BRAZILIAN GOVERNMENT

BRASIL

STANDING WITH THE BRAZILIAN PEOPLE

Brazil welcomes the opportunity to contribute to the Sharm el-Sheikh online portal under the Sharm el-Sheikh joint work on implementation of climate action on agriculture and food security, recognizing its important role in sharing information on projects, initiatives and policies for increasing opportunities for implementation of climate action to address issues related to agriculture and food security.

Resilient Agriculture Investment for Net-Zero Land Degradation (RAIZ)

I. Introduction

Land degradation constitutes a systemic threat to global food security, climate resilience, and sustainable development. According to the Food and Agriculture Organization of the United Nations (FAO), more than 30% of the world's agricultural land is degraded, directly affecting productivity, livelihoods, and ecosystem services. This challenge is compounded by climate change, biodiversity loss, and increasing pressure on food systems, particularly in developing countries.

The restoration of degraded agricultural land has therefore emerged as a strategic priority across the three Rio Conventions — the United Nations Framework Convention on Climate Change (UNFCCC), the United Nations Convention to Combat Desertification (UNCCD), and the Convention on Biological Diversity (CBD) — as well as under the 2030 Agenda for Sustainable Development, notably SDG target 15.3 on Land Degradation Neutrality.

In this context, the Resilient Agriculture Investment for Net-Zero Land Degradation (RAIZ) initiative is presented as a concrete implementation-oriented response to the Sharm el-Sheikh Joint Work on implementation of climate action on agriculture and food security. RAIZ aims to bridge the persistent gap between policy commitments, scientific evidence and the mobilization of finance for large-scale agricultural land restoration, with direct benefits for food security,

climate mitigation and adaptation, biodiversity conservation and rural livelihoods.

Brazil, drawing on more than a decade of experience with its national low-carbon agriculture policy — the ABC and ABC+ Plans — submits RAIZ as a collaborative, scalable and globally relevant initiative aligned with the objectives of the Sharm el-Sheikh Joint Work and the broader climate finance agenda.

II. The initiative

RAIZ is a global, multi-stakeholder initiative launched under the COP30 Action Agenda, aimed at accelerating investment in the restoration of degraded agricultural lands at scale. It operates as a collective effort — a mutirão — connecting governments, farmers, financial institutions, development banks, private investors, scientific institutions and international organizations.

The initiative is structured around four complementary pillars:

(i) **Mapping and prioritizing degraded agricultural landscapes**: RAIZ supports countries in identifying, mapping and prioritizing degraded agricultural lands with productive potential, combining national data, geospatial information and scientific evidence. This approach enables targeted interventions aligned with national circumstances, food security priorities and climate commitments.

(ii) **Estimating restoration costs and financing needs**: Through country-specific Farmland Restoration Finance Reports, RAIZ assesses the costs of restoration pathways, identifies funding gaps and estimates potential returns, supporting evidence-based decision-making for public and private investors.

(iii) **Mobilizing diversified sources of finance:** RAIZ promotes the use of blended finance instruments, combining public finance, development finance, climate funds and private capital. It supports access to international climate finance mechanisms and fosters the alignment of national agricultural and financial policies with restoration objectives.

(iv) **Fostering cooperation and knowledge exchange**: The initiative facilitates peer-to-peer learning, dissemination of best practices and cooperation among countries and stakeholders, strengthening institutional capacity and accelerating implementation.

RAIZ is fully aligned with the transformation of agriculture and food systems, placing land restoration at the center of climate-resilient and productive agricultural development. By focusing on agricultural landscapes, RAIZ complements existing forest-focused restoration initiatives and directly addresses food security and rural development challenges.

III. Project/program

The Brazilian Green Way (Caminho Verde Brasil) is a flagship national program that exemplifies how the objectives of the Resilient Agriculture Investment for Net-Zero Land Degradation (RAIZ) can be operationalized through concrete policy instruments, governance arrangements and financing mechanisms.

Launched in December 2023 by the Federal Government of Brazil, the Brazilian Green Way is the operational identity of the National Program for the Conversion of Degraded Pastures into Sustainable Agricultural and Forestry Production Systems (PNCPD). It is a State-level program coordinated by the Ministry of Agriculture and Livestock (MAPA), implemented in partnership with other federal ministries, public financial institutions, research organizations and representatives of the agricultural sector.

Brazil currently has approximately 160 million hectares of pastureland, of which around 100 million hectares present some degree of degradation. Scientific assessments conducted by EMBRAPA indicate that about 40 million hectares of these degraded pastures have high suitability for conversion into sustainable agricultural and agroforestry production systems. The Brazilian Green Way directly targets this opportunity by promoting large-scale land restoration as a strategy for food security, climate mitigation and rural development.

The Brazilian Green Way establishes a new agro-environmental governance paradigm, marked by the coordinated action of MAPA and the Ministry of the Environment and Climate Change (MMA). For the first time, agricultural productivity and environmental integrity are addressed jointly within a single programmatic framework, aligning agricultural credit, environmental safeguards and climate objectives.

IV. Monitoring, Reporting and Verification (MRV)

The Measurement, Reporting and Verification (MRV) framework of RAIZ is designed to ensure transparency, scientific robustness and investment-grade credibility across all stages of farmland restoration. RAIZ relies on open-access, geospatially enabled monitoring systems to map degraded agricultural land, track restoration progress and quantify climate, biodiversity and productivity outcomes over time. By integrating satellite imagery, land-use and land-cover datasets, and national environmental and agricultural statistics, the MRV system enables consistent spatial and temporal assessment of restored areas. Platforms such as geospatial data viewers and interoperable GIS tools allow policymakers, investors and implementing partners to visualize priority areas, monitor land-use transitions and verify performance against national commitments. This approach strengthens risk-informed decision-making by translating complex scientific data into actionable insights for planning, reporting and investment assessment.

V. Alignment with National and Global Goals

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.

RAIZ directly responds to this diagnosis by operationalizing land restoration and sustainable agricultural intensification as investable pathways, consistent with FAST’s emphasis on accelerating access to finance, strengthening national delivery systems and scaling proven solutions. By integrating national programs, RAIZ exemplifies how FAST principles can be translated into concrete pipelines of bankable projects. The initiative could provide a practical delivery mechanism under the FAST agenda, demonstrating how restoring degraded

agricultural land can simultaneously advance food security, climate mitigation and adaptation, and sustainable development at scale.

VI. Scientific evidence

The scientific evidence underpinning RAIZ is extensive, convergent and well documented across international scientific assessments, multilateral reports and peer-reviewed literature. Land degradation has reached a scale that directly threatens global food systems, climate stability and rural livelihoods. According to FAO, approximately 1.6 billion hectares of agricultural land worldwide are degraded, representing nearly one third of all cultivated land (FAO, 2022). This degradation is not uniformly distributed: Africa alone accounts for 221 million hectares of degraded agricultural land, while Latin America and Asia face accelerating soil erosion, nutrient depletion and loss of productive capacity.

The impacts of land degradation on food security are empirically demonstrated. The State of Food Security and Nutrition in the World reports that between 638 and 720 million people experienced hunger in 2024, while 2.3 billion people (around 28% of the global population) faced moderate or severe food insecurity (FAO et al., 2025). Degraded soils are strongly correlated with yield gaps, higher production costs and increased vulnerability to climate shocks, particularly in rainfed systems predominant in low- and middle-income countries.

Quantitative evidence shows that restoring degraded agricultural land can deliver substantial productivity gains. Meta-analyses compiled by FAO and IPES-Food indicate that regenerative and conservation-based practices can increase yields by 20–30% in degraded systems, while reducing dependence on synthetic inputs and improving water-use efficiency. In semi-arid regions, restored soils exhibit 30–40% higher water retention, significantly increasing resilience to drought and rainfall variability (ICRISAT, 2022).

VII. Conclusion

The Resilient Agriculture Investment for Net-Zero Land Degradation (RAIZ) initiative offers a practical, implementation-focused pathway to advance climate action on agriculture and food security under the Sharm el-Sheikh Joint Work. By integrating scientific evidence, national policy experience and innovative financing approaches, RAIZ translates global commitments into concrete actions on the ground.

RAIZ demonstrates that restoring degraded agricultural lands can simultaneously enhance food security, reduce greenhouse gas emissions, strengthen climate resilience, conserve biodiversity and improve rural livelihoods. As a collaborative platform aligned with the objectives of the Rio Conventions and the Sustainable Development Goals, RAIZ contributes to a coherent and integrated response to the intertwined challenges of climate change, land degradation and food insecurity.

Brazil reaffirms its commitment to sharing its experience, supporting international cooperation and fostering scalable solutions through RAIZ, contributing to the effective implementation of climate action in agriculture and food systems worldwide.

VIII. References

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