mechanisms and that leverage public finance to derisk private investments**	**4** **Fostering knowledge exchange on best practices.**

RAIZ is a quadruple-win for climate, biodiversity, land degradation/desertification combat and food security. By uniting the Rio Conventions and the Agenda 2030 and its SGDs with a renovated approach towards finance, Brazil's leadership at COP30 aims to prompt degraded land restoration as a true and tangible window of opportunities.

Building on these efforts, RAIZ, as part of COP30 Action Agenda, aims to transform agriculture and food systems through land restoration and sustainable agriculture. Understand, prioritize, finance and stimulate cooperation and partnerships that generate concrete projects for restoring degraded areas, contemplating climate benefits, biodiversity, combating desertification and food security is at the center of RAIZ, that is anchored into the following key principles:

1 **Co-benefits:**
Spotlighting the climate, biodiversity, desertification, and food security co-benefits of restoring degraded areas.

2 **Country engagement:**
Recognizing local and regional challenges and specificities, including production systems and practices, family farming, traditional and indigenous knowledge, as well as access to technologies and innovation.

3 **Science and innovation:**
Ensuring that the best available science and innovation are considered, alongside local knowledge and practices.

4 **Local recognition:**
Promoting country engagement in accordance with national interests, priorities and needs.

5 **Stakeholder engagement:**
Fostering the participation of multiple stakeholders, including scientific partners, the business sector, the financial market, producer and supply chain organizations, civil society and governments.

6 **Coordination:**
Coordinating and collaborating with existing global and regional initiatives and partnerships to maximize synergies and avoid duplication of efforts.

COP30 is a moment to catalyze climate actions into a vivid implementation mode. For Brazil, land restoration is a precondition to support win-win outcomes not only for climate, biodiversity and desertification combat, but to improve the capacity to address and strengthen countries roles towards food security and improving livelihoods. RAIZ is the opportunity to reverse the cycle of conversion, land use and degradation, transforming land and soil restoration into a flourishing global agenda that delivers multiple environmental benefits while contributes to cope with food security.

Countries who participate in RAIZ will be supported through four key service offerings. The breadth and depth of delivery will be customised based on an initial assessment on the country's key gaps and opportunities related to deploying farmland restoration finance at scale.

1
MAP DEGRADED LANDSCAPES TO PRIORITIZE AREAS FOR INVESTMENT

» RAIZ will work with national institutions to create a Map of Degraded Agricultural Land, combining local data (on environment, climate, and livelihoods) and country commitments to identify priority areas for restoration and investment.

» The tool will include analysis features to help policymakers, financiers, and project developers make informed decisions. RAIZ will also provide capacity building to ensure national teams can fully use and maintain the tool.

2
IDENTIFY INVESTABLE RESTORATION SOLUTIONS AND ASSESS THEIR FINANCING NEEDS

» RAIZ will support governments in identifying investable restoration solutions on the ground and assessing their cost at scale, under a Farmland Restoration Finance Report, informed by national institutions and local experts.

» The report will be informed by data on restoration solutions being implemented in the country, such as expected financial returns, current costs and funding gaps.

3
SPOTLIGHT OPTIMAL INVESTMENT MECHANISMS AND SCALE PROVEN SOLUTIONS

» RAIZ will help governments identify and access the most suitable financing mechanisms at national and global level. The Farmland Restoration Finance report will also assess the optimal financial instruments that can be used based on the rate of return of the solutions and local funding availability., in consultation with businesses, investors and financial institutions.

» RAIZ will also provide technical assistance during the design and implementation of national financing instruments to ensure funds are used effectively and achieve real restoration results. Where needed, RAIZ will help countries prepare proposals for international climate finance and develop investment cases that attract private partners.

4
FOSTER COLLABORATION AND KNOWLEDGE EXCHANGE WITHIN THE FINANCIAL ECOSYSTEM

» RAIZ will assess each country's readiness and enabling environment for restoration finance, including policy frameworks, financial sector maturity, and institutional coordination.

» It will capture and consolidate lessons from national implementation – on expanding financing mechanisms, channeling funds to restoration projects, and building public–private collaboration. These will be distilled into case studies and guidance to inform RAIZ's global work and peer learning across countries.

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REFERENCES

Brazil. Ministry of Agriculture, Livestock and Food Supply. (2021). ABC+ Plan — Brazil's New Climate Change Adaptation and Low Carbon Emission in Agriculture Plan. Brasília: MAPA.

Brazil. Ministry of Agriculture, Livestock and Food Supply. (2023). Plano ABC 2010-2020. Brasília: MAPA. Available at: https://www.gov.br/agricultura/pt-br/assuntos/sustentabilidade/planoabc-abcmais/plano-abc/acoes-do-plano

Bolfe, É.L.; Victoria, D.d.C.; Sano, E.E.; Bayma, G.; Massruhá, S.M.F.S.; de Oliveira, A.F. Potential for Agricultural Expansion in Degraded Pasture Lands in Brazil Based on Geospatial Databases. Land 2024, 13, 200. https://doi.org/ 10.3390/land13020200

Climate Policy Initiative. (2022). Global Climate Finance Flows 2022. San Francisco: CPI.

Climate Policy Initiative. (2025). Global Landscape of Climate Finance 2025. San Francisco: CPI. Available at: https://www.climatepolicyinitiative.org/publication/global-landscape-ofclimate-finance-2025/

Climate Policy Initiative. Food and Agriculture Organization of the United Nations. CPI & FAO. 2025. The Triple Gap in Finance for Agrifood Systems. Revised. Rome. Available at: https://doi.org/10.4060/cd3611en

Climate Shot Investment Coalition – CLIC. (2025). Landscape of Climate Finance for Agrifood Systems 2025. Available at: https:// climateshotinvestor.org/publications/landscape-of-climate-finance-for-agrifood-systems-2025

Convention on Biological Diversity. (2022). Decision 15/5: Kunming-Montreal Global Biodiversity Framework. Montreal: CBD. https://www.cbd.int/doc/decisions/cop-15/cop-15-dec-04-en.pdf

Ecosystem Marketplace. (2022). Voluntary Carbon Market Outlook 2030. Washington, DC: Forest Trends.

European Union. (2023). *Regulation (EU) 2023/1115 of the European Parliament and of the Council on deforestation-free products*. Official Journal of the European Union.

Food and Agriculture Organization of the United Nations. (2022). The state of the world's land and water resources for food and agriculture: Systems at breaking point (SOLAW 2021). FAO. https://doi.org/10.4060/cb9910en

Food and Agriculture Organization of the United Nations. (2021b). Review of Forest and Landscape Restoration in Africa 2021. FAO. https://doi.org/10.4060/cb6111en

Food and Agriculture Organization of the United Nations. (2021c). Climate finance to agrifood systems. Rome: FAO. https://doi.org/10.4060/cc9010en

Food and Agriculture Organization of the United Nations. (2021d). Global Soil Partnership Technical Report. Rome: FAO.

Food and Agriculture Organization of the United Nations. (2023). Global assessment of soil pollution: Summary for policy makers. FAO. openknowledge.fao.org/server/api/core/bitstreams/7f60b088-de3e-4e08-b88e-b26e37b5b18e/content

Food and Agriculture Organization of the United Nations. (2025). The State of Food Security and Nutrition in the World 2025. Rome: FAO. https://doi.org/10.4060/cd6008en

Food and Agriculture Organization of the United Nations & United Nations Environment Programme. (2021). United Nations Decade on Ecosystem Restoration: Strategy 2021–2030. Nairobi/Rome: UNEP/FAO.

Independent High-Level Expert Group on Climate Finance. (2024). Scaling Up Finance for Climate and Nature. New York: United Nations.

Intergovernmental Panel on Climate Change. (2019). Special Report on Climate Change and Land. Geneva: IPCC.

International Crops Research Institute for the Semi-Arid Tropics. (2022). Soil and water management research in the Sahel. Hyderabad: ICRISAT.

International Institute for Sustainable Development. (2022). FAST Initiative at COP27. Winnipeg: IISD.

International Panel of Experts on Sustainable Food Systems. (2022). From uniformity to diversity: A paradigm shift from industrial agriculture to diversified agroecological systems. Brussels: IPES-Food.

Parente, L., Mesquita, V., Miziara, F., Baumann, L., & Ferreira, L. (2024). Assessing the pasturelands and livestock dynamics in Brazil, from 1985 to 2020: A novel approach based on high spatial resolution imagery and Google Earth Engine. Land, 13(2), 200. https://www.sciencedirect.com/science/article/abs/pii/S0034425719303207?via%3Dihub

United Nations. (2023). The Sustainable Development Goals Report 2023. New York: United Nations.

United Nations Convention to Combat Desertification. (2022). Global Land Outlook 2. Bonn: UNCCD.

United Nations Convention to Combat Desertification. (2023). Great Green Wall: Implementation status and way ahead to 2030. Bonn: UNCCD.

United Nations Environment Programme. (2022). State of Finance for Nature 2022. Nairobi: UNEP.

United Nations Environment Programme (2024). State of Finance for Nature: Restoration Finance Report. Growing the Green: Why and how restoration finance needs to quadruple by 2030. Nairobi. Available at: https://wedocs.unep.org/20.500.11822/46730

United Nations Framework Convention on Climate Change (UNFCCC). Sharm el-Sheikh online portal. Available at: https://unfccc.int/topics/land-use/workstreams/agriculture/sharm-el-sheikh-online-portal

United Nations Framework Convention on Climate Change (UNFCCC). 2024 NDC Synthesis Report. October 2024. Available at: https://unfccc.int/documents/641792

United Nations Framework Convention on Climate Change (UNFCCC). Issues related to agriculture and food security. https://unfccc.int/topics/land-use/workstreams/agriculture

World Agroforestry Centre. (2023). Agroforestry and dietary diversity in Malawi. Nairobi: ICRAF.

World Bank. (2023). World Development Indicators. Washington, DC: World Bank.


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